

FLORIDA BASIC RECRUIT
TRAINING PROGRAM:

HIGH LIABILITY

VOLUME 2

Florida Basic Recruit Training Program: Volume 2

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The training in this course is provided to familiarize students with issues that may involve high liability and/or high stress. FDLE urges students to ensure that their practices are correct in accordance with their agencies' policies and procedures. Employing agencies are solely responsible for guiding their employees' actions in actual situations.

Acknowledgments

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PREFACE

The mission of the Florida Criminal Justice Standards and Training Commission is to ensure that all citizens of Florida are served by criminal justice officers who are ethical, qualified, and well-trained. The Commission certifies officers who complete a Florida Basic Recruit Training Program and gain sworn employment through a Florida criminal justice agency, or who are diversely qualified through experience and training and who meet minimum employment standards.

As staff for the Commission, the Florida Department of Law Enforcement (FDLE) Professionalism Division is responsible for establishing and maintaining officer training programs. Criminal Justice officer training is conducted at Commission-certified training schools housed in Florida criminal justice agencies, community and state colleges, and vocational technical schools. By statute, entrance into the basic recruit training programs for law enforcement and correctional officers is limited to those who have passed a basic skills examination and assessment instrument, which is based on a job task analysis in accordance with s. 943.17(1)(g), F.S. The same job analysis process is used to develop job-related training and performance standards for basic recruit training. Hundreds of officers, residents, and instructors have participated in the development of the officer job analysis and training curricula.

The FDLE Professionalism Division is responsible for ensuring that officer training remains job-related, valid, and up-to-date. Through an annual review and revision of basic recruit training curricula, the Commission ensures that basic recruit graduates are prepared for sworn employment with state or local criminal justice agencies in Florida.

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LAW ENFORCEMENT VEHICLE OPERATIONS

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Unit 1: Vehicle Inspection

Lesson 1: Exterior, Under the Hood, and Interior Vehicle Inspection

Lesson Goal

At the end of this lesson, you will know guidelines for properly inspecting your assigned vehicle.

Operating a motor vehicle in a law enforcement setting is a dynamic and challenging task. The ability to drive in emergency mode, communicate with dispatch, and remain aware of the actions of other drivers presents complexities not experienced in normal driving. This course is designed to help officers understand a vehicle's limits, as well as their personal limits. An officer's awareness of the effects of physiological and psychological stressors on their driving is critical. Officers should also understand how the public views them as drivers. This course will help you develop the skills required to operate a motor vehicle safely.

The Basics of Vehicle Inspection

There are guidelines for properly inspecting your assigned vehicle. During an inspection, you will check the proper fluid levels, hoses, electrical wiring, belts, and tires. You should also inspect the vehicle interior and exterior.

Most agencies have an inspection form that all officers are required to complete when they use an agency vehicle. The form helps officers remember what equipment must be inspected and allows them to report failing equipment. Each agency has its own policies or procedures for handling failing equipment. Some agencies may require officers to complete a report detailing the problem. Others may require officers to handle some problems themselves, such as changing a tire or a bulb or adding fluids, or to notify a particular shop that will repair the vehicle. The comments section on the inspection form is useful for all these purposes.

EXTERIOR VEHICLE INSPECTION

It is essential to inspect a vehicle before taking control of it and operating it on the road. You will drive your law enforcement vehicle in extreme conditions, unlike the conditions in which you would drive a personal vehicle. Therefore, before using the vehicle, you must locate any potential problems so they can be repaired.

For personal safety, perform inspections before and after every use of the vehicle. When you fail to inspect a vehicle properly, you may miss potential safety hazards. Failing to complete an inspection may violate agency policies. There is potential for liability if something happens because of a vehicle problem, especially if inspection and correction could have prevented that problem.

Before using a vehicle, inspect its exterior to identify any damage. Conduct a quick visual examination of the vehicle's body and undercarriage and look for the following:

- scratched paint that may be the result of contact with an object or intentional damage
- dents that are more obvious signs of contact with another object, perhaps a vehicle
- missing or broken light covers that can present a hazard to other drivers and may be a traffic violation
- damaged or malfunctioning emergency equipment, such as a siren, light bar, or other emergency lights that could prevent operating the vehicle in emergency mode
- broken or cracked glass that could injure you and impair vision
- broken or cracked mirrors that could impair vision
- a dirty windshield that could impair observation ability
- foreign objects, such as tree limbs and road debris trapped under the vehicle, that could cause serious problems if they strike one of the vehicle's moving parts
- foreign objects on the undercarriage other than natural objects or road debris, for example, a potentially harmful device such as an explosive. (If an explosive or other harmful device is detected, back away from the vehicle and contact the appropriate personnel as designated by your agency's policies and procedures.)
- fluid leaks visible on the ground under the vehicle

Tires and Rims

Inspection of the vehicle's exterior also includes its tires and rims. Tires should be checked for uneven wear that may result from improper balance or alignment, over inflation, or under inflation. These problems can make a vehicle difficult to handle. Tire inflation is measured by *PSI* (pounds per square inch). Proper PSI ensures tires are inflated at or above the manufacturer's recommended level. You can find the recommended PSI on your vehicle's doorjamb. If tire wear bars are even with the tread surface, the tires will not dissipate fluids. Embedded foreign objects can deflate or blow out a tire. Do not pull out the object; instead, have the dealer or maintenance personnel handle the removal. The dealer or maintenance personnel should also look at any bulges on the sidewall. Cuts in a tire can cause a blowout and should be observed and addressed. You should also inspect the rims on the vehicle for dents, cracks, or damage to the bead.

If the front tire fails, the vehicle may lose traction. You may have difficulty steering, feel vibration in the steering wheel, and feel the vehicle pulling in the direction of the affected tire. If the rear tire fails, the vehicle may also lose traction and pull in an unpredictable direction.

HL111.1. Check the operational readiness of the exterior of the vehicle

UNDER THE HOOD

A good-looking exterior does not guarantee proper vehicle operation. Do not drive your vehicle without also checking under the hood. Make sure that all vehicle fluids are at the manufacturer's recommended levels before driving the vehicle.

The fluid levels you should check include:

- engine oil
- transmission fluid
- brake fluid
- power steering fluid
- coolant reservoir
- windshield washer fluid

Hoses, wires, and belts are essential for the safe operation of the vehicle and should be inspected each day before operating the vehicle. Check belts for fraying, cuts, cracks, and gouges. Examine hoses for dry rot, cracks, holes, bulges, and leaks. Check wires for fraying, corrosion, cracked or missing insulation, and exposure.

HL111.2. Check the fluid levels, hoses, wires, and belts

The communications and emergency equipment installed in a law enforcement vehicle puts a tremendous strain on the battery. Check the battery for proper operation. The inspection should include terminal connections, water level (if applicable), and signs of damage to the battery's exterior.

INTERIOR VEHICLE INSPECTION

Before using a vehicle, inspect its interior. This is essential to ensure safe operation while driving. For example, loose items like briefcases, flashlights, and coffee cups travel at the same speed as the vehicle. If you must stop abruptly, unsecured items become severe hazards in the vehicle. Make sure all equipment is stowed and properly secured.

HL111.3. Inspect the interior of the vehicle to make sure that items are functioning and secured properly

Always check seats for tears or other damage. Before and after every shift and after every transport, check under the back seat for possible weapons or contraband a suspect may have left in the car. Check seat belts for fraying and binding and make sure the clasps lock properly. Test headlights, interior lights, turn signals, and hazard flashers to ensure that they operate normally. Also check the rearview mirror to see if it is securely attached or if it is cracked or broken.

HL111.4. Inspect the rear seat compartment to locate all visible damage, weapons, and contraband

Test communications equipment to make certain that you can make and receive radio transmissions. Make sure that manual or electric windows and door locks operate properly. Observe gauges for visible damage

and see if they react properly to input. The gas and battery gauges should move when the vehicle is turned on. Test emergency equipment (horn, siren, and light bar) to ensure it works properly.

After the initial inspection, start the vehicle's engine, and check windows and doors for proper operation. Be aware of unusual sounds, smells, or other indicators that may warrant further inspection of the vehicle. While the vehicle is running, look under it (standing to the side of the vehicle, not in front of it) to check for leaks that may not be apparent when the engine is not running. After completing this check, you can turn off the engine.

HL111.5. Start the vehicle to check for operational readiness

REAR CARGO AREA/TRUNK

Open the rear cargo area, trunk, or truck bed and inspect its contents. Inside should be a spare tire, vehicle jack, tire tool, and assorted equipment for use on duty (usually issued by your agency). Ensure that all the rear cargo area contents are properly restrained; shifting equipment may damage the vehicle or change the way it handles. Long and protruding equipment (long guns, long-handled tools, and equipment) must be stored across the width of the rear cargo area (side to side, not front to back). This will eliminate protrusion into the passenger compartments or the gas tank in a rear-end collision.

1

Unit 2: Proactive Driving Skills

Lesson 1: Hazard Detection and Observation Skills

Lesson Goal

At the end of this lesson, you will understand and develop enhanced observation and driving skills to assist in operating the vehicle.

Enhanced observation and driving skills will help you when driving agency vehicles and carrying out your duties.

While you cannot predict every driver's actions or what hazards you may encounter, you must be prepared to react. The National Highway Traffic Safety Administration's guide, *Countermeasures That Work*, lists the following tips you should follow to prevent accidents:

- Learn to recognize driving situations that can be hazardous.
- Assume other drivers will make errors.
- Adjust speed, position, direction, and attention to be able to maneuver safely if a hazard develops.
- Scan far enough ahead to be able to react safely to approaching situations.
- Scan frequently to the side and rear for passing or approaching vehicles.
- Scan thoroughly before changing speed or direction.

HL121.1. Identify driving tips for preventing accidents

Be prepared to react to another driver's actions or to road hazards.

You must use your senses to detect and verify a potential hazard or problem. If you determine that a safety hazard exists, pull the vehicle off the road to a safe location and notify dispatch (also known as the public safety telecommunicator). Always follow your agency policies and procedures for handling a vehicle problem.

HL121.2. Detect potential hazards through the use of the senses

Vision

Vision supplies about 90% to 95% of incoming data to a driver and helps with detecting and avoiding hazards. Several components of vision may affect the ability to operate and control a vehicle:

- **acuity**—sharpness of vision
- **depth perception**—the ability to judge distance and perceive space to determine how far away an object is
- **peripheral vision**—the ability to see above, below, and to the sides (a person who is in a stationary vehicle and who has good peripheral vision can see about 180° from side to side)
- **color vision**—the ability to distinguish colors
- **night vision**—the ability to see clearly in darkness

HL121.3. Identify the importance of vision in identifying potential hazards

Environmental and physical conditions, alertness, and aging are factors that affect vision. You should get your eyesight checked regularly and correct any vision problems with lenses before operating any vehicle. Other factors, including vehicle speed and glare from the sun or other lighting sources, may also have an impact on your ability to see. Window tinting in law enforcement and other vehicles can reduce general visibility. Keep in mind that approaching a vehicle with heavily tinted windows is a safety hazard for law enforcement.

You may frequently encounter a variety of road hazards. Pedestrians crossing streets at unlikely points may require a driver's immediate action. Bicyclists and motorcyclists share traffic lanes with other vehicles and sometimes fall. Skateboarders and roller skaters can also experience falls. Striking large animals poses obvious risks to vehicles and drivers, as does suddenly stopping or swerving to avoid smaller animals, which may cause worse damage than hitting them. Animals most active at dusk or night, such as opossums, raccoons, and armadillos also present risks. Improperly parked vehicles that block the roadway and vehicles that suddenly pull into traffic or obstruct vision are other dangers. Roadway obstructions and surface flaws or damage, and debris or fluid, are safety threats.

HL121.4. Describe encountered hazards

Hearing

The sense of hearing helps you locate the source of sounds that may indicate a problem with a vehicle, a suspicious incident, or a crime. Several factors can make the source of a sound difficult to find, such as whether the driver's windows are open or closed or whether there are surrounding buildings. When you are unsure where a noise is coming from, visually scan the surroundings to help you locate the source and direction of the sound. Driving with the driver's side window down helps you hear and see hazardous situations, such as people who need help, crimes in progress, or suspicious activity. Driving with the window down also helps alert you to other emergency vehicles, such as fire trucks, rescue vehicles, and law enforcement responding to the same scene.

Smell

You can use your sense of smell to detect many problems. If you detect an unusual odor while operating a vehicle, determine whether the odor is coming from the patrol vehicle or from outside. Look for smoke or other indicators of the odor's source. If the odor is not as readily identifiable as smoke, gasoline, or propane, exit the vehicle and call for additional resources to investigate. Unusual odors may indicate unusual hazards. You should be clear of those hazards before continuing to investigate.

Be aware that a fire can start if the vehicle is left running while parked over a grassy area for an extended period of time. This is usually caused by the extreme heat from a catalytic converter. The odor of bitter smoke is usually the first sign of a grass fire.

Touch

Touch can help you detect problems that affect vehicle operation and control. For example, if you feel the steering wheel vibrating excessively, the vehicle may have a steering or tire problem. If the steering wheel pulls in one direction, the vehicle may have an alignment problem. What you feel in your hands, feet, and other parts of the body provides feedback about the vehicle's handling. When you are driving and sense something unusual, you should determine whether it is a safety concern by applying the brake pedal to verify that the brakes work, checking the steering, and looking for smoke or signs of an engine fire.

Observation Skills

Several techniques can enhance your ability to be a keen observer aware of your surroundings. Driving at or below the posted speed limit is helpful for observing and responding appropriately to the environment. Making adjustments to your meal times and lifestyle will help you be more alert on the job. Some adjustments include eating smaller meals more frequently throughout the day and getting enough rest and sleep before a shift to avoid drowsy driving.

HL121.5. Describe techniques that can enhance or impede awareness

Some temporary factors can weaken a driver's observation skills. These include stress, emotions, fatigue, and frequent shift changes. Prescription and over-the-counter drugs and poor driving habits can also have an effect on observation skills and reaction times, resulting in inattention, loss of control, and even crashes.

HL121.6. Identify temporary factors that may impact observation

Medical conditions such as high blood pressure, diabetes, heart conditions, or epilepsy may also impair observation skills.

HL121.7. Identify medical conditions that may impact observation

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Unit 2: Proactive Driving Skills Lesson 2: Road and Weather Conditions

Lesson Goal

At the end of this lesson, you will understand and be able to prepare for potential hazards that you are likely to encounter due to road and weather conditions.

Officers are likely to encounter potential hazards due to road and weather conditions that can affect a vehicle's operation. Observation skills and techniques can help officers spot and react to potential road hazards.

You will encounter road surface abnormalities that can be hazardous if you do not know how to handle or correct the hazard. Such hazards include construction areas, other vehicles, intersection debris, fluids, wet surfaces, or standing water. When you see fluid on the road, slow down and try to avoid driving over or through the hazard.

Potholes and sinkholes, curbs, and railroad tracks can be hazardous, especially if you encounter them unexpectedly. When you cannot avoid striking or driving over an obstacle, try to strike it at a slight angle with free rolling tires. If two or more vehicle tires roll from a paved surface onto an unpaved surface, you should not attempt to return to the paved surface by abruptly turning the steering wheel. This can cause the vehicle to flip or cross several traffic lanes. Instead, decelerate and steer as straight as distance allows. After reducing speed, firmly grip the wheel and steer smoothly and steadily back onto the roadway.

HL122.1. Identify corrective action to take when encountering a road or weather hazard

Variable Road Surfaces

You should always watch the road, look ahead, and try to anticipate what kind of traction your tires will have on the surface they are approaching. While driving, you may encounter concrete, asphalt, clay, dirt, gravel, sand, or brick roadways. Vehicles respond differently to each of these surfaces, and you need to practice driving on each of them to know how your vehicle drives under those conditions.

Weather

In Florida, you are likely to encounter rain, fog, wind, and extremely bright sunshine. As a law enforcement officer, you may have to be on the road when most other people would be able to avoid it, such as during heavy storms. Because you may have to respond to an emergency during bad weather, you need to learn how to drive safely in all types of weather. You also need to understand how weather can affect your vehicle's performance.

Rain and wind are the weather conditions that are most likely to affect your vehicle's performance in Florida. Brakes often become wet when driven through deep water or heavy rain. Rain can cause a vehicle to lose traction and skid out of control. Even a small amount of rain can cause a car to float off the road.

Though they are designed to disperse water, tires sometimes hydroplane. They pull to one side or the other or may not hold at all. Try to avoid driving through water. Standing water can be deeper than you think and can cause mechanical malfunctions. Extreme wind may also affect the performance and handling of the vehicle; you should keep in mind that heavy winds can blow other drivers off course or cause tree limbs or other debris to fall into your path.

1

Unit 2: Proactive Driving Skills Lesson 3: Proactive Measures

Lesson Goal

At the end of this lesson, you will be able to identify types of crashes and know techniques for avoiding them.

Officers should be able to identify types of crashes and master techniques for avoiding them. Sometimes, another driver's actions or an officer's failure to recognize a hazard makes a crash unavoidable. An example is a vehicle that pulls out suddenly, forcing the officer to take evasive action to avoid a collision. Officers should be especially careful at intersections, as they represent the single greatest threat to safe vehicle operation. Some frequently occurring crashes include:

- sideswipes
- right-angle collisions at intersections
- collisions with fixed objects
- accidents caused by improper backing
- head-on collisions
- rear-end collisions

HL123.1. Identify types of frequently occurring crashes

You can take several measures to avoid a crash. You might take your foot off the accelerator to decrease speed, use evasive maneuvers, or apply the brakes. Steering to a safe location in the direction you want to go is also a good tactic for avoiding a crash.

HL123.2. Demonstrate crash avoidance techniques

Seat Belt Usage

Whether it is a standard lap and chest belt or a tactical harness, you must always wear your seat belt. The Florida Safety Belt Law (s. 316.614, F.S.) requires that:

- any person operating a motor vehicle must be restrained by a safety belt.
- any person 18 years of age or older who is a passenger in the front seat of a motor vehicle must be restrained by a safety belt when the motor vehicle is in motion.
- each passenger and operator of the vehicle under the age of 18 must be restrained by a safety belt or by a child restraint device pursuant to section 316.613, F.S.

There are exceptions to this law, but almost all passengers are required to be strapped in during transport. Your agency policies will mirror this law. Seat belts are a primary safety device. Do not rely on the airbags. The seat belt may save your life.

Avoiding Head-On Collisions

If a vehicle is moving toward you in the lane of travel, examine your surroundings for potential obstacles as you act to avoid a collision or attempt to reduce its effects. You can also reduce speed to increase the time to react. Driving to the right gives the other vehicle more space and puts you in position to drive off the road if necessary. Finally, you can drive off the road to avoid the collision.

If an oncoming vehicle forces you off the road, you can potentially reduce the chances of injury by attempting to select what to hit (items listed from least to most dangerous):

- soft objects (bushes, small trees, or fences)
- objects moving in the same direction (including another vehicle)
- a fixed object (tree, sign, or parked car)

If you cannot avoid hitting a fixed object or an oncoming vehicle, you should hit the object with the side of the vehicle rather than head on, glancing off the object or vehicle.

HL123.3. Identify possible actions to take to avoid injury or further vehicle damage

Three-Second Rule

The three-second rule establishes a minimum safe following distance for all vehicles and provides space and time for the driver to react to potential hazards. This rule applies at the posted speed limit when weather and road conditions are good. Use the three-second rule at any speed to determine if you are a safe distance from the car in front of you.

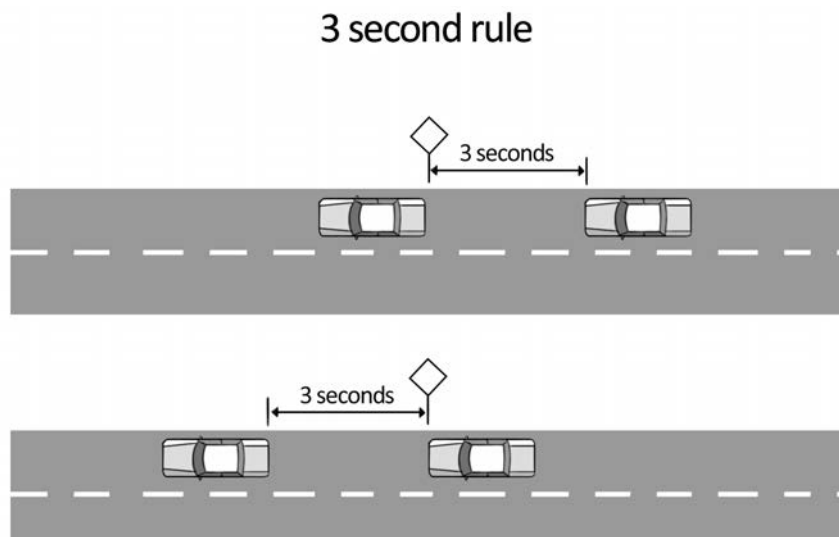


Figure 1-1: Three-second rule

To follow the principles of the three-second rule, watch the vehicle traveling in the same direction in front of you as it passes a fixed point, then count off the seconds it takes the patrol vehicle to reach the same fixed point. Count the seconds saying, “one thousand one, one thousand two, one thousand three.” If the patrol vehicle reaches or passes the fixed point before counting the three seconds, choose another fixed point and count again. You should make sure your vehicle passes the fixed point after counting three seconds. This means you are following at a safe distance.

Six-Second Rule

Under poor road conditions or in bad weather, use the six-second rule. Its principles are the same as those of the three-second rule, except that six seconds are counted after the vehicle ahead passes a fixed object. Events and situations that call for the six-second rule include traveling at higher than normal rates of speed, driving during emergency responses, or traveling with other responding units. Inclement weather, fog, and smoke also require the six-second rule. Also, oncoming headlights, streetlights, hazards and debris, and construction areas all make for situations that call for application of the six-second rule.

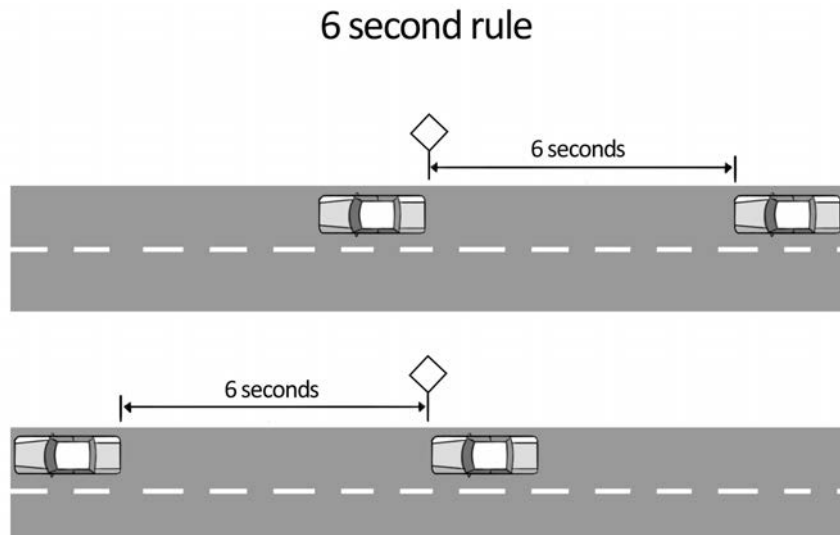


Figure 1-2: Six-second rule

HL123.4. Describe techniques and principles to enhance driver awareness, including the three-second and six-second rules

1

Unit 3: Principles of Driving Lesson 1: Handling Characteristics

Lesson Goal

At the end of this lesson, you will understand how physical force affects your ability to control and safely maneuver a law enforcement vehicle. You will also know how a law enforcement vehicle will react to the driver's input, road conditions, and natural forces.

This section explains how physical forces affect your ability to control and safely maneuver a law enforcement vehicle. Remember that vehicles react to driver input, road conditions, and natural forces. The tires of most law enforcement vehicles rest on four 6-inch squares (known as the tire contact patch). All the factors just listed affect those four small areas and what happens to the vehicle.

Vehicular Motion

There are three types of vehicular motion: pitch, roll, and yaw. **Pitch** occurs during acceleration or braking and causes the transfer of a vehicle's weight from front to rear or rear to front. **Roll** occurs when turning. This shifts the vehicle's weight from side to side. **Yaw** is the transfer of a vehicle's weight causing an end-for-end motion resulting in the vehicle turning 180° on a horizontal plane.

Stability

Vehicular stability affects the degree of pitch, roll, and yaw that a vehicle experiences. A stable vehicle does not pitch and roll as easily as an unstable vehicle. The center of gravity on the most stable vehicle is low and centered, like a Formula One or Indy race car. The higher a vehicle's center of gravity, the lower its stability. For example, trucks and SUVs are less stable because of their high center of gravity. A vehicle with a wider tracking width, like a military Humvee, is more stable. As a vehicle's tracking width decreases, so does its stability. Trucks and SUVs are less stable because of their narrow tracking width.

Electronic Stability Control (ESC) helps drivers maintain control of their vehicle during extreme steering maneuvers, even when the vehicle nears or exceeds the limits of road traction. A traction control system (TCS) is typically a secondary function of the ESC designed to prevent loss of traction.

Weight Transfer and Distribution

Equipment and passenger loads affect weight transfer and could change a law enforcement vehicle's stability. Be sure to load all equipment in such a way as to distribute weight evenly. Weight transfer and distribution occur when the vehicle's speed changes and influence the vehicle's handling ability. Weight is distributed only where the tires contact the surface. The more dramatically the brakes or accelerator are applied, the more dramatic the weight transfer and its effects.

As a driver applies the brakes, weight transfers in the direction the vehicle is traveling—forward or backward. This transfer affects the distance it takes to stop the vehicle. When a vehicle accelerates, weight transfers to the rear tires, affecting acceleration and the handling of the vehicle. Weight transfer and distribution also occur when a vehicle changes direction. When a vehicle turns a corner, weight is transferred from one side to the other. The transfer is more noticeable in a van, truck, or SUV than in sedans. This transfer of weight can force the vehicle out of a driver’s travel lane or off the road. In extreme situations, it can cause the vehicle to roll over.

HL131.1. Explain the importance of braking to a safe speed before entering a turn or corner

When a vehicle turns a corner, weight transfers toward the tires on the outside of the turn. The front outside wheel carries the most weight, while the rear wheel on the outside of the turn carries less, followed by the front wheel on the inside of the turn, and, finally, the rear wheel on the inside of the turn. Because of this diminished steering capability, you should not attempt to brake and steer at the same time. Always brake before turning and then steer into the turn.

HL131.2. Identify the importance of initiating the steering input before entering a turn or corner

Turns

A **radius** is the distance from the center of a circle to the outside. A turn or curve is a portion of a circle. An **increasing radius** is a turn that gets wider during the turn, much like a circle getting larger.

A **decreasing radius** is a turn that gets tighter during the turn, much like a circle getting smaller.

A **constant radius** is a turn that remains the same throughout, getting neither wider nor smaller. An example could be a 90° turn, such as a turn made at an intersection. Safely negotiating a tight turn requires less speed and more steering input.

HL131.3. Identify an increasing, decreasing, and constant radius

Corner Negotiating Techniques

An **apex** is the center point of any curve. The apexing technique is how the vehicle is steered in relation to a curve’s apex while maintaining your lane. The vehicle’s position in relation to the curve defines the early, center, or late apexing techniques.

HL131.4. Describe how to locate the apex

The early apexing technique is when the vehicle is steered so it is closest to the inside of the curve before reaching the apex. This technique increases the force enacted on a vehicle moving in a curved path, moving it outward, away from the center of the curve and can cause loss of control.

early apex turn

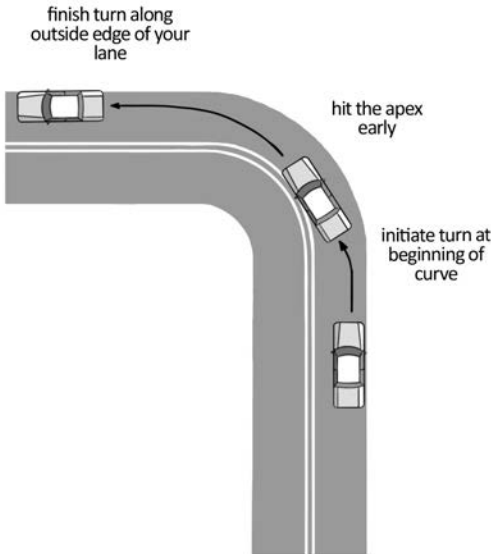


Figure 1-3: Early apex

The center apexing technique is when the vehicle is steered closest to the middle of the curve.

center apex turn

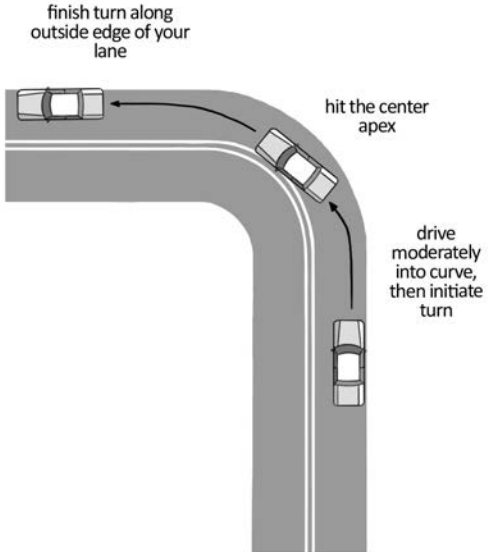


Figure 1-4: Center apex

The late apexing technique is when the vehicle is steered so it passes closest to the inside of the curve after reaching the apex. This technique decreases the force enacted on a vehicle moving in a curved path, reducing the potential for loss of control. The late apexing technique, in most cases, is the best cornering or turning method. It allows the most room for driver error.

late apex turn

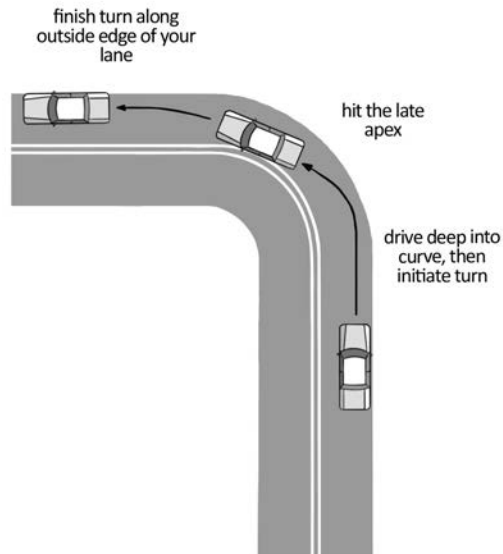


Figure 1-5: Late apex

HL131.5. Demonstrate the apexing techniques

Steering has a direct relationship with vehicle dynamics, vehicle handling, and traction control. The speed of a vehicle and the forcefulness of steering influence these forces. Speed and steering also greatly affect the weight transfer of the vehicle, which in turn affects the driver's control of the vehicle. Understeer and oversteer describe certain vehicle movements resulting in a loss of traction by the front or rear tires. You should not confuse the word "steering" in these terms with the actual movement of the vehicle's steering wheel. However, recovery from these events may require steering input.

HL131.6. Identify steering as it relates to vehicle dynamics and traction in a turn

Understeer is the tendency of a vehicle to turn less sharply than the driver intends. The cause of understeer may be a combination of excessive speed, lack of traction on the steering tires, and improper braking in a turn or curve. A combination of two or more of these errors can cause you to lose control. The correction for understeer is to remove the foot from the accelerator, maintain steering input but not apply brakes, and, if necessary, steer the car to a safe place and stop.

HL131.7. Identify principles of understeering

Oversteer is the tendency of a vehicle to steer into a sharper turn than the driver intends, sometimes with a loss of traction of the rear to the outside. Oversteer generally occurs at higher speeds when the rear tires

lose traction and excessive braking occurs in a turn or curve. The correction for oversteer is to remove the foot from the accelerator and/or brake, steer the car where desired (when the front tires have not lost traction), refrain from applying the brakes, and, if necessary, steer the car to a safe place and stop.

HL131.8. Identify principles of oversteering

Wheel tracking causes the rear wheels to follow a tighter path than the path the front wheels traveled in a turn.

HL131.9. Identify principles of wheel tracking

When trying to avoid a fixed object, you must steer the front of the vehicle wide off the object to prevent the rear wheels from striking it. Applying the correct inputs makes you a more capable driver in both normal and extreme conditions.

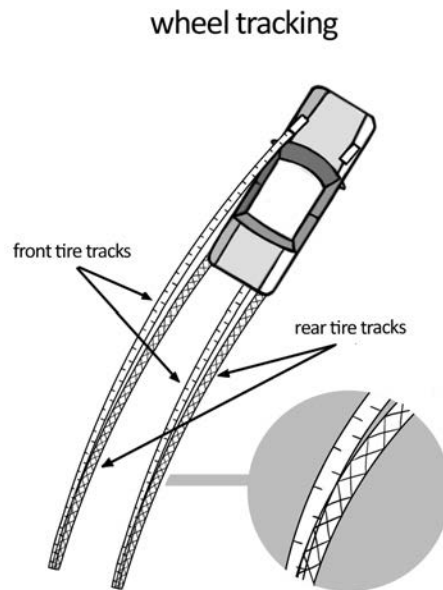


Figure 1-6: Wheel tracking

HL131.10. Identify how to control wheel tracking by properly steering around an object

1

Unit 3: Principles of Driving Lesson 2: Steering the Vehicle

Lesson Goal

At the end of this lesson, you will know proper hand position and steering techniques.

Steering is one of the most important aspects of driving a vehicle. How you sit in a vehicle is also important because it enables you to correctly steer, accelerate, use mirrors, use proper seat position, and brake.

HL132.1. Identify how to make the necessary adjustments to the vehicle while seated

Steering Wheel Grip

Hold the steering wheel with a firm yet relaxed grip. The thumbs should rest on the rim of the steering wheel and never hold the wheel too tightly; holding the wheel tightly will cause you to tire more quickly. You must use proper hand position and grip each time you take control of a vehicle.

HL132.2. Identify how to properly grip the steering wheel

HAND POSITION

Facing the steering wheel, the top center of the wheel is in the 12 o'clock position. The bottom center of the wheel represents 6 o'clock. It is recommended that you place your right hand in the 4 o'clock position and your left hand in the 8 o'clock position. This hand position provides quicker response, reduces fatigue, and reduces injury if the air bag deploys. The design of some steering wheels may require a slightly different hand position.

Shuffle Steering

After properly adjusting the equipment, place your hands in the required position, and grip the steering wheel correctly. Perform the shuffle steering technique to make a right turn and a left turn. Driving in reverse does not involve shuffle steering.

To turn right, move the right hand into the 12 o'clock position at the top of the steering wheel and pull the steering wheel down in a smooth motion into a right turn:

1. Simultaneously maintain contact with the steering wheel with the left hand, and slide the left hand into the 6 o'clock position.
2. Continue to turn as the hands meet at the 6 o'clock position by gripping with the left hand and loosening the right hand while maintaining contact with the steering wheel with the right hand. Shuffle the wheel from hand to hand, rotating the left hand up toward the 12 o'clock position.

3. Simultaneously maintain contact with the steering wheel with the right hand, and slide the right hand into the 12 o'clock position.
4. Make sure that neither hand crosses the steering wheel's top (12 o'clock position) or bottom (6 o'clock position). The right hand stays on the right side of the wheel; the left hand stays on the left side of the wheel.

To turn left, move the left hand into the 12 o'clock position at the top of the steering wheel and pull the steering wheel down in a smooth motion into a left turn:

1. Simultaneously maintain contact with the steering wheel with the right hand, and slide the right hand into the 6 o'clock position.
2. Continue to turn as the hands meet at the 6 o'clock position by gripping with the right hand and loosening the left hand while maintaining contact with the steering wheel with the left hand. Shuffle the wheel from hand to hand, rotating the right hand up toward the 12 o'clock position.
3. Simultaneously maintain contact with the steering wheel with the left hand, and slide the left hand to the 12 o'clock position.
4. Make sure neither hand crosses the steering wheel's top (12 o'clock position) or bottom (6 o'clock position). The left hand stays on the left side of the wheel; the right hand stays on the right side of the wheel.

It is imperative to use this steering technique, because it helps maintain control of the steering wheel, especially when the caster effect occurs. The **caster effect** is the tendency for a vehicle traveling forward to straighten from a turn when the driver releases the steering wheel. Using the shuffle steering technique allows the caster effect to work for you rather than against you. The caster effect does not apply when driving in reverse.

HL132.3. Identify the caster effect

Optical Driving and Hand-Eye Coordination

Optical driving is looking in the desired direction of travel to avoid an obstacle and to avoid steering in the direction of the obstacle. This is also referred to as **eye-targeting**.

1

Unit 3: Principles of Driving Lesson 3: Braking Techniques

Lesson Goal

At the end of this lesson, you will know proper braking and acceleration techniques.

To complete the driving exercise successfully, you must learn and demonstrate the proper acceleration and braking techniques. With proper braking technique, the driver presses the brake pedal with increasing pressure to slow or stop as quickly as possible.

When practicing and demonstrating proper braking, do the following:

1. Rotate the right foot from the accelerator to the brake while leaving the heel on the floor.
2. Place the ball of the right foot on the center of the brake pedal.
3. Apply increasing pressure to the brake pedal.
4. Increase pressure on the brake pedal to stop the vehicle in the shortest distance.

HL133.1. Explain principles of proper braking

Anti-lock Braking System (ABS)

Enhancement to the conventional braking system called **anti-lock braking system (ABS)** is now standard equipment on vehicles. This type of motor vehicle braking system electronically prevents the wheels from locking by rapidly applying and releasing the brake while allowing the driver to remain in control of the steering. ABS and non-ABS work alike under normal (gradual) braking pressure. When an emergency (hard or sudden) stop is required, the two systems operate differently.

When a driver applies a steady downward pressure to the brake pedal, the computerized ABS automatically slows and stops the vehicle. To stop a vehicle equipped with ABS quickly, apply the brakes hard to engage the ABS. You will feel the brake pedal pulsing, which is a normal condition indicating that the vehicle is in ABS mode.

Proper Acceleration

The following steps explain the proper technique for accelerating a vehicle while avoiding loss of traction and controlling weight transfer:

1. Position the foot properly; rest the right heel at the base of the accelerator.
2. Rest the ball of the right foot squarely on the accelerator pedal.
3. With the ball of the right foot, apply pressure to the accelerator, pressing it down.

4. Apply smooth consistent pressure to the accelerator until the desired acceleration rate has been reached.
5. Apply proper pressure without losing traction and passing the point of incipient spin.
6. Release the pressure on the pedal as needed to control loss of traction or decrease the acceleration rate.

Remember that proper acceleration is best done in a smooth, straight line using steady pressure. If the tires begin to spin, immediately release the accelerator; this stops the tires from spinning. You can then smoothly reapply the accelerator and move the vehicle forward.

1

Unit 3: Principles of Driving Lesson 4: Vehicle Cornering

Lesson Goal

At the end of this lesson, you will know how to enter an intersection safely and properly at normal driving speeds and make a 90° turn to the right or left.

Cornering requires entering an intersection safely and properly at normal driving speeds and making a 90° turn to the right or left. Proper braking is an important element of negotiating a turn. Officers should also recognize the apex of the turn and properly adjust the vehicle's location to fully use the available space. Steering input with inappropriate speed keeps a vehicle from going in a straight line.

You must demonstrate effective cornering by making right and left turns following these steps:

1. Drive straight forward when approaching the turn.
2. Reach and maintain a speed of 35 mph.
3. Be sure to operate turn signals before the turn.
4. Brake to a safe speed before entering the turn. Complete braking while driving straight forward.
5. Align the vehicle in the appropriate traffic lane outside the turn or corner.
6. Determine the apex or path of travel through the turn.
7. To ensure steady weight transfer, maintain a constant speed while entering the turn.
8. Provide steering input; shuffle steer through the curve.
9. Look through the turn to observe and react to obstacles, hazards, and road conditions.
10. Begin accelerating while exiting the curve.

HL134.1. Position the vehicle for entry into a turn or corner

1

Unit 3: Principles of Driving Lesson 5: Vehicle Backing

Lesson Goal

At the end of this lesson, you will know how to safely and effectively back up your vehicle.

Many crashes occur when drivers are backing up. The ability to back a vehicle safely out of a particular location or situation is an officer safety skill. If you fail to back the vehicle properly, you might hit a person or an object. The majority of law enforcement vehicle crashes are a result of backing into a fixed object. Some vehicles have limited visibility to the rear. Use side mirrors or installed backup cameras as necessary.

All dynamics apply to the vehicle in any direction of travel. In reverse, drive slowly to compensate for an increase in weight transfer and a decrease in your field of vision. The rear brakes, which handle a great amount of weight transfer while driving in reverse, are not as efficient as the front brakes. Therefore, the ability to stop when backing is significantly lowered.

Driving in reverse requires less steering input to produce a larger change in direction. You will find this especially evident when driving the Reverse Serpentine course.

Large or quick steering movements may cause you to lose control of the vehicle. You will find this evident when driving the Tactical Backing course.

You must demonstrate effective backing of a law enforcement vehicle. When backing, perform the following steps:

- Press the brake with the right foot while shifting the transmission into reverse.
- Turn the upper body to the right, placing the right arm on the top of the upper portion of the passenger seat.
- Look through the rear window; scan the area behind the vehicle.

HL135.1. Identify the pivot position when backing up a vehicle

- Place the left hand in the 12 o'clock position, and, with upper body turned, release the brake, and slowly accelerate.
- Back the vehicle while steering, using the left hand and a smooth motion.
- When driving in reverse, consider the option of using mirrors.
- Except in an emergency, always back slowly.

HL135.2. Identify how to steer in reverse with your left hand while slowly accelerating and maintaining control of the steering wheel

1

Unit 4: Lights and Sirens

Lesson 1: Night and Subdued Light Driving

Lesson Goal

At the end of this lesson, you will understand factors that influence a driver's performance while operating a vehicle during reduced lighting or nighttime hours and certain techniques to use to improve vision while driving at night or under reduced visibility.

Although only one-third of all driving is done at night, more than half of all fatal crashes occur during hours of darkness. This happens because drivers believe that they can drive as fast at night as they can during the day. This perception and false confidence, combined with reduced visibility, create a more hazardous driving environment.

Several factors may influence driving performance at night:

- overdriving of vehicle headlights—the most common night driving error is to overdrive the distance the vehicle's headlights project. According to s. 316.237, F.S., vehicle headlights should reveal a person 450 feet away with the high beams and a distance of 150 feet with the low beams. When increasing speed, you may not be able to stop your vehicle within the visible area that the vehicle's headlights create. This factor is most important when driving in emergency mode. High speed increases stopping distance and decreases reaction time.
- reaction distance—reaction time remains the same whether driving during the day or night. However, lack of light increases the time required to initially observe a hazard.
- field of vision—at night, peripheral vision decreases. Less light narrows the field of vision.
- loss of visual cues—at night, it is easy to lose many visual cues that are available during the day, which lowers the ability to judge distance and the speed of oncoming traffic.
- glare—glare from oncoming vehicles or other outside sources can temporarily blind a driver. When driving at night, human eyes adjust to the lack of light and use night vision. When the light suddenly changes, eyes need time to readjust.
- emergency lights—when driving in emergency mode, emergency lights can increase the amount of glare encountered. The high intensity of the emergency lights easily reflects off objects.

HL141.1. Identify types of sensory influences the driver may experience at night

You can use these techniques to improve your vision while driving at night and to react properly to oncoming vehicular traffic:

- reducing speed and not looking directly at the headlights of oncoming vehicles
- looking off to the shoulder of the roadway to protect night vision while using the white line at the edge of the road for guidance
- dimming the headlights for oncoming traffic to reduce glare and protect the night vision of other drivers
- using low beams while driving in fog or smoke during the day or at night, which limits the amount of glare reflected back at the driver
- reducing glare by controlling all interior lights

HL141.2. Identify techniques that may improve vision at night

1

Unit 4: Lights and Sirens

Lesson 2: Operating in Emergency Mode

Lesson Goal

At the end of this lesson, you will know various safety issues and expected psychological and physiological effects to consider while operating a law enforcement vehicle in emergency mode.

The decision to operate a law enforcement vehicle in emergency mode is one an officer must never take lightly. Driving in emergency mode can place you and the public at risk. Responding in emergency mode or pursuing a vehicle is among the most dangerous driving situations, because officers may experience psychological and physiological effects.

You must follow specific Florida laws that relate to the operation of emergency vehicles. Individual agency policies can add further restrictions to state law on when and how you will operate vehicles in emergency mode. You must revert to your specific agency's policies relating to emergency mode operation. Court opinions and legislation continuously change laws. Consult your supervisors and your agency legal advisers about issues specific to your respective agency to stay up to date.

After deciding to drive in emergency mode, an officer must be continuously concerned about certain safety factors while responding.

Driving in Emergency Mode

Many concerns accompany operating a vehicle in emergency mode. Remember to always control your vehicle by using proper steering, braking, and accelerating techniques. It is possible to respond rapidly and safely when using good judgment and good driving techniques.

Responding to an emergency call causes stress, which can lead to many psychological and physiological reactions. The psychological stress of an emergency call may cause you to exceed your ability or your vehicle's ability in trying to catch the violator at any cost or get there before anyone else.

HL142.1. Identify possible psychological stress on the driver in emergency mode

Physiological effects are the measurable changes to normal body functions. These include tunnel vision, selective hearing, increased heart rate, time distortion, and loss of spatial awareness or fine motor skills. It is important for you to be aware of these effects and keep them under control when responding in emergency mode.

HL142.2. Identify possible physiological effects on the driver in emergency mode

Several techniques help officers respond safely in emergency mode. You must use all available emergency equipment properly. You are responsible for ensuring a safe response. Make decisions about the use of lights based on the response to the call, not on extraneous factors such as concerns about waking people during the night or causing inconvenience to other drivers on the road. You should also realize that a siren

is not a protective shield. Many motorists drive with their radios and air conditioners on and their windows up, or have soundproof cars and it is possible that they do not hear the siren.

You must approach intersections correctly, yielding or stopping when the situation warrants to ensure that you adhere to due regard for the safety of others when requesting right-of-way. Make eye contact with other drivers at an intersection whenever possible before driving through that intersection.

Maintain proper following distances from privately owned vehicles, as well as other emergency vehicles. If you follow a vehicle too closely, it is possible that the driver will not see your lights in the rearview mirrors.

Always offset your vehicle to the left of the available roadway but within your lane. That makes your vehicle more visible to the vehicles you are following, as well as those approaching from the opposite direction. Following this position should enable the driver in front of you to see your vehicle in both their rear and side mirrors.

Always keep in contact with the dispatcher and other responding units when driving in emergency mode.

HL142.3. Identify safe emergency driving techniques

1

Unit 4: Lights and Sirens Lesson 3: Pursuit Considerations

Lesson Goal

At the end of this lesson, you will know the case law that influences policy regarding pursuits. You will know how to communicate during a pursuit and how to identify the possible conclusions to a pursuit.

The goal of pursuit is to apprehend a fleeing violator. You cannot control the violator's driving or the route the violator takes. While your own driving will be a response to the violator's actions and route, you should never let a violator's driving dictate your own.

An officer's decision to initiate a pursuit depends on the officer's knowledge of agency policies and the Florida Statutes, as well as the conditions and circumstances at the time. You must weigh the risks to yourself and the public against the benefits of apprehending a violator after a pursuit.

HL143.1. Identify how to make a decision to operate in emergency mode

Pursuit is an active attempt, by driving an authorized emergency vehicle (with emergency equipment activated), to apprehend occupants of a moving vehicle if the driver of such occupants' vehicle increases vehicle speed, takes other evasive actions, or refuses to stop in an apparent attempt to avoid apprehension. Be aware of your duties to the public as they relate to emergency and pursuit driving. You must consider your decision to engage the fleeing vehicle, as well as the consequences that might come of beginning a pursuit and terminating it, if the violator then continues to operate the vehicle recklessly.

HL143.2. Define pursuit

Court cases address officers' duty to care for the public while operating law enforcement vehicles. In *DeShaney v. Winnebago County Department of Social Services*, 489 U.S.189 (1989), the U.S. Supreme Court stated that an officer or agency has no duty to guarantee a person's safety unless a special relationship exists between the law enforcement and that person. This type of relationship exists, for example, between law enforcement and a person in custody. After law enforcement restricts the person's freedom of movement, they assume responsibility for that person's safety and must keep the person reasonably free from harm.

Pursuit situations generally mean that you begin a pursuit but have no duty to continue it. When you terminate a pursuit, it is unlikely that you will be liable if the violator continues to drive recklessly. According to the Florida case *City of Pinellas Park v. Brown*, 604 So.2d 1222 (Fla. 1992), law enforcement has a duty to protect the public when choosing to continue a pursuit.

In the *Pinellas Park* case, officers and deputies from three jurisdictions engaged about 15 law enforcement vehicles in a pursuit on a main roadway. All officers and deputies violated department policies by continuing the pursuit. Another officer driving an unmarked law enforcement vehicle entered the roadway from a side street in an attempt to join the pursuit. At the same time, a vehicle occupied by two sisters waited to cross the roadway. Without warning the women, an officer entered from a side street and turned right

onto the main road in an effort to get ahead of the pursuit. When the light turned green, the sisters pulled into the path of the pursued vehicle. Both sisters and the fleeing driver were killed.

The Florida Supreme Court held that the law enforcement action in this case created a risk to the public that was foreseeable and preventable. The Court did not prohibit law enforcement pursuits; it simply stated that any law enforcement decision to start or continue a pursuit is subject to court review under the doctrine of negligence, not just as a use of force under the Fourth Amendment. If law enforcement has a duty of care to a resident and if law enforcement action or inaction causes injury or death to that person, the court must determine whether law enforcement acted reasonably. The Court also noted that in modern times, “losing” a vehicle during pursuit does not mean law enforcement will never find the vehicle nor bring its occupants to justice. It is not always a matter of “catching them now or never.” Law enforcement may identify a violator for apprehension later. Following agency policies is the best way to avoid liability in a pursuit scenario.

In *Brower v. County of Inyo*, 489 U.S. 593 (1989), the U.S. Supreme Court addressed the issue of deadly force in law enforcement pursuit. In that case, the Court held that certain pursuit tactics might result in a claim of a constitutional violation as a seizure by deadly force. In *Brower*, law enforcement set up a roadblock by parking an 18-wheeler around a curve in the roadway and placing a law enforcement vehicle with its headlights positioned to blind Brower as he drove around the curve. The combination of these caused Brower to strike the stationary truck, resulting in his death.

In reaching its opinion, the Court relied heavily on its earlier decision regarding deadly force in *Tennessee v. Garner*, 471 U.S. 1 (1985). The Court was concerned with the use of deadly force to apprehend a person for committing a non-dangerous crime and drew a distinction between the act of pursuing and the act of blocking or seizing a person. Brower clearly was seized; law enforcement actively tried to block him, so responsibilities associated with seizure applied to their actions.

In *Brower*, as in *Garner*, the Court took the position that deadly force should not be used to apprehend citizens for minor offenses such as traffic violations. This distinction also highlights the relationship between the violator’s and officers’ actions. When merely pursuing, officers have no special relationship with the violator and assume no responsibility for the violator’s injury or death. However, if the officers take affirmative steps to halt or force the fleeing individual to stop, whether by roadblock or physical contact between vehicles, the officers are responsible for the results. Their actions become a seizure under the Fourth Amendment.

The issue of using a law enforcement vehicle as deadly force is best addressed in specific policy. When law enforcement intentionally use a vehicle as a weapon, it becomes a deadly weapon. An agency’s use of force policy governs the vehicle’s use just as it governs any other weapon of opportunity. Questions often arise regarding use of tactics such as ramming. Another tactic, Pursuit Immobilization Technique (PIT), is discussed later in this lesson.

Another issue is the standard for judging whether you are responsible for injury or death caused by pursuit or emergency response. In *County of Sacramento v. Lewis*, 523 U.S. 883 (1998), the U.S. Supreme Court adopted the standard referred to in earlier cases involving force. Officers may be liable if their actions are sufficient to “shock the conscience” of the Court. This standard must be decided on a case-by-case basis. The Court distinguished between mere carelessness or negligence, deliberate indifference, and the intent to cause harm. To “shock the conscience” under the conditions of a high-speed pursuit, the officer must have intended to cause harm to the violator without justification for the use of deadly force.

Although the *Lewis* decision involved a minor offense that resulted in the death of a passenger on a motorcycle, the Court again recognized the dynamic nature of some law enforcement activities. Writing for the majority, Justice Souter wrote, “A law enforcement officer in deciding to give chase must balance on one hand the need to stop a suspect and show that flight from the law is no way to freedom, and, on the other, the high-speed threat to everyone within stopping range, be they suspects, their passengers, other drivers, or bystanders.” This “balancing test” is what officers must consider when deciding to engage in, continue, or terminate a pursuit.

In 2007, the U.S. Supreme Court decided another pursuit/use of force case in *Scott v. Harris*, 550 U.S. 372, 127 S.Ct. 1769 (2007). Deputy Scott pursued Victor Harris for a traffic offense at high speeds for several minutes before attempting to terminate the chase using PIT, though at much higher speed than was recommended by PIT training. Writing for the majority, Justice Scalia said, “Whether or not Scott’s actions constituted application of ‘deadly force,’ all that matters is whether Scott’s actions were reasonable.” Scalia disagreed with Harris’ argument that the public endangered by the chase could have been protected if Scott and the other officers had just stopped chasing Harris.

Because Florida officers are bound by the *Pinellas Park v. Brown* decision, which imposed a negligence standard for injuries caused during chases, the *Scott* decision does not give the green light for an “anything goes” approach to pursuits. However, under the Fourth Amendment’s use of force analysis, injury to the fleeing driver will generally not be considered to be the result of unreasonable force.

HL143.3. Explain case law regarding operating a vehicle in emergency mode

Once engaged in a pursuit, you must notify dispatch that you are starting or stopping a pursuit. You must activate and properly use all available emergency equipment during the pursuit. You must keep in contact with dispatch and other assisting units during the entire pursuit, notifying them of any changes or additional help needed. When engaged in a pursuit, control your vehicle as well as speed by pacing the violator’s vehicle, using the six-second rule to establish a safe distance between your vehicle and the violator’s vehicle. Practice good driving techniques, and keep in mind that the chance of brake fading or loss of traction increases as the pursuit continues. Also remember that it is necessary to alter driving methods to accommodate nighttime conditions. Immediately end a pursuit when the risk to the public or yourself (or other officers) outweighs the benefit of apprehending the violator.

HL143.4. Describe basic steps for conducting a vehicle pursuit

A pursuit has several possible conclusions including:

- The violator stops voluntarily, and the pursuit ends.
- The violator is stopped involuntarily, resulting in the violator’s apprehension or death.
- You end the pursuit without apprehending the violator, permitting the violator to escape, at least temporarily.
- The violator crashes.
- You crash.

HL143.5. Identify the conclusions to a pursuit

Pursuit Termination Techniques

Some Florida law enforcement agencies use tactics and technologies to conclude vehicular pursuits more safely and more rapidly. These agencies have training and policies that teach and govern the application of forcible-stop techniques.

ROADBLOCKS

A **roadblock** is the use of vehicles, barricades, cones, or other objects to block traffic flow partially or completely. Its purpose is to demonstrate overwhelming law enforcement superiority and position so that the violator will stop and surrender. According to *Brower v. County of Inyo*, a roadblock must be positioned so the violator has sufficient time to stop. Using a roadblock poses a hazard to you, other motorists, pedestrians, and the violator. Therefore, it is necessary to use care and caution when choosing a location for a roadblock and while setting it up.

Appropriate locations for roadblocks include areas that provide a clear view of the roadblock from both sides and highways, streets, or roads. Inappropriate locations for roadblocks include locations over the crest of a hill and locations in, on, or around a curve. Never select a location where the violator has no warning that the crash may occur, unless the use of deadly force is necessary. Never use non-law enforcement equipment to block the roadway, and never remain seated in vehicles used to obstruct the roadway. This places you in extreme danger. Communication between officers establishing the roadblock and officers in pursuit is vital. All officers involved in the pursuit should be informed of the roadblock technique to be used.

TIRE DEFLATION DEVICES

Many brands of tire deflation devices are available for law enforcement agencies. The employing agency's policies and training will provide guidelines for using tire deflation devices. All tire deflation devices share common characteristics:

- hollow spikes that puncture a vehicle's tire and allow air to be released, causing the tire to deflate
- a track or mat base
- some form of deployment

PURSUIT IMMOBILIZATION TECHNIQUE (PIT)

Some law enforcement agencies use the **Pursuit Immobilization Technique (PIT)** to stop a violator's vehicle by using the law enforcement vehicle to apply force to either the rear right or left side of the violator's vehicle to end the pursuit. You may use this technique only if you are properly trained and are following your agency policies.

Pursuit Reporting

When you are involved in a pursuit, promptly report the details of the pursuit to the agency. Policies on reporting differ between agencies, but prompt reporting is always required.

2

FIRST AID FOR CRIMINAL JUSTICE OFFICERS

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Unit 1: Prepare to Respond to a Medical Emergency

Lesson 1: Introduction to First Aid

Lesson Goal

At the end of this lesson, you will be able to describe your responsibilities within the Emergency Medical Services (EMS) system and be able to provide emergency first aid according to the Criminal Justice Standards and Training Commission (CJSTC) standards.

As the first officer to respond to the scene of an emergency, you can make a difference in a life-threatening situation. By applying your knowledge, skills, and abilities, you can stabilize patients and keep things from getting worse until EMS arrives.

Emergency Medical Services

The **EMS system** is a network of trained professionals linked to provide advanced, out-of-hospital care for victims of sudden traumatic injury or illness.

The roles and responsibilities of criminal justice officers differ from those of other professional out-of-hospital caregivers. At the scene of an emergency, the criminal justice officer ensures the safety of everyone, alerts the EMS system, and is usually the first person to provide basic first aid to patients. Advanced, specialized training prepares paramedics, emergency medical technicians (EMTs), and other responders to provide more comprehensive care than criminal justice officers can provide. The EMS system has teams of highly skilled people trained to respond to emergencies daily.

HL211.1. Describe the duties of the criminal justice first-aid provider within the Emergency Medical Services (EMS) system

Criminal Justice First-Aid Provider Responsibilities

When you first arrive on the scene, your initial duty is to determine if the scene is safe for you and other responders to enter. Always maintain awareness of your surroundings. After ensuring scene safety, your next concern as a criminal justice first-aid provider is the patient.

Your first-aid duties may include:

- Wearing personal protective equipment (PPE) to help prevent infection
- Gaining access to a patient (in some emergencies, you may need to move one patient to reach a more critically injured patient)
- Assessing a patient for life-threatening injuries
- Alerting EMS providers and relaying all relevant medical information

- Providing a patient with basic medical care based on needs you identified during your assessment
- Remaining with a patient until EMS providers relieve you and transport the patient to an advanced medical facility

Stay calm. Some emergencies are life-threatening or involve emotionally charged situations with patients, family members, and bystanders. Let everyone know more help is on the way. Maintaining your composure can help you to assess the scene, set priorities, and establish that you are in control of the scene. Communicate clearly with the patient and responding EMS personnel so that there are no misunderstandings. Try to work efficiently, but avoid working so quickly that you make mistakes or have misunderstandings with others.

As a criminal justice officer that provides basic first aid, you play a vital role in delivering emergency first aid to patients who experience sudden illness or injury. What makes your role so vital is that you are responsible for the patient in the first few minutes after the event. The EMS system depends on your actions during those minutes. What you do sets the foundation for the remainder of the rescue. Correcting a breathing problem or stopping bleeding can save a life. In this role, you also help other patients who are not in critical condition by preventing more injuries, performing proper assessments, gathering medical histories, and preparing for EMS personnel to arrive.

HL211.2. Describe the officer's responsibilities for providing emergency first aid according to the Criminal Justice Standards and Training Commission (CJSTC) standards

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Unit 1: Prepare to Respond to a Medical Emergency

Lesson 2: Legal and Ethical Issues

Lesson Goal

At the end of this lesson, you will be able to describe the legal guidelines associated with your responsibilities as a criminal justice first-aid provider to include your duty to act and the role of consent.

Legal and Ethical Responsibilities

Legal and ethical considerations significantly affect your roles and responsibilities as a criminal justice officer, for example, asking for and receiving a patient's consent, or documenting a patient's refusal of treatment. The public expects—and the law requires—you to be competent with behavior that is always above reproach. Placing the public's well-being first during an emergency will help you reduce your likelihood of acting unethically.

HL212.1. Describe the legal and ethical responsibilities for a criminal justice first-aid provider

DUTY TO ACT

According to *Black's Law Dictionary*, a **duty to act** is "a duty to take some action to prevent harm to another, and for the failure of which one may be liable, depending on the relationship of the parties and the circumstances."

Duty to act refers to your contractual or legal obligation to provide care. If you are a correctional officer or a correctional probation officer, you have an obligation to provide care to a patient who needs and consents to care only when you are on duty. If you are a law enforcement officer, you have a duty to act 24/7 within your jurisdictional boundaries.

You also have the duty to render first aid following a use of force incident when you know, or it is evident, that the person detained or in custody sustained injuries or requires medical attention. Provide first aid or seek additional medical assistance when it is reasonable, based on the totality of the circumstances, and without jeopardizing your health or safety. Keep in mind that your responsibility for a suspect's welfare and security does not end once they are restrained. Do not ignore their need for first aid while maintaining security and control of the suspect before EMS arrives. Once a higher level of care arrives, such as a paramedic or EMT, assist as needed while maintaining security and control of the suspect.

Breach of duty occurs when you either fail to act or act inappropriately.

HL212.2. Describe how the duty to act applies to the criminal justice first-aid provider

STANDARD OF CARE

Black's Law Dictionary defines the standard or scope of care as “the degree of care that a reasonable person should exercise.” Under the law of negligence, it is “the conduct demanded of a person in a given situation. Typically, this involves a person giving attention to possible dangers, mistakes, and pitfalls, and ways of minimizing those risks.”

Standard of care is the care that you are expected to provide to the same patient under the same conditions as would any criminal justice first aid-provider who received the same level of training. For example, providing CPR is within your scope of care as a criminal justice officer but performing open-heart surgery is not.

HL212.3. Describe how the standard of care applies to the criminal justice first-aid provider

GOOD SAMARITAN ACT

The **Good Samaritan Act** protects a first-aid provider from liability for emergency care or treatment performed in good faith or emergency care or treatment that would be expected of another first-aid provider with equal training. The Good Samaritan Act does not stop someone from filing a lawsuit; however, it does provide a defense if you performed according to the standard of care for a first-aid provider. Always provide care to the best of your ability. Do not go beyond the scope of and level of your training and maintain the patient's best interest.

The Good Samaritan Act may provide protection for law enforcement officers when they are acting outside their jurisdictions and it may also protect correctional officers and correctional probation officers when they are providing care during off-duty hours.

HL212.4. Describe how the Good Samaritan Act affects the criminal justice first-aid provider

ABANDONMENT

Abandonment is giving up a right or interest with the intention of never again claiming it.

You abandon the patient when you stop providing care without ensuring that the patient continues or begins to receive the same or better care. Continue providing emergency first aid until another medical professional with the same or higher-level training replaces you, or you are unable to continue.

HL212.5. Describe the implications of abandonment for the criminal justice first-aid provider

NEGLIGENCE

Negligence is defined in *Black's Law Dictionary* as “the failure to exercise the standard of care that a reasonably prudent person would have exercised in a similar situation; any conduct that falls below the legal standard established to protect others against unreasonable risk of harm, except for conduct that is intentionally, wantonly, or willfully disregarding of other's rights.”

Negligence occurs if all these conditions are present:

- duty to act—you had a legal duty to the patient (you were supposed to administer care to the patient)
- breach of standard of care—you had a legal duty to act or you failed to act in a certain way (you failed to act in a manner that a reasonable person with the same level of training would act)
- causation—your action or inaction directly resulted in the patient’s injury (makes the distinction that a person’s negligent behavior actually caused the injury)
- damages—the patient was harmed as a result of your actions and the court is able to compensate the patient (usually monetarily) for their injuries

HL212.6. Describe the implications of negligence for the criminal justice first-aid provider

CONSENT

Before you begin to provide first aid, gain the patient’s consent or permission. Fully explain the care you plan to provide and its possible related risks.

- **Expressed consent** is permission given for an action that is clearly and unmistakably stated or written by the patient or legal guardian. Expressed consent is positive confirmation, and can be supported by verbal communication such as, “yes, I consent” or a physical gesture such as a nod in agreement to medical care.
- **Implied consent** is the assumption that a person has given permission for an action because of their actions, rather than explicitly expressed. An example is when a patient rolls up their sleeve for a blood sample or extends their arm for a blood pressure reading.

You make assumptions under implied consent. An example would be a situation where an unresponsive patient is at risk of death, disability, or deterioration of their condition and you would assume they would agree to life-saving care if able to consent. Implied consent may also apply to conscious patients who do not stop you from providing treatment.

- **Informed consent** is a person’s agreement to allow something to happen, made with full knowledge of the facts, benefits, risks, and alternatives. The information given to the patient must be fully understood by the patient or their legal guardian. A patient chooses a treatment or a procedure after a physician or other health-care provider discloses the information regarding the risks involved. Informed consent involves additional information exchange between the medical provider and the patient than expressed consent does.

To refuse medical care, a patient must be competent. A competent adult is one who can make an informed decision about medical care. The patient must understand your question and the implications of decisions made about medical care. Consider an adult incompetent if they are under the influence of alcohol or drugs with an altered mental status and impaired judgement, have serious illness, have an injury that affects judgment, are mentally ill, or have a developmental disability.

If you do not obtain consent, this can result in a criminal charge of battery. Battery is unlawful touch or strike without the person’s consent.

Competent adults have the right to refuse treatment verbally or non-verbally by shaking their head in a negative manner. Competent adults also have the right to withdraw from treatment after it begins. This is true for patients who consent and then change their minds. It also applies to a patient who is unconscious when treatment begins, regains consciousness and mental competence, and asks you to stop. Make every effort to persuade the patient to consent to treatment. Obtaining consent can be a collaborative effort between officers and EMS to render emergency care for a patient who needs it.

A person involved in a traumatic incident, such as an auto accident, may be emotionally, intellectually, or physically impaired. If the person continues to refuse treatment, keep them under observation until EMS arrives. If the patient loses consciousness and you believe a life-threatening situation exists, immediately begin first aid.

HL212.7. Describe the role of consent when providing emergency first aid

Consent and Minors

In Florida, children younger than eighteen are minors. You must have a parent or legal guardian's permission before providing care. However, if the parent or legal guardian is not available in life-threatening emergencies or emergencies that could result in disability, provide emergency first aid based on the principle of implied consent.

An emancipated minor is either financially independent, does not live with a parent or caregiver, is married, or is an active member of the military. You do not need a parent or legal guardian's permission to treat an emancipated minor. The emancipated minor's consent is enough.

Competent adults have the right to refuse treatment for their children. For situations involving minors in life-threatening emergencies that need medical care and the parents will not consent, refer to your agency's policies and procedures for guidance. As this may be child abuse or neglect, notify the Department of Children and Families by calling the Florida abuse hotline, 1-800-962-2873.

DO NOT RESUSCITATE/ADVANCE DIRECTIVE

A terminally ill patient may have a directive in place, written in advance, and signed by both the patient and a physician. Commonly known as a do-not-resuscitate order (DNR/DNRO) or an advance directive. The DNR/DNRO documents the terminally or chronically ill patient's wish to refuse cardiopulmonary resuscitation (CPR) if they stop breathing or if their heart stops beating. An advance directive documents the patient's request to withhold specific medical care. Licensed medical professionals, EMTs, or paramedics, can be legally bound to honor a DNR/DNRO or advance directive; this however, does not apply to criminal justice officers. As a criminal justice first-aid provider, you have a duty to act, regardless of a DNR/DNRO. You cannot withhold CPR or first aid. Make sure to further consult your agency's policies on DNR/DNROs.

HL212.8. Describe the role of a Do Not Resuscitate Order (DNR/DNRO) for a criminal justice first-aid provider

Medical Alert

You may have a patient who wears an identification bracelet or necklace, carries a card in their wallet, or has a medical alert tattoo that alerts you to a specific medical condition, such as an allergy, epilepsy, or diabetes. On the jewelry or card, you may find a telephone number to call for detailed information about

the patient. This bracelet, necklace, or card is known as a **medical alert**. If the patient can gain access to their phone, ask them for the name of their ICE (In Case of Emergency) contact person who may be able to provide medical alert information.

Be aware that the medical emergency you are responding to and what the patient is experiencing may not always be related to the medical condition on the medical alert. For example, if the patient's medical alert indicates that they are diabetic and the patient is experiencing seizure-like symptoms, do not assume that the patient is experiencing a seizure related to diabetes. They could be experiencing a stroke, or could have head trauma resulting in seizure.

HL212.9. Describe the role of medical alerts or notifications for a criminal justice first-aid provider

HIPAA

A patient's privacy, medical history, condition, and health-care treatment is, by law, confidential information. The patient or a legal guardian must sign a written release before the release of any medical information, except when relaying information to EMS.

The Health Insurance Portability and Accountability Act (**HIPAA**) protects the rights of patients and the release of patient information. Do not release patient health information without a patient signature unless another health-care provider needs patient information to continue medical care or you receive a request to provide patient information as part of a criminal investigation, such as child abuse, elder abuse, or spouse abuse. If you make the report in good faith, related laws often grant immunity from liability for libel, slander, or defamation of character. A legal subpoena may require you to provide patient information in court.

Be careful when discussing a case with anyone to avoid unintentionally providing protected health information about the patient.

HL212.10. Describe the legal and ethical considerations of HIPAA for the criminal justice first-aid provider

Scene Evidence

You may respond to a call that could be both a crime scene and a medical emergency. Examples may include any scene involving suicide, homicide, suspected drug overdose, domestic dispute, abuse, hit-and-run, or robbery. Additionally, any scene involving battery, gunfire, or a weapon, can potentially be a crime scene and medical emergency.

Remember that any item on the scene may be evidence. If you suspect sexual assault or battery, advise the person not to bathe or wash. Explain the importance of preserving evidence. Always show empathy to a victim, as they have just undergone a traumatic event.

HL212.11. Recognize that every call for emergency medical care can be a crime scene

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Unit 1: Prepare to Respond to a Medical Emergency

Lesson 3: Patient Communication

Lesson Goal

At the end of this lesson, you will be able to communicate effectively with patients who have special considerations as you provide emergency first aid.

When responding to a crisis or medical emergency, effective communication helps you get needed information and provides reassurance to patients, their families, and bystanders. By responding in a calm, caring, and polite way, you convey a sense of confidence and assurance to those around you.

When interacting with an emotional patient, family member, or bystander, redirect the conversation to divert their attention. Recognize the person's worries or focus their attention on the immediate situation or a meaningful task. At the same time, do not let yourself get distracted during these interactions and remember to stay focused on treating the patient.

Patients With Special Considerations

You may need to help or render first-aid care to patients who have functional needs or require special considerations. To provide effective emergency first aid to these patients, be aware of their functional needs and disabilities. Take appropriate steps to ensure that communication with patients with disabilities is as effective as communication with patients without disabilities.

PATIENTS WHO ARE BLIND OR HAVE LIMITED VISION

When initially surveying the scene, be alert to signs indicating that the patient is blind or has limited vision. Clues include eyeglasses, a collapsible white cane with a red tip, or a guide dog. If you are unsure, ask the patient if they have limited vision. Although people learn to compensate for limited vision by using other senses, an accident or emergency can cause disorientation. Speak to the patient and provide information about the surroundings. Clearly describe what you will do before you provide care.

A patient with a guide dog may be more concerned about the dog than their own situation. If possible, keep the patient and the dog together. Let the patient direct the dog or tell you how to manage the dog. Remember that most guide dogs are protective. Taking charge of or handling the guide dog without the patient's direction can confuse the dog.

PATIENTS WHO ARE DEAF OR HARD OF HEARING

At the scene of emergency, it may not always be obvious at first when a patient is deaf, hard of hearing, or suffering from temporary hearing loss. Sometimes the patient may indicate to you that they are deaf or specify that they have a hard time hearing.

People who are deaf or hard of hearing use a variety of ways to communicate, and your method of communication may vary depending on the abilities and preferences of the person. In general, the patient has the right to choose their preferred method of communication.

When providing care to patients who are deaf or hard of hearing, attempt to get the patient's attention before communicating (e.g. a gentle tap on the shoulder or hand wave). Identify yourself and show your identification. Face the patient directly when you are communicating. Speak slowly and clearly if you are relying on speech. Make sure you are understood by the patient if you are using writing (sign language grammar may be different from written English).

Continue to keep the patient informed using whatever method you can reasonably accommodate and that works best for the patient, whether that means relying on physical gestures, writing, speech, an interpreter, or some combination. Let the patient know that help is on the way.

PATIENTS WITH DEVELOPMENTAL DISABILITIES

"Developmental disabilities" is a broad term used to describe a group of conditions that affect physical or mental functioning that arise early in life. There are many types of developmental disabilities, such as autism spectrum disorder and Down syndrome, and no one is exactly alike. Remember that you may easily confuse or cause fear in a patient with developmental disabilities. General recommendations for communicating include talking to the patient in a normal tone of voice, talking to them directly, using concrete and specific language, speaking in short sentences, and using simple words. Repeat or rephrase your statements until the patient understands.

PATIENTS WITH DEMENTIA

"Dementia" is "a general term for a decline in mental ability severe enough to interfere with daily life," according to the Alzheimer's Association. Dementia is not a specific illness; it refers to a wide range of symptoms. During a crisis, patients with dementia might experience greater fear, confusion, or frustration than they would otherwise. As a result, they could have trouble following directions and staying focused. Always introduce yourself and assure the patient that you are going to help them. Speak clearly and slowly to help them understand you. When needed, repeat instructions or questions in the same order. Moving patients with dementia to a quieter area can also help them focus and reduce their stress.

PATIENTS WHO ARE JUVENILES

When communicating with younger patients, staying calm is important. Get down to their eye level. Move slowly. Include the children in your conversation and keep them informed about what you are doing. This can help ease their fears.

Often maturity regresses during a crisis. Because you are an unfamiliar person, it may increase their anxiety and fear in an already frightening situation. Avoid removing a child from parents when you do not suspect abuse; separation anxiety can become a major concern. Involve parents or caregivers in the examination and treatment of their child.

PATIENTS WITH MEDICAL EQUIPMENT

Some patients might have chronic illnesses which require them to have complex medical devices such as pacemakers, insulin pumps, surgically inserted breathing tubes, ventilators, and catheters. Do not become

distracted by a patient's medical equipment. Respectfully ask the patient or caregiver how the special equipment works as you provide emergency first aid.

PATIENTS WITH NON-ENGLISH LANGUAGE NEEDS

When providing first aid, you may encounter a patient who has non-English language needs and may need language assistance services to communicate across language barriers. Contact your public safety telecommunicator regarding access to an interpreter. If an interpreter is unavailable or not immediately available, use the same techniques used to communicate with patients who are hard of hearing. Do not ask children on the scene to interpret as they might be too upset at seeing a loved one in distress to be a reliable interpreter. Non-verbal cues, such as hand gestures, may sometimes be the best way to communicate with the patient if no interpreter is available.

HL213.1. Describe how to communicate with patients who have special considerations

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Unit 1: Prepare to Respond to a Medical Emergency

Lesson 4: Human Body

Lesson Goal

At the end of this lesson, you will be able to describe basic human anatomy with a focus on the respiratory and circulatory systems.

Eleven systems interact and work together to make up the body. This lesson will focus on the systems and organs that are most relevant to providing life-saving first aid. By learning about the different systems inside the body, you can better determine the proper care for each individual patient and their specific symptoms.

Respiratory System

The **respiratory system** delivers oxygen to and removes carbon dioxide from the blood. The body can go without oxygen only for a few minutes. The nose, mouth, and throat make up the upper airway that brings oxygen to the lungs (lower airway). The passage that connects the upper airway with the lower airway includes the voice box (larynx) and the windpipe (trachea). At the upper end of this passageway is a small leaf-shaped flap (epiglottis) that keeps food and other foreign objects from entering the windpipe. A large muscle, the diaphragm, below the lungs at the bottom of the chest cavity, helps move air in and out of the lungs.

HL214.1. Describe the function of the respiratory system and its main parts

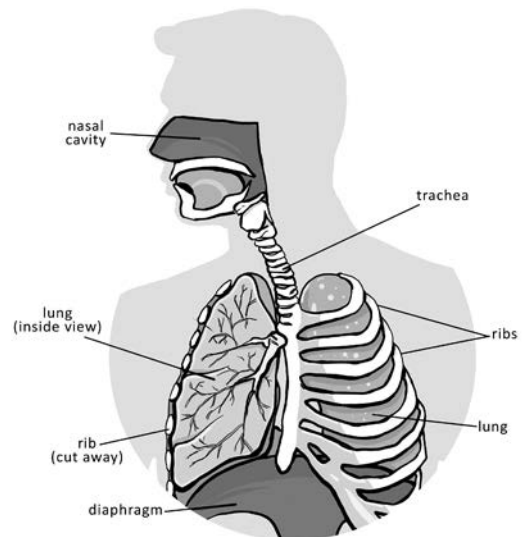


Figure 2-1: Respiratory system

The respiratory systems of infants and children differ from an adult. Their tongues take up proportionally more space in their mouths. Their windpipes are narrower, softer, and more flexible. Very young infants breathe mostly through their noses and at a faster rate than adults.

Circulatory System

The **circulatory system**, or cardiovascular system, pumps blood throughout the body. It delivers oxygen and nutrients to and removes waste from the body's tissues. Basic parts of the circulatory system are the heart, veins, capillaries, arteries, and blood. Positioned behind the breastbone (sternum), slightly to the left in the chest cavity, is the heart, a hollow, muscular organ about the size of your fist. The circulatory system is a closed system, and the blood is under constant pressure and circulation from the heart's pumping action.

Blood vessels are a system of tubes through which blood flows. Vessels called arteries carry blood away from the heart to the rest of the body. Vessels called veins carry blood back to the heart. Throughout the body, small vessels called capillaries connect arteries to veins. The following major arteries determine blood flow and are used to feel for a patient's pulse:

- carotid: supplies blood to the head and neck, felt on either side of the neck
- brachial: supplies blood to the upper arm, felt on the inside of the upper arm
- femoral: supplies blood to the upper thigh and leg, felt in the groin area
- radial: supplies blood to the lower arm and hand, felt at the thumb side of the wrist

HL214.2. Describe the function of the circulatory system and the four major arteries



radial pulse



carotid pulse



brachial pulse

Figure 2-2: Taking a pulse

Skeletal System

The **skeletal system** is the supporting framework for the body, giving it shape and protecting vital organs. The main components of the skeletal system are: the skull, spinal column, shoulder girdle, rib cage, pelvis, lower extremities, and upper extremities.

- The skull—houses and protects the brain. It also gives shape and function to the face.
- The spinal column—protects the spinal cord and is the primary support for the entire body. It consists of separate bones called vertebrae that stack one on top of each other and are held together by muscles.
- The shoulder girdle—consists of the collarbone and shoulder blades.
- The rib cage—contains the sternum and ribs. It protects the heart, lungs, liver, and spleen.
- The pelvis—protects the reproductive organs and supports the organs in the lower abdominal cavity.

- The lower extremities—consist of the upper leg, lower leg, ankle, and foot.
- The upper extremities—consist of the upper arm, lower arm (forearm), wrist, hand, and finger bones that comprise the arm.

HL214.3. Describe the function of the skeletal system and its main parts

Muscular System

The **muscular system** gives the body shape, protects internal organs, and allows for body movement. The body contains three types of muscles. Muscles used for deliberate acts, such as chewing, bending, lifting, and running, are voluntary muscles. These are muscles attached to the skeleton and under the control of the nervous system and brain. A person can contract and relax these muscles. Involuntary muscles, or smooth muscles, carry out many automatic body functions. They are in the walls of the tube-like organs, such as ducts, blood vessels, and the intestinal wall. A person does not consciously control these muscles. Involuntary muscles called cardiac muscles, found only in the heart, work constantly to expand and contract the heart.

HL214.4. Describe the function of the muscular system and types of muscle

Nervous System

The **nervous system** controls voluntary and involuntary body activity. It also supports higher mental functions, such as thought and emotion. It lets a person be aware of and react to the environment and keeps the rest of the body's systems working together. It has two main systems:

- The **central nervous system**—consists of the brain and the spinal cord. Its components are the body's "mainframe computer" and processing center. This is where all communication and control originate.
- The **peripheral nervous system**—includes nerves that connect to the spinal cord and branch out to every other part of the body. These nerves serve as a two-way communication system. Some carry information from the brain and spinal cord to the body. Others carry information from the body back to the brain.

HL214.5. Describe the function of the nervous system and its two main parts

Skin

The **skin** is the largest organ of the body. It protects everything inside the body, provides a barrier against bacteria and other harmful substances and organisms, and regulates body temperature. Acting as a communication organ, the skin also receives and relays information about heat, cold, touch, pressure, and pain. It transmits this information to the brain and spinal cord through nerve endings.

HL214.6. Describe the function of the skin

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Unit 1: Prepare to Respond to a Medical Emergency

Lesson 5: Infection Control Basics

Lesson Goal

At the end of this lesson, you will be able to describe the ways criminal justice officers may be exposed to pathogens while performing job-related duties and some practices for reducing and preventing risk of infection.

Exposure to Pathogens

While performing your first-aid duties, you may encounter injured people who are also sick with or are carriers of an infectious disease. Some might display symptoms and others might be asymptomatic and show no symptoms. It is important to take steps to prevent infection, regardless of whether you suspect infection or not. Since there is a higher chance of exposure to potentially infectious materials (such as blood) during first aid treatment, knowing how diseases are transmitted and how to minimize your exposure may help keep yourself and everyone safe while still allowing you to do your job with confidence.

Some of your other job-related tasks may also expose you to substances or materials that contain pathogens—microorganisms, such as bacteria and viruses, that cause disease. These tasks could include property searches and confiscation, frisks and custodial searches, any response to resistance, crime scene investigation, or inmate transport.

Exposure to pathogens can occur from person-to-person contact, indirectly through the air, or through direct contact with infectious materials that contain pathogens. Potentially infectious materials include things like bodily fluids, tissues, and organs.

- **Bloodborne pathogens** are microorganisms in human blood that can cause disease. You can be exposed to them through blood from an open wound while providing emergency first aid or from needlesticks and other sharps-related or sharp-device related injuries.
- **Airborne pathogens** are microorganisms discharged from an infected person by coughing, sneezing, laughing, or close contact. They remain suspended in the air on dust particles, and respiratory and moisture droplets that you may breathe in.
- Bodily fluids are liquids within the human body, such as mucus, saliva, vomit, semen, vaginal secretions, and blood. Always regard bodily fluids that you encounter as potentially infectious or contaminated with pathogens.

Staying aware of your community and knowing the ways infectious diseases can spread can help you prepare accordingly.

HL215.1. Describe how exposure to pathogens occur when providing emergency first aid

Universal Precautions, Body Substance Isolation (BSI), and Standard Precautions

The Centers for Disease Control & Prevention (CDC) developed universal precautions as a set of procedures designed to prevent transmission of bloodborne pathogens to first-aid or health-care providers. Universal precautions instruct providers to assume that the blood and bodily fluids of all patients are potentially infectious.

Body substance isolation (BSI) goes further than universal precautions, and is the practice of isolating yourself from all body substances (not just blood and bodily fluids) of patients undergoing medical treatment. It is critical in preventing disease transmission. BSI mainly relies on the use of personal protective equipment (PPE) and practicing personal behaviors that reduce risk.

In more recent years, the CDC has recognized the need for new infection control measures to address the spread of airborne pathogens as well as bloodborne pathogens, as many highly infectious diseases can be transmitted through air or droplets and not just body substances. These new measures are referred to as standard precautions by the CDC. They include elements of universal precautions and BSI and are meant to apply to the care of all patients, regardless of suspected or known infection status.

Like universal precautions and BSI, all bodily fluids (except sweat), bodily waste, and exposed wounds should be treated as potentially infectious under standard precautions. Standard precautions emphasize the practice of hand hygiene throughout patient care, not just if hands are visibly soiled or when removing gloves. The role of PPE, such as facial protection, gloves, and protective clothing, is also more important than ever in preventing transmission of airborne and bloodborne pathogens. With standard precautions, the focus is not only on protecting health-care providers from infection, but patients as well, by ensuring that health-care providers do not infect patients during treatment or through contaminated equipment.

Refer to your agency policy and procedures regarding universal precautions, BSI, and standard precautions.

HL215.2. Describe the importance of universal precautions, body substance isolation (BSI), and standard precautions when providing emergency first aid

Practices to Reduce Risk

HAND HYGIENE

Your hands can come into contact with potentially infectious materials or contaminated surfaces throughout the day. Practicing hand hygiene is one of the best ways to prevent infection and it works by helping to remove or inactivate pathogens and harmful substances that are on your hands. It includes handwashing or hand disinfection with an alcohol-based product. Routinely practice hand hygiene during your work shift and at the end of your shift and whenever you are treating a patient.

When washing your hands with antimicrobial or plain soap and water, first wet them with water. Apply soap and rub your hands together vigorously for at least 20 seconds. Lather every part of your hand. Rinse your hands with water, and thoroughly dry them with a disposable towel.

Use the towel to turn off the faucet.

If your hands are not visibly soiled, and you do not have access to soap and water, use an alcohol-based hand rub or hand sanitizer with at least 60% alcohol to decontaminate them. Apply the hand sanitizer to one palm and rub your hands together until they are dry. If you have not had contact with blood or other body fluids, consider using sanitizing hand wipes as alternatives to washing with plain soap and water.

HL215.3. Describe the importance of practicing hand hygiene to reduce the risk of infection when providing emergency first aid

USE OF PERSONAL PROTECTIVE EQUIPMENT

Always use appropriate PPE in any emergency where you are providing first aid, as it is a barrier against infection. PPE includes eye protection, gloves, protective clothing (gown or coveralls, sleeves, shoe covers), masks or shields, and biohazard bags. Make sure to practice hand hygiene after removing PPE.

HL215.4. Describe the importance of using personal protective equipment (PPE) when providing emergency first aid

Gloves

Gloves minimize skin contact with blood or other body fluids. Always use gloves if you expect to have physical contact with someone; if you have skin contact with people who are bleeding or have open sores, rashes, blisters, burns, or other broken skin conditions; and if you have open cuts, sores, burns, rashes, or other broken skin conditions on your hands.

Standard precautions apply in any situation where you clean and decontaminate spilled blood or other bodily fluids, handle bodily fluids or blood-contaminated equipment (such as bloody handcuffs), or handle containers (such as red or yellow bags) labeled biohazardous or biomedical waste (note that anything that is placed into a red bag is not retrievable).

How you remove disposable gloves is critical in maintaining BSI and standard precautions. See Figure 2-3 for instructions on using and removing disposable gloves. Follow hand hygiene procedures immediately after taking off gloves.

HL215.5. Describe how to put on, properly remove, and discard disposable gloves

Using Disposable Gloves

Before putting on protective gloves, remove any jewelry that may puncture the material of the gloves. If the material of the gloves is fragile, it may be important to trim your fingernails to avoid puncturing the gloves while you are putting them on, using them, or taking them off.

If you are going to be dealing with known hazardous materials, try to obtain and use the gloves that will resist damage or permeation by a wide range of materials and consider using two pairs of gloves with different qualities.

Removing Disposable Gloves

Removing gloves without contaminating your hands takes a technique that can easily be learned with a little practice. Be sure you do not touch your skin with the outside of either glove while doing this.



1. Remove the first glove by grasping it just below the cuff on the palm side and rolling the glove off the fingers.



2. Place the glove in the palm of the gloved hand.



3. Remove the second glove by inserting your ungloved fingers inside the cuff of the palm side without touching the outside of the glove.



4. Begin pushing or rolling the glove off the fingers.
5. Dispose of gloves properly, and wash hands with soap and water.

Figure 2-3: Using and removing disposable gloves

Facial Protection

A filter mask, such as a surgical or respirator mask, can provide protection against airborne pathogens if worn over both your nose and mouth. Goggles or a face shield and a surgical mask can be used to protect eyes, nose, and mouth from splashes or exposure to body liquids.

Maintain PPE Equipment and Supplies

Take proper care of your equipment. As with any other tool you use on the job, be familiar with using and maintaining your medical and safety equipment. If you work with reusable items, clean, disinfect, or sterilize them before the next use. During this process, be sure to wear protective gloves and eyewear, if appropriate. Follow local protocol and department policy when maintaining supplies and equipment.

HL215.6. Describe how to maintain equipment and supplies

DISPOSAL OF BIOHAZARDOUS WASTES

To minimize the danger of bloodborne infections, properly handle and discard materials contaminated with blood or body fluids and other infectious materials. The procedures you use to handle biomedical or biohazardous wastes must comply with Federal Occupational Safety and Health Administration (OSHA) requirements for identifying and segregating blood or waste material saturated with body fluids. OSHA requires color-coded bags or containers for storing biomedical waste, such as red or yellow bags or containers with the international biohazard symbol. Rigid plastic sharps containers secure used syringes and needles to prevent injuries. Follow local protocol or department policies for disposal of wastes classified as biomedical or biohazard.

On the job practices can reduce your risk of occupational exposure to pathogens. If exposure occurs, report your exposure based on your agency policies and procedures.

HL215.7. Describe the importance of proper handling of biomedical or biohazard materials to reduce the risk of infection when providing emergency first aid

Bloodborne Diseases

A disease that can be spread through contamination by blood and other bodily fluids is considered a bloodborne disease. Bloodborne pathogens that are of primary concern include hepatitis B virus, hepatitis C virus, and human immunodeficiency virus (HIV).

HEPATITIS B

The hepatitis B virus causes hepatitis or inflammation of the liver. Outside occupational settings, sexual contact or sharing contaminated needles (through intravenous drug use) primarily transmits the hepatitis B virus. It can also remain infectious in dried bodily fluids for an undetermined time. A person can transmit the disease while asymptomatic or not experiencing obvious symptoms.

HEPATITIS C

Hepatitis C is the most common chronic bloodborne infection in the United States. The hepatitis C virus causes hepatitis C. Direct contact with human blood primarily transmits hepatitis C. This occurs from sharing needles or drug paraphernalia, needle sticks, contaminated sharps, or from an infected person passing it to their child during pregnancy or childbirth. Sexual contact with an infected person can also (rarely) spread the virus.

Signs and Symptoms of Hepatitis

Signs and symptoms of hepatitis may include flu-like symptoms, fever, body aches, fatigue, loss of appetite, and weakness. Later stages of hepatitis include symptoms such as yellowing of the skin or eyes, dark urine, light colored stool, diarrhea, itchy skin, weight loss, severe liver damage, enlarged and tender abdomen, and even death. Not everyone infected necessarily experiences all these symptoms.

HL215.8. Describe how to prevent transmission of hepatitis B and hepatitis C when providing emergency first aid

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

A bloodborne virus that attacks and weakens the immune system is HIV, which can lead to acquired immunodeficiency syndrome (AIDS). Transmission occurs primarily through the following:

- during unprotected sexual intercourse with an HIV-positive person
- when sharing contaminated needles
- from an HIV-positive person to their child during pregnancy, birth, or breastfeeding
- direct contact with blood and certain body fluids, such as semen, vaginal or rectal fluids, or breast milk with a detectable viral load

Someone who is HIV-positive may show no symptoms initially or have mild flu-like symptoms. The person may also live many years without obvious symptoms. Current HIV medicine may help certain people treat HIV and keep their viral load low so that it is undetectable, allowing them to stay healthy and reduce the risk of transmission.

HL215.9. Describe how to prevent transmission of human immunodeficiency virus (HIV) when providing emergency first aid

Airborne Diseases

Any disease that spreads from person to person through the air is an airborne disease. An infected person who talks, sings, coughs, or sneezes into the air, particularly in a relatively confined space, can spread airborne pathogens. These pathogens can enter the body through the nose, throat, sinuses and lungs, affecting the respiratory system. Airborne diseases can require short or prolonged exposure for an infection to occur. For those working in an enclosed correctional environment, a greater opportunity exists for exposure than for other criminal justice personnel.

HL215.10. Describe ways a criminal justice officer can be exposed to airborne pathogens

COVID-19

SARS-CoV-2 is the virus that causes COVID-19. The CDC recommends maintaining physical distance from an infected person, if possible, and practicing proper hand hygiene. Avoid touching your face (eyes, nose, and mouth) with unwashed hands. Follow your agency's policies and procedures regarding exposure control and wearing face masks. If you have contact with someone confirmed or suspected to have COVID-19, follow the current CDC's guidelines for EMS along with your agency's policies and procedures.

HL215.11. Describe ways to reduce the risk of COVID-19 transmission when providing emergency first aid

Signs and Symptoms of COVID-19

COVID-19 affects different people in different ways. Infected people have a wide range of symptoms from mild symptoms to severe illness. If you are showing any of the following emergency warning signs—trouble breathing, persistent pain or pressure in the chest, confusion, inability to wake or stay awake, or pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone—seek emergency medical care.

TUBERCULOSIS

Tuberculosis (TB) is an airborne disease that affects the respiratory system. Brief exposure to a TB source rarely results in infection. TB usually transmits through people who work or live together, sharing close, confined spaces over extended periods of time. Fresh-air and adequate ventilation can reduce the potential for TB to spread. For example, when you transport people who might have TB infection or any other airborne disease, open your vehicle's windows to allow for maximum ventilation.

Signs and Symptoms of Tuberculosis

A person with TB disease may have any, all, or none of the following symptoms: feelings of sickness or weakness, fever, weight loss, night sweats, chest pain, and coughing up blood. If you suspect you or someone you know has signs and symptoms of TB disease, seeing a doctor immediately is important. Without treatment, a person can spread the infection and disease to others.

Other Infectious Diseases

MRSA

Methicillin-Resistant Staphylococcus Aureus (MRSA) is a type of bacteria that is highly contagious and resistant to certain antibiotics. Staph infections, including MRSA, occur most frequently among people in hospitals, health-care facilities, and detention facilities. People are more likely to get an infection if they have contact with open wounds, wound drainage, or nasal secretions of a person infected with MRSA.

Signs and symptoms of a skin infection can be a wound site that is red, swollen, or painful, or an area that is warm to the touch or is draining pus. The site may look like a spider bite, pimple, or boil, and the person may have a fever.

Follow these precautions to avoid transmission of MRSA:

- Shower with soap and water as soon as possible after direct contact with an open sore and use a clean, dry towel.
- Do not share equipment, towels, soap, or any personal care items.
- Do not share drinking containers.
- Do not share ointments, creams, or eye drops.
- Keep your hands away from your nose, mouth, and eyes.
- Keep all skin wounds completely covered with a bandage.
- Wash towels, equipment, uniforms, and any other laundry in hot water and detergent daily.

HL215.12. Describe how to prevent transmission of MRSA when providing emergency first aid

HEPATITIS A

The hepatitis A virus causes hepatitis A. It is highly infectious, but is preventable with isolation precautions and appropriate PPE. While hepatitis B and hepatitis C are spread through contact with blood and bodily fluids, hepatitis A is primarily spread through person-to-person contact through fecal contamination and oral ingestion. Poor personal hygiene, poor sanitation, and intimate contact facilitate transmission. Common-source epidemics from contaminated food and water also occur.

HL215.13. Describe how to prevent transmission of hepatitis A when providing emergency first aid

2

Unit 2: Respond to a Medical Emergency Lesson 1: Scene Size-Up

Lesson Goal

At the end of this lesson, you will know the components of scene size-up, and how to communicate scene information with other responders.

The scene size-up has four components: scene safety, mechanism of injury or nature of illness, the number of victims, and the need for more rescuers and special equipment.

Scene Safety

Scene size-up begins as soon as you receive notice from dispatch or you come upon it. Although it takes only moments to perform, scene size-up is crucial to all involved. Before you enter the scene, take an overall view of what is happening. Always maintain situational awareness. Remember, if you get injured, you may not be able to help anyone else.

If the scene is unsafe and you have no means to make it safe, do not enter. Pay attention to what you see, hear, smell, and feel. Quickly put all your observations together to help determine what you and others need to do to make the scene safe. Only after determining the scene is safe to enter can you help patients.

Possible dangers vary greatly, depending on the scene type. Officers respond to a variety of incidents, including natural disasters, domestic violence calls, nuisance animal calls, and active threat/shooter incidents. Keep in mind that although some scenes may be similar, none is the same. Each presents its own dangers and will require a different level of awareness. There may be times when a patient can render their own first aid based on your verbal direction from outside the scene. This lesson provides information on general approaches for scene safety assessment. You will learn more about providing care while under a direct threat in a separate lesson.

HL221.1. Describe how to determine if the scene is safe to enter before providing emergency first aid

Mechanism of Injury or Nature of Illness

While assessing scene safety, try to determine the mechanism of injury to the patient or the nature of the illness. Simply put, try to determine what happened. What is the patient's chief complaint? Understanding what happened helps you judge the extent of injury or illness.

Are you dealing with a trauma patient or a medical patient? A trauma patient is an injured person while a medical patient is a person who is ill. Knowing the patient type that you have helps you determine the type of first aid or equipment needed. A patient who belongs to both categories requires treatment for each; for

example, a patient that suffered a heart attack or lost consciousness due to low blood sugar that lead to a vehicle crash would need treatment for the trauma injury as well as medical illness.

HL221.2. Describe how to recognize the difference between a trauma patient and a medical patient before providing emergency first aid

Number and Location of Patients

The next size-up component is determining the number of patients. If there is more than one, find out how many and where they are. In certain situations, such as rollover car crashes, patients ejected from a vehicle may be difficult to find. You may need to question other patients, witnesses, or bystanders. When there are multiple patients, you will need to prioritize care and triage patients depending on several factors. You will learn more about how to triage in the lesson on mass casualty incidents and triage.

HL221.3. Describe how to identify all the victims on the scene

Need for More Responders or Special Equipment

Assess the need for and relay a request for more resources based on your local protocol and department policy. In a clear and concise manner, verbally transmit all information gathered during your size-up so that the communications center or responding units are aware of the circumstances. Relay your information about overall scene safety, type and extent of injuries, number of patients, and the need for special units to assist. The quicker you relay information; the faster additional resources can respond. Relaying scene size-up information accurately and quickly better prepares responding units for what they might encounter when they arrive on scene.

HL221.4. Describe how to determine the need for more or specialized help when providing emergency first aid

2

Unit 2: Respond to a Medical Emergency Lesson 2: Patient Assessment

Lesson Goal

At the end of this lesson, you will be able to conduct an initial assessment for level of consciousness, a primary assessment following the MARCH guidelines, a secondary assessment that includes a comprehensive physical examination and patient medical history, as well as how to record and relay vital signs to EMS.

Every patient you encounter in an emergency needs an assessment while you wait for EMS to arrive. Your approach will usually go from general to specific. Begin with a scene size-up and generally observe the patient, scanning for whether they are conscious and whether they are breathing normally.

Following the initial assessment, there are two types of patient assessments—primary and secondary. Perform a primary assessment to identify and address any immediate life-threatening conditions. The secondary assessment is a thorough, full head-to-toe assessment of the patient.

Assess for Level of Consciousness

When you first approach a patient, quickly check their level of consciousness (LOC). Level of consciousness is used to indicate how awake, alert, and aware someone is of their surroundings.

The AVPU scale can be useful when measuring a patient's level of consciousness. AVPU stands for: alert, verbal, pain, and unresponsive.

- **Alert:** Is the patient fully awake? A patient who is alert will be aware of their surroundings and can react to their environment. They are fully awake and their eyes usually open spontaneously.
- **Verbal:** Does the patient respond when you talk to them? A patient who might not seem alert or awake but is verbally responsive will usually respond in some way when you talk to them (such as grunting in response to a question or moving slightly when you prompt them).
- **Pain:** Does the patient respond to pain with a voluntary or involuntary movement? Do they only respond to painful stimulation? If the patient is not alert or verbal, check whether the patient responds when you apply gentle pressure to their hand or shoulder. The patient who is responsive to pain may moan, make a sound, or attempt to withdraw.
- **Unresponsive:** Is the patient not responding to anything at all? An unresponsive or unconscious patient will not respond to any stimuli or make any movements or sounds. If you determine that the patient is unresponsive, follow the steps for CPR.

When determining the LOC of an infant or child, visual assessment is your most valuable tool. If an infant or child appears drowsy or is in obvious respiratory distress, consider this condition serious. This could be a symptom of head trauma or severe infection.

If the patient is a criminal justice officer and they drop below the level of alert, disarm them to avoid possible safety concerns.

HL222.1. Describe how to conduct an assessment for level of consciousness (LOC) and if the patient is alert, verbal, in pain, or unresponsive (AVPU)

Complete the Primary Assessment

Regardless of their LOC, you will need to do a primary assessment of the patient. During the primary assessment, the priority for care is the rapid identification and management of life-threatening conditions. A patient that is unresponsive will not be able to provide information and will immediately require a primary assessment. Make sure to relay all vital information to responding medical personnel.

PRIMARY ASSESSMENT GUIDELINES

Complete the primary assessment in the exact order and priority outlined in the mnemonic MARCH.

MARCH	
Massive hemorrhage	Is the patient experiencing life-threatening bleeding?
Airway	Is the patient's airway obstructed or closed?
Respirations	Is the patient's chest rising and falling?
Circulation	Does the patient have a pulse and blood flow?
Hypothermia/Head injury	Does the patient have low body temperature or decreasing LOC?

HL222.2. Describe the primary assessment guidelines

ASSESS AND MANAGE LIFE-THREATENING INJURIES

Massive Hemorrhage

Massive hemorrhage or uncontrolled severe bleeding is the number one preventable cause of trauma-related deaths. It is critical to focus on stopping life-threatening bleeding first. Very low blood pressure, rapid heart rate, loss of consciousness, paleness, and weak pulse can accompany severe bleeding. If you see signs of severe bleeding, look for the source. Some helpful bleeding control techniques include: applying direct pressure to the wound with a sterile dressing to stop the bleeding, packing the wound, or applying a tourniquet, if possible (in later lessons you will learn more about the techniques for treating and controlling life-threatening bleeding).

HL222.3. Describe how to conduct an assessment for a massive hemorrhage

Airway

An obstructed airway will restrict or completely impede a patient's ability to breathe. Refer to your CPR training to safely clear objects in the airway and the various methods of airway management, such as head

tilt/chin lift and jaw thrust. Do not move forward to the respirations assessment until you establish and maintain an open airway.

HL222.4. Describe how to conduct an assessment for an open airway

Respirations

To assess for respirations or breathing, look for the rise and fall of the chest or abdomen. Does the patient's chest have equal rise and fall on both sides? If the patient is breathing, are they breathing adequately? Look for signs of movement around the mouth and lips. Signs of inadequate breathing include labored or painful breathing, wheezing, snoring, blue or purplish color inside of the lips or fingernails, and skin color changing to a pale or gray color.

Pay attention to the depth or manner of breathing. No visible rise and fall of the chest or abdomen are a sign that the patient has stopped breathing. A patient that is not breathing may rapidly deteriorate into cardiac arrest, meaning the heart is no longer pumping blood throughout the body, which can lead to death. This requires rescue breathing to provide supplemental ventilations with a barrier mask. (Remember that you need an open airway to effectively provide rescue breaths.) Immediately request an automated external defibrillator (AED) and be prepared to perform CPR.

HL222.5. Describe how to conduct an assessment for respirations

Circulation

Assess for blood circulation by confirming the existence of a pulse and note skin color and skin temperature. Find a pulse by placing your fingers (not your thumb) on a pulse point.

- For an infant, always check the brachial pulse on the upper arm, located near the inside of the elbow.
- For an unconscious adult or child, check the carotid pulse on the neck.
- For a conscious adult or child, check the radial pulse on the inside of the wrist, below the thumb. Assume that a conscious patient has a pulse.

Determine the force or strength of the pulse. A patient with no pulse or an absent pulse may be in cardiac arrest and require immediate intervention through effective CPR and an AED.

Another way to assess for adequate circulation is by performing a capillary refill time test. This test is used to rapidly assess changes in blood flow in the arms and legs. Apply pressure by squeezing the patient's finger or toe nail bed for two seconds. After releasing pressure, if the squeezed nail bed returns to a pink color within two seconds, blood flow is adequate.

Blue skin coloring can indicate possible circulation problems. Change in normal body temperature can also indicate poor circulation or death.

HL222.6. Describe how to conduct an assessment for circulation

Hypothermia/Head Injury

Rapidly decreasing body temperature can be a main concern when treating trauma patients, as it can make bleeding symptoms worse by decreasing the blood's ability to clot or gel, leading to more bleeding and other complications. To prevent the patient from suffering from dangerously low body temperature, minimize their exposure to the elements and protect them from wind and water. Keep the patient warm and dry and remove any wet clothing. Consider moving them to an insulated surface such as a rescue blanket or a climate-controlled vehicle or structure.

For head injury, a possible concern is permanent brain damage from lack of oxygen or proper blood flow to the brain. Assess the patient for unequal pupil size and any fluids coming out of their ears. Check for an impaled object or deformity to their skull. The patient may have decreasing LOC. You will learn more about treating head injuries in the lesson on spinal, head, and neck injuries.

HL222.7. Describe how to conduct an assessment for hypothermia and a head injury

Complete the Secondary Assessment

Once all immediate life-threatening injuries have been addressed and the patient is stabilized, the patient will require a secondary assessment. During the secondary assessment, you will complete a comprehensive physical examination of the patient for all injuries and take a detailed patient medical history. In some cases, you might not always be able to complete a secondary assessment, especially if you do not successfully address all primary assessment concerns before EMS arrives.

SECONDARY ASSESSMENT GUIDELINES

The following acronyms, DOTS and PMS, can be useful to keep in mind and will help guide you when performing the secondary assessment. DOTS can be used when examining each body part while PMS can help you when examining the extremities.

HL222.8. Describe the secondary assessment guidelines

DOTS	
Deformities	An abnormal shape of a body part that may indicate fractures. Compare an injured body area to a similar, uninjured area.
Open injuries	Wet clothing may indicate external bleeding. Carefully remove or cut open the clothing to find the bleeding, and try to control it immediately.
Tenderness	A conscious patient may complain of a pain when touched. In an unresponsive patient, observe the face for pain response (such as a grimace).
Swelling	Raised skin that may indicate soft-tissue injury and fractures.

HL222.9. Describe how to conduct an assessment for deformities, open injuries, tenderness, and swelling (DOTS)

PMS	
Pulse	Assess for presence or absence of pulse.
Motor	Assess for motor function (movement).
Sensory	Assess for sensation before movement. Ask the patient if they have feeling in the area you touch.

HL222.10. Describe how to conduct an assessment for pulse, motor, and sensory (PMS) functions

PERFORM A COMPREHENSIVE PHYSICAL ASSESSMENT

Complete a head-to-toe physical examination of the patient. Systematically inspect and touch each body part before moving to the next. Look, listen, and feel for DOTS.

1. **Head**—start at the top of the head, gently examine by touching the scalp and skull, assessing for and feeling for depressions. Observe anything out of the ordinary, such as fluid loss from the ears or nose, discoloration around the eyes (raccoon eyes), mouth injuries that may obstruct the airway, and discoloration behind the ears (Battle’s sign) that may indicate brain trauma.
2. **Eyes**—look at the patient’s pupils, the small dark holes in the center of the eyes. Normal pupils appear round and equally sized. Constricted pupils appear smaller or pinpoint and dilated pupils appear enlarged. If you have a low candlepower penlight, flash it at each pupil. They should both react equally by constricting briskly in response to the light. Nonreactive pupils are often associated with severe brain damage. This test can also help you detect the presence of alcohol, drugs, or other substances.
3. **Neck**—gently feel the neck area. Look at the throat for signs of trauma, asymmetry, swelling, and airway obstructions. While doing this, ask the conscious patient to wiggle their fingers and toes. Ask if the patient’s extremities feel numb or tingly and if they have neck pain.
4. **Shoulders**—gently squeeze the shoulders inward feeling and listening for grinding which may indicate a fracture.
5. **Chest and abdomen**—look to see if both sides of the chest rise and fall equally during breathing, for bruising, and for holes in the chest wall. Listen for noises coming from the chest wall. Feel the chest for areas of pain or tenderness and feel for fractured ribs. Squeeze lightly on the ribcage. Continue to the abdomen, following the same touching procedures. Tenderness and swelling in the abdomen may indicate internal injury or pregnancy.
6. **Pelvis and groin**—gently squeeze inward, checking for tenderness or deformities, and whether the pelvis is stable. Note any bleeding or injury in the groin area; the pelvis has a lot of blood vessels and bleeding in this area may be life-threatening.
7. **Lower extremities**—individually and systematically assess the lower extremities. If you find that one leg is shorter, this may indicate a fracture of the femur. Place your hands along the soles of the patient’s feet and ask them to press them against your hands. You should feel equal pressure from both feet.

8. Upper extremities—after assessing both arms for DOTS, check for circulation, movement, and sensation on both sides. Check circulation in the fingers. Does the patient feel their hands and fingers? Can the patient move their hands and fingers? Ask the patient to hold your fingers and squeeze them simultaneously. Both hands should have equal strength.
9. Spine and back—if you have the necessary assistance and a compelling medical reason such as blood pooling under the patient, roll the patient to check their back while trying to maintain strict spinal precautions (you will learn more about moving patients in a following lesson). Feel along the spine for possible spinal fractures and deformities. Look for any bruising or swelling that could indicate internal bleeding.

HL222.11. Describe how to perform a comprehensive physical assessment during a secondary assessment

GATHER PATIENT MEDICAL HISTORY

While conducting your comprehensive physical assessment, talk to the patient. Try to gather relevant medical information or history to relay to EMS. If the patient is unconscious, begin by questioning family members or bystanders. Any information you get helps in providing care for the patient.

Ask if the patient is experiencing any symptoms and whether they have allergies or wear medical alert jewelry. If the patient is taking medication, note when the last dose was. Ask about past history, such as other medical problems that may contribute to the patient's current condition. Record the time the patient last ate or drank. Lastly, you'll want to note what events led to the emergency and the time of injury or sudden illness (some medications may be harmful if given too long after time of injury).

All this information can help you determine the extent of injuries or illness. Include the information in your report when handing the patient off to appropriate medical personnel. Remember: you may be the last person to speak to the patient, so gathering this information could be critical.

HL222.12. Describe how to gather patient medical history during a secondary assessment

Record Vital Signs

The primary assessment addressed all necessary life functions and the secondary assessment addressed injuries or illnesses that required basic intervention. Once both assessments are complete and the patient is stable, there may be time to record the patient's pulse and breathing rate. This information helps responding EMS determine if the patient's condition is improving, stable, or deteriorating.

- To take a patient's pulse, place your fingers on a pulse point. Count the number of beats for fifteen seconds. Multiply this number by four to arrive at the patient's average pulse rate.
- To calculate a patient's breathing rate, watch the patient's chest rise; count the number of breaths taken over fifteen seconds. Multiply this number by four to arrive at the average breathing rate.

HL222.13. Describe how to record pulse and breathing rates while providing emergency first aid

Complete an Ongoing Assessment

If the patient is stable, reassess every fifteen minutes. If unstable, reassess every five minutes. Continue an ongoing assessment until EMS relieve you. In your ongoing assessment, reassess the patient's responsiveness level, airway and breathing, and pulse rate and quality. You may need to repeat parts of the secondary assessment to detect changes in the patient's condition.

HL222.14. Describe how to conduct an ongoing assessment while awaiting additional EMS resources

Update EMS

Once EMS arrives, relay scene and patient information to medical responders. In some situations, you will provide information by radio to dispatch while EMS is on their way. Doing so prepares them to treat the patient as soon as they arrive.

Here are some typical questions EMS may ask:

- "How many patients are there?"
- "Where are they?"
- "Who are the high priority patients?"
- "What treatment did you render?"

Specialized personnel, such as firefighters and EMS, may become involved in a rescue, based on local protocol and department policy. EMS may ask you to render emergency first aid, provide protection to a patient, or assist with moving a patient. As a criminal justice first-aid provider, do what you can safely do, use the equipment available to you, and stay within the limits of your training and qualifications.

HL222.15. Describe how to communicate with EMS during a medical emergency

2

Unit 2: Respond to a Medical Emergency Lesson 3: Moving Patients

Lesson Goal

At the end of this lesson, you will be able to place a patient in a recovery position or position of comfort to avoid positional asphyxia in a non-emergency situation. You will also be able to move a patient in an emergency using drags, lifts, and carries.

In an emergency, you may have to move a patient to safety or to reposition them in response to their changing medical conditions. When you must move an injured person, choose the method carefully to avoid making the injuries worse and to avoid injuring yourself. You may also need to assist EMS in moving patients or removing an entrapped patient. Follow EMS direction and assist when needed.

Perform an emergency move when a patient is in immediate danger or the patient's location prevents providing care to them or another patient. Perform a non-emergency move when the situation is not urgent. Always perform BSI protocols and wear appropriate PPE when moving a patient.

Proper Lifting Techniques

When moving a patient, observe the rules of proper lifting and moving. Be aware of your physical limitations.

- Maintain correct alignment of your spine, shoulders, hips, and feet.
- Take a good athletic stance.
- Engage your abdominal muscles while lifting.
- Use proper breathing techniques.
- Look straight ahead. Do not look down.
- Lift with your legs, hips, and buttocks, not your back.
- Keep the patient's weight as close to your body as possible.
- Limit the distance you need to move the patient if possible.

HL223.1. Describe how to lift a patient properly

Recovery Position

Place an unresponsive, breathing patient with no suspected neck or back injuries in the recovery position. The **recovery position** helps maintain an open airway should the patient become nauseated or vomit, and may prevent breathing restrictions, such as positional asphyxia.

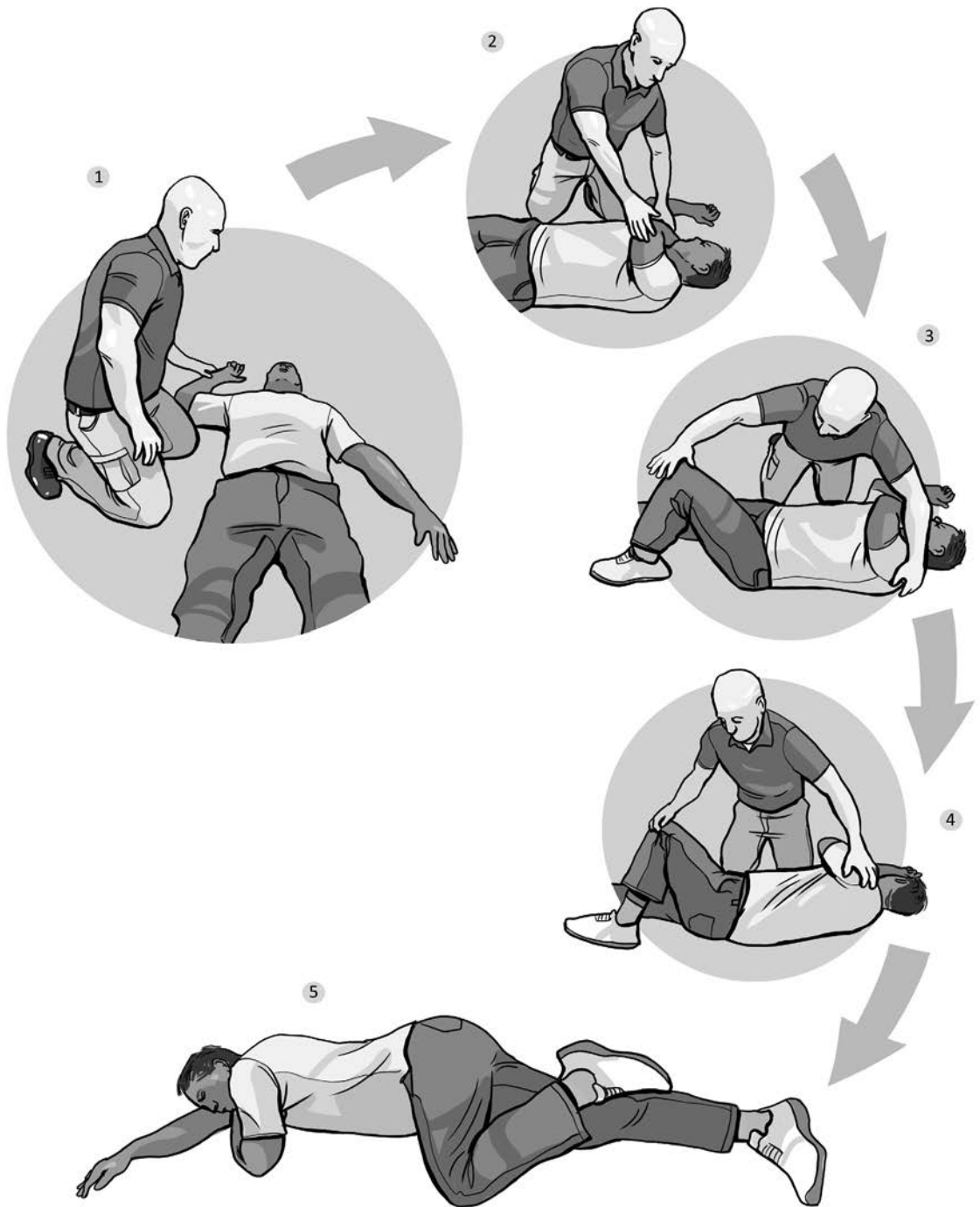


Figure 2-4: Recovery position

To place a patient in the recovery position:

1. Position the patient on their back without causing additional injuries and stand to one side of them.
2. Place the patient's left or right arm straight up overhead, flat on the floor.
3. Place the back of the patient's other hand on their opposite shoulder.
4. Grasp the patient on the shoulder and the knee and roll them towards you.
5. Pull the patient's knee up and over towards you so that their leg is bending and resting on the floor, and their foot is either flat on the floor or hooked on their knee.

Any patient placed in a recovery position is critically ill and should be reassessed every five minutes. Allow a responsive patient to assume a position of comfort, assuming it is safe to do so, while sitting up, or a tripod position where the patient sits down while leaning forward with their arms resting on their knees or standing with their arms resting on another surface.

If a restrained suspect is complaining about not being able to breathe and is not combative, place them in a position of comfort.

HL223.2. Describe how to place a patient in a recovery position

Positional Asphyxia

Positional asphyxia occurs when someone's body is in a position that interferes or prevents them from breathing adequately and leads to an insufficient intake of oxygen that the body needs. Some patients may have risk factors that can contribute to positional asphyxia, such as obesity, alcohol and drug use, or pre-existing conditions including bronchitis, emphysema, and chronic lung disease. Positional asphyxia can happen if a person is face down, with their chest on a hard surface, arms restrained behind their back, and left in this position for a significant amount of time. Positional asphyxia may also happen because of accident or illness that places someone in a breathing-restricted position.

Signs and symptoms of positional asphyxia include the patient making a gurgling or gasping sound with mucus or foam coming from their nose or mouth, visual signs that the patient is struggling to breathe, or a patient verbally complains of not being able to breathe. If the patient displays a change in mental status, escalating or de-escalating activity, a reduced LOC, or blue skin discoloration, these can indicate the patient is experiencing positional asphyxia.

Prevention and treatment of positional asphyxia includes getting the patient out of a prone position (which may apply pressure to the diaphragm) as soon as practical and placing the unresponsive patient in a recovery position, or a responsive patient in a position of comfort. If the patient is a restrained suspect, search them, and place them in a position of comfort (often sitting upright leaning back against a solid surface).

HL223.3. Describe factors that contribute to positional asphyxia

Walking Assist

Perform a walking assist for a responsive patient with leg injuries or who is blind or has low vision and is still capable of walking but may need some assistance.

1. Stand next to the patient on the same side as the injury.
2. Place the patient's arm across your shoulder.
3. Place your arm around the patient's waist. Grasp their belt, if necessary.
4. Help the patient to a safe or comfortable place and encourage the patient not to put body weight on the injury.

HL223.4. Describe how to perform a walking assist of a patient



Figure 2-5: Walking assist

Emergency Drags

Emergency drags are a life-saving component of first aid. Use an emergency drag when you need to move a patient quickly. Drags are physically demanding to perform over long distances. Be aware of any hazards that you may be dragging the patient over. A critical issue when moving a patient is the danger of making an existing spinal injury worse. Make every effort to maintain the patient's head, neck, and shoulder alignment. Whenever a drag is performed, the patient should be immediately assessed and any interventions checked once the drag is complete. It is easy to dislodge a tourniquet or wound packing during a drag.

SHOULDER DRAG

1. If the patient is unconscious, secure their hands by folding them across their chest to protect them during the move.
2. Stand behind the patient's head and squat by bending your knees.
3. Reach under the patient's arms and grasp your own wrist. Consider grasping the patient's opposite wrists.
4. Pull the patient in as close as possible to your chest.
5. Stand up, lean back, and walk backwards.
6. Move the patient with you. The patient's feet will drag on the ground.



Figure 2-6: Shoulder drag

BLANKET DRAG

Perform a blanket drag as an emergency move when you need to move a patient who you should not lift or carry by yourself and the environment is safe to do so. If you do not have a blanket, any large piece of fabric, plastic, or litter will work for this move.

1. Place a blanket directly against the patient's side.
2. Gather the blanket into accordion-style, lengthwise pleats.
3. Position yourself on the patient's side opposite the blanket.
4. Extend the patient's arm that is closest to you straight up and beside their head.
5. Reach across the patient and grasp their hip and shoulder.
6. Roll the patient toward you onto their side.
7. Tuck the blanket under the patient.
8. Roll the patient onto the blanket and wrap the blanket around the patient.
9. Grasp the blanket so that it supports the patient's head and neck. Drag the patient toward safety.



Figure 2-7: Blanket drag

ARM DRAG

Perform an arm or ankle drag when you need to move a patient short distances and in extreme emergency conditions.

1. Stand at the head of the patient and squat to grasp their wrist(s).
2. Pull the patient's arms above their head and grasp their wrists or forearms.
3. Drag the patient to safety.



Figure 2-8: Arm drag

ANKLE DRAG

1. Stand at the feet of the patient and squat to grasp their ankle(s).
2. Drag the patient to safety.

HL223.5. Describe how to perform an emergency drag of a patient



Figure 2-9: Ankle drag

Two-Officer Extremity Lift

Extremity lifts are often easier than drags. Considered non-emergency moves, these lifts require at least two officers' efforts. Use these techniques to move patients who are unresponsive or unable to move from the floor or ground. However, do not perform an extremity lift if you suspect or know a patient has an injury to the spine or an extremity injury.

1. Officer 1, kneel on one knee at the patient's head.
2. Place your hands, palms up, under the patient's shoulders.
3. Lift the patient to a sitting position.
4. Support an unconscious patient's back with your kneeling leg.
5. Place your hands under the patient's arms.
6. Firmly grasp the patient's opposite wrists, and fold them across the patient's chest.
7. Officer 2, position to one side of the patient's knees with your non-weapon side to the patient. Wrap your inside arm over the patient's thighs and your outside arm under their thighs. Be careful where you grasp the patient's legs, preferably above the knees, to avoid hyperextension. Grasp your wrist(s).
8. Officer 1, at the patient's head, delivers all commands.
9. Simultaneously both officers stand while lifting the patient.
10. Officer 2 should turn and face the direction of movement.

HL223.6. Describe how to perform an extremity lift of a patient

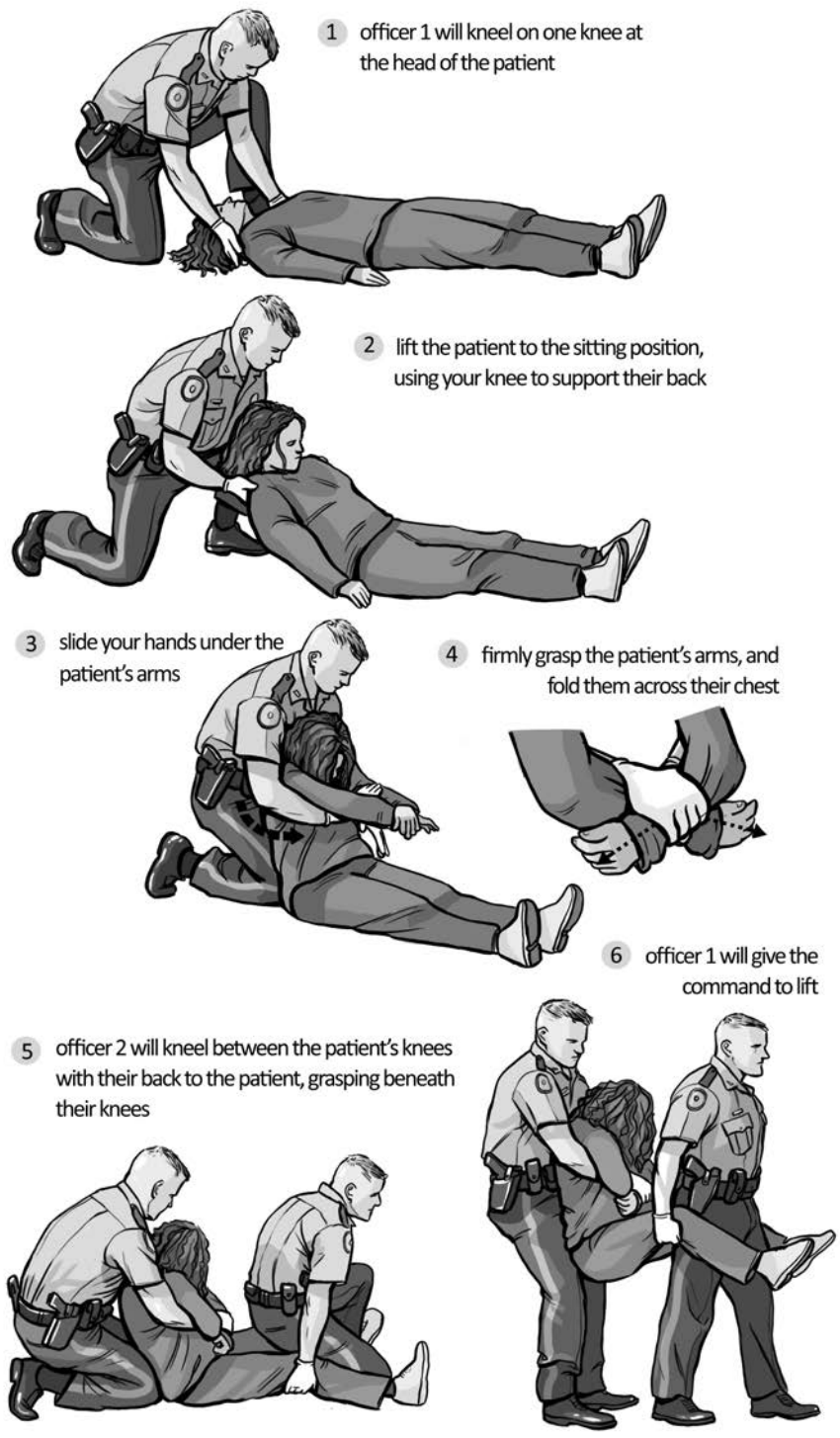


Figure 2-10: Two-officer extremity lift

SEAL Team 3 Carry

Use a SEAL Team 3 carry to move a patient who cannot walk. Remember to use proper lifting and moving techniques. Do not perform this carry if you suspect or know a patient has an injury to the spine or an extremity injury.

1. Officers 1 and 2 stand behind the patient.
2. Place the patient's arms around the shoulders of both officers.
3. If conscious, instruct the patient to use their arms to hold onto the officers.
4. Hold the patient's arms around the officer's neck if the patient is not able to hold on.
5. Grasp the patient's belt, pants, or back pocket.
6. Lift and go.

When performing a Seal Team 3 carry, always be aware of potential threats. One of the officers may have a free hand and should be prepared to provide security.

HL223.7. Describe how to perform a SEAL Team 3 carry of a patient



Figure 2-11: SEAL Team 3 carry

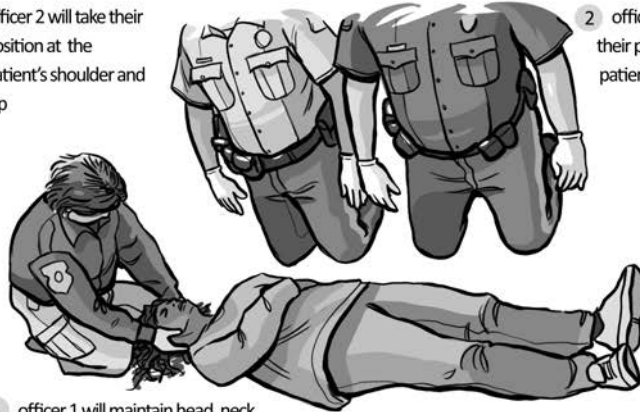
Log Roll

Use this technique only when moving the patient is necessary or when assisting medical personnel. Ideally, this technique is performed with at least two or three people. The purpose of a log roll is to roll the patient onto their back, front, or side, possibly on a blanket or board.

1. Perform a log roll on the floor or ground with at least three officers on their knees.
2. Officer 1, constantly maintain head, neck, and spinal motion restriction.
3. Officer 2, take your position at the patient's shoulder and hip. Stay far enough away from the side of the patient's body so there is room to roll the patient toward you.
4. Officer 3, take your position on the same side of the patient as Officer 2. Position yourself at the patient's thigh and lower leg. Stay far enough away from the side of the patient's body so there is room to roll the patient toward you.
5. Officer 2, reach across the patient. Place your hand on the patient's shoulder. Place your other hand on the patient's hip.
6. Officer 3, reach across the patient. Place your hand above the other officer's hand on the patient's belt line. Place your other hand on the outside of the patient's knee area.
7. Officer 1, issue all commands to roll the patient toward Officers 2 and 3, and simultaneously maintain the patient's head, neck, and spine alignment.
8. Assess the patient for injuries.
9. If applicable, reverse the process to return the patient to their original position.

HL223.8. Describe how to perform a log roll of a patient

- 1 officer 2 will take their position at the patient's shoulder and hip
- 2 officer 3 will take their position at the patient's thigh and lower leg



- 3 officer 1 will maintain head, neck, and spinal stabilization



- 4 officer 1 will issue all commands to roll the patient over

- 5 upon command, officers 2 and 3 will reach across and roll the patient over



- 6 check for injuries and return the patient to their original position in the same coordinated manner

Figure 2-12: Log roll

2

Unit 2: Respond to a Medical Emergency Lesson 4: Mass Casualty Incidents and Triage

Lesson Goal

At the end of this lesson, you will be able to respond to a mass casualty incident as the first officer on the scene and participate in triage and a multiple agency response.

You may respond to an incident that involves multiple casualties or multiple patients with severe injuries, also known as a mass casualty incident (MCI). Events such as traffic crashes involving multiple vehicles, severe weather events, and active threat/shooter incidents can quickly become an MCI. You may be the first person to arrive on the scene of an MCI, and should be able to prioritize patients for care based on the severity of their injuries before providing emergency first aid.

Assuming there are no active threats, your role as the first responder involves conducting a scene size-up, establishing command of the scene, and communicating with other first responders through dispatch. Ideally, you accomplish these tasks simultaneously.

Once additional resources are available, your next step is to begin triage. **Triage** is the process of sorting and categorizing patients. The goal of triage is to do the most for the most, rather than to provide extensive treatment to a single patient. Immediate life-saving interventions, particularly tourniquet application, can be performed, but the focus is on rapidly evaluating all patients to determine the order that patients will receive future medical attention based on the severity of their injuries.

Check local protocol and department policy to determine if your agency uses a specific model. Although triage models differ slightly, the basic principles remain the same.

HL224.1. Describe the role of the first officer on the scene of a mass casualty incident

Triage Processes

SIMPLE TRIAGE AND RAPID TREATMENT (START)

The START method of triage can be used to assess many patients rapidly, and personnel with limited medical training can use it effectively.

1. Use BSI and appropriate PPE.
2. Locate and remove all the walking wounded into one location away from the incident, if possible. Do not forget these patients. Someone should triage them as soon as possible. Say “Everyone who can hear my voice and can walk, come to this area.” Now move quickly through the remaining patients.
3. If available, triage and tag the remaining injured patients with triage ribbons (color-coded plastic strips) by tying them to an upper extremity in a visible location (wrist if possible).

4. Classify patients according to the START protocols.
 - ▶ RED—immediate
 - ▶ YELLOW—delayed
 - ▶ GREEN—ambulatory (minor)
 - ▶ BLACK—deceased (non-salvageable)
5. Remember the mnemonic RPM: respiration, perfusion, mental status.
 - ▶ Assess respirations:
 - a. If respiratory rate is 30 or fewer breaths per minute, assess perfusion.
 - b. If respiratory rate is more than 30 breaths per minute, tag RED.
 - c. If the patient is not breathing, open the airway, remove obstructions if seen, and assess for (a) or (b) above.
 - d. If the patient is still not breathing, tag BLACK.
 - ▶ Assess perfusion:
 - a. Perform by palpating a radial pulse or assessing capillary refill time.
 - b. If no radial pulse is present or the capillary refill time is greater than two seconds, tag RED.
 - c. If radial pulse is present or capillary refill time is two seconds or less, assess mental status.
 - ▶ Assess mental status or LOC:
 - a. Assess the patient's ability to follow simple commands and their orientation to time, place, and person.
 - b. If the patient follows simple commands, tag YELLOW.
 - c. If the patient does not follow simple commands, is unconscious, or disoriented, tag RED.
 - d. Note: Depending on injuries (burns, fractures, bleeding) it may be necessary to tag YELLOW.
6. Make independent decisions for each patient. Do not base triage decisions on the perception of having too many patients in a single category.
7. If you encounter borderline decisions, always triage to the most urgent priority (GREEN / YELLOW patient, tag YELLOW).
8. Direct the movement of patients to proper treatment areas, if necessary.

9. Provide appropriate medical treatment to patients before you move them and as incident conditions dictate.
10. The first assessment that produces a RED tag stops further assessment of that patient. During triage, only manage the correction of life-threatening problems, such as airway obstruction or severe bleeding.
11. The triage priority determined in the treatment phase should be the priority used for transport.
12. If you identify a patient in the initial triage phase as a RED and transport is available, transport right away.

SORT, ASSESS, LIFE-SAVING INTERVENTIONS, TREATMENT/TRANSPORT (SALT)

The SALT method of triage combines many approaches from other triage processes. SALT uses the same categories as START, but also adds another category, "GRAY," meaning the patient is expected to die, but is not yet deceased. This signals to responders to focus their efforts on more immediate patients that have a higher chance of survival.

1. Begin with patient categorization: global sorting for patients that can walk, wave, or are still, with the goal of prioritizing patients based on severity of injuries.
2. Patients are further classified into categories of immediate (RED), expectant (GRAY), delayed (YELLOW), minimal (GREEN), and deceased (BLACK).
3. Perform individual patient assessments and rapid life-saving interventions, such as controlling massive hemorrhage or severe bleeding and addressing airway obstructions.
4. In general, the order of treatment or transport should be immediate patients first, then delayed, then minimal. Expectant patients should be provided with treatment or transport when resources allow.

HL224.2. Describe how to triage during a mass casualty incident

Multiple Agency Response

In a multiple agency response, your role depends on your arrival time, department policies, and local protocol. Florida implements the Incident Command System (ICS) for multiple agency response in times of disaster. If necessary, the original ICS commander will relinquish command by providing a situation report.

An MCI can overwhelm anyone who reaches the scene first. Understanding the role of the first officer on the scene can reduce the stress of the situation. Taking control of the scene, getting information such as the number and category of patients to responding personnel, and beginning triage helps make the combined response successful.

HL224.3. Describe the officer's role when assisting in a multiple agency response to a mass casualty incident

2

Unit 2: Respond to a Medical Emergency Lesson 5: Providing Care While Under Threat

Lesson Goal

At the end of this lesson, you will be able to provide care when under direct and indirect threat situations. You will also learn how to evacuate a scene and techniques for moving patients while under fire.

When you are responding to an active threat/shooter incident, you may need to provide care for another officer who has been wounded. While the methods described below can be used with any patient, the section on providing care under different threat levels is primarily for providing care to fellow responding officers at a scene. For this reason, the term “officer” is used instead of “patient.”

Direct Threat Care

Direct threat care/hot zone/care under fire environment describes a scene that can include an active threat, multiple active threats, or any imminent danger. Your primary concern in direct threat care is to stop or neutralize the threat if possible. As threats are changing, continuously conduct a threat assessment until the threat no longer exists or involved parties are in an area of relative safety.

Instruct a wounded officer to move out of the visual field of the threat or away from the source of imminent danger to an area of cover or relative safety. If the officer is alert and capable, direct them to stay engaged.

In general, prioritize only the most life-threatening injuries that can be quickly addressed, such as massive hemorrhage. If the officer is bleeding from an extremity like a leg or arm, control the bleeding by applying a tourniquet while behind cover or something that can block bullets. If you become injured, the primary focus should be applying your own tourniquet and providing self-care (the lesson on bleeding and soft-tissue injuries covers this in greater detail).

Instruct the officer to render their own self-aid if possible, including the self-application of a tourniquet. If the officer is unresponsive or unable to render self-aid or move to safety, conduct a remote assessment to develop a rescue plan to maximize scene safety.

Indirect Threat Care

Indirect threat care/warm zone/tactical field care environment describes a scene in which the officer is out of imminent danger and but not yet in a safer zone. A hot zone can change to a warm zone once the officer is in a place of relative safety or an area of cover becomes cleared but not secured. This is an area where there is less of chance of you or other officers sustaining injuries. However, a warm zone can become a hot zone again simply by the return of the threat.

Your level of care includes following the assessment and treatment priorities outlined in MARCH. Address any life-threatening bleeding first by applying direct pressure to a wound, wound packing, and using sterile

dressings or seals in addition to tourniquets. Except for placing the patient in the recovery position, do not initiate any airway care, like CPR, until you and the patient are in the warm zone.

Evacuation Care

Evacuation care/cold zone/tactical evacuation care environment describes a scene in which you are moving towards transporting an injured officer to a medical treatment facility. A cold zone can also refer to an area that has been cleared of threats and may include triage areas and incident command posts.

The best medical care for an injured officer and other trauma patients is typically evacuation and hand-off to a higher and more skilled practitioner, but it is good practice to re-evaluate the injured person and all interventions so you can communicate the information to EMS. The only time that you should consider delaying evacuation is to address immediately life-threatening conditions, such as a massive hemorrhage and airway compromise. Any additional interventions during this phase of first aid can occur while on the way to higher care or when performed by EMS operations.

HL225.1. Differentiate between direct threat care, indirect threat care, and evacuation care environments

Moving Patients While Under Threat

During active threat/shooter incidents you might not have time to stop to provide care (aside from direct threat care) and will need to be prepared to move injured officers and patients from a hot or warm zone to a cold zone, such as a collection point for EMS. The following techniques for moving patients to safety are important to keep in mind as you deal with evacuation care and possible on-going threats.

VEHICLE DUMP

Perform a two-officer vehicle dump using the lifts previously discussed to transport a patient to higher care if there is delayed access to EMS or to meet EMS at a designated location. Ideally, perform a vehicle dump using two officers; however, under extreme circumstances, you may need to perform a one-officer vehicle dump.

In a one-officer vehicle dump, immediately life threatening conditions (e.g. tourniquet for massive extremity bleeding) should be addressed before leaving the patient to operate the vehicle. A two-officer vehicle dump can become a three-officer vehicle dump when you need someone to open the vehicle door or you need someone to maintain security in an active threat/shooter situation.

Vehicle Dump – Two Officers

1. Officers 1 and 2 performs a two-officer extremity lift of the patient and walks them to the truck bed or space in the vehicle that will accommodate a patient.
2. Officer 2 places the feet of the patient in the vehicle and moves to assist Officer 1.
3. Officer 1 lifts the patient's torso into the vehicle.
4. Both officers adjust the patient into a position of comfort that maintains an open airway and secures the patient in the vehicle.

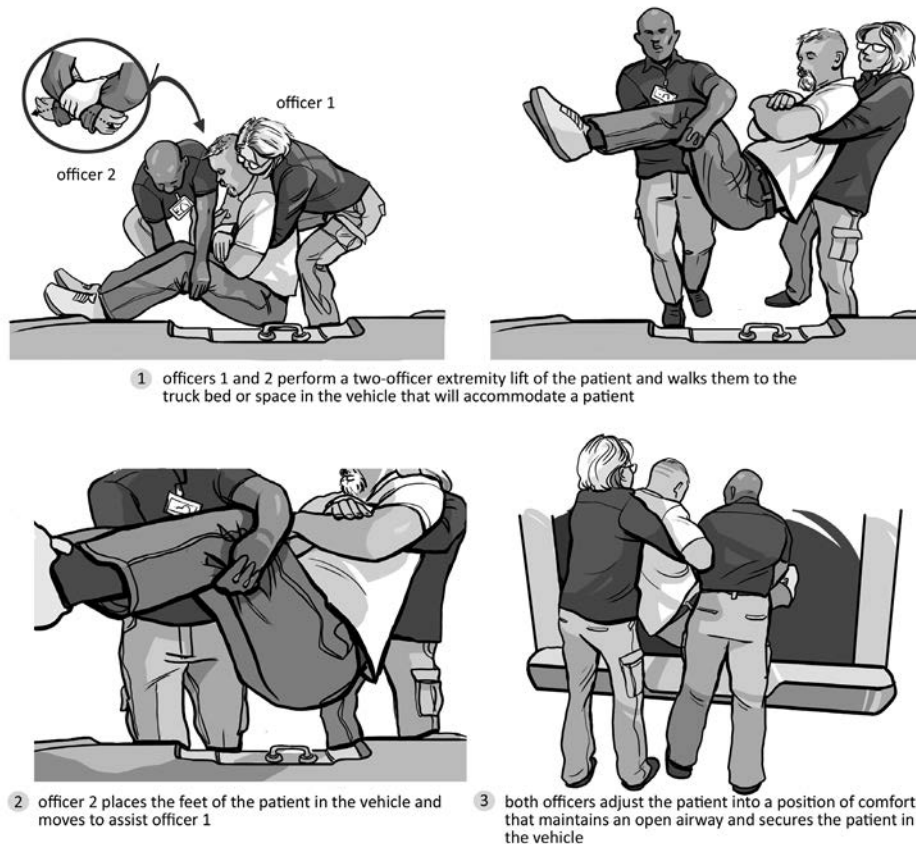


Figure 2-13: Vehicle dump

Vehicle Load – Feet First

1. Officers 1 and 2 performs a two-officer extremity lift of the patient and walks them to the vehicle that will accommodate a patient.
2. Officer 2 is leading the carry toward the vehicle.
3. Officer 2 places the patient's feet and lower legs on the seat and moves to the opposite side of the vehicle while Officer 1 holds the patient's torso.
4. Officer 2 grasps the patient's ankles and pulls the patient towards them while Officer 1 pushes the patient into the vehicle.
5. Both officers adjust the patient into a position of comfort that maintains an open airway and secures the patient in the vehicle.
6. The officer in the vehicle should be positioned to render additional first aid as required.

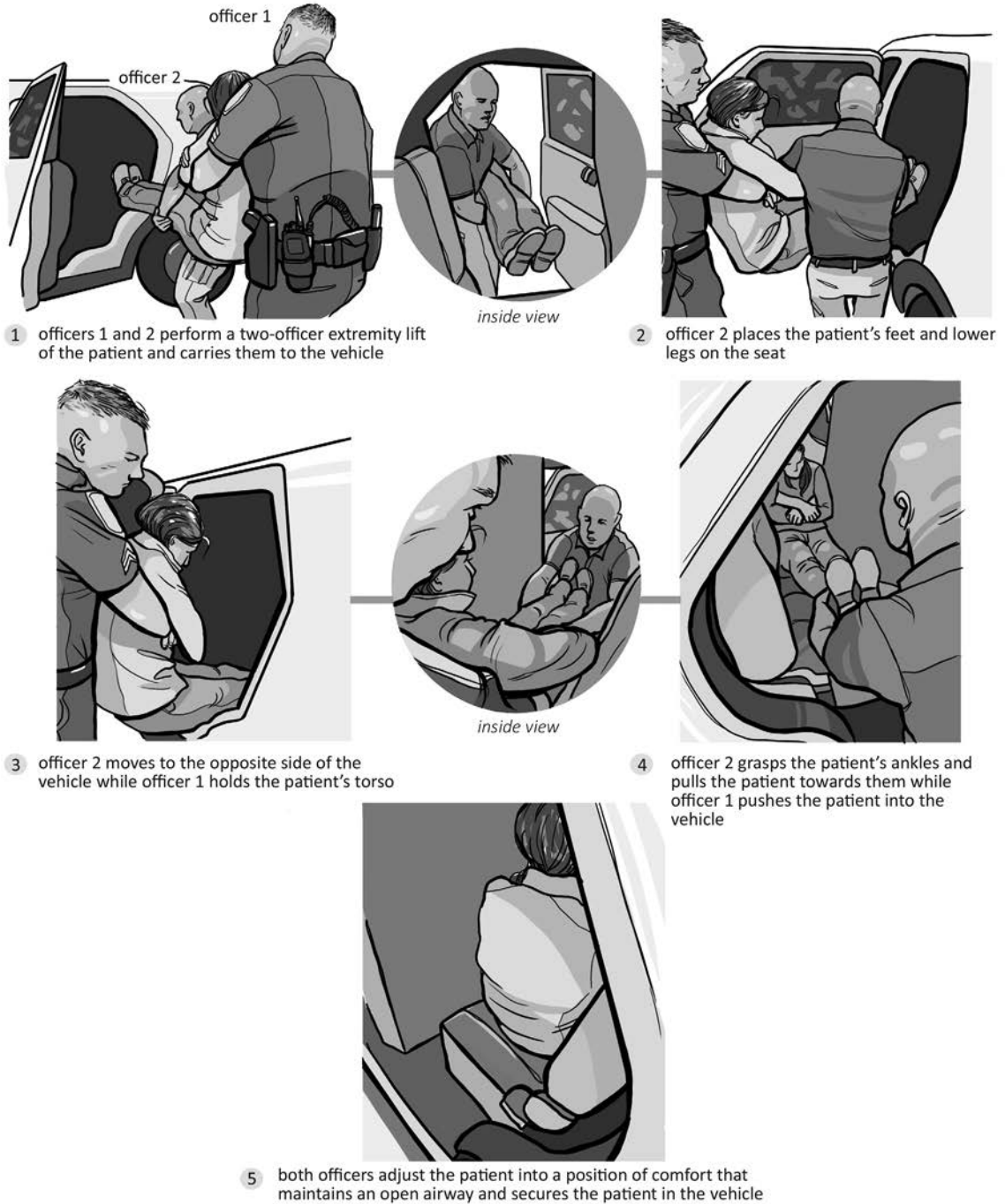


Figure 2-14: Vehicle load – feet first

Vehicle Load – Head First

1. Officers 1 and 2 performs a two-officer extremity lift of the patient and walks them to the vehicle that will accommodate a patient.
2. Officer 1 positions themselves near the outside edge of the open door to allow enough space to turn toward the vehicle.
3. Officer 2 places the patient’s legs on the ground and moves to the opposite side of the vehicle.
4. While Officer 2 is getting into position, Officer 1 turns and steps toward the vehicle, placing the patient’s torso on the seat.
5. Officer 2 grasps the patient’s wrists and pulls the patient towards them while Officer 1 pushes the patient’s legs into the vehicle.
6. Both officers adjust the patient into a position of comfort that maintains an open airway and secures the patient in the vehicle.
7. The officer in the vehicle should be positioned to render additional first aid as required.

HL225.2. Describe how to load a patient into a vehicle

- 1 officers 1 and 2 perform a two-officer extremity lift of the patient and carries them to the vehicle.



- 2 officer 1 positions themselves near the outside edge of the open door to allow enough space to turn toward the vehicle



- 3 officer 2 places the patient's legs on the ground and moves to the opposite side of the vehicle



- 4 while officer 2 is getting into position, officer 1 turns and steps toward the vehicle, placing the patient's torso on the seat



- 5 officer 2 grasps the patient's wrists and pulls the patient towards them while officer 1 pushes the patient's legs into the vehicle



- 6 both officers adjust the patient into a position of comfort that maintains an open airway and secures the patient in the vehicle

Figure 2-15: Vehicle load – head first

OFFICER VEST DRAG

Perform this drag as a last option and only on an injured officer who is wearing a tactical vest either inside or outside their shirt. Dragging the injured officer for long distances can result in choking. Use this drag for short distances only. When the officer is wearing a concealed vest, do not use the shoulder straps as they may not hold the weight of the officer.

1. If the officer is unconscious, secure their firearm.
2. Stand behind the officer's head and squat by bending your knees.
3. If the officer is wearing an outer carrier vest, grasp the shoulders of the officer's outer carrier vest.
4. If the officer is wearing a concealed vest, grasp both the shoulders of the vest and the shirt.
5. Pull the officer up and toward you.
6. Stand up, lean back, and walk backwards.
7. Drag the officer to safety.

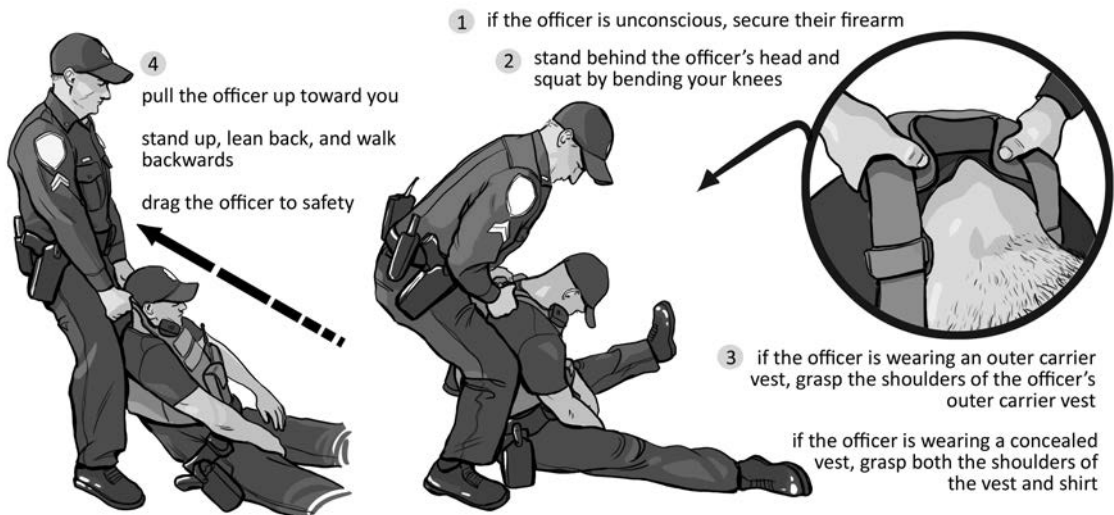


Figure 2-16: Officer vest drag and close up

2

Unit 3: Trauma-Related Medical Issues Lesson 1: Shock

Lesson Goal

At the end of this lesson, you will be able to recognize when a patient is going into shock and provide emergency first aid.

Any injury that requires MARCH interventions is likely to result in shock. **Shock** is the failure of the heart and blood vessels to maintain enough oxygen-rich blood flowing to the vital organs of the body. Uncontrolled bleeding, tender or distended abdomen, unstable pelvis, femur fractures, and a severe allergic reaction are conditions that could rapidly lead to shock. Shock may lead to a lowering of the core body temperature. Assume that any patient you are treating may eventually go into shock and will require treatment.

Signs and Symptoms of Shock

The principles of shock prevention and control are to recognize the signs and symptoms and to begin treatment before shock completely develops. It is unlikely that you will see all the signs and symptoms of shock in a single patient. Sometimes an illness or injury can disguise the signs and symptoms of shock, the symptoms may not appear immediately, or they can appear hours later. Signs and symptoms of shock may include:

- anxiety, restlessness, and fainting
- altered mental status in the absence of a head injury
- nausea and vomiting
- excessive thirst
- eyes that are vacant and dull (lackluster) with large (dilated) pupils
- shallow, rapid, and irregular breathing
- pale, cool, or moist (clammy) skin
- weak, rapid, or absent pulse

HL231.1. Describe the signs and symptoms of shock

Treatment for Shock

To treat a patient for shock:

1. If the patient has life-threatening bleeding or a severe allergic reaction, prevent further blood loss by stopping bleeding or provide treatment for the allergic reaction.
2. Maintain an open airway.
3. Remember your CPR training: use the head tilt/chin lift method to open the patient's airway. If you suspect spinal or neck injuries, use the jaw thrust method.
4. Elevate the lower extremities.
 - ▶ Position the patient on their back and elevate the lower extremities six to twelve inches by using the appropriately sized resources available to you.
 - ▶ If you suspect the patient has serious head, neck, spinal, or pelvic injuries, do not elevate the lower extremities.
5. Keep the patient warm by covering them with a suitable material to maintain body heat. Do not provide the patient with something to eat or drink.

HL231.2. Describe how to provide treatment for shock

2

Unit 3: Trauma-Related Medical Issues Lesson 2: Soft-Tissue Injuries and Bleeding

Lesson Goal

At the end of this lesson, you will learn about soft-tissue injuries and be able to provide emergency first aid for a patient with major or minor bleeding, using basic tools such as dressings, bandages, and tourniquets.

Closed Soft-Tissue Injuries

A **closed soft-tissue injury** is any injury that is bleeding internally or has pooling blood under the skin. There are two types of closed soft-tissue injuries:

- **Bruising** is a closed, discolored injury that is somewhat flat, tender to the touch, and has an obvious discoloration (black and blue) at the injury site. Bruising occurs from leakage of blood under the skin from small blood vessels.
- **Swelling** is a closed, discolored injury that is a raised, firm, and painful lump. Swelling occurs from larger leakage of blood under the skin from larger blood vessels.

Closed soft-tissue injuries can be life-threatening even though they may be lacking the obvious signs of open soft-tissue injuries, such as bleeding outside of the skin.

TREATMENT FOR CLOSED SOFT-TISSUE INJURIES

To treat a patient for a closed soft-tissue injury:

1. Treat large bruising and swelling by applying a cold pack to the injury site. Minimal swelling normally does not require treatment but applying cold pack to the injury site helps reduce pain and swelling.
2. If you cannot assess the seriousness of a closed soft-tissue injury, treat the patient as if they have internal bleeding, and monitor for shock.

HL232.1. Describe how to provide treatment for a closed soft-tissue injury

Open Soft-Tissue Injuries

An open soft-tissue injury is any injury where the skin is open, which may lead to external bleeding. Types of open soft-tissue injuries include:

- amputation—removal or loss of a limb
- evisceration—a wound where the organs protrude outside the body

- puncture wound—wound caused by a sharp object that penetrates skin
- laceration—a cut in the skin
- abrasion—injury to the outer layer of skin from rubbing or scraping

HL232.2. Describe the different types of open soft-tissue injuries

The most important first-aid responsibilities to a patient with an open soft-tissue injury are to control bleeding and prevent further contamination of the area.

Bleeding

In a previous lesson, the circulatory or cardiovascular system was mentioned as being responsible for delivering oxygen to the body's tissues, among other functions. If the patient has severe bleeding or massive hemorrhage, their body tissues may not be receiving adequate oxygen exchange even if the patient is breathing. Therefore, it is important to identify and stop life-threatening bleeding as quickly as possible.

Understanding what type of bleeding the patient has will tell you how you can best stop the bleeding and keep the patient alive.

- **arterial bleeding**—bright red blood spurting or flowing from a wound, indicating a severed or damaged artery
- **venous bleeding**—dark red blood flowing steadily from a wound, indicating a severed or damaged vein
- **capillary bleeding**—dark red blood oozing slowly from a wound, indicating damaged capillaries

HL232.3. Describe the three types of bleeding

TOOLS TO STOP BLEEDING

No matter what tools you use, stopping bleeding involves applying some type of pressure to the injury site to stop or slow the flow of blood out of the body.

Use the following tools to control bleeding:

- A **tourniquet** is a device that restricts the flow of blood to an extremity. Unlike the more common venous tourniquets used during blood collection, arterial tourniquets used to control life-threatening bleeding stop arterial flow. It works by creating a circumferential force around the limb which compresses the bleeding blood vessel against underlying bone. It works much the same way as simply holding direct pressure with fingers, but is more consistent in the force applied.
- **Dressings** are (preferably) sterile pads applied directly to a wound. Avoid touching or contaminating the side of the dressing that will come in direct contact with the wound.

- **Hemostatic gauze or dressing** is a wound dressing containing an agent that promotes blood clotting. It encourages clotting at the injury site.
- **Bandages** are coverings that hold dressings in place and do not touch the wound. They can create pressure to help stop bleeding, support an injured extremity, and prevent the wound from further contamination and damage.

HL232.4. Describe the main tools to stop bleeding of an open wound

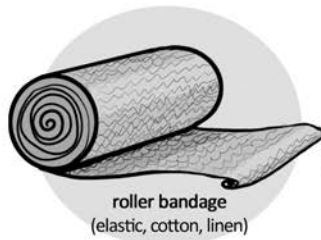
MAJOR, LIFE-THREATENING BLEEDING

Some common signs of major, life-threatening external bleeding include:

- blood spurting out of the wound (arterial)
- volumes of blood that will not stop or is pooling on the ground
- clothing soaked with blood
- loss of all or part of an arm or leg (amputation)
- a patient who is bleeding and has an altered level of consciousness

Determine if the bleeding is coming from an extremity (like an arm or leg), or from a junction (such as the neck, armpit, or groin area where an extremity meets the torso). If the bleeding is coming from a junction, pack the wound (ideally with a hemostatic dressing) and apply steady pressure until the bleeding stops according to manufacturer instructions. If the bleeding is coming from an extremity, use a tourniquet to control or stop the bleeding.

HL232.5. Describe the common signs of major, life-threatening external bleeding



roller bandage
(elastic, cotton, linen)

long strips of material, usually made of elastic, cotton, or linen:

elastic- wrapped around a joint or limb to support a strain or sprain, in addition to covering gauze dressings

cotton or linen- used to cover gauze dressings and are secured with tape, clips, or pins



gauze & hemostatic dressing

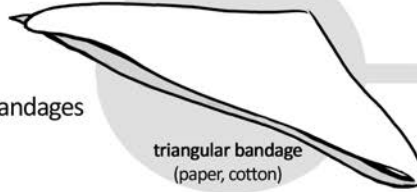
thick rolls or pads, usually made of cotton:

gauze- used to cover large wounds and are secured with tape or a bandage

hemostatic- used to promote rapid blood clot for traumatic injuries with severe bleeding, and are secured with a bandage

-both dressings may also be utilized for packing wounds

bandages



triangular bandage
(paper, cotton)

large triangular pieces of disposable paper or cotton:

-used to make slings and swaths to protect and support a broken bone or strain

-used for applying pressure to the wound to control bleeding

dressings



adhesive dressing

small adhesive strips that come in a variety of shapes and sizes:

-used to cover smaller, superficial wounds

folding a donut for stabilizing impaled objects



loop triangular bandage around your hand 2-3 times



tuck excess fabric through the loop



pull excess fabric through the loop and repeat



until your bandage looks like this →



Figure 2-17: Applying dressings and bandages

EXTREMITY BLEEDING

When a tourniquet is available, use a tourniquet as the preferred method to stop major, life-threatening bleeding from an extremity. If a tourniquet is not available, apply direct pressure or pack the wound to stop the bleeding.

A person who has suffered a complete or partial amputation of a limb may not be bleeding severely when first discovered, but you should still apply a tourniquet. Lack of bleeding is due to the body's normal defenses of contraction and spasm of the blood vessels. Bleeding will start when the blood vessels relax or if the clot knocks loose when moving the patient.

Refer to the tourniquet manufacturer for instructions on how to unpackage and prepare the tourniquet in its recommended quick launch configuration. To apply a tourniquet to an extremity:

1. Recruit someone with a gloved hand, or the patient, to apply pressure while you are preparing to apply the tourniquet. Be sure it is already looped through the tourniquet buckle.
2. Route the looped and preloaded tourniquet band around your non-dominant hand, about your wrist level. Then grasp the injured limb at the hand or foot with your non-dominant hand to off load it onto the injured limb with your dominant hand.
3. Position the tourniquet as high on the extremity as possible, "high and tight," and at a right angle to the extremity.
 - ▶ Do not apply the tourniquet over a solid object within the clothing, such as a pen, phone, wallet, or set of keys that may be in a pocket.
 - ▶ Do not apply the tourniquet on a joint, such as a knee, ankle, elbow, or wrist, or a junctional site.
4. Pull the band tightly and fasten it back on itself.
5. Twist the windlass until bleeding has stopped.
6. Secure the windlass to lock it in place.
7. Look at the injury site, check for bleeding, and assess for circulation below the tourniquet of the injured extremity. All bleeding should have stopped and there should not be a pulse below the injury.
8. Secure the TIME strap and record the time of application on the strap, write the time on the patient's forehead, or radio dispatch to record the time of the tourniquet application.
9. Mark the patient on the forehead by writing a "T" to alert medical personnel that the patient is wearing a tourniquet.
10. If in a warm or cold zone and if time and equipment permit, dress and bandage the wound.

Once the tourniquet is in place, do not remove or loosen it. Only medical personnel should remove or loosen a tourniquet. In some cases, you may need to apply a second tourniquet, which you will apply directly adjacent to the first tourniquet.

HL232.6. Describe how to use a tourniquet to stop major bleeding from an extremity injury

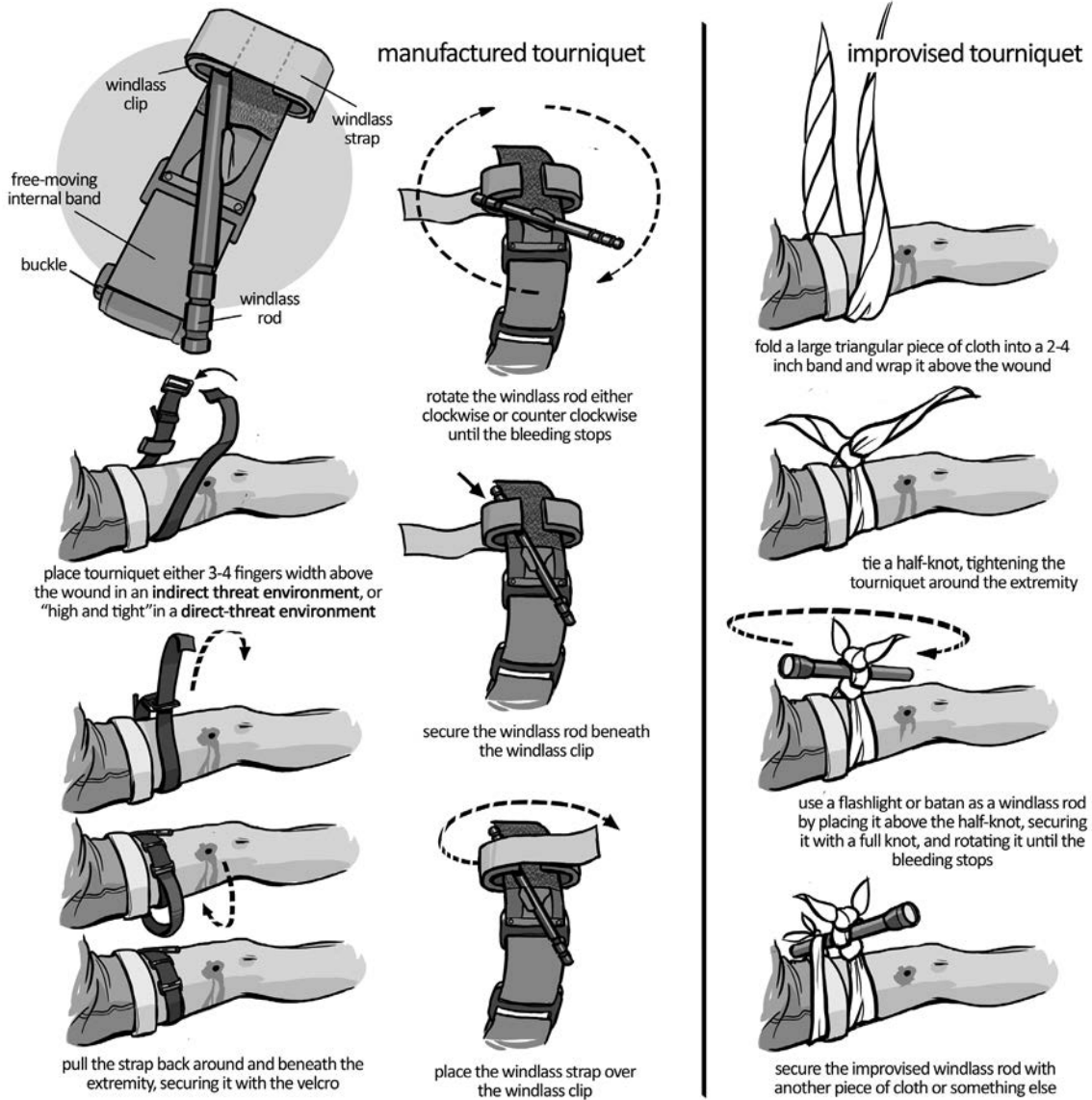


Figure 2-18: Applying a tourniquet

JUNCTIONAL BLEEDING

Junctional bleeding occurs at a junction of the torso to the extremities, such as neck, armpit, or groin areas. Traditional tourniquets are not effective in stopping bleeding at junctional sites. A later lesson on spinal, head, and neck injuries will discuss controlling bleeding for penetrating neck injuries.

To stop bleeding at a junctional site:

1. Recruit someone with a gloved hand, or the patient, to apply pressure while you are preparing to provide emergency first aid.
2. Packing the wound with hemostatic gauze is the recommended treatment. If not available, use standard gauze or clean cloth.
3. Place any excess gauze directly over the wound and apply direct pressure according to manufacturer recommendations if using hemostatic gauze, and for three to five minutes if using standard gauze or a clean cloth. Constantly reassess for bleeding.
 - ▶ If bleeding is better controlled but still present, leave old gauze in place and pack new gauze around it. If bleeding is as quick as before, remove and repack.
 - ▶ If you do not have additional hemostatic gauze, do not remove the saturated hemostatic gauze but leave it in place and apply a layer of bulky dressing.
 - ▶ If using standard gauze and the first layer of gauze does not stop the bleeding, do not remove it, but apply additional layers as needed while applying pressure.
4. Once you stop the bleeding, apply a pressure bandage to secure the gauze to the wound.

HL232.7. Describe how to stop major bleeding from a junctional injury

MINOR BLEEDING

Provide emergency first aid to injuries with minor bleeding when the care environment is safe from threats. To treat an injury with minor bleeding:

1. Recruit someone with a gloved hand, or the patient, to apply pressure while you are preparing to provide emergency first aid.
2. Cover the wound with a clean dressing.
3. Apply direct pressure until bleeding stops. If the first layer of dressing (standard gauze) does not stop the bleeding, do not remove it, but apply additional layers as needed while applying pressure.
4. Apply a bandage to secure the dressing once the bleeding stops.

HL232.8. Describe how to treat an injury with minor bleeding

2

Unit 3: Trauma-Related Medical Issues Lesson 3: Puncture Wounds

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with a puncture wound such as an impaled object or a gunshot wound.

Impaled Object

Puncture wounds are usually the result of an object, blunt or sharp, penetrating the skin's soft tissue. A penetrating or puncture wound's severity depends on the wound location, the penetrating object's size, and the force that created the injury.

An impaled object is an object that punctures the soft tissue and stays in place. An object impaled in the head, neck, chest, abdomen, back, or upper thighs needs immediate care followed by prompt EMS transport.

To treat a patient for an impaled object:

1. Do not remove the object from the wound unless it obstructs the patient's airway.
2. Cut away clothing around the impaled object to determine if the patient has other wounds or to expose enough skin to apply the stabilizing dressing.
3. Apply proper dressing to prevent further contamination of the injury.
4. Secure the object by surrounding it with stabilizing dressing or any material that prevents the object from moving. You might use, for example, two pillows, rolls of gauze, or a paper cup.
5. Stop bleeding. Only apply enough pressure to the wound site to stop bleeding. Be careful not to put pressure on the embedded object.

HL233.1. Describe how to provide treatment for an impaled object



do not remove object



cut away clothing to fully expose the injury site



keep the object stable at all times



carefully apply dressing to the injury site and surround it with either more dressing or other soft objects



continue to apply pressure



wrap the dressing with a bandage to maintain pressure and keep the object in place



only apply enough pressure to control the bleeding



secure the bandage



fully expose the injury site



apply dressing and surround the injury site with gauze



wrap the dressing with a bandage and secure it

fold a triangular bandage into the shape of a donut



carefully place the donut around the object to keep it stable



carefully place a cup over the object



wrap and secure a bandage around the cup and injury site

Figure 2-19: Impaled object

Human or Animal Bites

A bite can be a serious injury. The wound can later become infected if not treated and cause severe discomfort.

To treat a patient for a human or animal bite:

1. Clean the wound site with sterile gauze.
 - ▶ Head and face bites have the potential to cause airway compromise.
 - ▶ Be aware of the possibility of bloodborne pathogens.
 - ▶ Follow agency policies and procedures for reporting a bite.
2. Dress and bandage the wound.
3. Apply only enough pressure to stop bleeding.

If you are treating an animal bite, make every attempt to find the animal. It may carry rabies or other infections. Follow local protocol and department policy when contacting specialized units, such as animal control. Notify the proper agency of all animal bites.

HL233.2. Describe how to provide treatment for a human or an animal bite

Gunshot Wounds

Gunshot wounds can cause serious injury by fragmenting, penetrating, vibrating, and damaging internal organs. When a bullet passes through the body, it can form a cavity, which is the space left by the tissue that is destroyed or displaced by the passage of the bullet.

A small entry wound that causes little bleeding might mask severe internal injuries. The damage from the wound may extend farther and deeper than just the exposed area. Bullets may fragment or may deflect off bone, travelling significant distances within the body. Complications from gunpowder, clothing, and bacteria drawn into the wound can cause infection. Depending on the location, a gunshot wound could cause a spinal cord injury as well.

Exit wounds are sometimes larger than entry wounds and may not be aligned with the entry wound. There can also be multiple entry and exit wounds. However, it is important to note that not all gunshot entrance wounds will have an exit wound.

To treat a patient with a gunshot wound:

1. Notify EMS of a gunshot wound patient.
2. Look for the entry wound and possible exit wound.
3. Dependent upon where the entry and possible exit wounds are on the body, the type of bleeding, and the involvement of internal organs, determine the appropriate medical intervention and follow basic bleeding control procedures.
4. Dress and bandage the entry or exit wounds as needed until EMS arrives.

HL233.3. Describe how to provide treatment for a gunshot wound

2

Unit 3: Trauma-Related Medical Issues Lesson 4: Spinal, Head, and Neck Injuries

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with a spinal, head, or neck injury.

Spinal Injuries

Injury to the head, neck, shoulders, back, and abdomen may cause injury to the spinal cord. A spinal injury may be difficult to identify and can temporarily or permanently interrupt the relay of messages from the brain to the body, eliminating a person's ability to move, feel, or even breathe. Spinal injuries may present some of these symptoms:

- constant or intermittent pain or tenderness in the neck or back
- weakness in the arms or legs with or without movement
- respiratory distress
- tingling, numbness, loss of sensation in upper or lower extremities
- obvious deformity of the spine (rarely seen)
- loss of bladder or bowel control
- persistent erection

SPINAL MOTION RESTRICTION

If scene size-up and the primary assessment suggest spinal injury, minimize movement of the patient's spine.

1. Position yourself at the patient's head.
2. Make sure the patient's head is in a neutral position lying down, so that the patient's nose is at the same level as or in line with their navel (belly button).
3. Place your thumb and fingers below the ears and on the shoulders. This way the motion of the neck with respect to the torso is restricted. Make sure that the head is not extended forward or backward or rotated.
4. Continue to restrict spinal motion until EMS arrive. Patients should not be transported in the seating position.

JAW THRUST MANEUVER

Perform a jaw thrust maneuver when you suspect an unresponsive patient has a neck or spinal injury and you need to establish an open airway.

1. Position yourself at the patient's head. Place one hand on each side of the patient's head with your thumbs resting on the cheekbones.
2. Grasp the angles of the patient's lower jaw on both sides and press down with your thumbs as you lift the jaw. If the lips close, push the lower lip open with your index finger.
3. Use a lifting motion to move the jaw forward with both hands. This pulls the tongue away from the back of the throat.
4. Maintain spinal motion restriction until EMS arrive.

If the situation becomes unsafe, move the patient. The object is to keep the breathing patient's head in the same position you found it and to prevent movement until advanced medical personnel arrives. If you must leave the patient unattended to call EMS or if the scene becomes unsafe, do not leave the patient on their back, place them in a recovery position. When you return, do not move the patient again if they are breathing and stable in the recovery position.

HL234.1. Describe how to provide treatment for a neck or spinal injury

Head, Face, and Scalp Wounds

Head and neck injuries are among the most serious emergencies. They can impair the upper airway and cause breathing difficulties. Impacts to the head and neck can also cause hidden fractures. If a head or neck injury is obvious or suspected, or if a trauma patient is unresponsive, immediately stabilize the head and neck. If the patient is wearing a helmet, do not remove the helmet unless it is obstructing their airway.

Scalp wounds may bleed profusely but are usually easy to control with direct pressure. After determining that the wound is not deep and there are no obvious skull depressions, treat a scalp wound the same as you would a soft-tissue injury.

To treat a patient for a laceration or cuts to the head, face, or scalp:

1. Use a dressing to apply direct pressure to the site. Be careful not to obstruct the airway and to allow for normal breathing.
 - ▶ The location and severity of the wound determines whether you apply direct pressure or loosely dress the wound.
 - ▶ Never apply direct pressure to a head wound if the patient has an obvious or depressed skull fracture. You might drive fragments of bone into brain tissue, causing further damage.
 - ▶ If fluid drains from the ears or the head, loosely cover the ears with a dressing.
2. Trauma to the mouth can cause a lot of bleeding. Your main concern is to establish and maintain an open airway.

3. If the patient's teeth were knocked out from their mouth and you locate the teeth, wrap them in moist dressing and transport them with the patient.

HL234.2. Describe how to provide treatment for a head, face, or scalp injury

Traumatic Brain Injury

A **traumatic brain injury (TBI)** is a brain injury that occurs when sudden trauma causes damage to the brain. TBI can occur when the head suddenly and violently hits an object, when the brain hits the inside of the skull, or when an object penetrates the skull and enters brain tissue.

Symptoms of a TBI can be mild (often referred to as a concussion), moderate, or severe and can include:

- changes in LOC/altered mental status
- unequal size of pupils
- discoloration around the eyes and behind the ears
- trouble breathing
- vomiting
- seizures
- coma
- paralysis
- in infants or children, the inability to nurse, take a bottle, or eat

HL234.3. Describe the signs and symptoms of traumatic brain injury (TBI)

INFANT TBI

In an infant or child younger than six years of age, a TBI is usually caused by violent shaking or blunt impact. This type of head trauma, also known as shaken baby syndrome (SBS), is a sign of child abuse. The National Center for Shaken Baby Syndrome estimates that over a thousand children receive injuries or die from head trauma related to child abuse each year. SBS is the primary cause of death and disability from child abuse in infants and young children.

Infants have weak neck muscles and delicate blood vessels in their brains. The brain floats in a fluid inside the skull. Shaking or blunt trauma to the head causes the infant's brain to hit the inside of their skull. This action causes nerve fibers to tear and will make the infant stop crying and lose consciousness. Torn blood vessels cause swelling, which limits circulation of blood, decreases the supply of oxygen to the brain, and leads to brain damage.

Visible swelling, bruising, and lacerations can help you identify but are not required to suspect whether abusive head trauma occurred. Signs and symptoms of head trauma can appear more quickly in infants than adults.

HL234.4. Describe how traumatic brain injury (TBI) occurs in infants and children

TREATMENT FOR TBI

A patient with symptoms of moderate or severe TBI should receive emergency first aid as soon as possible. The goal of treatment is to prevent further injury, and ensure proper oxygen and adequate blood supply to the brain. To treat a patient for a TBI:

1. Treat an obvious head laceration, swelling, or bruising as you would a head, scalp, or face injury.
2. Reassess every five minutes. Consider all patients with TBI as unstable.
3. If the victim is a law enforcement officer, disarm the officer at the first sign of change in mental status.

HL234.5. Describe how to provide treatment for an adult, child, or infant experiencing a traumatic brain injury (TBI)

EYE TRAUMA

Types of eye injuries can involve sand or dirt in the eye, eyelid injuries, chemical burns, objects impaled in the eye, or an extruded eyeball. To treat a person with an eye injury:

1. Discourage the patient from rubbing their eye. This can cause more damage to the eyeball.
2. Carefully and separately, examine each eye.
3. Identify the injury's cause, when it occurred, whether it affects both eyes, and when the patient first noticed symptoms.
4. Cover the injured eye to limit eye movement for all eye injuries.
5. Cover both eyes to limit eye movement for all severe eye injuries (such as impaled objects or extruded eyeballs).
6. Use a rigid eye shield or cover that does not press down on the eyeball to avoid further damage.

Treating eye injuries varies according to the nature of the injury.

To treat a patient with an eyelid injury:

1. Gently apply a patch, preferably rigid, to the affected eye. This limits eye movement, which can cause further injury.
2. Stop bleeding with light pressure if the injury does not affect the eyeball itself.

To treat a patient with an impaled object in the eye:

1. Do not remove an impaled object or apply pressure to the eyeball or the object.
2. As with other impaled objects, stabilize the object. Cover the other eye to limit movement.

To treat a patient for trauma to their eye socket:

1. Do not try to restore the eyeball to the socket if the eyeball extrudes from its socket.
2. Cover both eyes with a moist dressing, and apply a bandage.
3. Try to stay with the patient until EMS arrives.

HL234.6. Describe how to provide treatment for an eye injury

NECK INJURIES

The neck contains major blood vessels and the windpipe (trachea). Neck wounds can bleed profusely. Air entering a blood vessel in the neck can cause stroke, heart attack, or an air bubble that clogs an artery in the lungs. When assessing for a neck wound, look for obvious deformity of the neck, open wounds with possible bubbling of air, swelling, and spinal injury.

Treating a neck injury varies according to the nature of the injury; however, you will apply a dressing followed with a bandage after the bleeding has stopped. Do not wrap the bandage around the neck but around the armpit opposite the injury.

To treat a patient with an open neck wound:

1. If the injury is spurting blood, apply direct pressure using wound packing to the artery. You will remain in this position until EMS arrives based on scene safety.
2. If the injury is a deep laceration, cover the wound with an occlusive dressing (air and water tight dressing), followed with a bandage.
3. If the injury is oozing blood, apply enough pressure to stop bleeding while maintaining an open airway and spinal motion restriction.

HL234.7. Describe how to provide treatment for an open neck wound

2

Unit 3: Trauma-Related Medical Issues

Lesson 5: Chest, Abdominal, and Genital Injuries

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with a chest injury using a chest seal, an abdominal evisceration using an occlusive dressing, a genital wound, and a pelvis fracture.

Chest Injuries

Any penetrating or blunt force trauma in the chest area or cavity can affect the patient's breathing and circulation. A patient with this potential life-threatening injury needs immediate emergency first aid, followed by prompt EMS response. Allow a responsive patient to assume a position of comfort provided it is safe to do so.

- A **closed chest injury** results from blunt force trauma to the chest area. It can damage internal organs and can cause internal bleeding. The patient may have chest pain when breathing, especially when inhaling, which indicates they may have broken ribs. Both sides of their chest may not go up and down uniformly as they breathe. Unequal rise and fall may indicate a collapsed lung. To treat a patient with a closed chest injury, provide the same care as you would for a closed soft-tissue injury.
- A **flail chest injury** occurs when two or more adjacent ribs are fractured in two or more places due to blunt force trauma. This causes the broken rib pieces to move in the opposite direction from the rest of the chest as the patient breathes. The patient will have intense chest pain and will breathe with short gasps. Watch for both sides of the chest to rise and fall equally as the patient breathes. Be ready to support breathing in these patients.
- An **open chest injury** occurs when there is a penetration through the chest wall. Air and blood enter the area surrounding the lungs and create a change in the pressure of the chest cavity. The main treatment for an open chest injury is to seal the wound and monitor for increased breathing difficulty.
- A **sucking chest injury** is a type of open chest injury involving a larger hole in the chest wall. As the patient breathes, the air moving through the open hole in the chest causes a sucking sound. Their chest may not rise normally during inhalation.

The main treatment goal for an open chest injury is to prevent additional air from entering the chest cavity through the wound hole or holes. The preferred treatment is to apply a commercially manufactured vented chest seal following the manufacturer's instructions. A **chest seal** is a type of airtight dressing applied to a penetrating trauma to the chest cavity that can limit air flow entering a wound and control air flow exiting a wound.

A vented chest seal acts as a one-way valve that allows air to escape the chest cavity but not enter the cavity. If a vented chest seal is not available, use a non-vented chest seal, but be aware of the potential to create a tension pneumothorax (a situation in which air builds up in the chest cavity causing tension, eventually preventing return of blood to the heart and death). If neither is available, use an occlusive dressing, an AED pad, or create an improvised chest seal.

Regardless of what type of chest seal you use, wipe all fluid or blood away from the wound prior to applying the seal. Apply the seal when the patient is exhaling to ensure that the least amount of air is in the chest upon application.

If you are using an occlusive dressing, monitor the patient for enlarged neck veins, agitation, and cyanosis or paleness. These are signs and symptoms of tension pneumothorax, which indicate that you need to “burp” the seal by pulling back one corner to allow air to escape as the patient exhales. Promptly reseal it after the patient exhales.

HL235.1. Describe how to provide treatment for different types of chest injuries

Improvised Chest Seal

There may be incidents where you do not have a commercially manufactured chest seal available or where you do not have enough seals on hand to treat patients. Use the resources available to you and find any material that does not allow air to readily pass through it, such as sturdy plastic bags.

To make an improvised chest seal:

1. Determine the number of entry and exit holes in the chest area.
2. Apply a section of the airtight material over each wound.
3. Using adhesive tape, tape down three or four of the edges of the square to the patient’s chest so that the tape covers the full length of each edge. Allow for at least two inches of the plastic material beyond the defect on all sides. Taping only three sides will mimic the effect of a vented chest seal.
4. If you do have a vented chest seal, place this over the largest hole, and use improvised seals over the other injuries.

HL235.2. Describe how to make an improvised chest seal

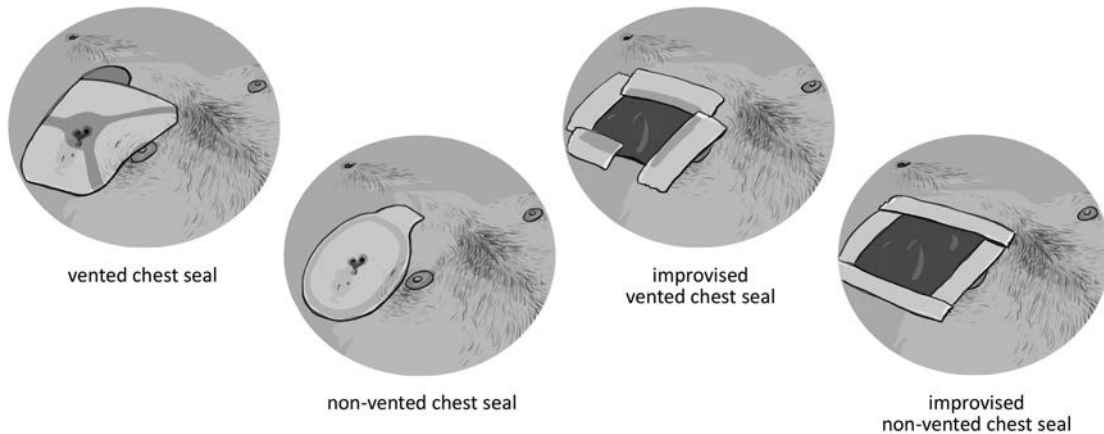


Figure 2-20: Chest seals

Evisceration

An **abdominal evisceration** is an open wound where the organs protrude from the abdominal cavity. Large abdominal eviscerations may produce large amounts of blood and body fluids. If available, wear additional PPE, such as a gown (raincoat) and eye protection. If the patient can breathe adequately and has no other life-threatening conditions, provide emergency first aid. Never pack the chest or abdominal cavity.

To treat a patient with an abdominal evisceration:

1. Do not touch or reinsert the exposed organ(s). Repositioning the organ can stop blood flow.
2. Cover the wound with a moist dressing and keep clean.
3. Place the patient in a position of comfort, most often on their back with the legs elevated and bent as if they were sitting in a chair. This helps decrease the chance of cutting off circulation to the organs.

HL235.3. Describe how to provide treatment for an evisceration

Genital Injury

Treating a genital injury is like treating other soft-tissue injuries. Genital wounds may bleed profusely. If there is an impaled object, always leave it in place.

Special considerations for female genitalia wounds:

- Never insert or pack anything into the vagina.
- Do not clean or allow the patient to clean the area.

Special considerations for male genitalia wounds:

- If any part of the genitalia becomes amputated, apply direct pressure to the wound.
- Try to find the amputated part. Wrap it in a dressing, place it in a plastic bag, and keep it cool, but do not place it directly on ice.

HL235.4. Describe how to provide treatment for a genital injury

Fractured Pelvis

Causes of a fractured pelvis include high-impact events such as a car accident or falling from a substantial height, athletic activities, or a bone-weakening disease that may occur in persons who are elderly.

Symptoms of a fractured pelvis include:

- pain, tenderness, bruising, or swelling in the pelvic bone area
- numbness or tingling in the groin or upper thighs
- discomfort or pain when sitting, standing, or walking
- leg or thigh bone turned outward or inward
- legs are not the same length

To treat a patient with a fractured pelvis:

1. Assess for pain, movement, and sensation in the feet.
2. Maintain spinal motion restriction if needed and if there are no other life-threatening injuries.

HL235.5. Describe how to provide treatment for a fractured pelvis

2

Unit 3: Trauma-Related Medical Issues Lesson 6: Extremity Injuries

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with an injury to the upper and lower extremities, to include fractures, dislocations, sprains, strains, and amputations.

Classifications of Fractured Bones

The medical term for a broken bone is *fracture*. There are two types of fractures:

- **open fracture**—the skin at the injury site is open, and the bone may protrude through the skin. If lacerations appear near the fractured bone, treat the break as an open fracture because you do not know if the bone penetrated the skin.
- **closed fracture**—the skin at the injury site remains intact.

HL236.1. Describe the classifications of fractures

Extremity Fracture

Most fractured extremities cause a large amount of pain, especially when the patient tries to move them. There may be swelling and obvious deformity compared to the other extremity. The patient may have decreased sensation or be unable to move the limb.

If you suspect that the patient has a fractured femur, consider this a life-threatening injury. If the fracture has separated the bone, there is a possibility that the bone will sever the femoral artery and cause significant blood loss within the thigh cavity. The injured leg is usually shorter than the uninjured leg and may have rotated. The thigh may be very swollen. The patient may be in extreme pain and unable to walk.

Fractures to bones in the lower leg may be less obvious; however, no matter where the fracture occurs, the patient may be in severe pain that will get worse if they try to move it. There is typically swelling, tenderness, and bruising.

If you suspect that the patient has an ankle injury and they are wearing boots, leave the boot in place. The boot provides support; removing it can cause more ankle damage. You may need to loosen or cut boot or shoe laces to allow room for swelling.

To treat a patient for a bone fracture:

1. Leave or place the patient in a position of comfort.
2. Provide support for the extremity as requested by the patient.

HL236.2. Describe the symptoms of a fractured extremity

Dislocation, Sprain, and Strain

A **dislocation** occurs when trauma forces the end of a bone from its normal position, and it comes out of its socket at the joint. Dislocations in adults occur more often in the shoulder and in the elbow for children. The injury will look deformed and may cause severe pain and swelling. Do not try to put the dislocated bone back into place as there are major blood vessels and nerves in the joint area and further injury may occur if you do this improperly. Treat a dislocation as you would treat a fractured bone.

A strain is an injury to a muscle or a tendon that becomes overstretched, sometimes called a pulled muscle. Strains commonly occur in the lower back and in the muscles at the back of the leg. A sprain is an injury to a ligament, or the strong bands of tissue that connect bones together in the joint. Sprains commonly occur in the ankle and wrist. The difference between a strain and a sprain is that strains stretch the muscle or tendon, and sprains injure the ligament that holds bones together. Treat a strain or sprain by applying ice and elevating the extremity.

HL236.3. Describe the symptoms of a dislocation, sprain, and strain

Amputation

An **amputation** is the loss or removal of a limb or body part such as a finger, toe, hand, foot, arm or leg. There are two types of amputations: complete and incomplete or partial. Both may require a tourniquet.

To treat a patient with a limb amputation:

1. If there is arterial bleeding or spurting blood, you may need eye protection.
2. For a complete or partial amputation of a limb, apply a tourniquet “high and tight” above the wound, not over a joint, even if there is not currently any bleeding, as such bleeding may develop later.
3. If the amputation involves fingers or toes, apply direct pressure; a tourniquet is not needed.
4. Do not delay the patient’s treatment or transport to look for the amputated part. However, when you do find the amputated part:
 - a. Wrap it in dressing.
 - b. In the case of multiple amputations, wrap each part separately.
 - c. Place it in a plastic bag.
 - d. Keep it cool, but do not place it directly on ice.

HL236.4. Describe how to provide treatment for an amputated body part

2

Unit 3: Trauma-Related Medical Issues Lesson 7: Burns

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with burns of different depths and locations, and from various causes.

Burns can be a minor medical condition or a major, life-threatening condition. Burns are tissue damage caused by exposure to heat, chemical or electrical contact, and overexposure to the sun or other radiation. The treatment for burns depends on the depth of the burn, where the burn is located on the patient, and cause of the burn.

Burn Depth Classification

Burns can be classified based on how deep into the skin the burn damaged the tissue.

- **superficial burns** damage the first, or outermost, layer of skin, which becomes red and feels very painful. They typically occur when the patient suffers from prolonged exposure to low-intensity heat or a short duration flash exposure to a heat source. A common example is sunburn.
- **partial-thickness burns** damage the first two skin layers, which causes swelling and red, white, or splotchy skin. Blisters may appear and can feel very painful. Contact with hot, not necessarily boiling, liquids, explosions, hot grease, and flame can cause this type of burn.
- **full-thickness burns** damage all skin layers and often affect the muscles and nerves underneath. Skin looks waxy, white, or charred. Because of nerve damage at the site of a full-thickness burn, the patient may feel no pain. If a patient with a full-thickness burn does feel pain, the pain originates from the area around the full-thickness burn, which may be a partial-thickness burn.

HL237.1. Recognize the seriousness of a burn as it relates to the depth of tissue damage

Burn Location

In addition to the severity of the burn, the location is also a concern.

Burns that occur on children and the elderly are of special concern. A small burn on a child may cover a significant amount of skin in proportion to total body area. The effects of aging make the elderly person more susceptible to serious injury, as the skin is thinner and short exposure to a heat source can cause a severe burn. Moreover, burns in these age groups may be signs of abuse.

Consider burns on the face, hands, feet, and genitals as a critical injury. If the patient's face has a burn, they may also have suffered an inhalation burn or a burn to any part of their airway. Signs include singed facial hair, burning around the mouth and nose, soot on the face, breathing difficulty, and coughing. Swelling from

the burn may obstruct their airway. A burn on the chest may limit chest expansion, resulting in breathing difficulty.

One priority in treating burns is preventing infection. The possibility of infection increases with the size of the burn area. Intact skin helps the patient maintain a normal body temperature. If large areas of skin have burns, the body loses its ability to shiver and cannot maintain its normal temperature, resulting in hypothermia. Fluid shifts and losses through the compromised skin and infection both can lead to shock.

HL237.2. Recognize the seriousness of a burn as it relates to the location of the burn on the patient

Burn Types

Four common causes of burns include:

- thermal: exposure to heat from any source
- inhalation: exposure to smoke or chemicals through the respiratory system
- chemical: exposure to liquid or dry power on the skin
- electrical: exposure to electrical current, lightning

Scene Safety

When entering a scene where you know you may be treating thermal or chemical burns, make sure there are no explosive materials in the area. Determine the wind direction prior to entering the scene (enter upwind). Should you enter a scene, and someone is on fire, advise them to stop, drop, and roll, and apply water if available. If the scene is still an active chemical spill, you may not have safe access to the patient.

Be aware of the danger of wearing a polyester uniform and latex gloves in a fire. While they might not immediately catch fire, if these materials do catch fire, they can melt and stick to skin while causing severe burns.

When entering a scene that involves electrical hazards, make sure the scene has no live electrical current before trying to treat the patient. Ask the power company to disconnect the line if it is still live, or locate a breaker box and throw the main breaker, as appropriate. Ask someone to stay at the breaker box to make sure the power remains off while you provide treatment. If you have a patient struck by lightning, do not enter the scene until it is safe to provide emergency first aid.

HL237.3. Recognize how the type of burn will determine scene safety concerns

Burn Treatments

Do not apply creams or salves (such as aloe vera, petroleum jelly, or butter) to the wound. Do not bandage burned fingers or toes together. Do not apply ice directly to the burn.

THERMAL BURN TREATMENT

To treat a patient with a thermal burn:

1. Remove the patient from the heat source.
2. Determine the burn depth before choosing the proper technique to stop the burning.
 - ▶ For superficial burns, flush clean, cool, or tepid water on the area to reduce the pain, and then cover with a dry sterile dressing.
 - ▶ For partial-thickness burns, flush clean, cool, or tepid water on the area to reduce the pain (only if the blisters are intact), and then cover with a dry sterile dressing. Do not puncture blisters, as the open wound is vulnerable to infection; try to keep the blisters intact.
 - ▶ For full-thickness burns, if there is any clothing stuck in the burn, leave it there. Do not flush a full-thickness burn with water if this is a thermal burn.

HL237.4. Describe how to provide treatment for a thermal burn

INHALATION BURN TREATMENT

To treat a patient with an inhalation burn caused by smoke or chemicals:

1. Allow the patient to assume a comfortable position.
2. Keeping the patient's airway open is always a priority.

Patients may have already inhaled smoke or chemical laden smoke by the time you arrive on the scene. Possible sign of smoke inhalation is soot around the mouth or nose. In addition to burns, smoke inhalation may expose the victim to poisonous gases, including cyanide and carbon monoxide. These patients may be critically ill, even without major burns.

HL237.5. Describe how to provide treatment for an inhalation burn

CHEMICAL EYE BURN TREATMENT

To treat a patient with a chemical eye burn:

1. Position the patient's head so that the unaffected eye is above the affected eye. This helps prevent transferring the chemical to the unaffected eye (cross-contamination).
2. Carefully hold the eyelid open while flushing to avoid damaging the eye or eyelid.
3. Flush the affected eye with water (or use a sterile eye station, if available) from its inner portion to its outer portion for twenty minutes to dilute the chemical and deter further damage to the eyeball.
 - ▶ The water does not need to be sterile, but it must be clean. Do not re-use the water, use fresh water for every flush.
 - ▶ The chemical can continue to burn tissue in the eye, even after dilution.

4. If chemicals burned both eyes, flush one eye at a time, alternating eye positioning so that the eye you are flushing is always above the unflushed eye.

HL237.6. Describe how to provide treatment for a chemical eye burn

CHEMICAL SKIN BURN TREATMENT

To treat a patient with a chemical skin burn:

1. Determine the chemical that caused the burn.
2. If the patient is able, ask them to remove their clothing from the affected area.
3. Be careful not to spread the chemical to unburned areas or to yourself while removing the clothing. Try not to remove contaminated clothing over the face or head to avoid potential airway or eye burns.
4. Ask the patient to brush off any dry chemical residue.
5. Flush the burn with water for at least twenty minutes with a continuous flow of water. Keep the unaffected areas above the affected areas as you flush.

HL237.7. Describe how to provide treatment for a chemical skin burn

ELECTRICAL BURN TREATMENT

To treat a patient with an electrical burn:

1. Call EMS even if the patient states that they are feeling fine.
2. Remove patient clothing from the affected area. Do not pull off clothing that is stuck to the wound.
3. Check for entrance and exit wounds to help determine the path of the current.
4. Treat an electrical burn the same as you would treat a thermal burn.

Be aware that electrocution sometimes causes spinal injury or cardiac arrest. Electricity travels the path of least resistance, which is often the nerves and blood vessels. Internal burns can cause underlying damage, such as heart attack or organ damage.

HL237.8. Describe how to provide treatment for an electrical burn

2

Unit 4: Medical Issues Lesson 1: Substance Misuse Complications

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient who has complications from substance misuse. You will also be able to administer naloxone for fentanyl and opioid overdose.

Overdose

Patients who misuse substances can sometimes experience complications such as overdose, which is when you take too much of a substance or more than the recommended amount that your body can safely handle. An overdose, especially an opioid overdose, can be fatal. However, symptoms will range in severity depending on the type of substance, the quantity, how a person took it, and their age and overall health. Changes in tolerance can also affect the risk of overdose. Patients who lose their tolerance for a substance after taking a break and then use the same amount as before are more at risk for overdose.

Not all overdoses are a result of substance misuse. An overdose can also happen from dosage miscalculation, confusion, or accidentally using more than one substance at the same time. If you respond to the scene of a suspected overdose, the person may be using a substance for the first time or may have a history of misusing substances. Regardless of the patient's history, it is important to recognize the signs of an overdose and respond quickly.

HL241.1. Describe how overdose can occur

Responding to a Suspected Overdose

An overdose can include the following patient symptoms:

- pinpoint pupils
- blue or purplish black fingernails or lips
- unresponsiveness, inability to speak, but awake
- loss of consciousness, cannot wake up
- breathing or heartbeat has stopped or slowed
- choking sounds or snore-like gurgling
- pale or clammy face
- vomiting, severe stomach pain, or diarrhea

- dizziness, loss of balance or co-ordination, limp
- seizures, hallucinations
- agitation, paranoia

HL241.2. Describe the signs and symptoms of an overdose

Make sure that you have alerted EMS. Provide EMS with the name of the substance used in the suspected overdose, if known.

A suspected opioid overdose is primarily a respiratory medical emergency.

To respond to a patient experiencing a suspected overdose:

1. Perform ongoing assessment of the patient for life-threatening conditions based on the severity of the suspected overdose.
2. Be prepared to perform CPR and use an AED if available.

HL241.3. Describe how to respond to a suspected overdose

Administering Naloxone

Opioids are a class of drugs used to reduce or relieve pain. Naloxone rapidly reverses an opioid overdose. It is available as an injection, nasal spray, and auto injector. The basics for administering any naloxone delivery system is to administer a dose of naloxone every two to three minutes until the patient is breathing on their own. If using the nasal spray alternate nostrils. Follow the manufacturer's instructions and agency policies and procedures for storing, maintaining, and administering naloxone. This is the only medication that an officer can legally administer and your agency policy and procedures will dictate when and how you administer naloxone.

HL241.4. Describe when and how to administer naloxone

Fentanyl

Pharmaceutical fentanyl prescriptions are for pain management and delivered through injection, a transdermal patch, flavored lozenges, dissolving tablets, and nasal spray. Fentanyl is a synthetic opioid that mimics morphine but is up to 100 times more potent than morphine and up to 50 times more potent than heroin. Illegal labs produce illicit fentanyl and similar drugs, sometimes to use as additives to heroin. Some synthetic opioids, such as the animal tranquilizer carfentanil, can be 100 times more potent than fentanyl.

Signs of fentanyl poisoning or overdose include:

- disorientation
- difficulty speaking or walking
- slowed pulse
- nausea
- slow, shallow breathing
- respiratory arrest

The standard treatment for suspected fentanyl overdose is to administer naloxone. If exposed to the skin, remove contaminated clothing immediately. Wash the skin with soap and water for fifteen minutes, taking care not to further irritate the skin by scrubbing. Do not use alcohol, hand sanitizer, or any solvent to remove fentanyl as it can increase your skin's ability to absorb the drug.

HL241.5. Describe how to respond to fentanyl exposure

It is important to minimize your exposure to fentanyl by choosing the appropriate PPE based on the level of risk – low, moderate, and high risk.

Fentanyl Exposure			
Risk Level	Description of Exposure	Examples	What You Should Do
Low Risk of Exposure (little chance of fentanyl particles reaching your nose, mouth, eyes, or getting on your skin)	<ul style="list-style-type: none"> • not airborne • low quantity • no contamination 	<ul style="list-style-type: none"> • exposure to small amount of drugs • pills or capsules (sealed, intact container) • what you would expect for street-level possession or sale 	<ul style="list-style-type: none"> • Put on gloves. • Wear long sleeves if possible. • Use mask and eye protection if appropriate.
Moderate Risk of Exposure	<ul style="list-style-type: none"> • potential for airborne • moderate quantity • possible contamination 	<ul style="list-style-type: none"> • more than for personal use or street-level sale • potential for powder to become airborne 	<ul style="list-style-type: none"> • Cover your torso and arms. • Double glove. • Put on a mask and eye protection.
High Risk of Exposure	<ul style="list-style-type: none"> • airborne • high quantity • severe contamination 	<ul style="list-style-type: none"> • exposure to large amount of drugs • near loose powder • widespread contamination • drugs concealed in a tight space, and would be difficult to remove and process 	<ul style="list-style-type: none"> • Evacuate immediately. • Call a hazmat team, preferably a team with clandestine lab training. • Have on-site decontamination ready if possible. • Have medical personnel on standby.

Other Complications From Substance Misuse

“Excited delirium” is a broad term that is sometimes used to refer to a group of symptoms, such as severe agitation, hyperactivity, confusion, intense paranoia, and hallucinations, that appear suddenly but with short duration. The common causes of these symptoms could be, but are not always, poisoning from stimulant drugs, especially cocaine and methamphetamine. Signs and symptoms have been described as including the following:

- hyperthermia, sweating (temperatures can spike to between 105°F and 113°F)
- agitation
- hyperactivity
- incoherent shouting or unclear speech
- foaming at the mouth
- drooling
- dilated pupils

If you recognize these symptoms, it is important to get the patient help. Patients experiencing these symptoms need verbal calming, rapid de-escalation, and possibly medical treatment. Remove excess stimuli by turning off lights and sirens. Possible containment in a controlled and safe environment can ensure safety for everyone while the incident runs its course or prior to EMS arrival.

Substance Withdrawal

Withdrawal is a physical, mental, and emotional response to suddenly or slowly quitting the use of substances. If not managed medically, withdrawal from drugs such as alcohol and benzodiazepines can be severe or deadly.

Symptoms of acute withdrawal or detox include:

- substance cravings
- anxiety or panic attacks
- apathy
- depression
- fatigue or low energy
- foggy thought process
- impaired concentration
- increased sensitivity to stress
- increased sensory sensitivity
- insomnia or other sleep disturbances
- irritability, aggression, hostility
- lack of enthusiasm or motivation
- poor impulse control
- poor memory
- severe mood swings

Patients experiencing opioid withdrawal often pick at their skin as they are hallucinating that bugs are crawling on or under their skin. Alcohol and benzodiazepine withdrawal syndrome may be life-threatening and requires immediate advanced medical care and management.

HL241.6. Describe how to respond to a patient experiencing substance withdrawal

2

Unit 4: Medical Issues Lesson 2: Diabetes and Seizures

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient having a diabetic emergency or experiencing a seizure.

Diabetic Emergency

Diabetes is a chronic illness that influences how the body turns food into energy. Diabetes causes the body to not produce or properly use insulin. **Insulin** is a hormone that converts sugar, starches, and other food into energy needed for daily life.

There are several types of diabetes:

- Type I—diabetes in which the body does not produce or produces very little insulin
- Type II—diabetes in which the body does not use insulin properly
- Gestational—diabetes that may temporarily develop during pregnancy

When the body does not have enough insulin or insulin that is working properly, it cannot keep blood sugar at normal levels. Blood sugar that is too high or too low can cause a diabetic emergency.

Signs and symptoms of a diabetic emergency can include the following:

- intoxicated appearance that may mimic drunken behavior or suspected drug overdose, including staggering, jerky movements, or slurred speech
- confusion
- dizziness and drowsiness
- sweet, fruity, or acetone-smelling breath that you might mistake for the odor of alcohol
- blurry or double vision
- irregular breathing, rapid or weak pulse
- seizure, convulsion, loss of consciousness

HL242.1. Describe signs and symptoms of a diabetic emergency

When assessing a conscious patient, ask if they have any medical conditions. Do not assume that the person is under the influence of alcohol or drugs. If the patient states that they have diabetes, ask them if they

have eaten or taken medication or insulin. Look for a medical alert tag, insulin pump, glucose monitor, or an indication on their driver's license that they are diabetic.

To respond to a patient experiencing a diabetic emergency:

1. Notify EMS of the patient's condition.
2. Ask the patient if they have a blood glucose monitor with them. If necessary, help the patient perform a blood sugar check.
3. Keep the patient from overheating or becoming chilled.
4. Perform an ongoing assessment for life-threatening conditions while waiting for EMS and be prepared to perform CPR and use an AED if available.

HL242.2. Describe how to respond to a patient having a diabetic emergency

Seizure

A **seizure** is a burst of uncontrolled electrical activity between cells in the brain. Symptoms range from a blank stare into space or random shaking to twitching extremities to whole-body convulsions. Seizures also cause changes in the person's behavior, their bodily sensations, or awareness. People experiencing a minor seizure often exhibit signs and symptoms that resemble drunkenness or suspected drug overdose and, in some cases, may show signs of aggression. While having a seizure, the patient may stop breathing temporarily, bite their tongue, lose bowel or bladder control, make noises, spit, have foam around the mouth, display unusual behavior, or be unresponsive.

A person can have a single seizure or recurring seizures. Seizures are rarely life-threatening unless they continue indefinitely or two or more consecutive seizures occur without a period of responsiveness in between.

Seizures have various causes including:

- alcohol, illegal drug use (during withdrawal)
- brain abnormalities, tumors
- developmental disorders
- diseases such as epilepsy and diabetes
- flashing lights, moving patterns
- genetic influences
- head trauma
- high fever (predominately in children)
- infections
- lack of sleep
- medications (antidepressants, pain relievers)
- shock
- stroke

HL242.3. Describe signs, symptoms, and causes of seizures

Someone experiencing a seizure could be put at risk for falling, drowning, or getting involved in a car accident. Be prepared to provide first aid for injuries outside of responding to a seizure.

To respond to a patient experiencing a seizure:

1. Speak calmly to the patient. Look for a medical alert tag.
2. Begin timing the seizure and relay the information to EMS when they arrive.
3. If the patient is having a mild seizure and is still standing, encourage them to sit down. If they are shaking and jerking, ease them to the floor.
4. Clear the area around the patient of sharp or hard objects to prevent further injury.
5. Place something soft and flat as a barrier between the patient's head and the floor.
6. Remove their eyeglasses if appropriate. Loosen anything around their neck that may make it hard for them to breathe.
 - ▶ Do not force anything between the patient's teeth or into their mouth.
 - ▶ Do not restrain the patient.
7. Monitor the patient to ensure the airway is open.
8. After the seizure, perform a primary assessment. Encourage the patient to assume a position of comfort if they are responsive. If they are unresponsive after the seizure, you will need to place them in a recovery position.

HL242.4. Describe how to respond to a patient experiencing a seizure

2

Unit 4: Medical Issues Lesson 3: Asthma, Heart Attack, and Stroke

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with asthma who is struggling to breathe or a patient experiencing a stroke or heart attack.

Asthma Attack

Asthma is a respiratory condition in which the airway passage narrows due to swelling and mucus, which causes breathing difficulties. Signs and symptoms of an asthma attack are breathing difficulty while exhaling, rapid breathing, bluish skin, and a wheezing or whistling sound.

To respond to a patient experiencing a severe asthma attack:

1. Notify EMS of a patient experiencing a severe asthma attack.
2. Position the patient for comfort and advise them not to lay down.
3. Ask the patient if there is an accessible inhaler and assist them in using it.
4. Perform an ongoing assessment of the patient and be prepared to perform CPR and use an AED if available.

HL243.1. Describe how to respond to a patient with a severe asthma attack

Stroke

A **stroke** damages part of the brain due to the rupture or blockage of a blood vessel, often caused by high blood pressure, smoking, heart disease, or diabetes. The brain does not receive the oxygen and blood supply that it needs, which can cause brain damage if left untreated. Time is of the essence to transport the patient to advanced medical care.

The BEFAST mnemonic can help you recognize the signs and symptoms of a stroke and emphasize the importance of getting EMS to the scene immediately.

- Balance: sudden loss of balance or coordination
- Eyes: sudden loss of vision or double vision
- Face: one side is drooping when asked to smile
- Arm: lack of ability to keep their arms evenly raised

- Speech: slurred or having difficulty speaking
- Time: ensure EMS is on the way, critical to confirm the time of first symptoms

Additional signs and symptoms you may see:

- confusion or dizziness
- diminished consciousness/unconsciousness
- headache
- numbness/paralysis of extremities, typically on one side
- seizure

HL243.2. Describe the signs and symptoms of a stroke

To respond to a patient experiencing a stroke:

1. Notify EMS of a possible stroke patient and arrange for immediate transport to a medical facility.
2. Communicate the time of the onset of signs and symptoms to EMS.
3. Position the patient for comfort and try to keep the patient from falling asleep, if possible.
4. Be prepared to perform CPR if the patient loses consciousness and stops breathing and has no pulse.

HL243.3. Describe how to respond to a patient experiencing a stroke

Heart Attack

A **heart attack** occurs when a clogged blood vessel blocks the blood flow to the heart and it does not get the oxygen it needs. The top causes of heart attacks include smoking, high cholesterol, high blood pressure, diabetes, stress, and obesity. A heart attack can lead to cardiac arrest and you need to be prepared to administer CPR. Time is of the essence to transport the patient to advanced medical care.

Men and women have different signs and symptoms of a heart attack. Men typically complain of chest pressure. Women experience chest pressure and additional symptoms, such as:

- chest pain that radiates to other parts of the body such as the upper back, shoulder, arm, jaw, neck, or stomach area
- nausea, vomiting, heartburn
- sweating
- difficulty breathing, shortness of breath
- extreme fatigue, feeling as if they just ran a marathon

HL243.4. Describe the signs and symptoms of a heart attack

To treat a person experiencing a heart attack:

1. Notify EMS of a possible heart attack patient and arrange immediate transport to a medical facility.
2. Position the patient for comfort. Have the patient stop all activity.
3. Assist the patient in taking their medication for a heart attack if they can do so under their own power without choking.
4. Reassure the patient but prepare for possible cardiac arrest and be ready to perform CPR and use an AED, if available.

HL243.5. Describe how to respond to a patient experiencing a heart attack

2

Unit 4: Medical Issues Lesson 4: Heat- and Cold-Related Injuries

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with heat- and cold-related emergencies that could become life-threatening.

Heat- and cold-related emergencies may result in body injury and can ultimately cause death. To adjust to outside temperatures, the human body undergoes chemical and physical changes. Many conditions contribute to heat- or cold-related emergencies. Elderly people, infants, diabetics, and people with various preexisting health conditions may be more susceptible to these types of injuries.

HL244.1. Describe various ways the body adjusts to heat and cold

Heat-Related Emergencies

Heat-related emergencies can occur from loss of fluids and salts through heavy sweating. **Hyperthermia** occurs when the body cannot recover from this fluid loss. Hyperthermia has three stages—heat cramps, heat exhaustion, and heat stroke.

	Signs and Symptoms	
heat cramps	headache	<ul style="list-style-type: none">• cramps in abdominal muscles or extremities• warm, sweaty skin
heat exhaustion	headache loss of appetite vomiting	<ul style="list-style-type: none">• weakness, dizziness, fainting with heat cramps• moist, cool skin in the extremities• transition phase to heat stroke
heat stroke	headache loss of appetite vomiting	<ul style="list-style-type: none">• rapid pulse that weakens as condition worsens• hot, dry skin, the body has lost its ability to sweat• seizures, altered mental state, or unresponsiveness

HEAT CRAMPS AND HEAT EXHAUSTION

To treat a patient with heat cramps or heat exhaustion:

1. Remove the patient from the hot environment, and attempt to cool slowly.
2. Loosen or remove clothing.
3. Fan the body or apply a light mist of water.
4. Encourage an alert patient who is not nauseous to drink half a glass of cool water every 15 minutes.

HEAT STROKE

Heat stroke is a life-threatening emergency that requires prompt EMS transport.

To treat a patient with heat stroke:

1. Remove the patient from the hot environment.
2. Cool the patient immediately by applying cold packs to their neck, armpits, and groin, frequently replacing warmed packs with cold packs.
3. Keep skin wet with towels or wet clothing. Expose as much surface area of the body that you can to cool water, using the resources available (bucket of cold water, garden hose, ice, etc.)
4. Place the patient in a position of comfort or a recovery position.

HL244.2. Describe how to provide treatment for heat-related injuries

Cold-Related Injuries

Exposure to cold causes two types of emergencies:

- **Hypothermia:** an excessive cooling of the body's core temperature
- **Frostbite:** a localized injury from overexposure to extreme cold

HYPOTHERMIA

Causes of hypothermia can include overexposure to cold caused by weather conditions, improper clothing in cold weather, submersion in cool water for an extended time, and an inability to heat physical surroundings adequately.

Signs and symptoms of hypothermia include:

- bluish, mottled skin
- changes in pulse rate and breathing
- decreased muscle function
- low energy or drowsiness
- numbness
- shivering
- sluggish pupils
- cardiac arrest

To treat a patient with hypothermia:

1. Handle the patient gently.
2. Remove the patient from the cold environment, if possible.
3. Remove wet clothing and dry the patient.
4. Warm the body gradually by wrapping the patient in an emergency blanket, dry blankets, or dry clothing.
5. Encourage a fully conscious patient to drink warm, non-alcoholic, non-caffeinated liquids.

FROSTBITE

Frostbite, or a local cold injury, is the freezing or near freezing of a body part. Fluid in the cells freezes and swells, destroying or damaging them. Frostbite usually occurs in exposed body areas or areas with lower blood supply, such as ears, nose, fingertips, and toes. Frostbite can cause loss of the affected body areas.

Signs and symptoms of frostbite include skin that remains soft and turns pale when touched, an affected area that tingles upon re-warming, and the affected person losing feeling or sensation in the body area.

As frostbite progresses, the skin appears waxy and firm and becomes mottled and blotchy. The affected area swells and blisters. Tissue that is dead will turn black. Thawed skin may have an uneven color.

To treat a patient with frostbite:

1. Handle affected parts gently.
2. Remove wet clothing and cover the patient with an emergency blanket, dry blankets, or dry clothing.
3. If in a remote area or if you have delayed transport, warm the frostbite area in tepid—not hot—water. Do not warm the area if there is the possibility of refreezing.
4. Cover the affected area with a dry dressing or padding.

It is important to remember that heat- and cold-related injuries range from mild to extreme and can potentially lead to death. Assessing and caring for the patient may stop the injury's progress as you await advanced medical care.

HL244.3. Describe how to provide treatment for cold-related injuries

2

Unit 4: Medical Issues Lesson 5: Abdominal Pain and Poisoning

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient with abdominal pain that is significant enough for the patient to call for help, and for a patient experiencing poisoning or an allergic reaction.

Abdominal Pain

Separated from the chest cavity by the diaphragm, the abdominal cavity contains several organs. The abdomen is a large part of the body, and abdominal pain is a common complaint. A patient may feel abdominal pain directly over the affected organ, or the pain may radiate to a different body part.

As the first responder on the scene, do not spend time trying to determine the cause of the pain. Instead, recognize that the patient has an abdominal problem, complete a thorough patient assessment, place them in a position of comfort, wait for EMS, and treat any life-threatening symptoms accordingly. Remember that heart attacks may sometimes present with upper abdominal pain and nausea.

HL245.1. Describe how to respond to a patient with acute abdominal pain or distress

Poisoning

Poisons are substances that may cause an allergic reaction, injury, or death if introduced into the body. Poisons can be solids, liquids, or gases that enter the body through ingestion, inhalation, injection, or absorption.

HL245.2. Describe the different methods of poisoning

Signs and symptoms of poisoning include:

- difficulty breathing
- diarrhea
- abdominal pain
- dizziness or weakness
- chest pain, cough or burning sensation in the throat
- blue lips and skin or paleness
- nausea, vomiting

- burns around the nose or mouth
- seizures
- shock
- loss of consciousness

In the event of poisoning by absorption, patients can present with itchy skin, liquid or powder on the skin, redness, rash, or blistering. Signs of poisoning by injection include a bite or sting mark, itchy skin, stinger, or tentacle embedded in the skin, redness, swelling, pain around the site.

HL245.3. Describe the signs and symptoms of poisoning

Snake venom contains some of the most complex poisons known. These poisons can affect the central nervous system, heart, kidneys, and blood. Depending on the type of snake, snake venom can dissolve human tissue or cause nerve damage.

Signs and symptoms of poisoning from snakebites include:

- a semicircular bite site that may or may not bleed
- blurred vision
- drowsiness, slurred speech
- increased sweating and salivation
- nausea, vomiting
- one or two puncture wounds that may or may not bleed
- seizures, unresponsiveness
- severe pain and burning sensation at the wound site
- shock
- swelling and discoloration at the wound site beginning within 30 minutes and perhaps lasting several hours
- weakness, paralysis

Stings from some marine life can be very painful and make a person ill. Signs of poisoning from marine life stings are swelling and redness of the skin.

Many people have severe allergies to substances in the venom of insects, such as bees, wasps, hornets, yellow jackets, and ants. Although not poisoned, highly allergic people need immediate medical care for severe allergic shock after being stung. Signs and symptoms of poisoning from an insect bite or sting include:

- pain and swelling that extends to the stomach, back, or chest
- stomach cramping

- sweating or chills
- nausea
- body aches

Some spider bites, although not immediately life-threatening, develop a dark blue or purple area towards the center of the bite surrounded by a white ring and a larger red area that may turn into a large wound.

To treat a patient with poisoning:

1. If safe to do so, remove the patient from the source of the poison.
2. Make every attempt to identify the poison by questioning the patient, the patient's family, or any bystanders.
3. Provide appropriate treatment as recommended by poison control.
4. Notify EMS of the type of poison and any treatment provided.
5. If the patient is able, ask them to remove contaminated clothing, jewelry, and contact lenses from the affected area.
6. If the poison is a dry powder, ask the patient to brush it off.
7. Flush the area with a large amount of clean water for at least 20 minutes.
8. If the eye area experiences poisoning, follow procedures for eye trauma.

HL245.4. Describe how to provide treatment for poisoning

Anaphylactic Shock

Anaphylactic shock is a life-threatening emergency. Anaphylactic shock, or anaphylaxis, results from insect bites or stings, medications, pollen, foods, chemicals, or any substance that triggers a severe allergic reaction. Reactions typically occur within seconds to minutes after a sting, ingestion, or exposure. Patients who know they have allergies usually try to avoid substances that cause reactions. Avoidance is sometimes impossible, so these patients carry an epinephrine auto-injector. Available only by a prescription, the injector contains a single dose of the drug epinephrine. When injected, epinephrine counteracts the allergic reaction.

Signs and symptoms of anaphylactic shock may include:

- itching skin and hives
- itchy, watery eyes
- a weak and rapid pulse
- low blood pressure
- constriction of the airways which causes wheezing and trouble breathing

- swollen eyes, hands, and feet
- swollen mouth, lips, tongue, or throat
- warm, tingling feeling in the mouth, lips, face, chest, feet, and hands
- dizziness

HL245.5. Describe signs and symptoms of anaphylactic shock

To treat a patient experiencing anaphylactic shock:

1. Remove the patient from the source causing the allergic reaction.
2. Ask the patient if they have an epinephrine auto-injector. If so, you may assist by preparing the injection but the patient must inject the medication, as you may not inject prescription medication on your own. Follow your agency policy and procedures regarding your ability to administer this type of prescription medication.
3. Arrange for immediate transport. Prompt access to advanced medical care is crucial.
4. Perform an ongoing assessment for life-threatening conditions while waiting for EMS and be prepared to perform CPR or use an AED if available.

HL245.6. Describe how to provide treatment for anaphylactic shock

2

Unit 4: Medical Issues Lesson 6: Assisting in Childbirth

Lesson Goal

At the end of this lesson, you will be able to provide emergency first aid for a patient who may need help in childbirth and provide care for the newborn.

Childbirth occurs every day. Most often, it takes place without complications in a hospital setting, but occasionally the labor process begins so quickly that the person has no time to reach the hospital and you may be called on to assist. Sometimes there could also complications during labor which will require emergency first aid.

Assess for Labor

When called to assist a patient in labor or in the process of giving birth, size up the scene and perform a primary assessment. Labor occurs in stages, with labor contractions starting in the first stage and delivery of the baby occurring in the second stage. Try to assess how far in the labor process the patient is in.

Ask questions that will help you plan how you can assist the patient with the delivery, such as:

- When is your due date?
- Is this a multiple pregnancy?
- Has your water broken?

Depending on the answers, you will get a better idea whether there may be potential complications and how to prepare.

Prepare for Delivery

You will know delivery is close if you see the baby's head begin to show. Be prepared for large amounts of bodily fluids that are present during childbirth. Use all available PPE such as protective gloves, mask, face shield, and gown, if available. Follow basic infection control precautions.

To prepare for delivery:

- Call EMS for transport to a medical facility.
- If you have a patient that knows they are going to have multiple births, update EMS so that they are adequately prepared when they arrive.

- Try to maintain communication with EMS while they are on their way.
- Help the patient assume a position of comfort and place a clean towel under them if available.

HL246.1. Describe how to prepare for the delivery of a baby

Assist With Delivery

During a normal delivery, the baby's head usually comes out first, followed by the shoulders and then the rest of the body and legs last. Do not attempt to forcibly pull the baby out at any time.

1. Support and gently guide the baby's head out as the patient delivers the baby.
2. Be ready to place the newborn baby in a clean towel. (Remember that the newborn will be wet and slippery.)
3. Place the newborn on the patient's chest or abdomen and cover them both with a blanket if available.
4. Be sure to record the time of the delivery.
5. Monitor the patient's bleeding and apply a pad, gauze, or pressure to stop excessive bleeding.
6. If the area between the patient's vagina and anus is torn and bleeding, treat it as you would an open wound and apply dressings, sanitary pads, or gauze.
7. Place dressings or sanitary pads on, not in, the vaginal opening while elevating the patient's legs and hips.
8. Every few minutes reassess the patient for blood loss.
9. Save all dressing and expelled tissue. Do not throw away blood-soaked pads as you need to transport this with the patient.
10. Keep both the patient and the newborn warm.

HL246.2. Describe how to assist during the delivery of a baby

Care of the Newborn

After the patient delivers the baby:

1. The newborn should start to cry after delivery.
2. Hold the newborn in a face-down position or on its side to allow fluid to drain from their nose and mouth. Wipe the fluid away with a clean towel.
3. Every few minutes reassess the patient for blood loss and the status of the newborn.

If the newborn is not breathing or crying:

1. Rub the newborn's back with a dry towel.
2. Flick the soles of the newborn's feet to stimulate breathing.
 - ▶ If the newborn does not begin to breathe on its own within the first minute after birth, begin rescue breathing.
 - ▶ If the newborn has no pulse or has a heart rate less than 60, begin infant CPR.

After breathing begins:

1. Keep the newborn warm. Cover the top of their head.
2. Hand the newborn to the patient.
3. Encourage the patient to begin nursing the newborn. Nursing stimulates contraction of the uterus to deliver the placenta and helps slow bleeding.

HL246.3. Describe how to care for a newborn immediately after the delivery

Umbilical Cord and Placenta

The **umbilical cord** connects the baby to the patient and delivers oxygen and nutrients to the baby. In a hospital setting, the umbilical cord is often cut and clamped once it stops supplying blood to the newborn after birth. Without assistance from EMS, this will need to be delayed until they arrive.

The **placenta** forms during pregnancy and attaches to the uterus and the umbilical cord. The placenta will usually deliver in the last stage of labor, typically within ten to thirty minutes after the newborn. Once the patient delivers the placenta, place the placenta in a clean towel or container and position it at the same height as the newborn to help prevent the newborn's blood from flowing back into the placenta. Never pull on the umbilical cord to deliver the placenta.

HL246.4. Describe how to manage the umbilical cord and placenta after the delivery of a baby

Delivery Complications

Delivery complications that you will need to watch out for include an umbilical cord wrapped around the baby's neck, an umbilical cord prolapse, a breech delivery, and excessive bleeding after delivery.

UMBILICAL CORD AROUND THE NECK

It can be common for the umbilical cord to wrap around the baby's neck before labor. This rarely results in complications; however, if it wraps too tightly around the baby's neck without loosening on its own during delivery, it can become an issue. If this happens, you can loosen or unloop the umbilical cord around the neck during the delivery to allow the baby to breathe.

UMBILICAL CORD PROLAPSE

In some deliveries, the umbilical cord comes out of the vagina before the newborn. This is a life-threatening emergency. When the baby's head compresses the cord against the birth canal, this can cut off their supply of oxygen and blood. If you notice this occurring, notify EMS of the urgency to arrive quickly and instruct the patient to assume a knee-chest position to relieve pressure on the cord (chest and face down against the floor and hips elevated).

BREECH DELIVERY

If you see the feet or buttocks present first, not the top of the head, this is information that EMS needs to know immediately. Encourage the patient to remain calm. As the patient delivers the baby, support the baby's legs and body and the head will follow. Never try to pull the baby from the vagina by the legs or torso.

A vaginal delivery where the baby passes through the vagina is not possible if a single leg or arm appears first. A physician needs to deliver this baby. Rapid transport to a medical facility is crucial. Make sure that EMS is on their way and keep them updated.

EXCESSIVE BLEEDING AFTER DELIVERY

A person loses about one or two cups of blood and body fluid during normal childbirth. After delivery, watch for more bleeding than normal or massive hemorrhage and take steps to control the bleeding if it becomes severe or life-threatening. Treat for shock and alert EMS of the patient's condition. Continue to monitor and care for the patient until they arrive.

HL246.5. Describe how to provide treatment for complications of childbirth

3

CRIMINAL JUSTICE FIREARMS

Unit 1: Firearms Safety

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3

Unit 1: Firearms Safety Lesson 1: Firearms Safety Procedures

Lesson Goal

At the end of this lesson, you will know and demonstrate the firearms safety procedures that should be followed when handling or using firearms.

Officers face many dangers as part of their jobs, including the use of firearms. Failure to cautiously and consistently follow the rules of safe firearm handling can result in serious injury or death. You must acquire proper training on the specific model of firearm you will carry and use before touching, handling, or loading that firearm, or any other firearm. When studying firearms, the term **primary hand** is the hand you use to shoot the firearm. Your **support hand** is the hand that assists the primary hand.

HL311.1. Identify the primary and support hand

Safety is the most important element of firearms training. Think before you act whenever you are around firearms. No matter how proficient you become at marksmanship, you and those around you are not safe if you carelessly handle or discharge a firearm. As recruits, and later as officers, you will always follow all of the firearms safety. Facilitators and range instructors will enforce the safety rules any time firearms are present, issued, or handled. Remember: you are responsible for your firearm at all times.

HL311.2. Identify the common cause of most firearm accidents

Always refer to the manufacturer's manual for safety recommendations.

General Rules of Firearms Safety

Follow these safety rules at all times:

1. Treat every firearm as if it were loaded.
2. Never point your firearm at anything that you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep your firearm on safe until you intend to fire (if applicable).
5. Know your target and beyond.

HL311.3. Identify the general rules of safety that should be applied to all firearms

Rules for Firearms Safety on the Range

Follow these safety rules while on the firing range:

1. Immediately obey all directions and commands from the range instructor. Also, do not do anything until the range instructor provides you with instructions.
 - a. Load only on the range instructor's command.
 - b. Do not retrieve dropped ammunition, magazines, or equipment until the range instructor declares it safe to do so.
 - c. Perform unloading procedures even if the firearm is unloaded when the range instructor issues the "unload" command.
 - d. You may leave the firing line only at the range instructor's command. A firing line refers to the position in which gunfire is directed at targets.
 - e. Stop firing immediately at the "cease fire" command.
2. Care for and respect all firearms.
 - a. Never abuse firearms and prioritize safety. Remember that it is your responsibility to keep yourself and others safe on the range.
 - b. Perform a **safety check** to visually and physically verify that the firearm is not loaded each time you are issued or return a firearm and every time you pick up, put down, or hand a firearm to another person.
 - c. Report any issues with the firearm to the range instructor (for example, loose screws or loose sights).
3. Always keep the firearm secure and in its holster until you are told to perform an action.
 - a. Keep the retention mechanisms engaged on holstered firearms at all times.
 - b. Never unholster a firearm behind the firing line.
 - c. When moving to and from the range, keep the action of the firearms open, indicating that there are no rounds present. Carry a pistol with the magazine removed, slide locked to the rear, and muzzle pointed in a safe direction (safety on, if applicable).

The **action** is the part of a firearm that presents the round or cartridge for firing, removes the spent casing, and introduces a new round or cartridge.

Spent casing refers to the metal part of ammunition that is ejected from the firearm once a round has been fired, which then makes room for a new live ammunition round.
4. Keep your finger off the trigger and outside the trigger guard when drawing the firearm or returning it to your holster.
5. Always point unholstered firearms in a safe direction.

6. Never handle firearms on the firing line while someone is downrange.
7. Dry fire on the firing line only under the range instructor's supervision. Dry fire refers to the discharging of a firearm with an empty chamber and no magazine inserted.
8. Only use ammunition provided by the range instructor.
9. Use ear and eye protection on or near the firing line.
10. Do not talk during range exercises unless your range instructor speaks to you or in an emergency.
11. Do not eat, drink, or use tobacco products on the firing line.
12. Be courteous to fellow shooters.
13. When not training, watch other shooters and listen to the range instructor.
14. If you drop a firearm, do not pick it up; raise your hand to notify the range instructor immediately.
15. If a firearm fails to fire, keep it pointed in a safe direction and attempt to clear the malfunction. If you cannot resolve the issue, raise your support hand to notify the range instructor.
16. Be aware of spent casings (hot brass) as they are being ejected from your or your fellow shooters' firearms. If you need to remove hot brass from your person, you must secure your firearm first.
17. Immediately report all injuries to an academy staff member. Know the location of the trauma or first-aid kit on the range.

HL311.4. Identify what safety rules to follow on the range

Storing Firearms Safely

You are responsible for making sure your firearm is secure at all times, including when you are off duty. Section 790.174, F.S., addresses requirements for storing firearms safely:

- (1) *A person who stores or leaves on a premises under his or her control, a loaded firearm, as defined in s. 790.001, and who knows or reasonably should know that a minor is likely to gain access to the firearm without the lawful permission of the minor's parent or the person having charge of the minor, or without the supervision required by law, shall keep the firearm in a securely locked box or container or in a location which a reasonable person would believe to be secure or shall secure it with a trigger lock, except when the person is carrying the firearm on his or her body or within such close proximity that he or she can retrieve and use it as easily and quickly as if he or she carried it on his or her body.*

(2) It is a misdemeanor of the second degree, punishable as provided in s. 775.082, or s. 775.083, if a person fails to store or leave a firearm in the required manner and, as a result, a minor gains access to the firearm, without the lawful permission of the minor's parent or the person having charge of the minor, and possesses or exhibits it, without the supervision required by law:

(a) In a public place; or

(b) In a rude, careless, angry, or threatening manner in violation of s. 790.10.

This subsection does not apply if the minor [a person under the age of 16] obtains the firearm as a result of an unlawful entry by any person.

HL311.5. Identify the requirements in the Florida Statutes for storing a firearm

3

Unit 1: Firearms Safety Lesson 2: Use of Deadly Force

Lesson Goal

At the end of this lesson, you will be able to identify the statutes that govern the use of force and the legal aspects of using deadly force.

Use of Force

Chapter 776, F.S., governs all use of force by criminal justice officers. Even though the statute refers to “law enforcement” officers, the legal guidelines regarding use of force apply equally to corrections and correctional probation officers. Section 776.05, F.S., identifies two general areas in which an officer’s use of force is justified: to apprehend a subject and make an arrest, or to defend self or others. The statute states:

A law enforcement officer, or any person whom the officer has summoned or directed to assist him or her, need not retreat or desist from efforts to make a lawful arrest because of resistance or threatened resistance to the arrest. The officer is justified in the use of any force:

- (1) Which he or she reasonably believes to be necessary to defend himself or herself or another from bodily harm while making the arrest;*
- (2) When necessarily committed in retaking felons who have escaped; or*
- (3) When necessarily committed in arresting felons fleeing from justice. However, this subsection does not constitute a defense in any civil action for damages brought for the wrongful use of deadly force unless the use of deadly force was necessary to prevent the arrest from being defeated by such flight and, when feasible, some warning had been given, and:*
 - (a) The officer reasonably believes that the fleeing felon poses a threat of death or serious physical harm to the officer or others; or*
 - (b) The officer reasonably believes that the fleeing felon has committed a crime involving the infliction or threatened infliction of serious physical harm to another person.*

HL312.1. Identify elements of the Florida Statutes as related to the use of force by criminal justice officers

Deadly Force

Deadly force is force that is likely to cause death or great bodily harm. Section 776.06, F.S., states:

- (1) . . . the term “deadly force” . . . includes, but is not limited to:
- (a) *The firing of a firearm in the direction of the person to be arrested, even though no intent exists to kill or inflict great bodily harm; and*
 - (b) *The firing of a firearm at a vehicle in which the person to be arrested is riding.*

HL312.2. Define deadly force

Section 776.07, F.S., states:

- (2) *A correctional officer or other law enforcement officer is justified in the use of force, including deadly force, which he or she reasonably believes to be necessary to prevent the escape from a penal institution of a person whom the officer reasonably believes to be lawfully detained in such institution under sentence for an offense or awaiting trial or commitment for an offense.*

Use of deadly force may be an officer’s first and only appropriate response to a perceived threat. Deadly force does not necessarily mean that someone died from the force used. It can cause great bodily harm or no harm at all. For example, returning fire is deadly force even if the officer misses the target.

You must base your decision to use deadly force on a clear, reasonable belief that you, a fellow officer, or another person faces impending danger of death or great bodily harm.

You should never fire a firearm unless you are faced with a deadly force encounter. Once you have used your firearm, you have reached the highest level of force—deadly force. For more details regarding the use of force, refer to the Legal and Defensive Tactics chapters.

HL312.3. Identify the essential criteria to determine the justification of the use of deadly force

3

Unit 2: Ammunition Lesson 1: Ammunition Identification and Maintenance

Lesson Goal

At the end of this lesson, you will be able to identify different types and calibers/gauges of ammunition, and know how to inspect ammunition for defects and store ammunition properly.

Ammunition Parts and Types

Please refer to Figure 3-1. It illustrates the basic parts of ammunition for a pistol.

- bullet: portion of the cartridge that becomes a projectile when in flight
- case/casing: the metal or plastic container that holds all parts of a round of ammunition: primer, powder, and bullet
- headstamp: markings found on the head of ammunition that indicate caliber or gauge and identify manufacturer
- powder: propellant used in most firearms; it produces a large volume of gas when ignited
- primer: mixture used to ignite the propellant or powder
- rim: the edge on the base of a cartridge case that stops the progress of the case into the chamber
- round: complete ammunition cartridge that contains all parts of ammunition

HL321.1. Identify pistol ammunition parts and nomenclature

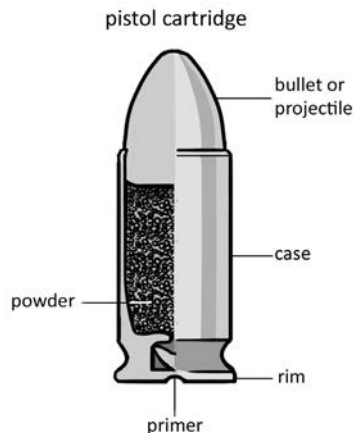


Figure 3-1: Pistol cartridge

Ammunition can be identified by examining the caliber or gauge found on the cartridge's headstamp. **Caliber** is a measurement used to identify different cartridge and projectile sizes. It is determined by measuring the diameter of the bore (the inside of the barrel) of the firearm. This helps identify the correct ammunition for a specific firearm. **Gauge** is a measurement of shotgun bores derived from the number of bore-sized balls of lead per pound.

HL321.2. Explain the difference between caliber and gauge

Inspecting Ammunition for Possible Abnormalities or Defects

It is important to know how to inspect ammunition for functionality and dependability. Your ammunition may be the correct type, caliber, and gauge, but it must still be checked for damage or defects. This section covers the most common types of ammunition defects and how to inspect ammunition for those abnormalities or defects.

You may find these abnormalities and defects when inspecting ammunition:

- scrape: indentation in the case that may weaken the case wall; occurs when a layer of the case wall has been scratched or torn away
- dent: dimple or depression in the case
- corrosion: layering of the case with oxidation or foreign material, such as mold, fungi, congealed oil, and lubricants
- puncture: actual opening in the case body

In addition to this list are other abnormalities and defects that include the round not firmly seated in the casing, missing primer, half-primer, and more.

HL321.3. Identify any abnormalities or defects on ammunition

Inspecting ammunition before loading is important. Periodically check your ammunition to identify and separate less than perfect rounds from service ammunition.

1. Make sure that the casing and rim are free of defects. Look and feel for scrapes, dents, corrosion, and punctures.
2. Determine that the projectile is firmly seated in the casing. Feel both ends of the ammunition to make sure the projectile is not loose.
3. Make sure that the primer is seated properly and free of dents. Look at and feel the cartridge to verify the primer is flush with the rim.

Handling Ammunition Safely

Proper maintenance of ammunition involves any care that helps provide the most safety when using and inspecting ammunition. Improperly maintained ammunition may cause a firearm to fail to fire or function, which may result in serious injury or death in a self-defense situation.

Use only ammunition from a reputable manufacturer, and do not alter the manufacturer's original design. Do not use reloads for duty ammunition. Reloads are cartridges that have been prepared using previously fired brass cases, and are not as reliable as new ammunition. Also, using reloaded ammunition may void the warranties of many firearms.

Do not drop or throw ammunition, as it may discharge. Do not place ammunition in the radio holder of your patrol vehicle. Ammunition that comes into contact with an electrical impulse may cause it to discharge.

Solvents and lubricants may cause a failure-to-fire malfunction, so avoid using them when handling ammunition. Wash your hands before handling ammunition to prevent solvents on your hands from seeping into the primers.

HL321.4. Identify proper handling procedures for ammunition

3

Unit 3: Semiautomatic Pistol Lesson 1: Familiarization

Lesson Goal

At the end of this lesson, you will know the semiautomatic pistol parts with correct nomenclature, the way the parts function, and the steps to safely handle a semiautomatic pistol.

The term **handgun** refers to either the semiautomatic pistol or the revolver. This unit focuses on the semiautomatic pistol, which is the handgun that most criminal justice officers carry.

All firearms have many of the same types of parts to achieve the same function. It is important to learn the nomenclature of the firearms covered in this training and how their parts function together to make the firearms work. This knowledge allows safe firearms operation on the range and in the field. It also helps you to better communicate with the armorer and to testify in court in a clear and credible manner.

Nomenclature

Semiautomatic pistols may operate differently based upon who manufactured them. Make sure you are familiar with the part names, locations, and functions for the semiautomatic pistol that you use. Refer to Figure 3-2 to help you identify each part.

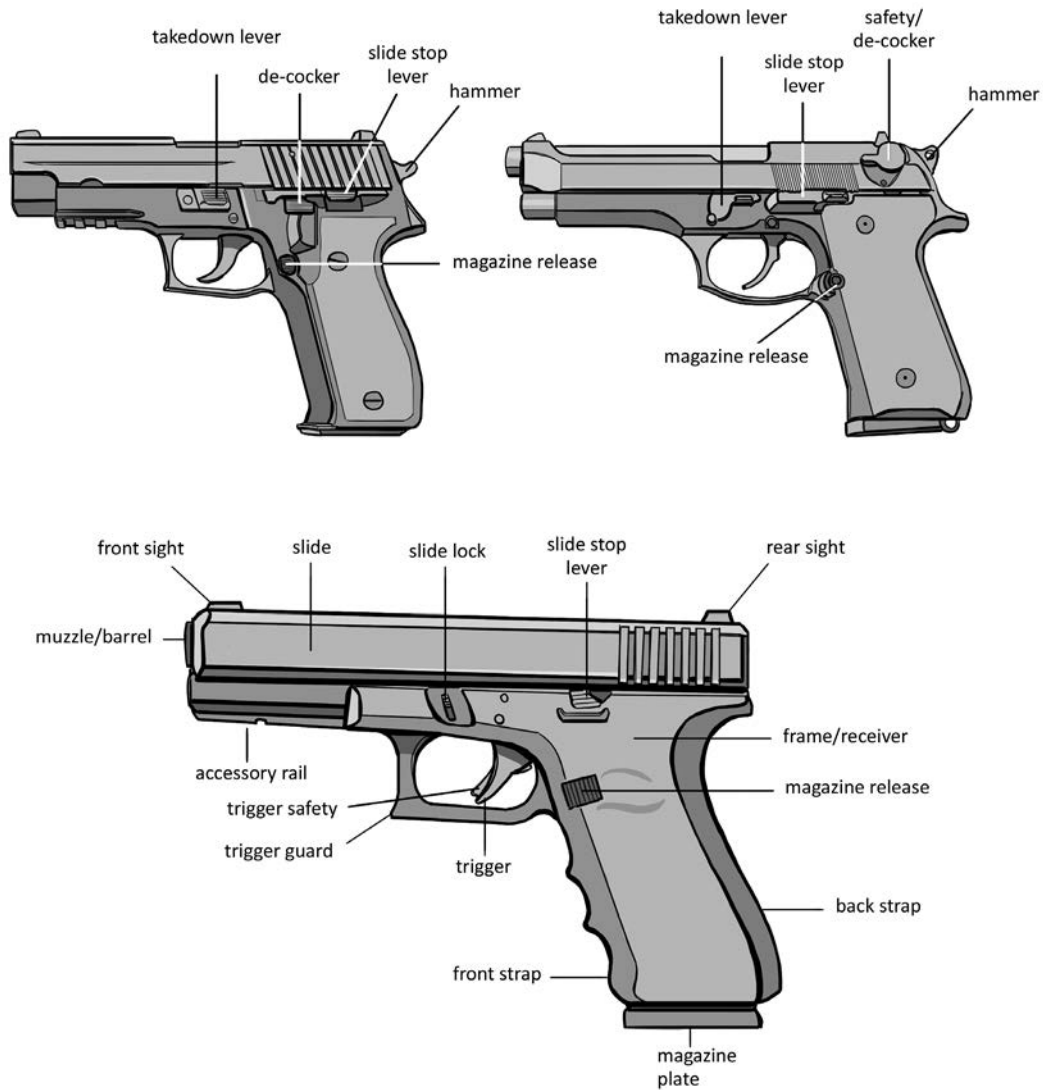
HL331.1. Identify semiautomatic pistol parts with the correct nomenclature

The following terms are associated with the use and function of a semiautomatic pistol:

- accessory rail: provides space for lighting and sighting devices
- back strap: portion of the grip that is placed in the palm of the shooting hand
- de-cocker: mechanism that safely de-cocks the pistol, releasing the spring tension on the cocked hammer or striker without allowing them to reach the round
- frame/receiver: holds the internal parts, as well as the slide assembly
- front sight: located on the front of the slide; used to bring the firearm into alignment for accuracy
- front strap: portion of the grip that allows the fingers of the shooting hand to rest
- hammer: strikes the primer or firing pin to ignite the propellant and fire the round
- magazine release: releases the magazine from the frame (magazine well)
- muzzle/barrel: provides a path for the fired bullet
- rear sight: located on the rear of the slide; used to bring the firearm into alignment for accuracy

- slide: houses the firing pin, barrel, recoil spring, sights, and extractor
- slide lock/takedown lever: device that allows quick and simple fieldstripping
- slide stop lever: device that locks the slide in the open position
- trigger: activates the pistol's operation
- trigger guard: part of the frame that protects the trigger

HL331.2. Describe the function of semiautomatic pistol parts



Position of parts may vary depending on the make and model of the weapon

Figure 3-2: Semiautomatic pistols

Semiautomatic Pistol Magazine

The magazine holds the ammunition, and can be taken apart for cleaning. When reassembling the magazine, make sure to replace the spring and follower correctly. Refer to Figure 3-3.

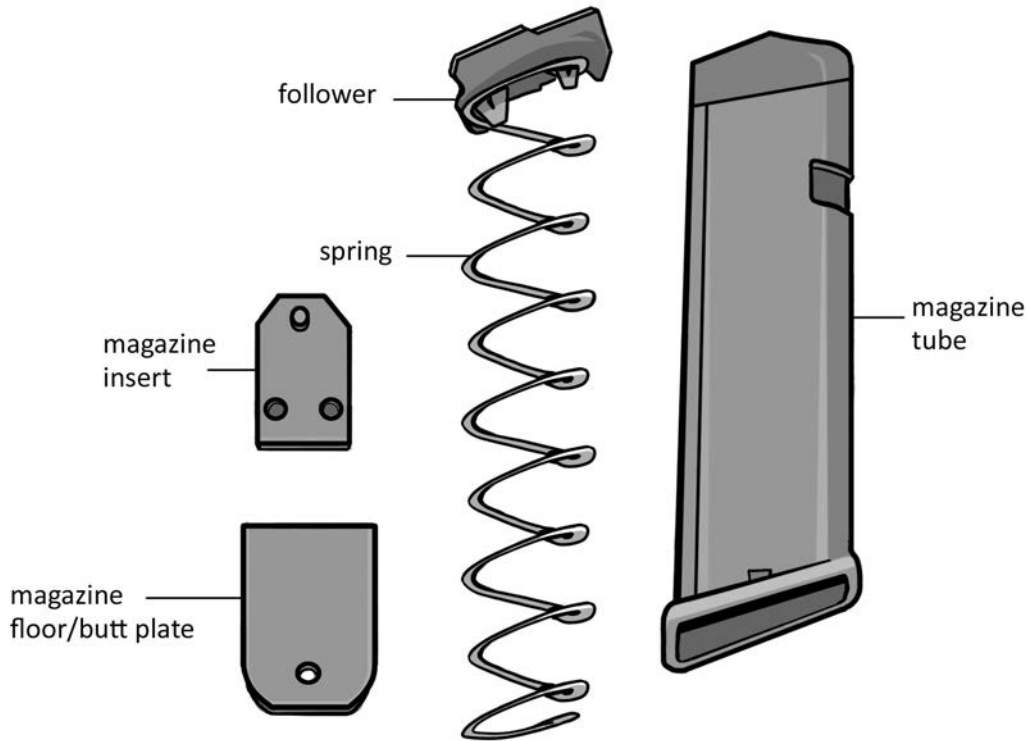


Figure 3-3: Semiautomatic pistol magazine

- follower: activates the slide stop and pushes the round up to be stripped off by the forward movement of the slide
- magazine floor/butt plate: holds the spring and follower in the magazine
- magazine insert: keeps the floor/butt plate secure and prevents dirt and debris from entering the magazine
- magazine tube: holds the internal components in place, including the ammunition
- spring: pushes the follower up

HL331.3. Identify semiautomatic pistol magazine parts with the correct nomenclature

How the Semiautomatic Pistol Works

A semiautomatic pistol functions by using the energy from the recoil of a single round of ammunition to extract and eject a fired cartridge from the pistol's chamber and load an unfired round from a magazine into the chamber for the next shot.

As you draw the trigger fully to the rear in double-action mode, the hammer moves back and then releases to strike the firing pin. Upon firing, the slide moves back, extracting and ejecting the spent cartridge case and pushing the hammer to the fully cocked position. As the slide moves to the rear, the recoil spring compresses. When all the energy has been used, the spring decompresses, pushing the slide forward. Then the slide returns forward, feeding the next cartridge from the magazine to the barrel chamber. The hammer remains cocked, and the trigger is in the rear position, so subsequent shots fire in single-action mode. This sequence repeats until the last round fires. Then the magazine follower exerts upward pressure on the slide stop, causing it to engage and hold the slide in the open position. (This example describes a double-action/single-action pistol.)

HL331.4. Describe how the semiautomatic pistol works

CYCLE OF OPERATION (OPEN ACTION)

1. loading: inserting a loaded magazine into the magazine well
2. feeding/chambering: moving the round from the magazine to the chamber by releasing the slide, picking up the round from the magazine and seating the round into the chamber
3. locking: the breech or back end of the barrel locks into the slide
4. firing: ignition of the primer and firing the cartridge
5. unlocking: unseating the breech end of the barrel from the slide
6. extraction: pulling the spent cartridge from the chamber
7. ejecting: pushing the spent cartridge out of the ejection port eject
8. cocking: returning the firing mechanism to the fire position

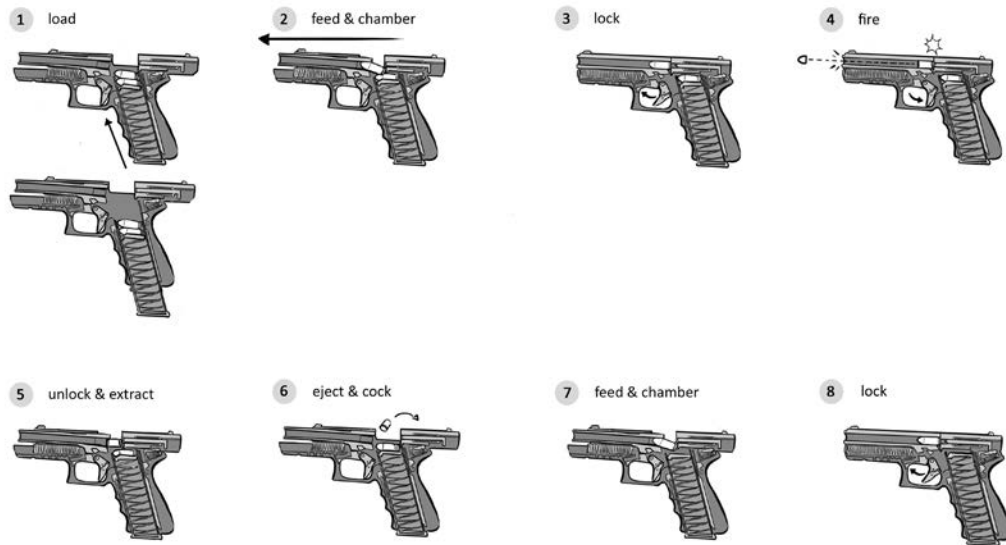


Figure 3-4: Cycle of operation for a semiautomatic pistol

PERFORMING A FUNCTION CHECK

A function check ensures that the firearm functions properly. It is usually performed after fieldstripping or cleaning and reassembling the firearm. To perform a function check, follow these steps:

1. Visually and physically check the firearm to make sure it is unloaded.
2. Operate the slide several times to make sure that it operates freely.
3. Pull the trigger. The firearm should function properly.
4. If the firearm:
 - a. has an external hammer, then manually cock the hammer and pull the trigger. The firearm should function properly.
 - b. is a striker-fired weapon, then hold the trigger to the rear as you release or cycle the slide with the support hand, then slowly release the pressure of the trigger until the trigger resets; you should hear a click and feel the reset on the trigger.
 - c. has a de-cocking lever, then manually cock the hammer and depress the lever. The pistol's hammer should de-cock.
5. Fully insert an empty magazine into the magazine well.
6. Pull the slide to the rear and confirm that it locks.

7. Depress the magazine release. The magazine should fall free.
8. Depress the slide stop lever or pull the slide to the rear and then release. The slide should function properly.

HL331.5. Describe how to perform a function check on a semiautomatic pistol

Handing the Semiautomatic Pistol to Another Person

To hand a semiautomatic pistol to another person, follow these steps:

1. Engage the safety, if applicable.
2. With your finger outside the trigger guard, press the magazine release and remove the magazine from the magazine well.
3. Secure the magazine.
4. Point the firearm in a safe direction, and pull the slide to the rear to eject the live round from the chamber.
5. Lock the slide to the rear by pulling it all the way to the rear and engaging the slide stop lever on the firearm's frame.
6. Visually and physically inspect the chamber, magazine well, and barrel to make sure they are empty.
7. With the slide locked to the rear and the magazine well empty, hand the pistol to the other person, grip first.

The person receiving the firearm should visually and physically check to make sure the it is unloaded.

HL331.6. Identify the steps to safely hand a semiautomatic pistol to another person

3

Unit 3: Semiautomatic Pistol Lesson 2: Drawing and Holstering

Lesson Goal

At the end of this lesson, you will know how to draw and holster a handgun.

The drawing and holstering procedures are the same for all handguns. While performing either maneuver, always remember to keep your head and eyes up to watch for threats, even in training. In other words, get in the habit of staying vigilant, because doing so regularly may save your life.

Drawing a Handgun

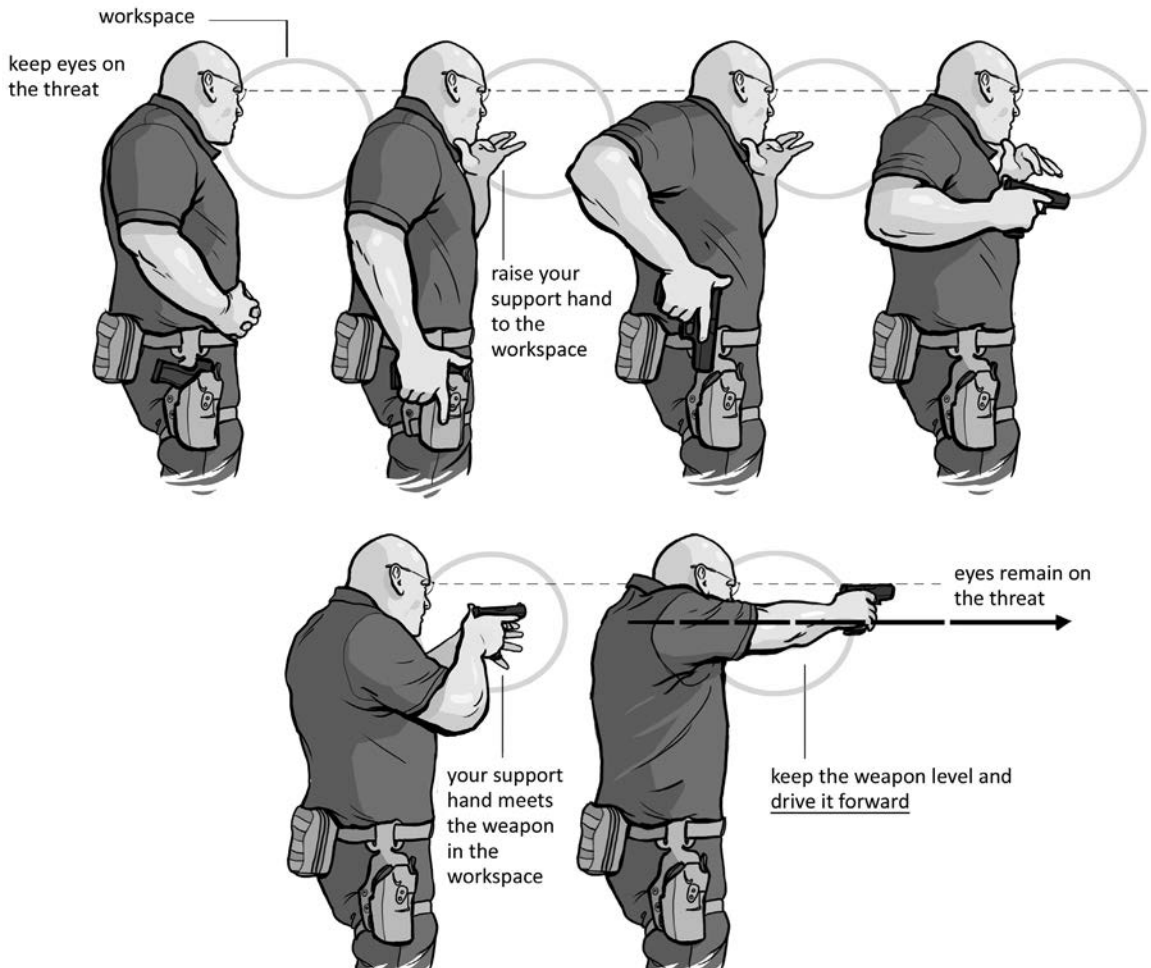


Figure 3-5: Drawing a handgun

To draw a handgun, follow these steps:

1. Disengage the holster retention device.
2. Keeping your hand high on the backstrap, wrap your fingers around the grip. Establish the grip prior to the draw and avoid adjusting it once the handgun leaves the holster.
3. Lift the handgun upward so its muzzle clears the top of your holster. (Remember to keep your trigger finger outside the trigger guard.)
4. With the handgun now in your **workspace**, or pulled in close and in your direct line of sight, join the support hand with the primary hand to form the two-hand grip and drive the muzzle straight toward the target. If no threat is present, keep the muzzle pointed in a safe direction.

HL332.1. Identify the steps to draw a handgun

Standing in place without cover during a deadly force encounter can get you killed, especially at the beginning of an engagement. Make yourself a hard target early in the encounter by stepping outside the threat's visual cone or direct line of sight when drawing your handgun. This is commonly referred to as moving "off the X."

While the lateral slide-step movement is great for creating angles that change the threat's immediate point of aim, stepping laterally is only one way to do it. Ultimately, the situation, number of threats, and your immediate environment will dictate how and where you move.

When moving, keep your feet low to the ground, feeling for objects that may cause you to trip or block your movement. Stepping low also helps with balance. In addition, be careful not to cross your feet.

To perform the lateral slide-step movement, follow these steps:

1. Face the target while assuming the offensive ready stance.
2. Shift your weight to the balls of your feet to allow movement.
3. Keep your back straight and your knees slightly bent.
4. While continuing to face the target, step to the side, leading with the foot in the direction that you are moving. For example, if you are moving right, step with your right foot first.
5. Slide the other foot over toward the leading foot to return to the offensive ready stance.

HL332.2. Demonstrate how to perform a lateral step while drawing a handgun

Grip

Grip during and after the draw is essential to good marksmanship and achieving tighter shot groups. A proper grip will help you with **recoil management**—the ability to control the movement of the handgun when it fires, allowing the sights to return on target in a predictable pattern without having to adjust your grip between shots. Your grip should be firm enough to manage the recoil.

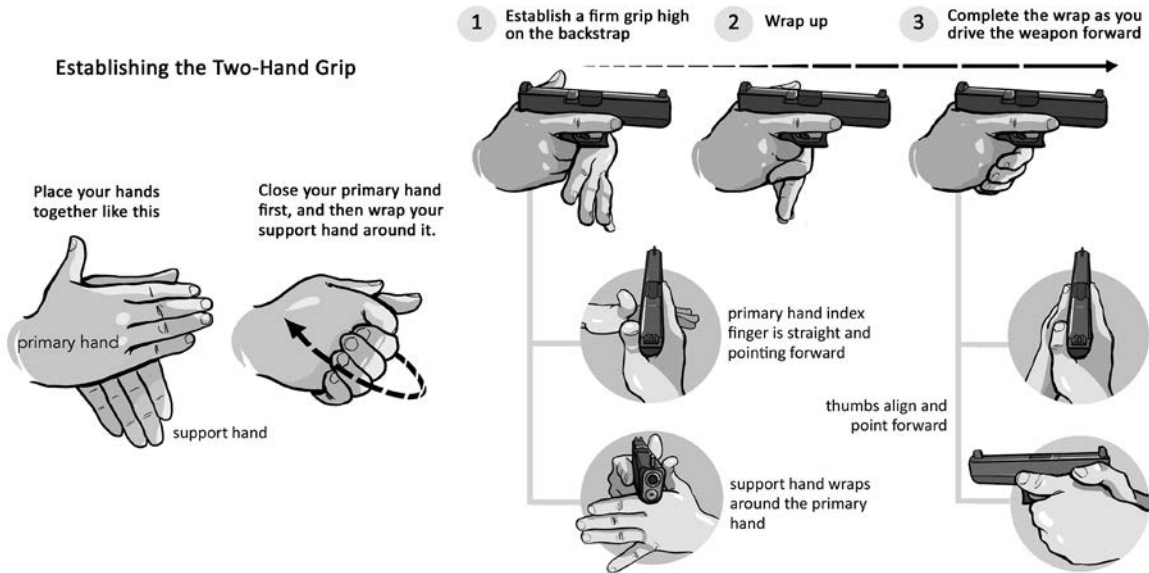


Figure 3-6: Two-hand grip with a semiautomatic pistol

HL332.3. Demonstrate a proper two-hand grip with a semiautomatic pistol

Holstering a Handgun

To holster a handgun, follow these steps:

1. Maintain a proper grip and keep your finger off the trigger and outside the trigger guard.
2. In the reverse order from drawing, smoothly return the handgun to your holster until you seat it properly.
3. Align the retention device components, and secure them together until locked.

It is recommended for the semiautomatic pistol to use the thumb of your shooting hand on the rear of the slide to prevent the slide from moving to the rear while holstering.

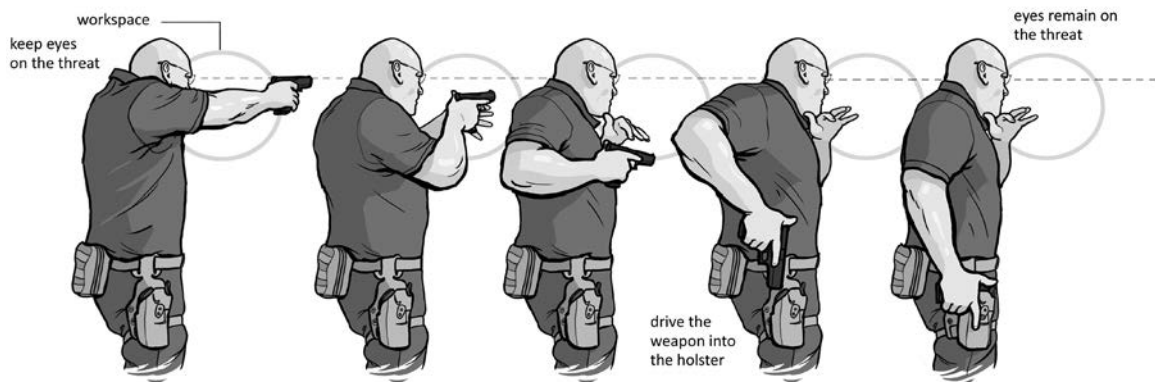


Figure 3-7: Holstering a handgun

- HL332.4. Identify the steps to holster a handgun

3

Unit 3: Semiautomatic Pistol Lesson 3: Loading, Unloading, and Reloading

Lesson Goal

At the end of this lesson, you will know how to load, unload, and reload a semiautomatic pistol.

Loading

To load a semiautomatic pistol, use your primary hand to draw the firearm from your holster and bring it into your workspace. While doing so, always keep the barrel pointed in a safe direction and your head and eyes up to watch for threats. Remember to take advantage of every load and charge as an opportunity to establish a good sight picture before holstering.

To load and charge a semiautomatic pistol, follow these steps:

1. Hold the firearm with your primary hand and bring it into the workspace.
2. Retrieve a magazine from your pouch with your support hand.
3. Place your index finger along the front of the magazine as you retrieve it.
4. Use your index finger to guide the magazine into the magazine well.
5. Push the magazine into the magazine well with a sharp upward motion using enough force to lock the magazine into place, then slightly tug it to ensure that it is seated.
6. Grasp the slide with your support hand and pull it all the way to the rear while pushing the firearm forward with your primary hand, then release the slide. Let the slide travel forward on its own, do not ride it forward. This chambers a round.
7. De-cock/disengage if applicable.

HL333.1. Demonstrate how to load and charge a semiautomatic pistol

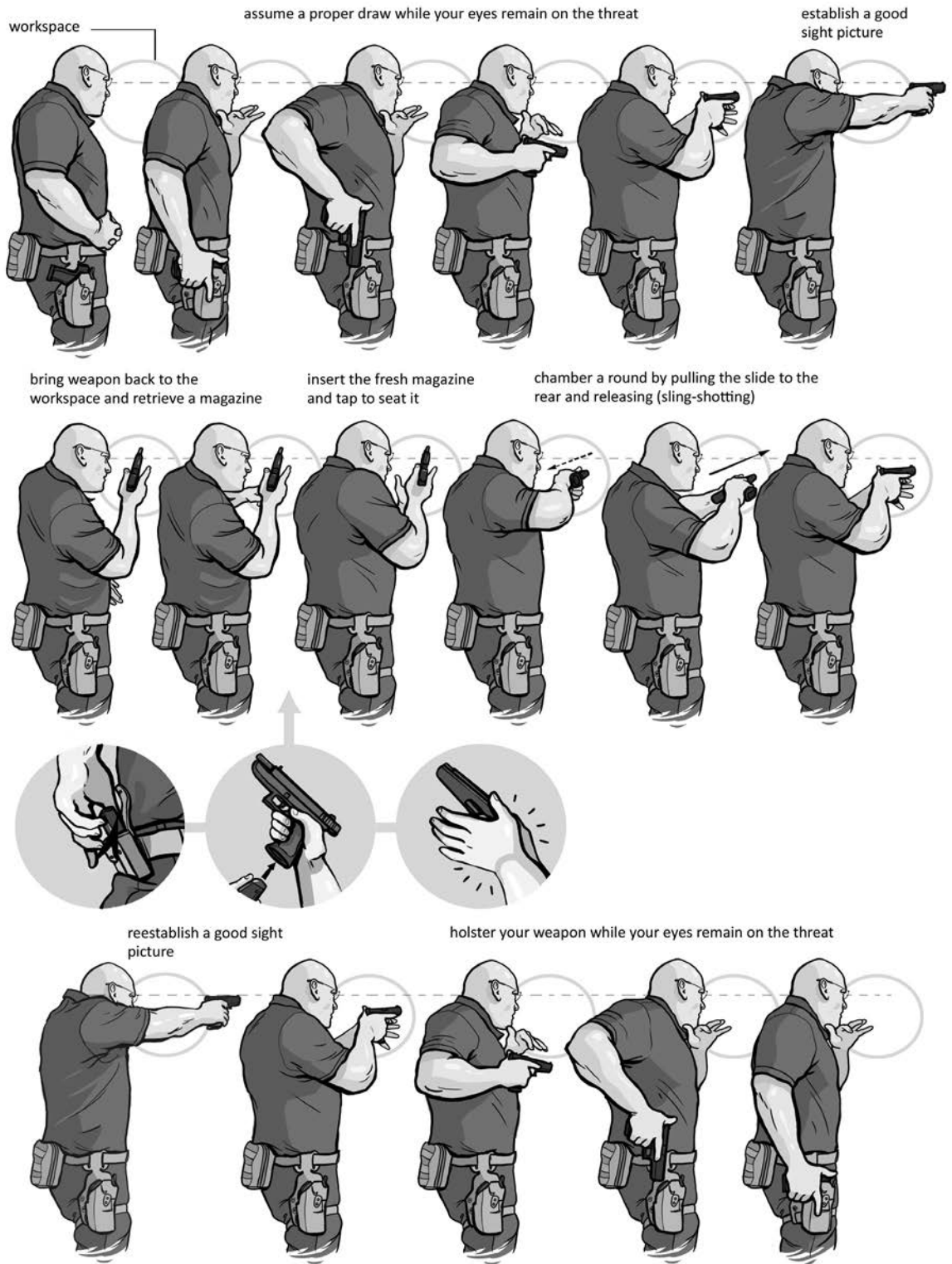


Figure 3-8: Loading a semiautomatic pistol

Unloading

Whether you are loading, unloading, or reloading, remember that your head and eyes are up to watch for threats while the firearm is in your workspace.

To unload an equipped semiautomatic pistol, follow these steps:

1. Engage the safety, if applicable.
2. Bring the firearm to your workspace and, with your finger outside of the trigger guard, press the magazine release. If you are a left-handed shooter, use your trigger finger to press the magazine release. Let the magazine fall to the ground; do not attempt to catch it.
3. Eject the round from the chamber by grabbing the slide and pulling it to the rear several times.
4. Lock the slide to the rear by pulling it all the way to the rear and engaging the slide stop lever.
5. Visually and physically inspect the chamber and magazine well to make sure they are empty.

Remember to keep the muzzle pointed in a safe direction at all times, and be sure that your hand or fingers do not cover the pistol's ejection port when operating the slide.

HL333.2. Demonstrate how to unload a semiautomatic pistol

Empty Gun Reload

When the slide locks back because the gun is empty, you must reload. Remove your finger from the trigger, then press the magazine release as you bring the handgun into your workspace and allow the empty magazine to fall to the ground. Follow the loading procedures as outlined previously, and note that the slide may be released to chamber a round by pressing the slide stop lever.

HL333.3. Demonstrate how to perform an empty gun reload on a semiautomatic pistol

3

Unit 3: Semiautomatic Pistol Lesson 4: Malfunctions

Lesson Goal

At the end of this lesson, you will know the malfunctions that may occur when using a semiautomatic pistol and how to correct them.

This section will teach you how to identify and correct the types of malfunctions that may occur as you fire your handgun. A **malfunction** is a condition that prevents a firearm from operating properly. You can usually prevent malfunctions caused by ammunition if you inspect the ammunition for defects before use. Knowing how to identify and correct problems with your firearm may save your life.

Before trying to correct a malfunction, follow these steps:

1. Remove your finger from the trigger.
2. Bring the firearm to your workspace, keeping the barrel pointed in a safe direction.
3. Identify the kind of malfunction and the proper technique for correcting it.

HL334.1. Demonstrate how to safely handle the semiautomatic pistol when identifying and correcting a malfunction

Semiautomatic pistol malfunctions include a squib load, a failure to fire, a failure to feed, a failure to eject, a double feed, or a failure to extract. The leading cause of malfunctions in semiautomatic weapons is the failure to properly seat the magazine.

A **squib load** is a malfunction that occurs when the primer ignites and there is no burn or only partial burn of the powder.

Squib loads can cause a bullet to fail to exit the muzzle and become lodged in the bore. This is a major safety hazard.

A distinct sound is associated with a squib load. It is not as loud or forceful as the sound of a regular round firing. You hear a pop instead of a bang and feel much less recoil.

If a squib load malfunction occurs during training, follow these steps:

1. Stop firing.
2. Keep your firearm pointed downrange.
3. Raise your support hand.
4. Wait for the range instructor to take the firearm.

Range instructors are responsible for clearing this malfunction. This description of a squib load and the procedure for handling a squib load apply to any firearm.

If you have a squib load malfunction during a deadly force encounter, be prepared to go to a secondary firearm if it is necessary and if one is available. Retreat and move to cover.

A **failure to fire** occurs when the trigger is pulled, but the round fails to detonate. The following conditions cause a failure to fire:

- The safety is engaged. Correct this malfunction by disengaging the safety.
- There is a failure to chamber a round. Correct this malfunction with Phase I clearance—Tap, Rack, Ready—which will be explained in the next section.
- The magazine is not seated in the magazine well. Correct this malfunction by tapping the magazine into the magazine well.
- The primer fails to fire after the firing pin or striker hits it. The result is a misfire and a dead round. Correct this malfunction with Phase I clearance—Tap, Rack, Ready.

In a **failure to feed**, the cartridge fails to feed into the chamber. This occurs when the magazine is not fully seated. Use Phase I clearance—Tap, Rack, Ready—to correct this malfunction, or insert a new magazine.

Failure to eject, often called a **stovepipe**, occurs when a fired cartridge case does not completely eject. The most common causes are a weak powder charge (bad ammunition), a dry weapon (not enough lubrication) and, a shooter not providing enough resistance while firing for the slide to operate (limp wrist). Use Phase I clearance—Tap, Rack, Ready—to correct this malfunction.

A **double feed** is when a round fails to extract from the chamber and is met with a new round that is being fed from the magazine. The cause of this malfunction includes damaged or poorly fitting magazine lips. To clear a double feed, you must use Phase II clearance, which will be explained in a later section.

Failure to extract occurs when the pistol fails to extract a spent casing from its chamber. The causes of this malfunction include a weak powder charge (bad ammunition), dirt behind the extractor, a dirty chamber, a broken extractor, a damaged or worn rim on the case, or an over-expanded or cracked case.

To clear this malfunction, use Phase I clearance. If you do not succeed, try Phase II clearance. If the extractor is worn or broken, a certified armorer must repair the firearm. If the firearm is dirty, it must be cleaned.

HL334.2. Identify the types of semiautomatic pistol malfunctions that may occur



failure to fire
ex. 1
safety is engaged



failure to eject
(stovepipe)
casing not fully
ejected



failure to fire
ex. 2
dead round



failure to extract
ex. 1
casing stuck in
chamber



failure to extract
ex. 2
double feed



failure to fire/
failure to feed
magazine
improperly seated



Figure 3-9: Semiautomatic pistol malfunctions

You can clear most malfunctions from the pistol (excluding a squib load) using two clearance methods. While performing either method, always attempt to clear the malfunction in your workspace so you can watch for threats while getting your firearm back into action. Move to cover, if available, to clear a malfunction during a deadly force encounter. Remember to keep the muzzle pointed in a safe direction at all times.

During proficiency evaluations and qualifications, you must clear weapon malfunctions (except a squib load) and continue firing. If you cannot return your firearm to firing condition after performing an immediate action drill, raise your support hand to notify the range instructor.

HL334.3. Apply the proper techniques for clearing semiautomatic pistol malfunctions

Phase I Clearance: Immediate Action Drill

Use Phase I clearance to fix failure to feed, failure to fire, stovepipe, and failure to extract malfunctions. The easiest way to remember this method is to learn the phrase “Tap, Rack, Ready, Fire” (if necessary).

When a malfunction occurs, follow these steps:

1. Bring the firearm into your workspace to identify the cause of the malfunction.
2. Tap—use your support hand to tap the bottom of the magazine into the magazine well. If the magazine is not fully seated, tapping will seat it.
3. Rack—reach up to the slide with your support hand, pull the slide to the rear, and then release it. Be sure that your hand or fingers do not cover the pistol’s ejection port. This is the same action you use when loading your firearm. It extracts and ejects a bad round (if necessary), and chambers a new round.
4. Ready—in a deadly force encounter, you must assess the situation. You either reengage the subject if they are still a threat, or issue commands if the subject surrendered while you were clearing the malfunction.
5. Fire if necessary.

Phase II Clearance: Immediate Action Drill

If Phase I clearance does not clear the malfunction or the malfunction is a double feed, use Phase II clearance. A Phase II clearance is more detailed and time-consuming.

To perform Phase II clearance, follow these steps:

1. Bring the firearm into your workspace to identify the cause of the malfunction.
2. Lock the slide to the rear to release pressure on the recoil spring and guide and the magazine.
3. Depress the magazine release and forcibly strip the magazine from the magazine well with the support hand.
4. Rotate the pistol toward the ejection port side and, with your support hand, work the slide back and forth until you clear the barrel and chamber of any rounds or obstructions.

5. Push a new magazine into the magazine well using a sharp upward motion, then slightly tug it to ensure it is seated.
6. Chamber a round by grasping the slide with your support hand and pulling it all the way to the rear while pushing the firearm forward with your primary hand, then release the slide.
7. Ready—assess the situation. Reengage the subject if they are still a threat, or issue verbal commands.
8. Fire if necessary.

Another way to clear a Phase II malfunction is to skip step 2 (locking the slide to the rear), and proceed with steps 3-7.

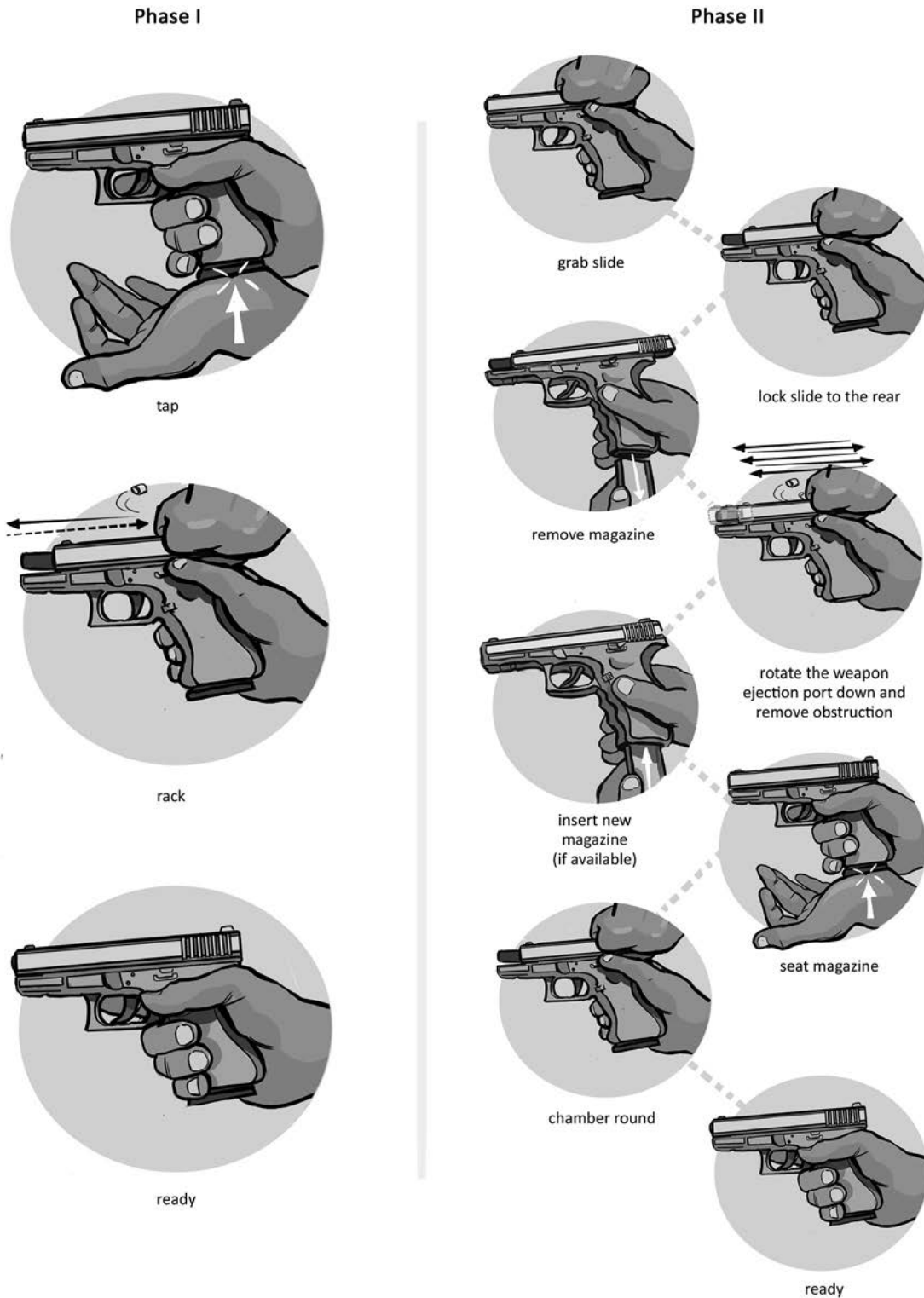


Figure 3-10: How to clear semiautomatic pistol malfunctions

3

Unit 3: Semiautomatic Pistol Lesson 5: Fundamentals of Marksmanship

Lesson Goal

At the end of this lesson, you will know the fundamentals of marksmanship when shooting a handgun.

Accurate shooting develops from knowing and correctly applying the fundamentals of marksmanship. The fundamentals of marksmanship are the same for all handguns. Concentrate on the fundamentals and breathe naturally while shooting to maximize your performance.

Shooting Stances and Positions

Stance is the posture a shooter assumes while firing a weapon. Acquiring a proper shooting stance is important when using firearms tactically or defensively, as it provides the shooter with stability and the capacity to move and engage targets properly. You can fire a handgun in a number of stances and from a number of weapon positions.

STANCES

Offensive Ready Stance

The offensive ready stance, sometimes called the fighting stance, is the same stance that is used in Criminal Justice Defensive Tactics. This stance most closely represents the instinctive response to a threat and minimizes the exposed areas of the body not covered by armor. The more aggressive the stance, the better.

To assume the offensive ready stance, follow these steps:

1. Plant both feet shoulder-width apart or slightly wider.
2. Align your head, hips, and feet toward the threat with your toes pointed forward.
3. Bend your knees slightly.
4. Bring the weapon-side leg to the rear so that the toe aligns with the heel or arch of the support-side foot.
5. Lean slightly forward to distribute more weight to the balls of the feet.
6. If shooting, draw your firearm to the two-hand high point position and bring the sights to eye-level with your head erect.

Kneeling Stance

To assume the kneeling stance, follow these steps:

1. While drawing your firearm, keep your finger off the trigger and drop down to one or two knees.
2. Keep the muzzle of your firearm pointed downrange.
3. Bring the firearm to the two-hand high point position and the sights to eye-level with your head erect.

HANDGUN POSITIONS

Compressed Ready Position

Use the compressed ready position when you are covering a subject who is ready to take aggressive and perhaps deadly action, or when you find yourself moving through tight spaces. This position is safer when maneuvering through crowds, and provides stability and ease of deployment while maintaining control of your firearm and reducing the chance of someone taking it away from you. You can also fire from this position in worst-case situations.

To assume the compressed ready position, follow these steps:

1. Assume the offensive ready stance.
2. While maintaining both hands on the firearm, bring the firearm in close toward the center of your body and off to the weapon-side slightly. The primary arm should be pulled back and pressed against the side of your body with the trigger finger indexed.
3. The barrel of the firearm should be pointed slightly downward or parallel to the ground facing forward.

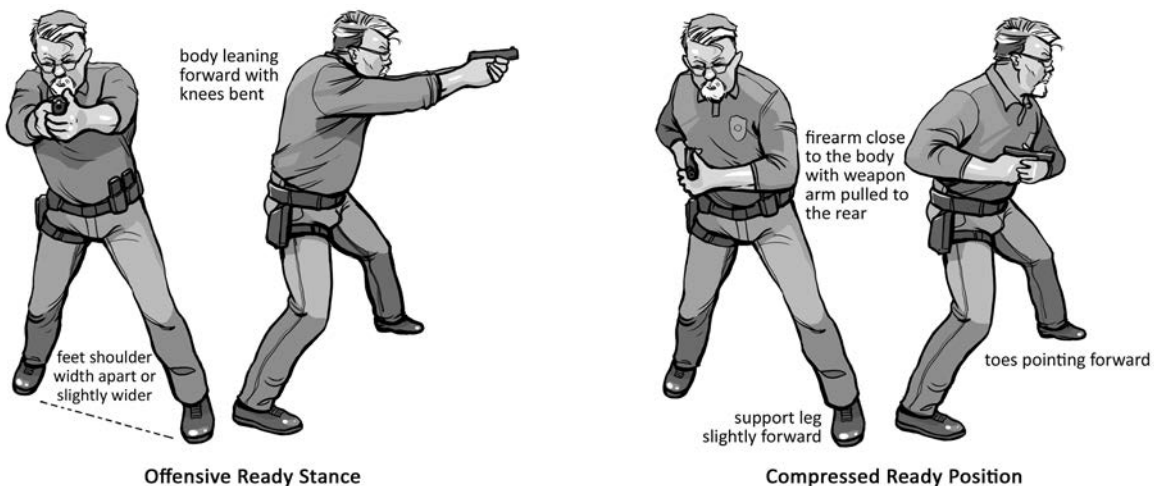


Figure 3-11: Offensive ready stance and compressed ready position

Two-Hand High Point Position

In the two-hand high point position, you are in an offensive ready or kneeling stance with your arms extended and sights on the target. This is the most common position to fire using a two-hand grip.

Hip Shooting Position

Use the hip shooting position when you are within arm's reach (3-4 feet away) of a threat to maintain control of your firearm and prevent them from grabbing it or knocking it to the side.

To assume the hip shooting position, you have two options:

Option 1—use a one-hand grip:

1. Assume the offensive ready stance.
2. Draw your firearm.
3. Place the elbow/forearm of your weapon arm against the side of your body above the holster and slightly cant the firearm's magazine well toward the torso. Make sure the muzzle is pointed at the threat.
4. Keep your elbow/forearm against the side of your body above the holster.
5. Perform the upper area block with your support hand to guard against an attack. Refer to the Defensive Tactics chapter to learn how to perform the upper area block.

Option 2—use a two-hand grip:

1. Perform steps 1-4 for the one-hand grip method.
2. Bring your support hand to your primary hand to form a normal two-hand grip.

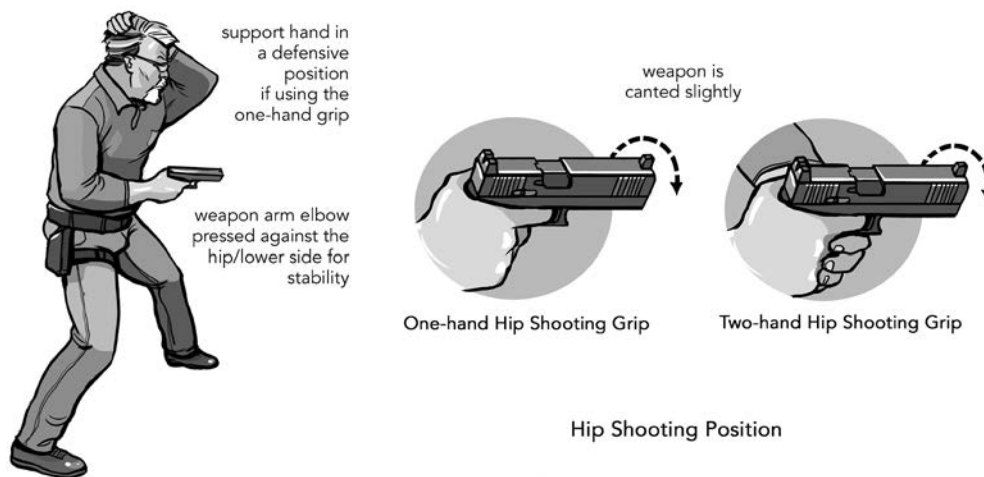


Figure 3-12: Hip shooting position

HL335.1. Apply the proper shooting stances and positions when shooting a handgun

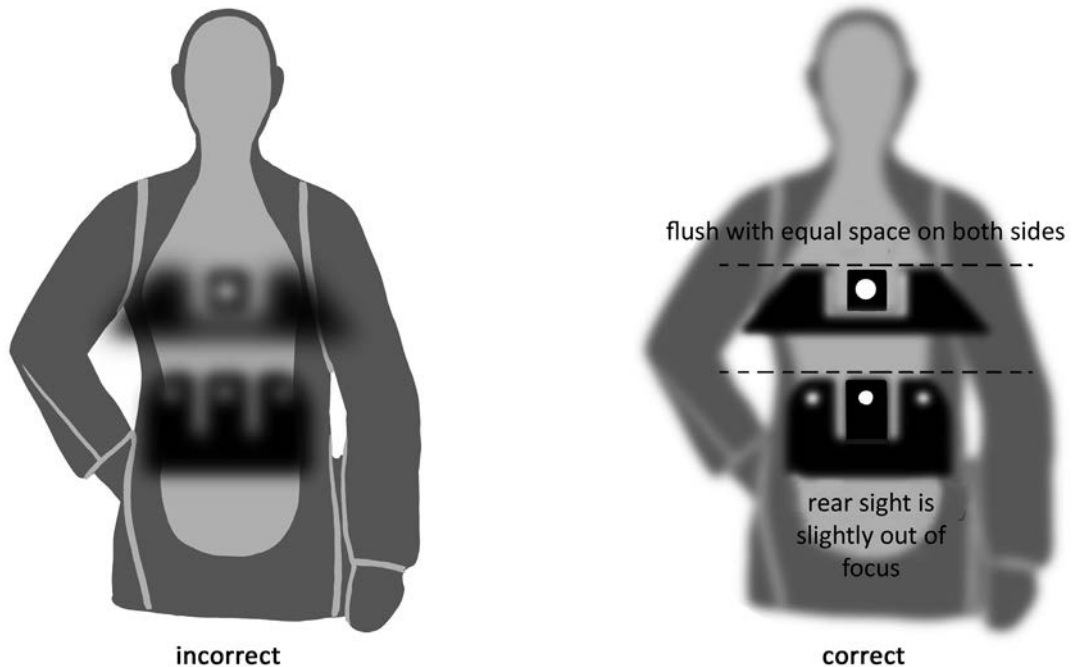
Sight Alignment and Sight Picture

Sight alignment is the relationship of the front sight and rear sight with the shooter's eye(s). It occurs when the top of the front sight is level with the rear sight's top edge and centered in the rear sight aperture or notch. Keep your eye(s) centered behind the rear and front sights, as this is the most important aspect of aiming. Your eye instinctively accomplishes this task with little training. This method also causes the least inconsistency from shot to shot.

Sight picture is the relationship between the eye, front sight, rear sight, and target.

For proper sight alignment and sight picture, follow these steps:

1. Look along the top of the firearm's sight plane.
2. Align the tops of the front and rear sights so that they are of equal height.
3. Center the front sight between the rear aperture or notch to create "equal light."
4. Place the sights on the target.
5. Focus on the front sight. The target will be blurry and the rear sight will be slightly out of focus.
6. Use your dominant eye to align the sights.



Factory sights may vary depending on the make and model of the weapon

Figure 3-13: Sight alignment and sight picture

Although it is recommended that you keep both eyes open during firing, this practice may take time to get used to. Keeping both eyes open during firing improves the focus of your dominant eye and sight picture, as well as improves your accuracy, while providing increased peripheral vision.

HL335.2. Demonstrate how to obtain sight alignment and sight picture with a handgun

Point Shooting

Point shooting is the technique used when you cannot use the sights on your firearm or you have no time to align the sight properly. In this case, the handgun becomes an extension of your arm and hand. Use this “extension” to point to the target or threat, and fire. Most flashlight-assisted shooting requires point-shooting skills, because point shooting can be very effective when the target is in silhouette. Also, flashlight-assisted conditions may alter how you see or use your sights. You should use this method only if you are close to the target or threat.

HL335.3. Apply the point shooting technique with a handgun

Trigger Control and Follow-Through

Trigger control results when the trigger finger presses the trigger straight back with increasing yet constant and steady pressure until the firearm discharges. Trigger control, the most difficult handgun fundamental to master, often determines a shot’s success.

To control the trigger properly, follow these steps:

1. The preferred method is to contact the trigger with your index finger.
2. Isolate your trigger finger to move the trigger straight back. Isolating your trigger finger means that you are applying pressure to the trigger with that finger without squeezing the rest of your hand. This is one of the many steps to help prevent the firearm from moving prior to the shot.

Follow-through requires you to:

- Maintain sight alignment before, during, and after firing a round.
- Maintain proper stance, grip, and finger placement on the trigger.
- Acquire sight picture, and to reestablish it each time you fire a weapon.

Do not try to force a handgun down at the time of discharge (anticipating recoil), but keep your body and firearm in a controlled position during discharge.

The act of firing without moving the handgun is a fundamental of marksmanship. Failure to control the trigger, stance, and grip will result in improper sight alignment and motion in the muzzle when the hammer falls.

Note: Controlling the trigger is a mental process; pulling the trigger is a physical process.

HL335.4. Apply proper trigger control and follow-through with a handgun

3

Unit 3: Semiautomatic Pistol Lesson 6: Flashlight Principles

Lesson Goal

At the end of this lesson, you will know how to apply the proper flashlight grips and techniques when firing a semiautomatic pistol in lowlight conditions.

The flashlight's main function is illumination. This includes illumination for movement, navigation, and searching, as well as for identifying and engaging a threat. If the flashlight is bright enough, you can also use it to disorient an unknown person or suspect approaching you.

Design and ergonomics are critical to proper and safe use of a flashlight. Firearm and hand sizes are two important factors in choosing an appropriate flashlight. Some firearms have the option to attach a weapon-mounted flashlight on the frame for tactical lighting. This allows you to turn your flashlight on and off while aiming at a target.

Generally, using a flashlight lets you make a smooth transition from search to firing mode. The positioning between the flashlight and the bore of the firearm may offer some recoil control so you can place shots efficiently. In reduced light, you can execute all the fundamentals you practiced.

Varying amounts of light in the confrontation area can work for or against you. For example, your vision may be affected for a period of time when you move quickly from a lighted area to a reduced-light area. Furthermore, your silhouette may present you as a target when you move from a dark area to a lighted area. It is important to remember that using a flashlight at any time will give away your position.

Whenever possible, consider the options of illumination for movement, navigation, searching, and to identify and control suspects. Always positively identify a threat before using deadly force.

Flashlight Grips

A flashlight grip is the way you hold a flashlight. Typically, you will hold your firearm in your primary hand while holding a handheld flashlight in the support hand.

Use one of the following flashlight grips:

WATCHMAN GRIP

The flashlight is held in the support hand with the illuminating end projecting from the index finger side of the hand. The thumb controls the on/off switch with a side-mounted switch near the front of the flashlight; the little or ring finger controls it with a side-mounted switch near the back of the flashlight.

LAW ENFORCEMENT OR TACTICAL GRIP

The flashlight is held in the support hand, with the illuminating end projecting from the little finger side of the hand. The thumb controls a rear-mounted switch; the index finger controls a side-mounted switch near the back of the flashlight; the little or ring finger controls a side-mounted switch near the front of the flashlight.

☑ **HL336.1. Apply proper flashlight grips when shooting a semiautomatic pistol in lowlight conditions**

Flashlight Techniques

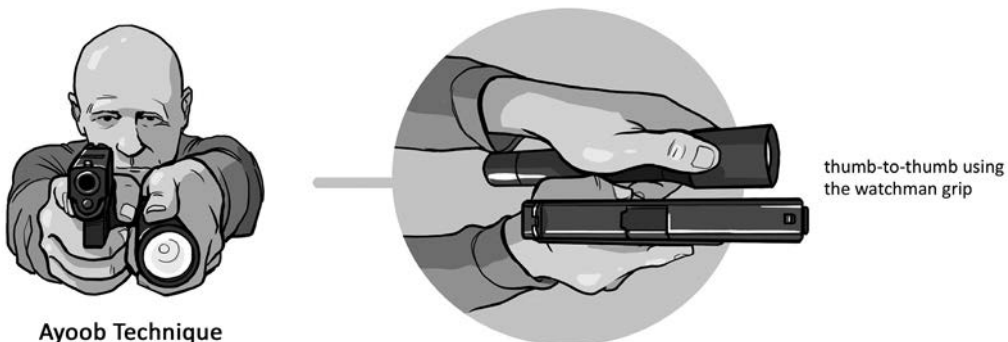
Firing a handgun at night hinders sight alignment, the ability to obtain a sight picture, and the ability to identify threats or targets. You must be able to identify a target or threat before engaging it with your handgun. Ideally, you should fire in reduced light (at night) only at close proximity because of the risk involved in identifying targets and threats. Focus on your firearm's front sight if you can see it. If you cannot, you must use the point shooting technique.

A flashlight technique is how you apply a flashlight grip. Use one of the following flashlight techniques.

AYOOB TECHNIQUE

To use this technique, hold the handgun in your primary hand and the flashlight in your support hand using the watchman grip. Then, hold your hands out in front of you with your arms extended and hands pressed together at your thumbs.

The Ayoob technique provides some support for firearm control and good illumination in relationship to the firearm. It also helps illuminate the handgun sight. You can quickly assume this position and easily identify a target.



Ayoob Technique

Figure 3-14: Ayoob technique

HARRIES TECHNIQUE

To use this technique, hold the handgun in your primary hand and the flashlight in your support hand using the law enforcement or tactical grip. Then, holding the handgun straight out in front of you, cross your support hand under your primary hand and put the backs of your hands together. With your hands braced together, you have more control over the handgun.

The Harries technique is not a natural position to take and requires practice. The key is to properly use the law enforcement or tactical grip. The technique illuminates the sights fairly well.

HL336.2. Apply proper flashlight techniques when shooting a semiautomatic pistol in lowlight conditions



backs of your hands are together using the law enforcement or tactical grip

Harries Technique

Figure 3-15: Harries technique

NECK INDEX TECHNIQUE

To use this technique, hold the handgun in your primary hand and the flashlight in your support hand using the law enforcement or tactical grip. Then, hold the flashlight to the side of your neck to illuminate the target through the sights of the handgun.

FBI TECHNIQUE

To use this technique, hold the handgun in your primary hand and the flashlight in your support hand using the law enforcement or tactical grip. Then, hold the flashlight straight out to the side or above your head to illuminate the target. This technique works best when navigating around a barricade.



Neck Index Technique



FBI Technique

Figure 3-16: Neck index and FBI technique

3

Unit 3: Semiautomatic Pistol Lesson 7: Cleaning

Lesson Goal

At the end of this lesson, you will be able to identify the necessary supplies and tools to clean a semiautomatic pistol and know how to clean and lubricate it.

Cleaning your firearm is important, as routine preventative maintenance will reduce the likelihood that a malfunction will occur. Cleaning also improves the accuracy, reliability, and lifespan of the firearm if performed regularly. When fieldstripping and cleaning your firearm, be sure to use the appropriate tools and cleaning supplies and do it in a properly lit and well-ventilated location.

Fieldstripping

While fieldstripping and cleaning your semiautomatic pistol, follow these steps:

1. Remove live ammunition from the cleaning area.
2. Safety check the firearm.
 - a. Remove the magazine from the magazine well by pressing the magazine release. Place the magazine away from the firearm.
 - b. Lock the slide to the rear by pulling it back and engaging the slide stop lever.
 - c. Visually and physically inspect the chamber, magazine well, and barrel. Look for ammunition casings and obstructions.
3. Remove the ammunition from the magazine and place it in a secure area away from the firearm.

HL337.1. Demonstrate how to fieldstrip a semiautomatic pistol

Cleaning and Lubrication

The firearm's cleaning kit could include a bore brush, solvent, gun-cleaning patches (cotton patches absorb more), nylon cleaning brush, cleaning cord, cleaning pad, gun oil/lubricant (non-penetrating), rags, pipe cleaners, and cotton swabs.

- cleaning tools—cleaning tools are caliber specific. Use the tools designated for the specific caliber of your firearm. A larger caliber cleaning brush or patch tip does not fit in a small firearm and may cause damage. A small tool may not completely clean a large firearm.

- solvent and lubricant—several types and brands of cleaners and solvents are available. Use solvent and lubricant specifically designed for firearms maintenance.
- patches and swabs—consider the firearm’s bore when choosing gun-cleaning patches. Different materials have different absorption qualities.

☑ HL337.2. Identify the proper supplies and tools to use when cleaning a semiautomatic pistol

It is recommended that you observe the manufacturer’s guidelines for cleaning your firearm. Make sure the tools you use do not invalidate the manufacturer’s warranty or conflict with the manufacturer’s recommendations.

Remove all lead, powder, debris, and dirt. These substances can cause a malfunction if they build up. Use the following processes:

1. Brush properly—use a back and forth brushing motion to remove loose objects, loosen other substances, and help solvents and cleaners work better.
 - ▶ Brush all surfaces of your firearm.
 - ▶ Make sure that the bore brush clears the bore completely after each stroke.
 - ▶ Make sure to use a soft brush that will not damage the firearm’s outer finished surface.
2. Brush with solvent—solvents are designed to dissolve and loosen lead, powder, debris, dirt, and substances that brushing does not clean.
3. Wipe all parts repeatedly to remove all of the solvent and debris until your firearm is clean. Use new clean, dry patches when necessary.

Pay special attention to the following parts of the semiautomatic pistol:

- magazines—clean magazines thoroughly and wipe dry. If magazines do not function properly, the firearm can malfunction.
- bore—as the projectile travels down the bore, it leaves behind small amounts of the material it is made of. To thoroughly clean the bore, you should insert the cleaning brush into the bore’s breech end, push the cleaning brush through until it clears the muzzle, and then pull it all the way out. Repeat this process until the bore of the barrel is clean.
- recoil spring and guide—clean thoroughly; dirt and debris hinder the firearm’s blowback and cycle function.
- slide—clean the entire slide, outside and inside. Pay special attention to the slide rails. You can use cotton swabs.
- extractor—clean the extractor thoroughly. It must be able to catch the rim of a fired cartridge as the firearm cycles. If not, the next round cannot feed properly and will result in a malfunction.
- firing pin hole—make sure the firing pin hole is free of all debris.

Lubricating your firearm is very important. Check your firearm regularly to ensure it is properly lubricated, and check the manufacturer's recommended lubrication points and amounts.

1. Lubricate the frame or slide rails to reduce drag or friction between surfaces when the firearm cycles.
2. Lubricate any other points recommended by the manufacturer.
3. Remove excess lubrication by wiping it off using a clean, dry cloth. A little lubrication goes a long way. Excess lubrication or solvents can harm ammunition by destroying the primer and powder of loaded cartridges. Wipe the inside of the magazine dry; leave no lubricant.

When you finish cleaning and lubricating your pistol, follow these steps:

1. Reassemble the pistol and its magazines.
2. Perform a function check of the pistol for proper operation.
3. Return the pistol to safe storage, or holster and secure it.
4. Properly dispose of all cleaning supplies.
5. Wash your hands with soap and water.

HL337.3. Demonstrate how to clean, lubricate, and prepare a semiautomatic pistol

3

Unit 4: Survival Shooting Lesson 1: Cover and Concealment

Lesson Goal

At the end of this lesson, you will be able to identify and know the difference between cover and concealment, and be able to apply proper firearms techniques when using cover and concealment.

Recall that in Units 1 through 3, you learned about how to take care of and use a firearm. In survival shooting, the stakes are high, and you will need to properly prepare and be able to apply what you have learned while under pressure. The following lessons will illustrate different survival shooting scenarios and techniques.

Cover and Concealment

In every instance, scan for cover and assume that anything and everything around you could be used as a prepared fighting position.

Cover is any object or obstacle that creates a bullet-resistant barrier between you and a threat. Examples include solid concrete walls, vehicle engine blocks, or concrete telephone poles. Cover should be chosen for its bullet-stopping capabilities, not its size.

Concealment is any object or group of objects that create a visual barrier between you and a threat but may not stop a projectile. Examples include bushes, trees, and cars. The purpose of concealment is to hide your exact location. Cover can be concealment, but concealment is not necessarily cover.

Walls and doors made of materials that bullets can penetrate may serve as concealment, but do not consider them cover. The objective of cover is to save your life by stopping or deflecting bullets and to provide a safer environment while you evaluate a situation.

HL341.1. Explain the difference between cover and concealment

WHEN CHOOSING COVER

Consider the following factors when choosing the appropriate cover:

- size—ideally, the object should be large enough to fully conceal your body, such as a vehicle or concrete wall. However, any cover is better than no cover.
- density—the cover should be capable of stopping a projectile.
- location—the cover should provide you with a tactical advantage.

- versatility—the cover should give you the most options, such as allowing you to use your primary hand rather than your support hand, or enable you to change positions or shooting stances.

HL341.2. Identify factors to consider when choosing the appropriate cover

BEFORE MOVING TO COVER

Consider these methods before moving to cover:

1. Never change your cover just for the sake of change. Move to new cover if you need to reach a safer location or to gain a tactical advantage.
2. Be aware of your surroundings and the condition of your firearm, whether it is loaded, and how many rounds remain in your magazine. Reload your firearm behind cover before moving, or whenever possible.
3. Know what suffices for cover, and carefully select and scan your next position of cover before moving.
4. Always scan for other possible cover locations.

HL341.3. Identify methods to consider before moving to cover

WHILE MOVING TO COVER

Consider these methods while moving to cover:

1. Be ready to engage the threat at any time while moving, so keep your firearm in the appropriate orientation and your finger off the trigger until you are ready to fire or when your firearm is extended.
2. Move quickly and decisively without hesitation, and use concealment along the way if available.
3. Be aware of foot placement to avoid tripping. You may need to run, crawl, “duck walk,” or slide-step laterally to reach cover.

HL341.4. Identify methods to consider while moving to cover

Lateral Slide-Step Movement

In Unit 3, Lesson 2, the concept of stepping laterally when drawing your firearm to escape the threat’s visual cone was introduced. You can also slide-step laterally when moving from one position of cover to the next, clearing a malfunction, or conducting a reload if not behind cover.

WHEN USING COVER

Consider these methods when using cover to engage a threat:

1. Keep your body and your firearm behind cover to avoid unnecessary exposure, and do not let the muzzle of your firearm extend beyond the cover object.
2. Maintain some distance from your cover, and do not rest your firearm and body on or against it. Leaning on your cover decreases your mobility, and it increases your chance of being hit by direct fire, ricochet, or scattered debris when projectiles impact your cover. Ricochet or debris may disable your firearm.
3. You do not have to be directly behind your cover to use it effectively. Try to use distance and angles to your advantage, and consider how your position of cover might look from the threat's viewpoint so that you are not leaving yourself exposed or giving them any advantages by your positioning.
4. Alter your shooting position from behind cover whenever possible, as muzzle flash may reveal your location—especially at night.

HL341.5. Identify methods to consider when using cover to engage a threat

Shooting From the Barricade Position

A ***barricade position*** is a position behind cover. To fire your handgun from the barricade position, follow these steps:

1. When faced with a threat, draw your firearm from your holster as you move to cover and identify your target.
2. Stay completely behind and away from cover. In other words, use your cover but do not “crowd” it.
3. When engaging the threat from cover, use any shooting position or stance but emerge from a different part of cover than where you arrived. More specifically, do not come out the same way you went in.
4. Present your firearm to the two-hand high point position before rolling out.
5. Roll out and expose only the necessary portion of your shoulder and head, and fire. Make sure that your muzzle does not extend beyond or touch your cover at any point.

HL341.6. Demonstrate an appropriate shooting position from behind cover

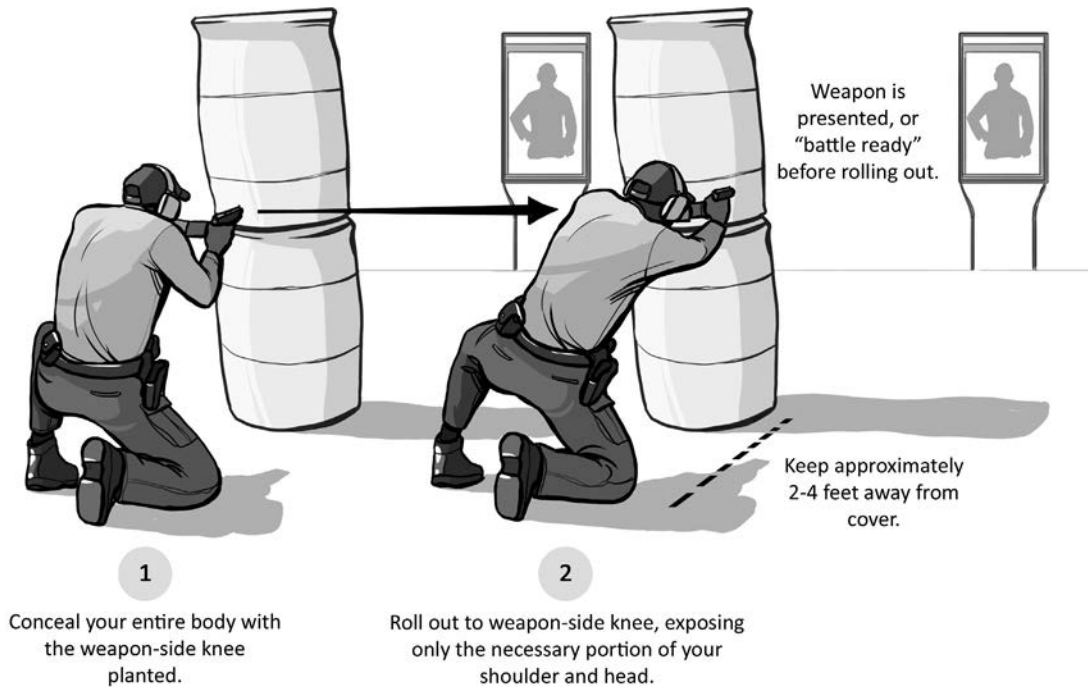


Figure 3-17: Shooting from the barricade kneeling

Tactical Reload

Know the condition of your firearm at all times. Ensure your firearm is completely loaded before confronting an armed suspect—so you can reload when you want to, not when you need to—in order to avoid having an empty firearm during a deadly force encounter.

To perform a tactical reload with a semiautomatic pistol, follow these steps:

1. Ensure that you have a lull in the engagement and assume a position of cover.
2. Hold the firearm with your primary hand and bring it into the workspace.
3. Retrieve a magazine from your pouch with your support hand and hold it in the top of your palm along your index finger.
4. Press the magazine release and catch the partially loaded magazine with the lower palm of the same hand.
5. Use your index finger to guide the fully loaded magazine into the magazine well.
6. Place the partially loaded magazine in your pocket to avoid confusing it with your other fully loaded magazines in your pouches.

HL341.7. Demonstrate how to perform a tactical reload with a semiautomatic pistol

3

Unit 4: Survival Shooting Lesson 2: Drawing and Reloading With One Hand

Lesson Goal

At the end of this lesson, you will be able to demonstrate drawing with the support hand, and reloading with one hand only, to engage a deadly threat.

Drawing With Your Support Hand Only

If you have ever injured your primary hand and had to do tasks with your other hand, you know how difficult it can be. One of the worst situations you can find yourself in is to be in situation where you need to use deadly force, but only have the use of one hand. For this reason, you need to practice using only your support hand for drawing and firing. Drawing and firing with your support hand only is an important skill to learn since it is possible that your primary hand may be taken out of commission during a deadly force encounter.

1. Reach across the front or back of your body, and use the fingers of your support hand to find the retention devices for your holster.
2. With your support hand fingers, disengage the retention devices.
3. Grip the handgun.
4. Safely draw the handgun from its holster and place it in a secure location, such as between your knees or on your lap.
5. Acquire a shooting grip on the handgun.
6. Safely bring the handgun across your body, watching the muzzle and ensuring your finger is outside the trigger guard, and point it at the threat.

HL342.1. Demonstrate how to disengage the holster retention devices with your support hand

Reloading With One Hand Only

Attackers tend to shoot for the gun, which means that your hand and arm could be taken out of action for the duration of the gunfight. This may also happen when your weapon is empty, so you must find a way to reload your firearm and reengage the threat before they overrun your position.

With your handgun empty and one hand out of service, use the following steps to reload your handgun with the other hand to neutralize the threat.

To perform a slide-lock reload with one hand only, follow these steps:

1. Pull the firearm into your workspace while ejecting the empty magazine.
2. Safely place the firearm in a secure location, such as your holster, between your legs, or behind your knee.
3. Retrieve a fresh magazine.
4. Load the fresh magazine into the firearm.
5. Acquire a shooting grip and draw the firearm.
6. Safely charge your firearm by pressing the slide release or cycle the slide using a ridged edge, such as your belt, holster, or magazine pouch.

HL342.2. Demonstrate how to reload using one hand only

3

Unit 4: Survival Shooting

Lesson 3: Response to Active Threat and Shooter Incidents

Lesson Goal

At the end of this lesson, you will be able to prepare for, and tactically respond to, a deadly force encounter involving an active threat or active shooter.

Active threat/shooter incidents involve one or more individuals using deadly force, such as with firearms, edged weapons, vehicles, or other improvised devices to kill or attempt to kill people in a confined or populated area. Active threat/shooter incidents are fast-paced and evolve quickly, leaving little time for officers to wait for backup to respond. Due to the increased number of incidents, you must prepare yourself mentally to confront an active threat/shooter as a single responder at any given time. You might also hear the term “active killer” or “active assailant” at your agency when referring to active threat/shooter incidents.

Always assume that you will respond alone, so be prepared to act without backup. Many lives depend on your ability to think and act swiftly, and the way you train and prepare for the event will likely determine the outcome at the scene.

Threat Assessment

Upon arriving at the scene, scan the area for possible problems and additional threats. The ability to assess a situation or subject depends largely on your observation skills, including the ability to differentiate between deadly and non-deadly threats, recognize hazardous areas and potential weapons, and identify areas that provide cover or concealment.

HL343.1. Demonstrate how to scan surroundings for possible threats

Survival Stress

Survival stress is the body and mind’s response to a perceived threat. Any stressful encounter, especially one that involves the use of deadly force, can generate physiological changes that affect how you perform on scene and your ability to recall the event.

In addition to training and experience, understanding the physiological changes associated with survival stress will help you manage them before, during, and after an encounter. Managing these changes will help reduce anxiety, stabilize motor skills, heighten situational awareness, and improve your ability to react decisively at the scene.

Survival stress may induce physiological changes that dictate the way you behave and perform in a deadly force encounter. For example, you may experience tunnel vision, diminished or amplified hearing, and an increased heart rate that makes it harder than usual to accomplish basic tasks.

It is not uncommon to lose your fine motor skills when under an immense amount of stress. Small, precise movements, such as basic firearms manipulation or aiming become difficult. For example, while in a situation where you are under fire, you may depend more on your point-shooting skills since the physical ability to shoot with one eye open while under fire will diminish greatly.

With the loss of your fine motor skills, you may need to rely more heavily on your gross motor skills, which will demand more from your large or major muscles to perform actions such as running or taking cover.

Another symptom of survival stress is the loss of complex motor skills. Losing your complex motor skills will make it difficult to perform tasks that require a combination of fine and gross motor skills using hand-eye coordination timed to a single event, such as shooting while on the move and reloading while scanning for threats.

In worst-case situations, you may suffer a complete breakdown of all motor skills that make you freeze up and be incapable of taking action.

To help manage the effects of survival stress, consider using the following strategies:

- Take slow, deep breaths.
- Keep your head and eyes moving.
- Use the OODA loop decision cycle.
 - ▶ Observe—take in information using the senses.
 - ▶ Orient—sort through what is observed and focus on what is really important.
 - ▶ Decide—make a decision based on what is important.
 - ▶ Act—take appropriate action based on the decision.

Refer to the Defensive Tactics chapter to learn more about the effects of survival stress.

HL343.2. Identify the physiological changes associated with survival stress

Mental Preparation

Recognize how survival stress will affect your ability to respond, and then develop strategies to manage that stress to prepare for a deadly force encounter. Get yourself in the head-space to confront such a threat by mentally rehearsing possible scenarios and your response to each one. Being mentally and emotionally prepared for the occasion will help you maintain your focus as you actively pursue and engage the threat.

Possible sources of stress that may trigger physiological changes and affect your tactical response during an active threat/shooter incident include:

- people that are injured, dying, or dead
- people pleading for help
- people running and screaming
- sounds of gunfire
- smell of smoke
- smell of blood
- loud alarms
- flashing lights

Avoid the urge to stop and help those who are wounded or scared until the threat has been stopped, since your primary focus is to stop the active threat/shooter before they can kill more people.

HL343.3. Identify the possible sources of survival stress during an active threat/shooter incident

Tactical Response

No matter what your assigned duty is, you may need to respond to an active threat/active shooter incident. Because officers are expected to respond to these incidents whether they are part of a specialized unit with several years of training or new officers just starting their careers, officers need to be able to think tactically and be ready to switch from a service-oriented role to tactical mode without notice. Making this switch can be difficult, so it is important to know the principles of tactical response and how to recognize the deadly threats at the scene. You also need to know which tactics to use immediately after neutralizing the threat.

Principles of tactical response include:

- immediate response—prepare to respond with what you have on your person or what is immediately available to you.
- violence of action—use unrestricted speed, strength, surprise, and aggression to stop the threat.
- direct-to-threat clearing—bypass all doors, rooms, and potential unknown threats if the location of the threat is known by sight, sound, or intelligence. Monitor the flow of the crowd, because observing where people are running away from can reveal the location of the threat.
- noise discipline—use the element of surprise by moving quietly.
- positive target identification—positively identify and stop the active threat/active shooter, and avoid additional armed responders, such as officers from other agencies, school guardians, or armed security teams.

Scanning for, and recognizing threats at the scene:

- pass—a person who holds a nonthreatening posture and has been visually cleared of weapons.
- hold/assess—a person who poses a fear of attack and does not assume and hold a surrender position or nonthreatening posture.
- shoot—an active threat/active shooter that has been identified and recognized as not being able to be safely and immediately captured or contained by lesser means.

Tactics to use immediately after neutralizing the threat:

- Assess 360° security, making sure there are no other active threats/active shooters or accomplices.
- Self-check.
- Communicate with responding backup.
- Provide first aid.

HL343.4. Demonstrate how to tactically respond to an active threat/shooter incident

4

CRIMINAL JUSTICE DEFENSIVE TACTICS

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4

Unit 1: Introduction

Lesson 1: Overview of Defensive Tactics Program

Lesson Goal

At the end of this lesson, you will understand the structure and goals of the defensive tactics training program.

The public often focuses attention on the decisions and methods that criminal justice officers practice in use of force situations. Whether meeting resistance on the street or in a correctional facility, officers must be prepared to respond appropriately to control a situation where the officers and the public are in danger. The defensive tactics curriculum offers criminal justice basic recruits effective, tactically sound, and legally defensible training in defensive tactics and control techniques. This course teaches recruits to select and properly execute techniques that are reasonable and necessary, given the circumstances and factors of a situation.

Defensive tactics is a system of controlled defensive and offensive body movements that criminal justice officers use to respond to a subject's aggression or resistance. These techniques are based on a combination of martial arts, wrestling, and boxing. The physical skills in defensive tactics require practice and repetition. Fitness, strength, agility, balance, and flexibility are vital to developing these skills.

HL411.1. Define defensive tactics

The role of defensive tactics is to assist the officer in restraining or arresting a person. Depending on the situation, officers will use various levels of force in applying defensive tactics techniques.

Any defensive weapon or technique has the potential to cause injury, great bodily harm, or death which is why it is so important to understand when and how to use appropriate techniques.

This course provides basic recruits with training in the physical skills necessary for the use of force in controlling subjects and for self-defense. Although there is some classroom instruction, most of this course is physical training.

Some instructions for techniques indicate using a specific side (for example, left hand or right foot). These are used for the sake of clarity. Any of these techniques can be reversed by switching left to right or vice versa.

4

Unit 1: Introduction Lesson 2: Preparation for Defensive Tactics Training

Lesson Goal

At the end of this lesson, you will be prepared to participate in the defensive tactics training program and demonstrate stretching exercises, falling techniques, and recovery techniques.

Because defensive tactics training is a physical endeavor, prepare for the activities required in this course by looking at your daily habits. Eat healthy food, get enough rest, and drink plenty of fluids to get the most out of this training. Making these changes will enhance physical performance and minimize the risk of injury.

Defensive tactics skills require physical fitness, strength, agility, balance, and flexibility. Because flexibility reduces the risk of injuries, do stretching exercises every day.

HL412.1. Apply strategies for optimal physical performance during a defensive tactics training program

Warm-Up and Cooldown Exercises

Begin and end each session with stretching exercises. A warm-up session raises the heart rate and increases blood circulation to the muscles, saturating them with oxygen. This helps your body prepare itself for physical activity. A cooldown after exercise redistributes blood flow, causing the metabolic rate to decrease. This process helps the muscles relax and prevents the tightening of muscles, which is vital for the body to recover.

Stretching usually begins with a warm-up, such as running in place, jumping jacks, push-ups, or any calisthenics exercises that last for 15–30 minutes to warm up the muscles, and increase heart rate, respiration, and perspiration. The following examples of stretching exercises and techniques are suitable to prepare for defensive tactics training. Incorporating the techniques listed below into your warm-up session can be beneficial since it readies you for training while also letting you practice fundamental techniques.

RECOMMENDED WARM-UP STRETCHES

Lunge and Twist

Stand with feet about shoulder-width apart. Hold both arms in front of you with elbows bent at 90° horizontally. Step forward with your left foot into a lunge position. Be sure to keep your knee over your left foot; don't twist at the knee. From your torso, twist your upper body to the left, then to the right. Maintain a slow and controlled movement throughout the exercise. Slowly move your arms to center and step forward with the opposite foot and twist to the other side. Perform 10 repetitions per side.

Knee Raises

Stand with feet about shoulder-width apart. Bend your left knee and raise it up as high as you can toward the left side of your chest. At the same time, bend your left elbow and lower it to meet your left knee. Repeat this sequence with your right knee. Do 10 repetitions per leg.

High Kicks

Stand tall with your feet shoulder-width apart or closer. Raise your arms straight in front of you at shoulder height. Lift one leg up as high as possible. Keep the leg straight. Then lower the leg back down. Do the same with the other leg. Keep alternating legs. Arms stay stationary throughout the exercise. Do 10 repetitions per leg.

Arm Swings

While standing, hold both arms out to your side horizontally, making a “T.” Swing both arms in and cross them in front of your chest, then swing them back out to the side. Repeat this movement for 30 seconds.

Arm Rotations

While standing, hold both arms out to your side horizontally, making a “T.” Rotate arms in a circle. Do 10–15 repetitions clockwise and 10–15 repetitions counterclockwise.

Arm Cross

While standing, bring your right arm across your chest with the palm up. Keep your arm straight. Grasp your upper arm above the elbow with your left hand and slowly pull in toward and across your chest. Hold for 10–20 seconds and repeat with the left arm.

Jump Squats

Stand with your feet shoulder-width apart. Start by doing a regular squat, then tighten your core and jump up explosively. When you land, lower your body back into the squat position to complete one repetition. Land as quietly as possible, which requires control. Do 10–15 repetitions.

Stationary Sprints

Begin in a standing position. Raise and lower one knee at a time as if running in place. Alternate legs as quickly as possible. Do three sets of 10–15 second intervals.

Wrist Rotations

From a standing, kneeling, or sitting position, extend both arms out in front, then slowly rotate one wrist in a clockwise direction and the other wrist in a counterclockwise direction. Do two to three sets of 10–15 second intervals in each direction.

FALLING TECHNIQUES

Falling techniques are useful if a subject attacks, pushes, or hits you with enough force to send you to the ground, or if you trip over an obstacle.

Falling properly reduces the potential for injury and minimizes the stuning effect associated with falling, so you can assume an effective defensive position. Returning to a defensive stance puts you in a position to defend against further attack or control the subject.

Front Fall

1. Use loud, clear verbal commands throughout the application of the technique.
2. Extend your bent arms slightly in front of your chest as in a natural bracing position.
3. Fall forward to a **prone position** (lying on the stomach, face down) contacting the ground with the palms, forearms, and feet, turning your head to the side, and exhaling on impact. If falling with an unholstered weapon, make contact with the ground with just one palm.
4. Follow up with appropriate action(s). (See Figure 4-1)



Figure 4-1: Front fall

Rear Fall

1. Use loud, clear verbal commands throughout the application of the technique.
2. Tuck your chin to your chest.
3. Squat and roll backward.
4. As your back makes contact with the ground, pull your arms in tightly, or you may swing both of your arms out at a 45° angle and strike the ground with the palms of both hands while exhaling.
5. Follow up with appropriate action(s). (See Figure 4-2)



Figure 4-2: Rear fall

Side Fall

1. Use loud, clear verbal commands throughout the application of the technique.
2. Tuck your chin to your chest.
3. Squat and roll to the rear quarter and to one side.
4. Relax your body as you fall.
5. Don't land flat. Reduce the shock by rolling after hitting the ground.
6. As your body makes contact with the ground, you may swing the same side arm and strike the ground with the palm to minimize impact.
7. Exhale to relax your body and to prevent having the wind knocked out of you.
8. Follow up with appropriate action(s). (See Figure 4-3)

HL412.2. Demonstrate falling techniques



Figure 4-3: Side fall

FOUNDATION

This position allows you to be ready to engage the subject on the ground or to recover to a standing position.

From lying on the back:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Using an extended arm, prop the upper body off the ground (posting). **Posting** is supporting the balance of the body using a limb.
3. Bend the knees with feet on the ground.
4. Keep your free hand up in a defensive position to protect vital areas.
5. Follow up with appropriate action(s). (See Figure 4-4)



Figure 4-4: Foundation

RECOVER TO THE STANDING POSITION

Your ability to get up safely from a ground encounter is critical. This technique prepares you to get back on your feet while protecting your face, head, body, and weapon from an aggressive subject.

Use this technique to gain time and distance between you and the aggressive subject. If you do not gain distance, the subject may get on top of you or strike you while trying to get up and get away.

From the foundation position:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Stand up from the ground establishing a strong base.
3. Use an appropriate technique to gain distance and protect your vital areas.
4. Maintain an appropriate stance.
5. Follow up with appropriate action(s). (See Figure 4-5)

HL412.3. Demonstrate recovery techniques

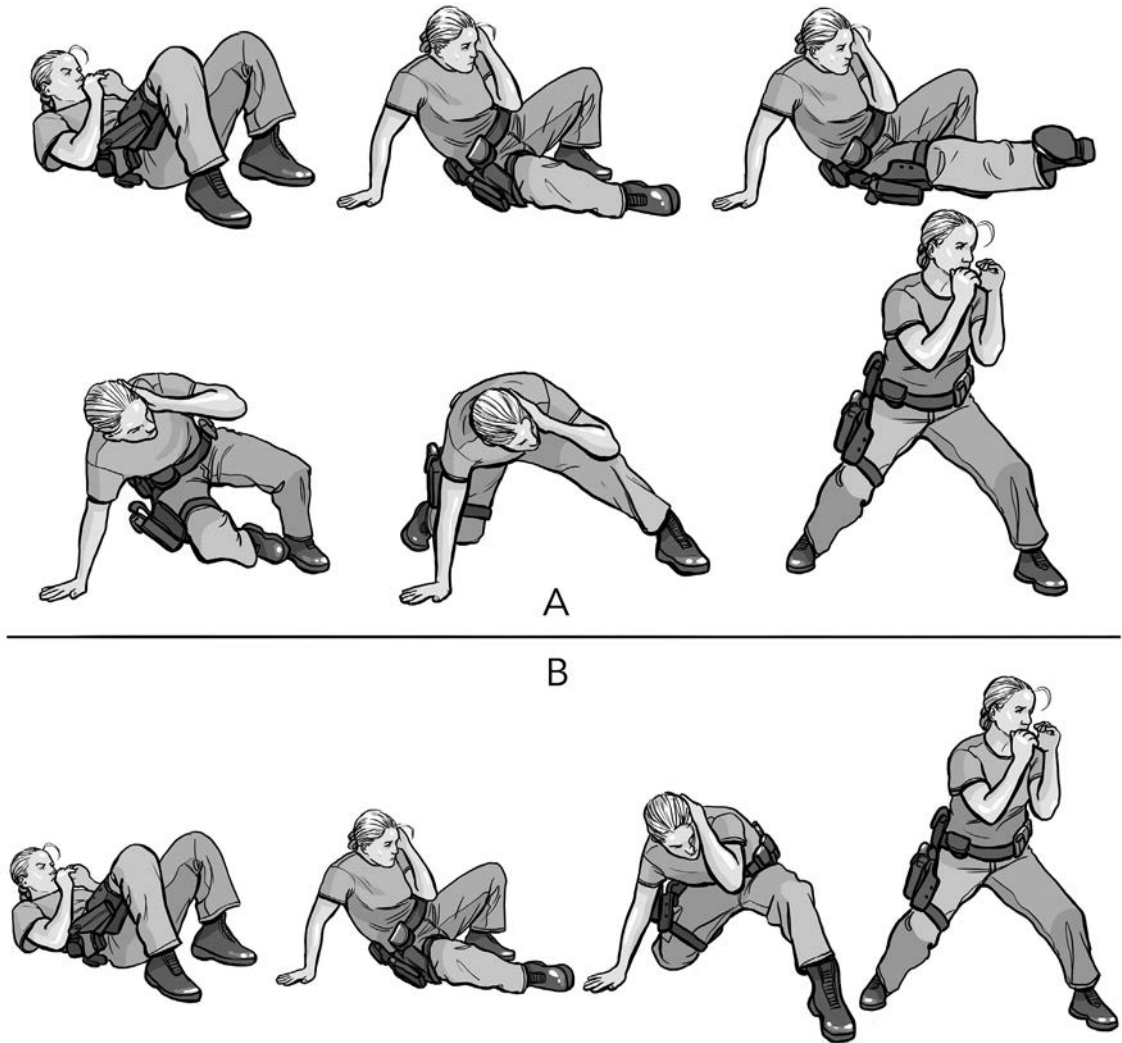


Figure 4-5: Recover to the standing position

HIP ESCAPES

Hip escapes allow you to move from side to side to avoid or defend against an attack. The movement in a hip escape is also known as **shrimping**. You can use shrimping to escape from certain ground positions, such as side control and full mount, which are discussed later in the lesson on ground control.

1. Use loud, clear verbal commands throughout the application of the technique.
2. From the foundation, tuck the chin to the chest to protect your neck and back of your head.
3. Push off with one foot, force your hips up, and push out toward the opposite side. Your hands will imitate a pushing motion, as if pushing the subject away.
4. Follow up with appropriate action(s). (See Figure 4-6)



Figure 4-6: Hip escape

SPRAWL

A sprawl is usually used to defend against a subject who shoots in for a takedown.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Shoot legs backwards, driving one hip down, which stops the subject's forward momentum.
3. Your chest will make contact with the subject's shoulder blades and drive the subject down. (See Figure 4-7)

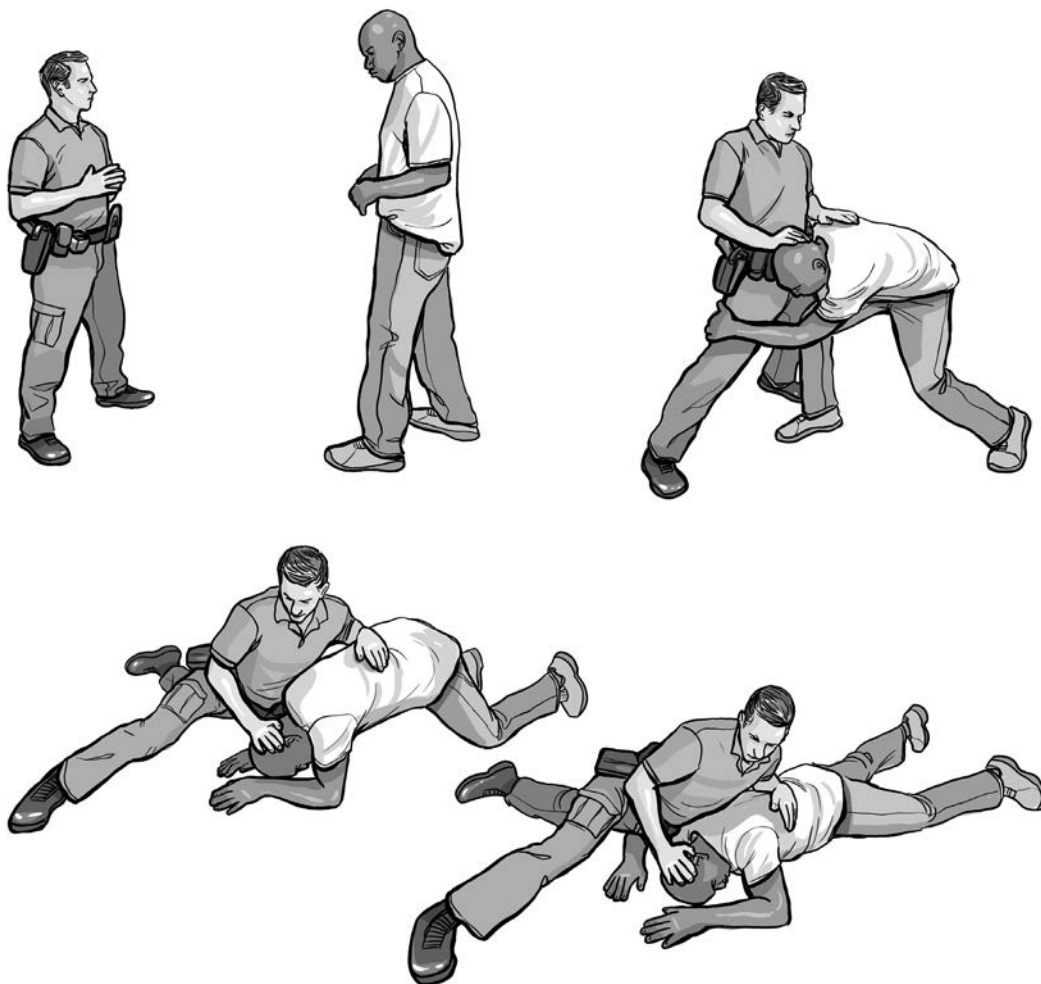


Figure 4-7: Sprawl

RECOMMENDED COOLDOWN STRETCHES

Neck Stretch

While standing, lean your left ear to your left shoulder for a count of 10 seconds. Repeat on the opposite side. Stretch chin to chest and head to rear. Perform two to three sets in each direction.

Straight Arm Behind Back Stretch

While standing, place both arms behind your hips. With interlocking hands, slowly raise your arms behind your back for a count of 10–20 seconds. Keep your head upright and neck relaxed.

Behind Neck Triceps Stretch

While standing, raise your right arm above your head and bend your right arm. Your elbow will be above your head. Using the opposite hand, grasp your elbow and slowly pull toward the midline of your back, moving your hand in between your shoulder blades. Hold the stretch for 10–20 seconds, and repeat on the left side.

Arm Crossed in Front of Chest

While standing, bring your right arm across your chest with the palm up. Keep your arm straight. Grasp your upper arm above the elbow with your left hand and slowly pull in toward and across your chest. Hold for 10–20 seconds, and repeat with the left arm.

Both Arms up Above Head Stretch

While standing, raise both arms above your head. Keep your arms straight and interlock your fingers with the palms facing up. Reach upward slowly while reaching slightly backward. Hold for 10–20 seconds.

Both Arms in Front of Chest Stretch

While standing with your feet shoulder-width apart, bring your arms from an overhead position slowly toward the front of your body, while rounding the back and stretching the shoulder blades apart. Hold for 10–20 seconds.

Butterfly Stretch

While seated on the floor, bend your legs so that the soles of your shoes touch. Your legs should be relaxed and knees should be flat on the floor, if possible. (If you lack flexibility, your knees might not rest on the floor.) Lean forward from the waist with a straight back. Bring your head as close to your feet as possible. Hold for 10–20 seconds.

Spinal Twist

Sitting on the floor with your legs extended straight, bend your right leg and bring your right foot to the outside of your left leg next to the knee. Place your right hand behind your hips for support. Push your right

knee to the left with your left elbow while turning your upper body to the right and rotating your shoulders as far as possible. Hold for 10–20 seconds, and repeat on the opposite side.

Supine Knee Flex Stretch

Lie on your back with your legs straight. Bring your right knee toward your chest, placing both hands below the knee while continually pulling the knee toward your chest. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Seated Bent Knee Stretch

While seated on the floor with both legs bent, bring your right ankle to your left knee. Support your upper body by placing your palms on the floor with fingers pointing away from your body. Bring both legs toward your chest. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Modified Hurdler’s Stretch

While seated on the floor, extend your right leg straight in front of your body. Bend your left leg and bring the sole of your left shoe to the inside of your straight leg. Lean forward from the waist and grasp the toes of your right foot while moving your chest as close to your straightened leg as possible. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Straddle Stretch

Sit on the floor with your legs straight out and spread your legs as far as possible. Grasp the toes of your right foot while leaning from the waist. Keep your buttocks on the floor and your back straight. Your chest should be directly over your right knee. Facing your right knee and keeping your back straight, lean your upper body forward toward the ground with your hands grasped as close to the right toes as possible. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Drills

PUMMELING DRILL

Pummeling is a grappling technique used to gain the double underhook position, which is a dominant control position that can be used in a variety of takedowns and grappling techniques (for example, front takedown). An overhook is when your arm is over the subject’s arm and controlling that arm. An underhook is when your arm is under the subject’s arm and controlling the subject’s upper body.

1. Start with a partner. You each have an overhook with your right arm and an underhook with your left arm.
2. You both move your overhook arm to an underhook position at the same time.
3. Continue this process and switch from overhook to underhook alternating sides each time.
4. Gradually increase resistance while both students attempt to gain the double underhook position. (See Figure 4-8)



Figure 4-8: Pummeling drill

ARM DRAG DRILL

The arm drag is a technique where you pull the subject's arm across your body to gain a dominant position. You can use the arm drag to set up a variety of grappling and takedown techniques (for example, escort position or rear takedown, discussed later in this chapter).

1. While facing the subject block and grab the subject's right arm with your left arm and bring the subject's arm across your centerline.
2. Use your right hand to reach across the subject's body and grasp the back of their right arm just above the elbow.
3. Continue the drill in the same manner and alternate the target arm. (See Figure 4-9)



Figure 4-9: Arm drag

Cardiovascular Conditioning

Cardiovascular training is any exercise that elevates the heart rate to a range of 60% to 85% of the maximum rate. When the heart rate is in that range, you are training in a cardiovascular or aerobic state. Cardiovascular training has many health benefits. In addition to burning calories and eliminating body fat, it strengthens the heart and lungs. Having a healthy heart can protect you from heart disease, which is the leading cause of premature death. Examples of cardiovascular exercises include walking, jogging, running, jumping rope, bicycling, swimming, and step aerobics.

Rest

Make sure you get enough rest and sleep to get the most out of your physical training.

Nutrition

A healthy diet and drinking enough water will also help you get the most out of your defensive tactics training.

Essential Nutrients in Food		
Nutrient	Function	Sources
protein	provides energy; builds and repairs body cells; is part of various enzymes, hormones, and antibodies	meat, poultry, eggs, legumes (such as lentils), milk and milk products, vegetables, nuts, seeds, seafood, and grains
carbohydrate	provides energy needed by the brain, nervous system, red blood cells, and other cells	breads, cereal grains, pasta, rice, fruit, vegetables, milk, and sugar
fat	provides energy and essential fatty acids; carries other fat-soluble nutrients (vitamins); is part of cell membranes, membranes around nerves, hormones, and bile (for fat digestion)	meat, poultry, fish, milk and milk products, nuts and seeds, oils, butter, margarine, and salad dressing

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Unit 2: Use of Force Lesson 1: Force Guidelines

Lesson Goal

At the end of this lesson, you will understand using reasonable and necessary force when taking a suspect into custody, when working in a correctional environment, or when defending yourself or others.

Chapter 776, F.S., governs all use of force by criminal justice officers. Even though the statutes refer to law enforcement officers, the legal guidelines regarding use of force apply equally to corrections and correctional probation officers. The statutes identify two general areas where an officer's use of force is justified: to apprehend and arrest a subject, or to defend self or others.

Section 776.05, F.S., addresses the issue of an officer using force to make an arrest:

A law enforcement officer, or any person whom the officer has summoned or directed to assist him or her, need not retreat or desist from efforts to make a lawful arrest because of resistance or threatened resistance to the arrest. The officer is justified in the use of any force:

- (1) Which he or she reasonably believes to be necessary to defend himself or herself or another from bodily harm while making the arrest;*
- (2) When necessarily committed in retaking felons who have escaped; or*
- (3) When necessarily committed in arresting felons fleeing from justice. However, this subsection does not constitute a defense in any civil action for damages brought for the wrongful use of deadly force unless the use of deadly force was necessary to prevent the arrest from being defeated by such flight and, when feasible, some warning had been given, and:*
 - (a) The officer reasonably believes that the fleeing felon poses a threat of death or serious physical harm to the officer or others; or*
 - (b) The officer reasonably believes that the fleeing felon has committed a crime involving the infliction or threatened infliction of serious physical harm to another person.*

HL421.1. Identify elements of the Florida Statutes related to the use of force by criminal justice officers

While chapter 776, F.S., applies in general to all criminal justice officers, chapter 944, F.S., addresses the use of force specifically by state correctional and correctional probation officers. Chapter 945, F.S., establishes that the Department of Corrections has jurisdiction over the supervisory and protective care, custody, and control of inmates and offenders.

Section 944.35, F.S., provides that:

(1)(a) An employee of the department is authorized to apply physical force upon an inmate only when and to the extent that it reasonably appears necessary:

- 1. To defend himself or herself or another against such other imminent use of unlawful force;*
- 2. To prevent a person from escaping from a state correctional institution when the officer reasonably believes that person is lawfully detained in such institution;*
- 3. To prevent damage to property;*
- 4. To quell a disturbance;*
- 5. To overcome physical resistance to a lawful command; or*
- 6. To administer medical treatment only by or under the supervision of a physician or his or her designee and only:*
 - a. When treatment is necessary to protect the health of other persons, as in the case of contagious or venereal diseases; or*
 - b. When treatment is offered in satisfaction of a duty to protect the inmate against self-inflicted injury or death.*

HL421.2. Explain the provisions of chapters 944 and 945, F.S., related to the use of force by state correctional and correctional probation officers

Objective Reasonableness

The courts use **objective reasonableness** to decide whether an officer's use of force is an appropriate response to a subject's resistance. Appropriate force is the amount of force reasonably necessary to make an arrest. The U.S. Supreme Court said in *Graham v. Connor*, 490 U.S. 386 (1989), that the reasonableness of a particular use of force must be judged from the perspective of how a reasonable officer on the scene would respond, rather than from the 20/20 perspective of hindsight. To determine if an officer's actions were objectively reasonable, the courts look at the facts and circumstances the officer knew when the incident occurred.

HL421.3. Explain the concept of objective reasonableness

Courts recognize that criminal justice officers must make split-second judgments about the amount of force needed in a particular situation under circumstances that are tense, uncertain, and quickly changing.

HL421.4. Explain that subject resistance and officer response may change rapidly

The officer's reasons for using force must be consistent with constitutional and statutory law, as well as agency policies and training guidelines. The Supreme Court has made clear that use of force is a seizure under the Fourth Amendment. Correctional officers must also consider that use of force may violate the Eighth Amendment's prohibition against cruel and unusual punishment.

An officer's agency may establish the specific techniques, tactics, and applications that an officer may use in an encounter with a resistant subject.

Authority to Use Force

Much litigation against criminal justice officers is not about the amount of force used, but whether the use of force was permitted at all. Though the law grants criminal justice officers the right to use force, this right is conditioned on their official authority.

Correctional officers have full-time authority over inmates due to the inmates' sentence and loss of certain rights.

A law enforcement officer is authorized to use only the force reasonably necessary to accomplish lawful objectives. This may be established by the officer's reasonable belief, or reasonable suspicion, that a crime has been, is being, or is about to be committed.

HL421.5. Apply the legal authority for an officer's response to a subject's resistance

Escalation, De-escalation, and Disengagement

Force decisions may escalate and de-escalate rapidly in relation to the perceived threat. An officer's goal is to achieve subject compliance. **Compliance** is the verbal or physical yielding to an officer's authority without apparent threat of resistance or violence.

Escalation, de-escalation, and disengagement are important concepts in making legally and tactically sound, reasonable responses to resistance. **Escalation** is increasing the use of force or resistance. **De-escalation** is decreasing the use of force or resistance. **Disengagement** is discontinuing a command or physical use of force, for example, by breaking away from a subject. Officers are legally permitted to escalate their use of force as the subject escalates their level of resistance.

HL421.6. Explain escalation, de-escalation, and disengagement

The officer's choices are determined by the subject's actions and the risk of physical harm posed to the officer or others. Once the officer gets control or compliance, they must de-escalate the use of force. Under certain circumstances, disengagement may be the best tactical option, for example, when the officer is waiting for backup, when the officer is injured or outnumbered, or when the suspect has superior firepower.

HL421.7. Explain how the injury potential to an officer may affect their response

If you place a subject in a prone position to apply restraints, remove them from the prone position, and place them into a position of comfort as soon as practical. Assess the subject to make sure they are responsive and not in distress.

In all of the defensive tactics you employ, remember that the subject's safety is your responsibility.

Structure of the Force Guidelines

The **Force Guidelines** provide a framework for making decisions involving the reasonable use of force by criminal justice officers. The structure of the Force Guidelines is based on constitutional considerations and case law and describes appropriate decision-making in a fluid and dynamic situation. The Guidelines consider the relationship between subject resistance and various situational factors in determining the officer's response options.

SUBJECT RESISTANCE LEVELS

Passive resistance is a subject's verbal or physical refusal to comply with an officer's lawful direction, causing the officer to use physical techniques to establish control.

Some examples of passive resistance include:

- The subject refuses to move at the officer's direction.
- The subject refuses to leave the vehicle when arrested during a traffic stop.
- The subject refuses to take their hands out of their pockets or from behind their back.

HL421.8. Define passive resistance

Active resistance is a subject's use of physically evasive movements directed toward the officer, such as bracing, tensing, pushing, or pulling to prevent the officer from establishing control over the subject.

Some examples of active resistance include:

- The subject physically hangs on to a person or object to keep from being removed.
- The subject braces or pulls away from the officer when the officer grips their arm.
- The subject tries to run when the officer touches or tries to grab the subject's arm or shoulder.

HL421.9. Define active resistance

Aggressive resistance is hostile, attacking movements that may cause injury but are not likely to cause death or great bodily harm to the officer or others.

Some examples of aggressive resistance include:

- The subject balls up their fist and approaches the officer.
- The subject pushes the officer back as the officer tries to take them into custody.
- The subject grabs any part of the officer's body.

HL421.10. Define aggressive resistance

Deadly force resistance is hostile, attacking movements with or without a weapon that create a reasonable perception by the officer that the subject intends to cause and has the capability of causing death or great bodily harm to the officer or others.

Some examples of deadly force resistance include:

- The subject refuses to drop a knife when ordered to by the officer and moves toward the officer.
- The subject shoots or points a gun at an officer or other person.
- The subject uses a vehicle to try to run down an officer.

HL421.11. Define deadly force resistance

OFFICER RESPONSE OPTIONS

Try to resolve a situation with the least amount of force necessary. Command presence and verbal communication often will defuse many volatile situations. Sometimes, though, these are not enough, or you may not have a chance to use them. You may have to use physical force to gain control. Physical force includes physical control, using less lethal weapons, and deadly force. You need not apply force in gradually increasing steps to justify physical control or even deadly force. Instead, you should respond with force that is reasonably necessary for the circumstances in each situation.

Officer presence is your ability to convey to subjects and onlookers that you are able and ready to take control. Subjects' and onlookers' reactions to you depend on their perceptions of how you present yourself.

Be aware of and interpret non-verbal communication. Some movements and gestures can be clues to escalating aggression, such as clenched fists, shifting feet, or hidden hands. Subjects also observe your actions to determine your attitudes and intentions. Officer presence is your first response to any situation. By simply arriving on the scene, an officer affects a subject or situation.

HL421.12. Demonstrate officer presence

Command presence is your demeanor and the way you exhibit confidence through erect posture, alertness, and attention to surroundings. It is how you carry yourself. Your presence can determine whether a subject's resistance escalates or de-escalates. A good command presence projects an image of confidence in your skills and abilities to perform the task at hand. Command presence includes personal appearance (your uniform and personal grooming).

Physical control is achieving compliance or custody through the use of empty-hand or leverage-enhanced techniques, such as pain compliance, transporters, restraint devices, takedowns, and striking techniques. These techniques will be discussed later in this chapter.

HL421.13. Define physical control

A **less lethal weapon** is not fundamentally designed to cause death or great bodily harm. Some examples include electronic control devices (ECD), conducted electrical weapons (CEW), expandable batons, flashlights, and chemical agent sprays.

HL421.14. Define less lethal weapon

Recall from Chapter 3, Firearms, that deadly force is likely to cause death or great bodily harm. Some examples include using a firearm, eye gouges, empty-hand strikes to the throat, and impact-weapon strikes to the side of the neck.

Section 776.06, F.S., states:

(1) *The term “deadly force” means force that is likely to cause death or great bodily harm and includes, but is not limited to:*

(a) *The firing of a firearm in the direction of the person to be arrested, even though no intent exists to kill or inflict great bodily harm; and*

(b) *The firing of a firearm at a vehicle in which the person to be arrested is riding.*

Section 776.07, F.S., states:

(2) *A correctional officer or other law enforcement officer is justified in the use of force, including deadly force, which he or she reasonably believes to be necessary to prevent the escape from a penal institution of a person whom the officer reasonably believes to be lawfully detained in such institution under sentence for an offense or awaiting trial or commitment for an offense.*

Using deadly force may be an officer’s first and only appropriate response to a perceived threat. Deadly force does not necessarily mean that someone died from the force used. It can cause great bodily harm or no harm at all. For example, striking the throat is deadly force even if the officer misses the target.

HL421.15. Discuss deadly force in relation to defensive tactics

The decision to use deadly force is a serious one. Base your decision to use deadly force as a defensive tactic on a clear, reasonable belief that you, a fellow officer, or another person faces imminent danger of death or great bodily harm.

HL421.16. Identify what is needed to justify using deadly force

Officers have a legal responsibility to prevent excessive use of force, or intervene during an excessive use of force encounter by other officers. Section 943.1735, F.S., defines excessive use of force as force that exceeds the degree of force permitted by law, policy, or the observing officer’s employing agency. To intervene, an on-duty officer must:

- observe another officer engaging, or attempting to engage, in excessive use of force
- choose an intervention that is reasonable based on the totality of the circumstances
- not jeopardize their own health or safety

HL421.17. Identify the circumstances when an officer has the duty to intervene

FACTORS FOR DECIDING TO USE DEADLY FORCE

Officers use three criteria for making deadly force decisions: ability, opportunity, and intent.

Ability refers to the subject’s having the means to carry out their intent to cause death or great bodily harm. An officer must determine whether the subject has the necessary means to cause death or great bodily harm to the officer or others. A weapon is not required; a subject must have only the apparent ability to carry out the intent. If the subject seems physically able to cause death or great bodily harm, then they have the ability. For example, a 6’4”, 250-pound muscular man threatening to do bodily harm to an officer

does not necessarily need a weapon. By virtue of their size and physical condition, they have the apparent ability.

Opportunity means the subject is capable of acting on a plan to cause death or great bodily harm to the officer or others. The subject's weapon often determines opportunity. For example, a suspect armed with a knife is perhaps not an immediate threat to an officer standing far away. However, the same person standing closer or carrying a firearm certainly has the opportunity to carry out the intent to cause death or great bodily harm.

Intent is a subject's intention to voluntarily make the bodily movement that becomes the act to commit a criminal offense. This can be viewed as a reasonably perceived, imminent threat to an officer or others based on a person's actions, behaviors, words, or other indicators. It is a perception derived from the totality of the circumstances.

HL421.18. Identify the subject's ability, opportunity, and intent as they relate to the officer's response to resistance

Officers should use the amount of force necessary and reasonable for the situation.

If ability, opportunity, and intent are present and you cannot control the threat using lesser means, then deadly force is justified. When resistance de-escalates, so must your response.

TOTALITY OF CIRCUMSTANCES

The **totality of circumstances** test considers the overall facts of a situation to determine if you had the authority to detain someone for committing a crime or to perform a legal search. In reference to defensive tactics, this also is a term the court uses to refer to all facts and circumstances known to the officer at the time, or reasonably perceived by the officer at the time, as the basis for a use of force decision. The courts will look at the totality of circumstances in determining whether the decision was objectively reasonable and, therefore, legally justified. The totality of circumstances includes consideration of the subject's form of resistance, all reasonably perceived situational factors that may have had an effect on the situation, and the response options available to the officer.

HL421.19. Explain what totality of circumstances means

Some situational factors may include:

- severity of the crime
- subject as an immediate threat
- subject's mental or psychiatric history, if known to the officer
- subject's violent history, if known to the officer
- subject's combative skills, if known to the officer

- subject’s access to weapons, if known to the officer
- innocent bystanders who could be harmed
- number of subjects versus number of officers
- duration of confrontation
- subject’s size, age, weight, and physical condition
- officer’s size, age, weight, physical condition, and defensive tactics expertise
- environmental factors, such as physical terrain and weather conditions

HL421.20. Identify various situational factors that may influence the use of force

The Force Guidelines recognize that officers make use of force decisions based on the totality of circumstances at the time of an incident. Circumstances are fluid and dynamic. Responding properly requires constant assessment as the situation changes.

HL421.21. Apply reasonable and necessary force to given situations

Force Guidelines—The Decision-Making Process	
Subject Resistance	Situational Factors
Is the subject verbally or physically resisting my lawful authority?	What subject factors influence this situation? Weapon? Physical size? Demeanor? Others?
Is the subject making attacking movements that are not likely to cause death or great bodily harm?	What officer factors influence this situation? Training? Experience? Physical size? Others?
Is the subject making attacking movements that are likely to cause death or great bodily harm?	What environmental factors influence this situation? Weather? Location? Presence of others?
Justification	Officer’s Response
Were my actions reasonable based on the subject’s resistance and the totality of the circumstances?	Can I physically control the subject?
Am I able to articulate the reasons for my actions?	Could I use a less lethal weapon not meant to cause death or great bodily harm?
Was I in compliance with constitutional and state laws, agency policies, and training?	Is deadly force the appropriate option to prevent death or great bodily harm to myself or others?

Use of Force Reporting

Many agencies require an additional report any time an officer uses force to control a subject.

To properly defend a use of force decision, you need to clearly articulate, or put into words, the basis for your decision to use force.

You should include the factors that establish your perspective from the totality of circumstances at the time you decided to use force. For example, if you used deadly force, state exactly what you saw and felt, what actions and behaviors the subject exhibited, and any other relevant information that created your perception that the ability, opportunity, and intent to cause great bodily harm or death existed. Simply stating in a report, "The suspect threatened me," is not a sufficient basis for justification.

Remember that the contents of a use of force incident report will be seen by supervisors, prosecutors, defense attorneys, judges, and the public. You should be thorough and include the factors used in any use of force decisions since information added later could be viewed with skepticism and could be inaccurate.

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Unit 2: Use of Force Lesson 2: Survival Stress Reaction

Lesson Goal

At the end of this lesson, you will recognize the effects of survival stress on the body and mind during a critical incident.

A person's coping mechanisms govern their ability to manage stress. Generally, a person's perception of self-harm determines if they view a situation as a challenge or a threat. For example, one officer engaged in a verbal confrontation with a subject might consider this interaction a challenge. However, when the subject suddenly lunges at the officer with balled fists, the officer might consider this a threat. Another officer may view the initial verbal confrontation as a threat instead of a challenge.

Survival Stress

Survival stress is sometimes called fear-induced stress or combat stress. **Survival stress** is the body and mind's response to a perceived threat. The stronger you perceive the threat, the stronger your body and mind will react. This will increase your anxiety level.

Anxiety levels vary depending on the situation and your experience and training. As anxiety increases or decreases, it creates a psychological imbalance.

Depending on how you assess the threat, your physiological response may vary. This may cause many mind-body responses, including an elevated heart rate, increase in respiration, and the pausing of digestion. These effects may lead to intense changes in your physical ability and decision-making.

HL422.1. Explain how survival stress affects confrontation between a subject and an officer

You can react to survival stress in four ways: fight, flight, posture, or submit. During an encounter, survival stress may occur in the subject, the officer, or both.

HL422.2. Describe the four instinctual reactions when experiencing survival stress

Some subjects may fight or flee while others, given the same set of circumstances, may decide to submit. To **submit** is to completely relinquish control to another. Subjects might also become verbally and physically threatening, indicating they may resist by assuming a threatening posture.

Conversely, the officer might posture by displaying a show of force without actually using force. The officer might choose to disengage from an overwhelming threat or decide to engage and take control of the subject.

Consider this example: An officer gives a man a command. The man postures by expanding his chest and begins to speak loudly, shouting, "You're not taking me!" He strikes his chest with his open hands while stepping back and forth, side to side as he yells the same words over and over.

The officer can choose to display a higher level of force by elevating voice commands and drawing an intermediate weapon, such as a baton (posturing). The man may back down (submit) and follow the officer's verbal directions with no force used. However, if the man does not submit to the officer's authority, his posturing may indicate that he is about to fight or is preparing to run (flee).

When in a threatening situation, your body and mind adapt to help you react to threats by releasing stress hormones. Understanding these psychological and physiological changes will help you better manage them before, during, and after an encounter.

HL422.3. Describe the psychological changes that may occur while experiencing survival stress

PHYSIOLOGICAL CHANGES UNDER STRESS

When facing extreme anxiety, you may experience physical changes within your body. One or more of the following symptoms of survival stress may occur:

- increased heart rate and respiration
- diminished or amplified hearing
- distorted vision (for example, tunnel vision, inability to see close objects with detail, or fixating on one location and not seeing other details of the event)
- loss of bladder and bowel control
- increased reaction time
- motor performance changes
- loss of ***fine motor skills*** (the muscle control required to make small, precise movements, such as unlocking handcuffs with a key)
- heavier reliance on ***gross motor skills*** (movements of the large or major muscles of the body to do things like run, punch, or kick)
- loss of ***complex motor skills*** (tasks that require a combination of fine and gross motor skills using hand-eye coordination timed to a single event, such as driving a vehicle)
- complete breakdown of motor skills (freezing or submitting)
- occurrences seeming faster or slower than they are
- objects appearing closer or farther than they are

HL422.4. Describe the physiological changes that may occur while experiencing survival stress

DECISION-MAKING UNDER STRESS

Decision-making becomes more difficult in stressful situations. Instead of using a deliberate thoughtful analysis, you may rely on short, concise mental shortcuts. These mental shortcuts allow people to solve problems and make judgments quickly and efficiently. They shorten decision-making time and allow you to function without constantly stopping to think about the next decision or course of action.

These types of “short-cut decisions” are based on training and experience. The less time you have to make a decision, the more likely you are to make a mistake in judgment. You can offset this issue by increasing your training.

HL422.5. Describe the impact that survival stress may have on an officer’s decision-making

SPEECH PATTERNS UNDER STRESS

Signs of stress often show up in vocal quality and speech pattern. High-stress situations can cause vocal cords to constrict and lead to a higher pitch in the voice and sometimes cracking or garbled sounds result. This can affect the clarity of radio communications.

An officer might speak emotionally or without thinking on the scene and after an incident. The officer may curse, brag, or boast.

This is due to being in a high state of stress both during and directly after an incident. At times, officers in this situation don’t remember or may even regret what they have said. This phenomenon might be called “exhilaration speech,” statements brought on by a euphoric feeling of accomplishment after prevailing in a critical incident.

Officers may speak without stopping while in an anxious state. During an internal investigation, they may say things that are not helpful to the investigation and may make their account seem unreliable. In the presence of a suspect, this speech pattern can erode an officer’s command presence and give the appearance of not being in control.

HL422.6. Describe the changes that may occur in speech patterns while experiencing survival stress

Threat Awareness

The Threat Awareness Spectrum is an illustration of how survival stress may affect your reaction to a perceived challenge or threat. Your desired state of awareness while on routine duty is Condition Yellow. This is the optimum state of mind to remain focused while scanning for potential problems. From Condition Yellow, you can quickly move to Condition Orange or Condition Red, based on the situation. Condition White and Condition Black are not optimum states of readiness while on duty.

HL422.7. Identify the desired state of awareness or readiness an officer should maintain while on routine duty

Threat Awareness Spectrum				
Condition White	Condition Yellow	Condition Orange	Condition Red	Condition Black
Unaware that a threat exists	General awareness of possible threats	Recognition that a threat exists	Specific threat identified and appropriate actions taken	Threat mismanaged due to panicked stress response
Attention is unfocused or preoccupied, and the officer is oblivious to potential danger in their environment.	Attention is focused, and the officer scans the environment for potential threats.	Awareness of a specific threat encourages preplanning and more intense focus. Physical indicators of stress may become evident.	The threat is assessed and managed through intensified cognitive and physical reactions. Survival stress functions become optimum.	Survival stress functions break down. Submission or freezing may occur. An officer may overreact, underreact, or not react to a situation.
<i>Example:</i> A person drives to work and does not remember the drive (automatic pilot).	<i>Example:</i> While on the job, an officer is in a state of relaxed awareness and notices what is going on.	<i>Example:</i> A patrol officer sees a vehicle backed into a parking space at a convenience store with the engine running, considers the possibility of a robbery in progress, and begins tactical planning. A correctional officer sees an inmate with possible contraband and begins forming a plan of action.	<i>Example:</i> The patrol officer initiates the plan to engage the suspects as they exit the store. The correctional officer initiates the plan to engage the inmate.	<i>Example:</i> The patrol officer panics and may not respond effectively. The correctional officer panics and may not respond effectively.

Source: Jeff Cooper, Principles of Personal Defense

Coping With the Effects of Survival Stress

Survival stress is a mind-body reaction to fear. You can increase your coping skills and better prepare for the effects of stress by doing the following:

- preplan
- stay physically fit
- get enough rest
- keep a nutritious diet
- use controlled breathing techniques
- rely on techniques that involve gross motor movements rather than fine motor skills
- train under realistic environmental conditions designed to mirror high-stress scenarios
- anticipate the possibility of resistance with every subject encounter
- stay proficient in physical and mental skills
- stay proficient with firearms and other issued equipment

Be aware that officers who have experienced an extremely stressful situation, such as an officer-involved shooting, may later show signs of post-traumatic stress disorder.

HL422.8. List techniques that may assist an officer in managing the effects of survival stress

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Unit 3: Defensive Tactics Techniques Lesson 1: Fundamental Principles of Defensive Tactics

Lesson Goal

At the end of this lesson, you will understand the fundamental principles used in defensive tactics techniques.

Fundamental Principles of Defensive Tactics

To properly and effectively perform defensive tactics techniques, you must be able to apply certain fundamental principles.

Balance: Maintaining a balanced posture is essential in performing any technique. To achieve balance, your head and hips must be aligned and your weight distributed evenly between your feet. If any one of these points is misaligned, you are not in balance. **Balance displacement** is a controlling technique used to break the subject's balance through the use of leverage principles.

Leverage: Leverage is using a great force against a weaker resistance. It is used in conjunction with joint manipulation or pain and mechanical compliance to gain control.

Pain compliance: Pain compliance is a subject's response to a combination of pain and verbal commands to stop resisting.

HL431.1. Describe the fundamental principles of applying defensive tactics

Mechanical compliance: An officer may gain control over a subject by applying pressure or leverage on a joint by locking it up so that no movement of the joint is possible, causing the subject to comply with verbal direction.

Joint manipulation: An officer may gain control over a subject by bending or twisting a joint in a direction that will cause pain or discomfort to the joint.

Motor dysfunction: An officer may gain control over a subject by using an incapacitation technique that causes temporary impairment of muscular control.

HL431.2. Describe how to gain control over a subject when applying defensive tactics

Penetrating strike: When delivering a strike, an officer strikes a muscle so that the striking object penetrates the muscle and nerves of the target area. This is a full transfer of kinetic energy that increases the power of the strike. For maximum effectiveness, most strikes are delivered using penetration so that the striking object stays on or indented in the target for an instant, allowing for energy transfer.

Clinch: A technique that involves holding a person tightly in a close position. You can use the clinch with striking techniques, to transition to a takedown, or as a stalling technique. (See Figure 4-10)

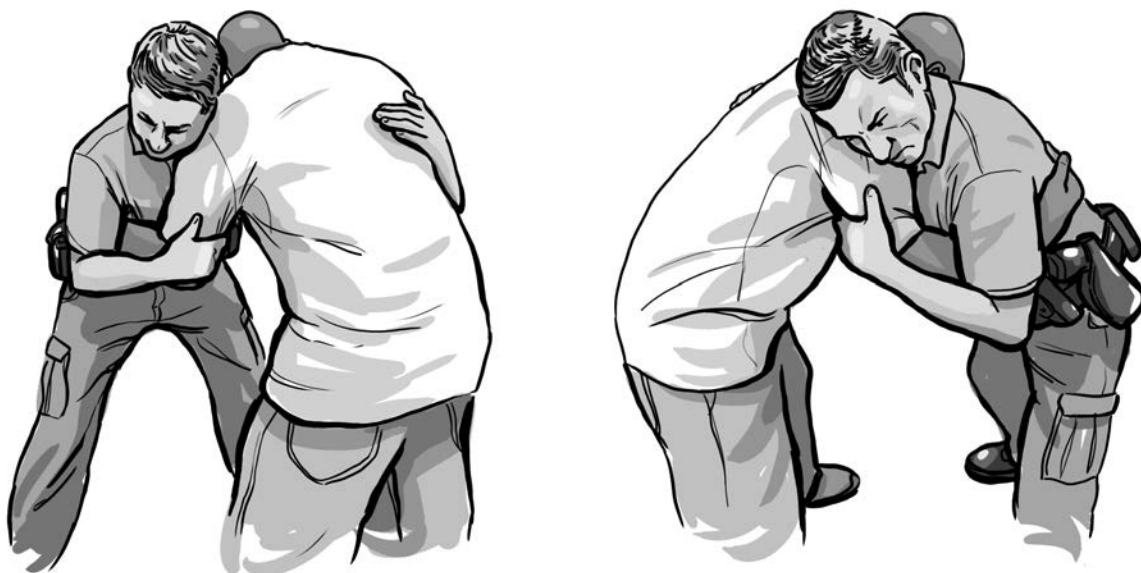


Figure 4-10: Clinch

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Unit 3: Defensive Tactics Techniques Lesson 2: Communication and Commands

Lesson Goal

At the end of this lesson, you will understand the components of verbal direction.

Communication is crucial at all levels of a use of force exchange. Unlike a category of force, communication is a part of all officer-subject interactions. Effective communication on your part can help de-escalate a situation. You are encouraged to use communication before, during, and after a confrontation. Communication is necessary to continually gauge compliance. In a use of force situation, resistance begins when a subject fails to comply with an officer's lawful commands. When an officer gives a verbal command, an evaluation will determine if escalation may become necessary.

Communication is exchanging information through verbal and non-verbal methods. Communication provides valuable insight into the likelihood of cooperation and compliance of a subject.

Dialogue is a controlled, unemotional communication between an officer and a subject aimed at problem-solving and communication. Used as a strategy, dialogue is intentionally designed to gain rapport and exchange information.

Verbal direction is the use of proper, clear, and concise commands to let a person know what you need or expect them to do. The ability to give verbal direction is usually the first step in controlling the subject's actions. Establish yourself as a criminal justice officer. Give clear and concise commands. Make sure that your commands are loud enough for the subject to hear.

HL432.1. Describe the components of appropriate verbal direction

Touch is a non-threatening, non-custodial physical contact and can be used to support or emphasize a verbal command. It can be effective to enhance your communication; however, before applying touch, consider its use carefully to avoid escalating a person's resistance.

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Unit 3: Defensive Tactics Techniques Lesson 3: Threat Assessment and Response

Lesson Goal

At the end of this lesson, you will understand the process of assessing a threat and be able to demonstrate appropriate responses.

Though it may be difficult to determine factors that constitute a specific threat, there are certain facts, circumstances, and conditions that, when taken together, may be perceived as threatening.

How you assess a situation and the level of threat you perceive will influence how you respond. The more information you have, the better prepared you will be to effectively assess the situation. You should consider all factors, whether obvious or not, when assessing threats.

HL433.1. Identify the need for conducting a threat assessment

Recognize that threats may be fluid and constantly changing. Continuously analyze situations for their threat potential.

Subject Behavior

Certain verbal and nonverbal cues indicate the possibility of the subject's aggression or posturing. Verbal cues may include abnormal stuttering, serious and explicit swearing, and specific verbal threats.

Non-verbal cues may include:

- increased breathing
- stopping of all movement
- clenched fists and quivering hands
- refusal to show palms of hands
- reddened or flushed face
- prominent expanding veins on face and forearms
- shifting of shoulders or change of stance
- glancing at a target area (target glance)

- ignoring the officer
- rapid, angry movements

HL433.2. Identify verbal and non-verbal cues in assessing threats

Be aware of unusual symptoms that a subject may exhibit upon initial contact or that may develop or intensify during the course of a confrontation. These symptoms may indicate serious issues, such as physical illness, mental illness, drug reaction or overdose, or post-traumatic stress disorder.

When confronting a subject with unusual symptoms, immediately request medical assistance.

Be careful of the position in which the subject is restrained. Take care to maintain an open airway, and ensure continuous breathing and proper circulation until medical help arrives.

Environmental Factors

Some potential environmental factors to consider in threat assessment include weather, traffic conditions, terrain, and the presence of animals, bystanders, and potential weapons.

Stances

When you interact with a subject or encounter a situation that you believe poses a potential threat, assume one of the following stances, as appropriate. Stances refer to how you stand when you interact with a subject or when they approach you.

INTERVIEW STANCE

1. Stand with head, hips, and feet aligned.
2. Plant your feet shoulder-width apart with the knees slightly bent.
3. Angle your body to the subject with the strong side away.
4. Place your hands above waist level.

HL433.3. Demonstrate the interview stance

OFFENSIVE READY STANCE

1. Stand with your head, hips, and feet aligned and your chin tucked.
2. Plant your feet slightly wider than shoulder-width apart with the knees slightly bent.
3. Angle your body so that your strong side is away from the subject. Place your hands just below eye level and toward your center. (See Figure 4-11)

HL433.4. Demonstrate the offensive ready stance

Interview Stance



Offensive ready stance



Figure 4-11: Interview and offensive ready stance

Relative Positioning

When preparing to approach a subject, place yourself in the safest possible position. **Relative positioning** describes where you stand or position yourself in relation to the subject. (See Figures 4-12 and 4-13)

HL433.5. Identify relative positioning

Reactionary Gap

A distance of 25 feet if you do not have visible control of the subject's hands, or a distance of 6-9 feet if you have visible control of the subject's hands.

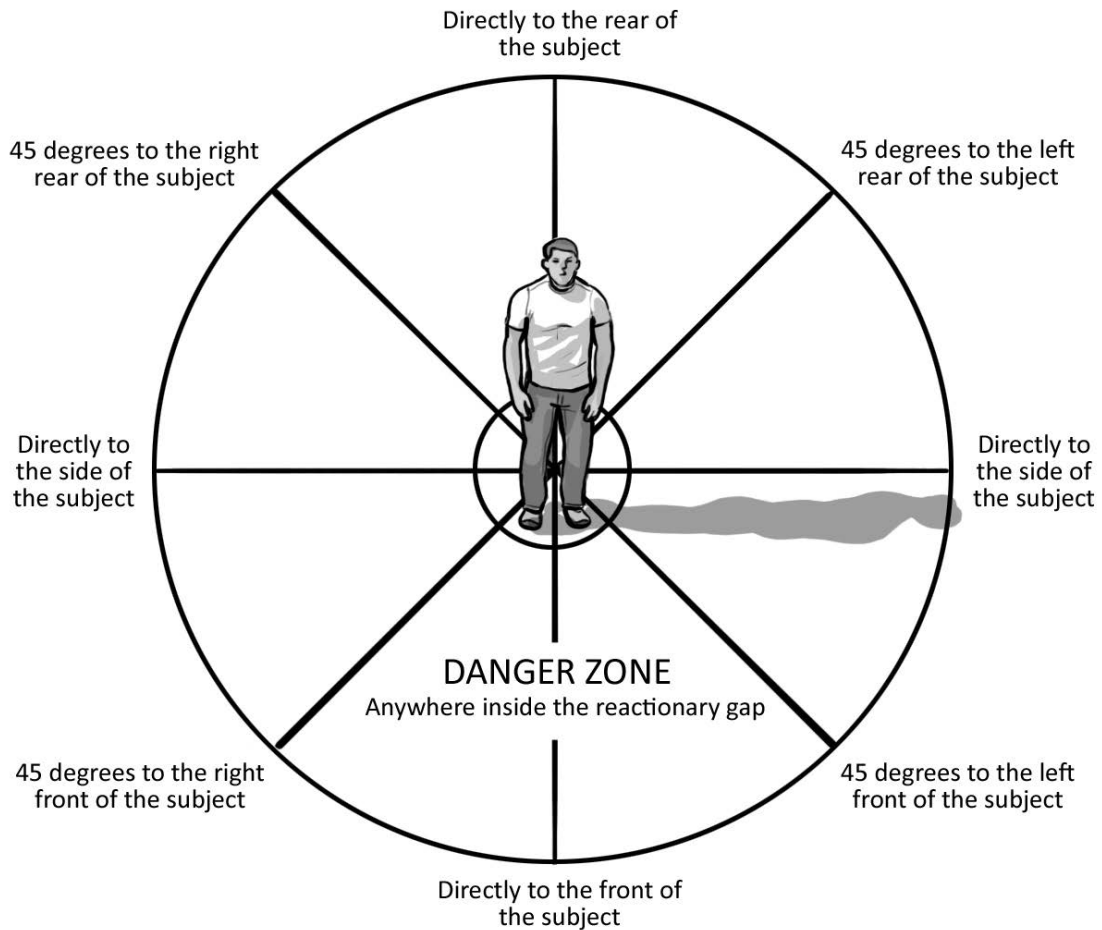


Figure 4-12: Relative positioning diagram



Figure 4-13: Relative positioning

Body movement refers to how you approach a subject or enter a scene. The manner and direction from which you approach a subject and the distance you maintain from them throughout the interaction are based on your assessment of the threat and potential harm present.

The **reactionary gap** is the distance you must keep between you and the subject to react effectively against a sudden threat (see Figure 4-14). This distance is generally 6–9 feet if you have visual control of the subject’s hands, or 25 feet when you cannot see their hands.

HL433.6. Demonstrate how to maintain a minimum reactionary gap

The area within the reactionary gap is the **danger zone**. Any time you are in the danger zone, the potential for physical harm increases. If you need to close the reactionary gap, do so as quickly as possible while maintaining good balance.

HL433.7. Identify the danger zone

Visual control of the hands is the ability to see both of the subject’s hands and to know that they are not holding any weapons.

When approaching a subject, you may use the following hand-clearing technique:

1. Maintain an appropriate reactionary gap.
2. Visually scan the area for potential threats.
3. Assume an appropriate stance.
4. Identify yourself as an officer, if appropriate.
5. Use clear, concise verbal commands.
6. Tell the subject to expose both palms. (See Figure 4-14)

HL433.8. Demonstrate hand clearing

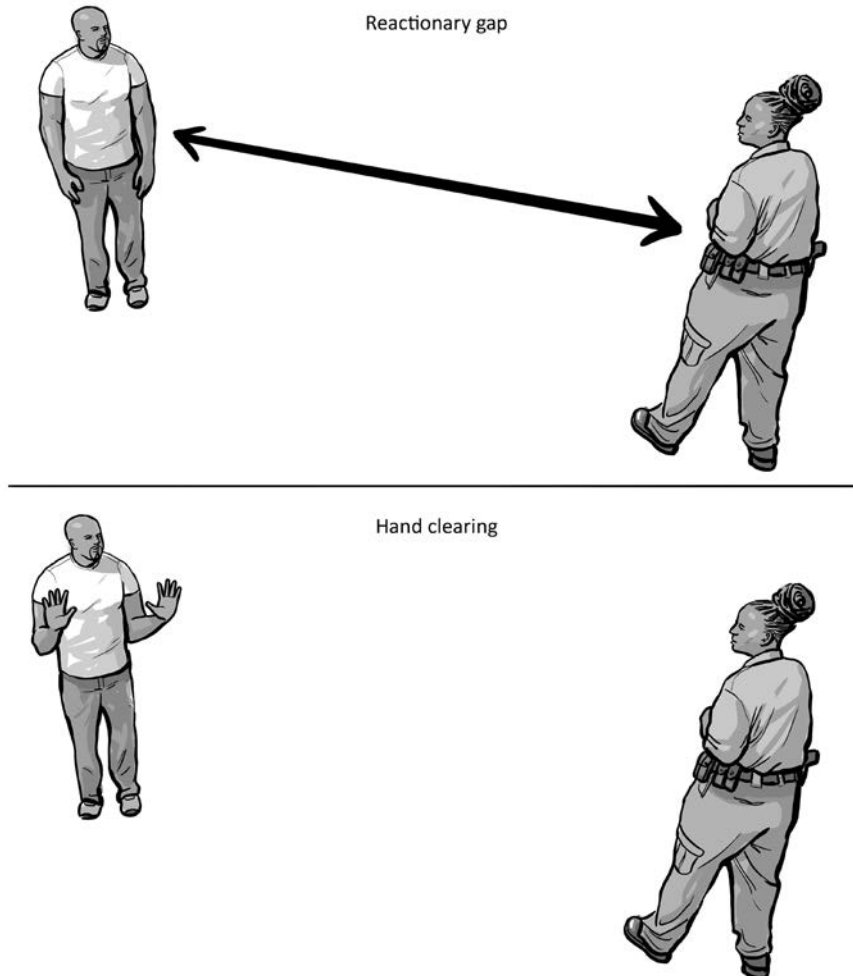


Figure 4-14: Reactionary gap and hand clearing

Reaction time principle is the amount of time it takes for the brain to process a physical threat and the body to respond. This process involves perceiving and analyzing the threat, forming a strategy, and initiating motor action(s). In other words, the officer sees the threat, figures out what to do, and then takes action.

☑ **HL433.9. Define reaction time principle**

The person who effectively manages the distance in a use of force encounter has a better chance of success. This applies during grappling and striking. Managing distance doesn't only mean moving away from a threat; it can also mean closing distance between you and the subject. Managing the distance helps you control the encounter. Always consider environmental factors, such as being surrounded by a crowd or being in a confined area.

Evasion and Redirection

Use evasion and redirection movements to avoid or redirect an attack. **Evasion** is simply shifting your body or sidestepping to avoid the attack. **Redirection** is using empty-hand techniques to move the subject away. Using evasive and redirecting tactics may allow time to disengage, escape, or use other force options (such as blocks or strikes). (See Figures 4-15 and 4-16)

☑ **HL433.10. Demonstrate evasion and redirection techniques**



Figure 4-15: Evasion

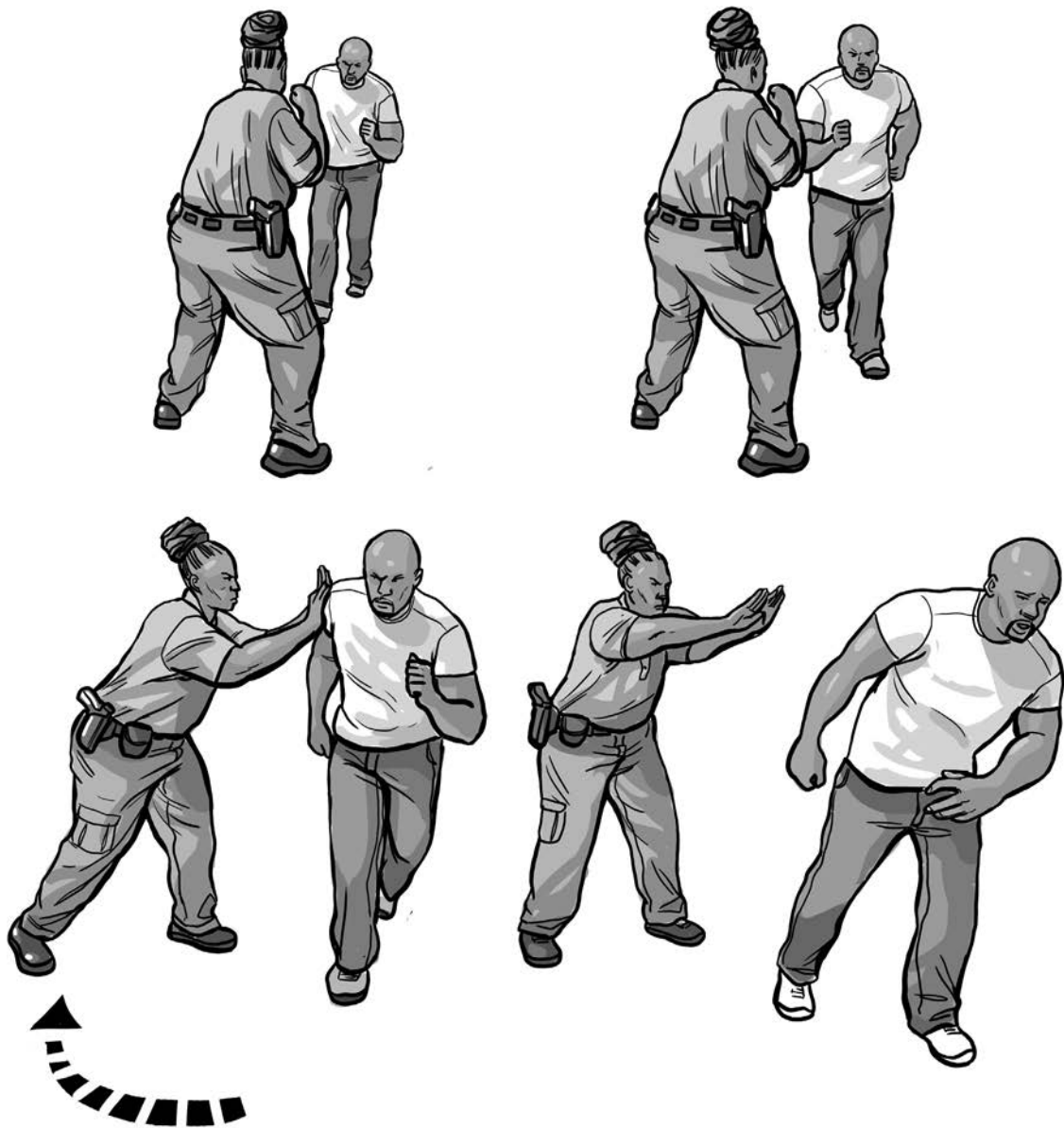


Figure 4-16: Redirection

4

Unit 3: Defensive Tactics Techniques Lesson 4: Pressure Points

Lesson Goal

At the end of this lesson, you will understand the concept of pain compliance and its use in controlling resistant subjects and be able to demonstrate how to apply a pressure point technique.

Pressure points are techniques used to control resistant behavior by using pain compliance. Pressure or leverage is applied using a fingertip or thumb tip to target a nerve, joint, or sensitive area, causing pain and compliance to verbal direction. These techniques do not work on every person or in all situations, but they are generally effective.

The two main components of pressure point techniques are:

- **touch pressure**—touching the location of a nerve or sensitive area and applying continual, uninterrupted pressure with the tip of the finger(s) or thumb until the subject complies
- **stabilization**—immobilizing the subject’s head so the subject cannot move or escape; be careful not to apply too much pressure or torque on the neck or spine when stabilizing the head

As soon as the subject complies by obeying your commands, release pressure to stop the pain. On all pressure point techniques, applying pressure longer than three to five seconds without a response may result in an adrenaline surge. This may cause the subject to exhibit symptoms similar to survival responses, an inability to feel pain, extraordinary strength, or selective hearing.

Use caution when applying a pressure point technique. The subject’s hands are free and you must move inside the danger zone. Also, be aware of the possibility of being bitten by the subject.

Pressure point techniques covered in this lesson include:

- under the jaw
- hollow behind the ear
- hollow behind the collarbone
- elbow under the shoulder blade

HL434.1. Demonstrate pressure point techniques

Under the Jaw

Use this technique when you want a seated, kneeling, or prone subject to stand up.

1. Approach the subject safely.
2. Use loud, clear verbal commands to let the subject know what you want them to do.
3. Stabilize the subject's head. Locate the pressure point(s) under the jawbone.
4. Apply pressure until the subject is compliant.
5. Decrease the pressure when the subject complies. Do not release control, just the pressure. If the subject begins to resist again, reapply the pressure.
6. Follow up with appropriate action(s). (See Figure 4-17)

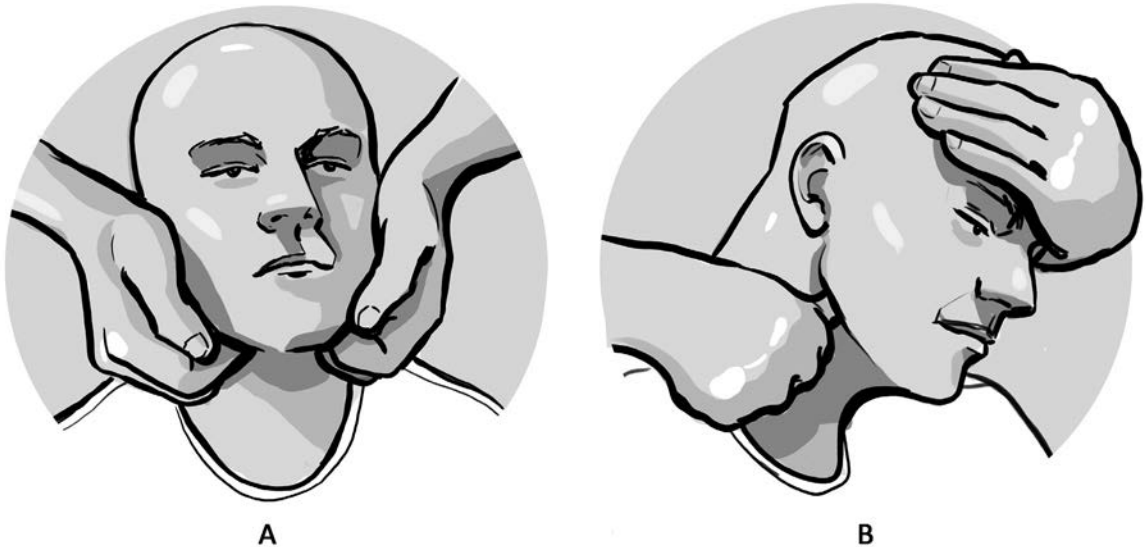


Figure 4-17: Pressure points—under the jaw A and B

Hollow Behind the Ear

Use this technique on a seated or prone subject or on a subject who is holding onto a fixed object.

1. Approach the subject safely.
2. Use loud, clear verbal commands to let the subject know what you want them to do.
3. Stabilize the subject's head. Locate the pressure point in the hollow behind the ear.
4. Apply pressure inward and toward the nose until the subject complies.
5. Decrease the pressure when the subject complies. Do not release control, just the pressure. If the subject begins to resist again, reapply the pressure.
6. Follow up with appropriate action(s). (See Figure 4-18)

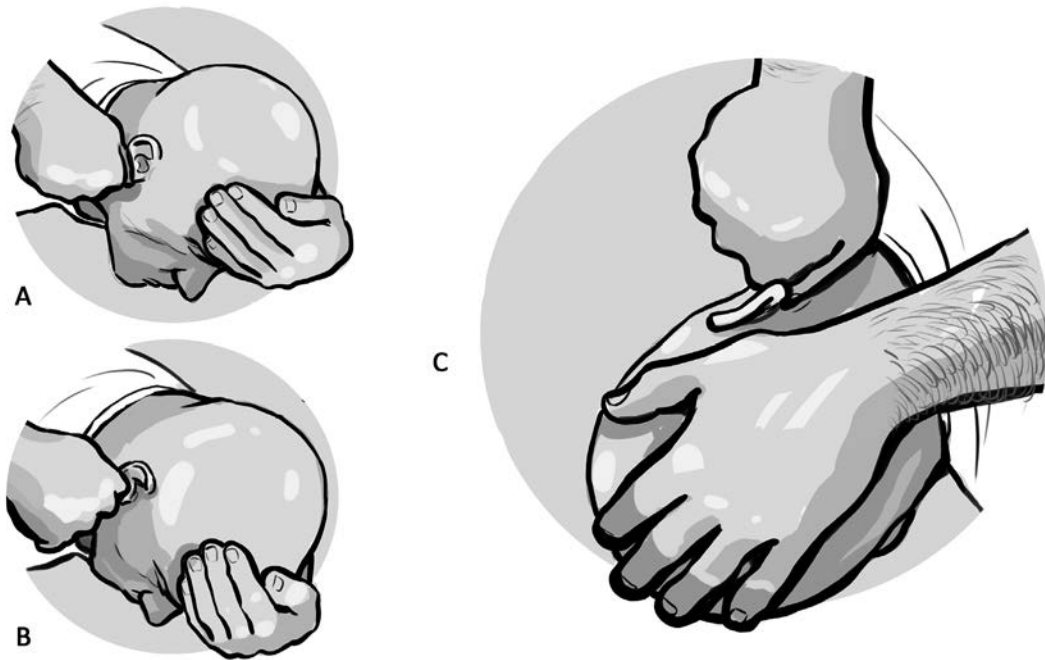


Figure 4-18: Pressure points—hollow behind the ear A, B, and C

Hollow Behind the Collarbone

Use this technique when you want a standing subject to sit, lie down, or move to another location. You can employ this technique from either the front or the side of the subject.

1. Approach the subject safely.
2. Use loud, clear verbal commands to let the subject know what you want them to do.
3. Stabilize the subject.
4. Locate the pressure point behind the collarbone.
5. Apply pressure toward the feet until the subject is compliant.
6. Decrease the pressure when the subject complies. Do not release control, just the pressure. If the subject begins to resist again, reapply the pressure.
7. Follow up with appropriate action(s). (See Figure 4-19)



Figure 4-19: Pressure points—hollow behind the collarbone

Elbow Under the Shoulder Blade

Use this technique to reach the arms or wrists (for example, for handcuffing) of a subject who is on their stomach with their hands tucked under them.

1. Approach the subject safely.
2. Use loud, clear verbal commands to let the subject know what you want them to do.
3. Stabilize the subject where they are face down, on their stomach.
4. Bend your elbow and place it on the subject's back along the spine at the shoulder blade.
5. Apply downward pressure with the elbow until the subject is compliant.
6. Decrease the pressure when the subject complies. If the subject begins to resist again, reapply the pressure.
7. Follow up with appropriate action(s). (See Figure 4-20)

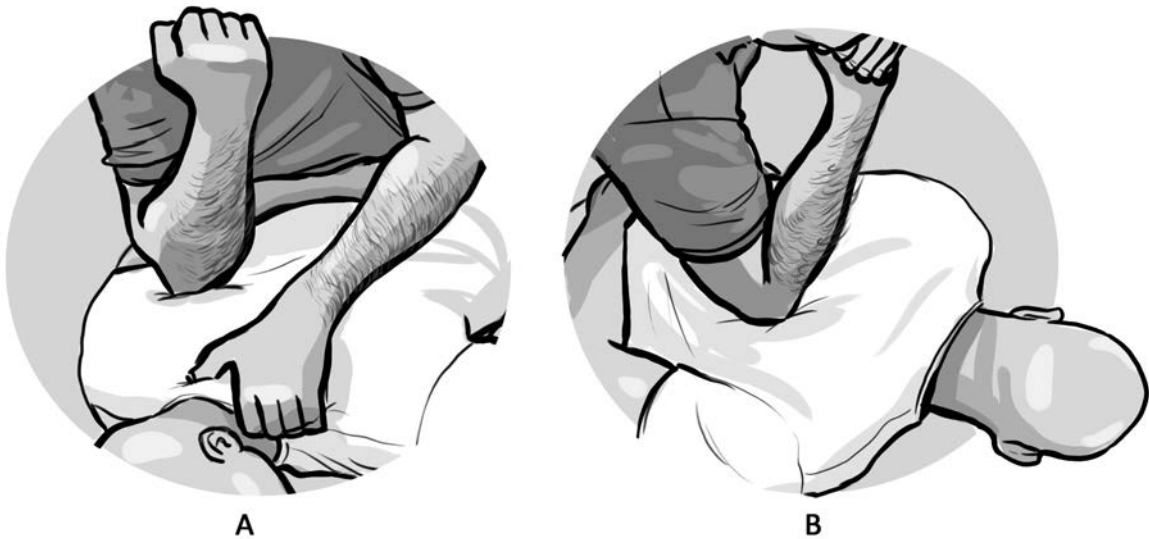


Figure 4-20: Pressure points—elbow under the shoulder blade A and B

4

Unit 3: Defensive Tactics Techniques Lesson 5: Escorts and Transporters

Lesson Goal

At the end of this lesson, you will be able to demonstrate proper escort and transporter techniques.

Officers may encounter subjects who refuse to obey their commands but demonstrate no physical resistance. You can use pain compliance, mechanical compliance, or joint manipulation techniques to move the unwilling subject from one location to another. These techniques are called escorts and transporters. These escort and transporter techniques are the basis for some takedowns. When using an escort or transporter technique, you enter the danger zone and should always be aware of your weapon's proximity to the subject.

Escorts

The **escort** position is a technique used to move a subject from one point to another without using pain compliance. It provides minimal control of the subject through leverage. If a subject resists, you may move to a transporter technique.

ESCORT POSITION

An escort may be your first physical contact with a subject. You apply pressure or leverage on a joint to lock it, and the subject complies.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Maintain an appropriate stance.
3. Make contact with the subject's arm by grasping simultaneously the wrist and the upper arm just above the elbow.
4. Turn the subject's palm so that it is facing you.
5. Move the subject, or follow up with appropriate action(s). (See Figure 4-21)



Figure 4-21: Escort positions A, B, and C

Transporters

Transporters, sometimes called **come-along holds**, are techniques used to move a subject from one point to another with pain compliance or mechanical compliance.

The following transporter techniques are included in this lesson:

- hammer lock
- shoulder lock

HAMMER LOCK TRANSPORTER

The hammer lock is a useful technique applied when a subject tries to pull away from the escort position. This technique uses pain compliance and mechanical compliance by moving the subject's arm behind their back. It can also be applied on a handcuffed subject.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Begin from the escort position.
3. A strike or diversion may be necessary to complete the technique.
4. Mirror the controlled hand and rotate the subject's controlled hand while sweeping the subject's hand behind their back.
5. Maintain control by bending the wrist.
6. Control or move the subject, or follow up with appropriate action(s). (See Figure 4-22)



Figure 4-22: Hammer lock transporter

SHOULDER LOCK TRANSPORTER

The shoulder lock transporter is a good controlling technique because of the position in which you put the subject's arm. This technique incorporates pain compliance, joint manipulation, and balance displacement. It can also be applied on a handcuffed subject.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Begin from the escort position.
3. A strike or diversion may be necessary to complete the technique.
4. Raise the subject's elbow upward, then roll the subject's shoulder forward.
5. Push the controlled arm behind the subject's back, over your forearm, placing your hand on the subject's triceps.
6. Reach across the subject's back and control the subject's head with your right hand (for example, by grabbing behind the subject's neck or the opposite shoulder).
7. Maintain control, or follow up with appropriate action(s). (See Figure 4-23)

HL435.1. Demonstrate escort and transporter techniques

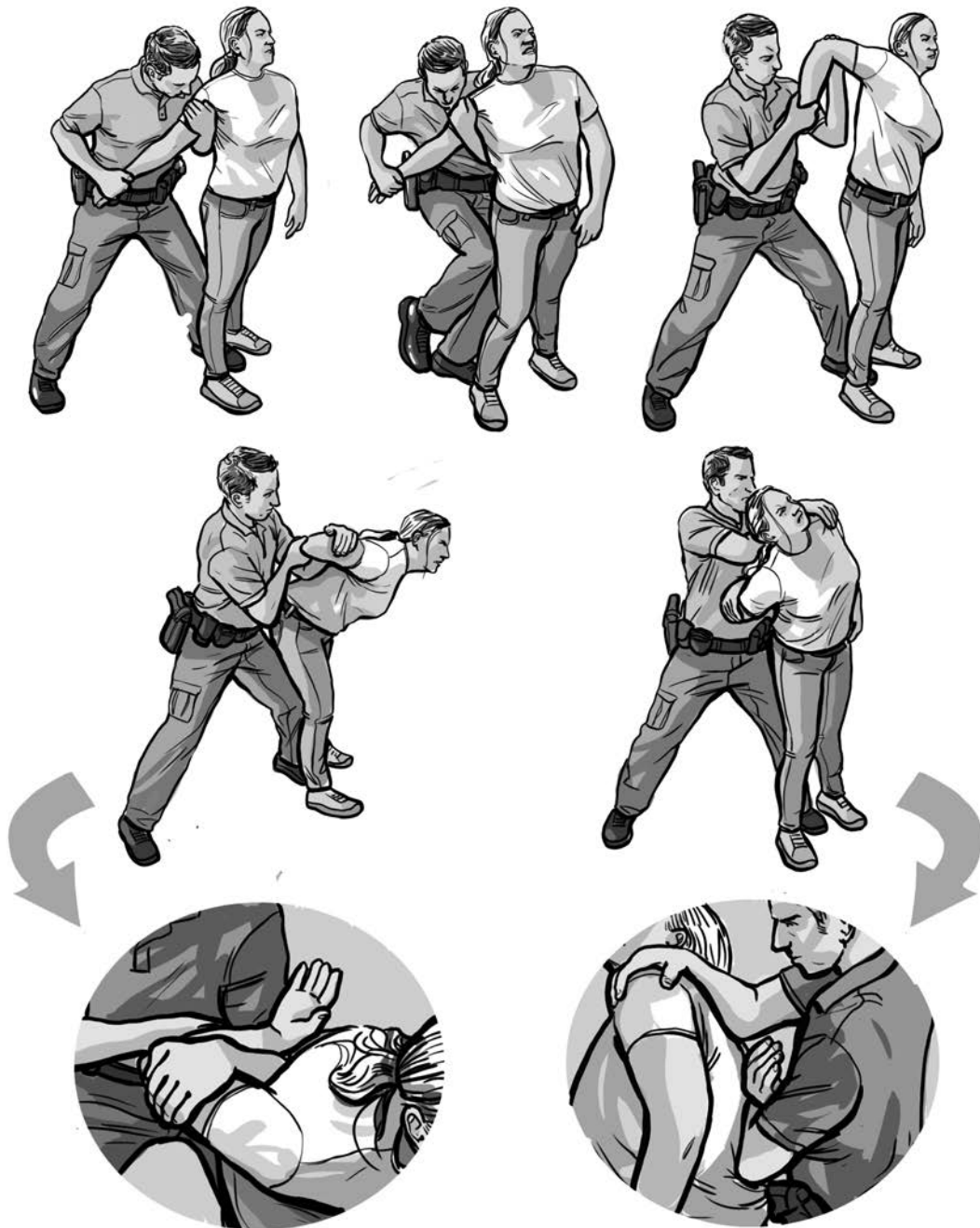


Figure 4-23: Shoulder lock transporter

4

Unit 3: Defensive Tactics Techniques Lesson 6: Restraint Devices

Lesson Goal

At the end of this lesson, you will be able to demonstrate the proper application and removal of restraint devices.

Restraint devices are tools, such as handcuffs, which are designed to temporarily restrain a subject's movements. There are other types of restraint devices, including waist chains (with black box), leg restraints (leg irons), and flexible leg restraints, that you may use in different circumstances.

Handcuffs

Handcuffs are temporary restraint devices frequently used to control a subject. Because handcuffing does not render a subject harmless, subjects should be continuously monitored to ensure officer safety. Applying handcuffs places the officer inside the reactionary gap or the danger zone. The subject may try to resist after the first handcuff is applied. Prepare to respond with an appropriate action.

The handcuffing procedure must be done in a controlled manner, to minimize potential harm to both officer and subject.

Using the nomenclature illustration, identify the parts of handcuffs. (See Figure 4-24)

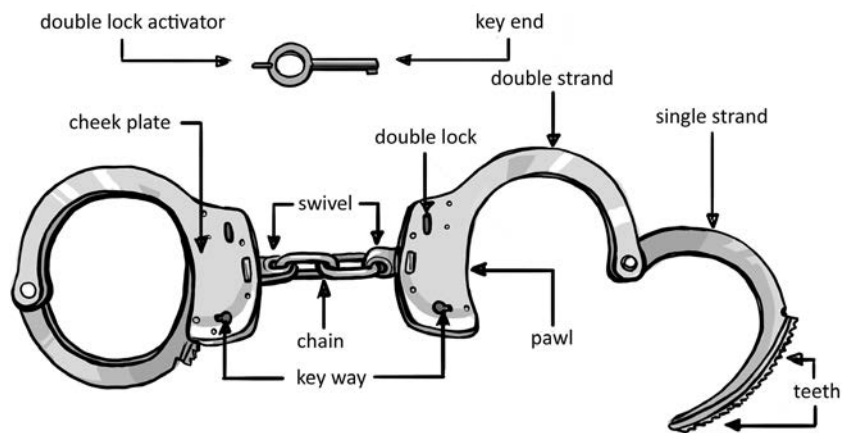


Figure 4-24: Handcuff nomenclature

Handcuffs or any other restraint device must be kept in working order.

Properly holster or load the handcuffs consistent with your cuffing technique.

Three-Point Pin

Usually, a three-point pin is used to control the subject for handcuffing. The three-point pin can effectively control the subject through mechanical and/or pain compliance by using the subject's shoulder and wrist.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Once a subject has been taken to the ground, maintain control of the subject's right arm.
3. Maintain the bent wrist on the subject's right arm to gain compliance.
4. Place your right knee across the subject's right shoulder blade. Avoid pressure to the spinal cord and neck when placing your knee or shin on the subject's shoulder.
5. Place your left knee on the ground close to the subject's rib area with the subject's upper arm on the front of your thigh.
6. Remain on the balls of your feet throughout the pin to allow quick recovery to a standing position. (See Figure 4-2.)



Figure 4-25: Three-point pin

Handcuffing Technique

Handcuffing techniques may vary depending on the compliance level of the subject, but the basic steps for applying handcuffs are as follows:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Visually inspect and direct the subject into a position that prepares for handcuffing.
3. Approach the subject. Note: If a weapon has been drawn, safely manage the weapon before approaching the subject.
4. Draw the handcuffs from the holster.
5. Place one handcuff on one wrist.
6. Place the other handcuff on the other wrist.
7. Check for proper fit.
8. Double lock the handcuffs.
9. Search the subject.

This technique can be used from a variety of positions, including kneeling (see Figure 4-26), standing from a rear or front approach (see Figure 4-27), or prone (see Figure 4-28). With non-compliant subjects, use controlling techniques to apply the handcuffs.



Figure 4-26: Handcuffing—kneeling position



Figure 4-27: Handcuffing—standing position



Figure 4-28: Handcuffing—prone position

Removing Handcuffs

To remove handcuffs, follow these steps:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Visually inspect and direct the subject into a position that prepares for removing handcuffs.
3. Approach the subject.
4. Draw the handcuff key.
5. Remove the handcuff from one wrist and close the cuff.
6. Control the subject's uncuffed hand.
7. Remove the other handcuff and close it.
8. Move away from the subject. (See Figure 4-29)



Figure 4-29: Removing handcuffs

Waist Chains

Waist chains are another type of restraint device, typically used by correctional officers to secure a subject when moving an inmate from one location to another. To apply waist chains, you will need verbal control of the subject.

1. Use loud, clear verbal commands throughout the process.
2. Position the subject facing you with their hands in front and palms facing each other. The subject's hands should be about 6 inches away from their body.
3. Facing the subject, place the handcuffs on their wrists, check for proper fit, and then double lock the cuffs.
4. Attach the black box to the handcuffs from the bottom up. Insert the elongated end of the chain to the backside of the black box.
5. Direct the subject to turn around, wrapping the chain around their waist, ensuring proper fit.
6. Have the subject pull their hands toward their body to take the slack out of the chain. Use a padlock to go through both lengths of the chain and secure on the subject's side. (See Figure 4-30)

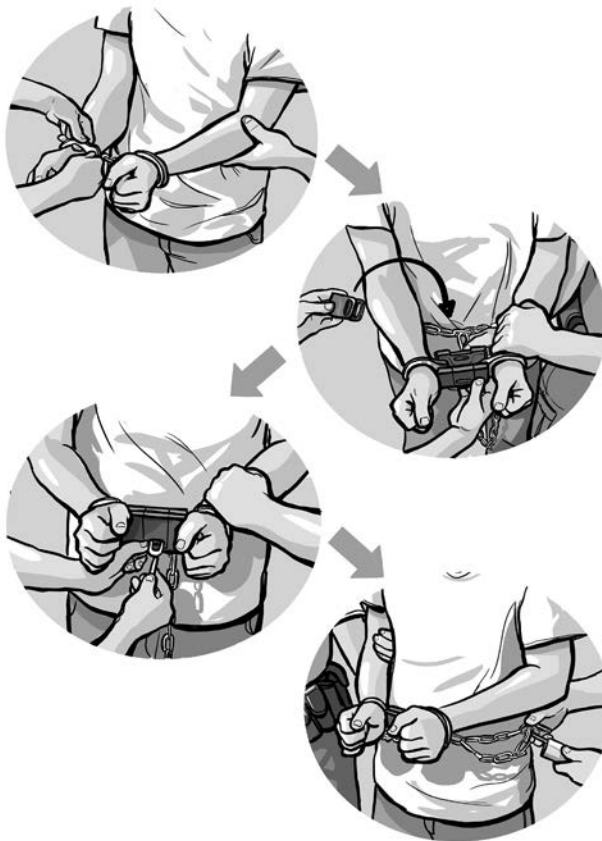


Figure 4-30: Waist chains

Leg Restraints

Leg restraints, also called leg irons, are generally used along with waist chains to limit the movement of a subject. To apply leg restraints:

1. Use loud, clear verbal commands throughout the process.
2. Hold the leg restraints with the double bar facing the subject's legs. This will ensure that the key holes are facing down.
3. Have the subject lean against a wall or kneel on a chair to maintain a balanced stance.
4. Apply the leg restraints to each ankle, check for proper fit, and then double lock them. (See Figure 4-31)



Figure 4-31: Leg restraints

Flexible Restraints

Flexible cuffs and flexible leg restraints are two common types of flexible restraints. Flexible cuffs are a useful tool for restraining single or multiple subjects. These types of restraints are most commonly associated with multiple arrests or transports. They are lightweight plastic or nylon and easy to carry but have a high tensile strength. Flexible leg restraints, “hobbles,” are a useful tool for restraining a subject who is kicking, trying to run away, or posing a safety threat. Applying flexible leg restraints is best performed by more than one officer.

FLEXIBLE CUFFS

Using a single flexible cuff or a double flexible cuff, place the cuff around the subject’s wrists. Before tightening them, place an index finger against the subject’s wrist and tighten the flexible cuff to your index finger and the wrist. Remove your index finger and ensure the flexible cuffs are not cutting off blood circulation. Repeat this process with the second flexible cuff.

REMOVING FLEXIBLE CUFFS

Use care when removing flexible cuffs. Make certain the cutting instrument used to remove the cuffs does not have sharp pointed ends or an exposed blade. For example, do not use a pocket knife or a box cutter. Place the cutting instrument between the flexible cuff and the subject’s wrist. Using the appropriate pressure, carefully cut through the flexible cuffs. Remove and dispose of flexible cuffs properly.

FLEXIBLE LEG RESTRAINTS

When applying flexible leg restraints use loud, clear verbal commands throughout the process.

1. Control the subject by handcuffing them and placing them in the prone position. Your partner will control the subject’s upper body, either with a three-point pin or a wrist compression.
2. Move close to the subject, and kneel or squat near the subject’s legs. Control the subject’s legs by grabbing and wrapping your hands around them, working your way to the subject’s feet.
3. While holding the subject’s feet together, slide the restraints over the lower half of the subject’s legs. Keep the restraints above the subject’s ankles.
4. Tighten the restraint device by pulling the excess portion. The restraint should be tight enough to restrict leg movement while allowing normal blood flow.
5. To further restrict the subject’s movement, clip the excess to the handcuff chain by bending the subject’s legs at the knees to a 90° angle behind the subject. Place the subject in a sitting position or lying on their side.

HL436.1. Demonstrate using restraint devices

4

Unit 3: Defensive Tactics Techniques Lesson 7: Frisks and Searches

Lesson Goal

At the end of this lesson, you will be able to demonstrate pat down, custodial, and inmate clothed searches and articulate the process for conducting a strip/unclothed search.

A **search** is a government intrusion into a place in which a person has a reasonable expectation of privacy.

Because inmates and probationers have a significantly reduced expectation of privacy, searches by corrections and probation officers are much less limited by Fourth Amendment concerns.

Three search techniques are typically used in the defensive tactics context: pat down, custodial, and inmate.

Pat-Down Technique

A **pat down** is a physical frisk of a subject conducted in a predetermined pattern to locate weapons. Before a law enforcement officer may conduct a pat down, they must have reasonable suspicion that the subject is armed. (See s. 901.151, F.S., Stop and Frisk Law.) **Reasonable suspicion** means that facts or circumstances exist that reasonably indicate that the person has committed, is committing, or is about to commit a violation of the law.

“The purpose of a pat down is not to discover evidence of a crime but to allow the officer to pursue his or her investigation without fear of violence.” See *Adams v. Williams*, 407 U.S. 143 (1972).

Under the **plain touch/feel doctrine**, the officer may seize any object “whose contour or mass” the officer identifies as apparent contraband. See *Minnesota v. Dickerson*, 508 U.S. 366 (1993). A law enforcement officer may pat down only the outside of the clothing for weapons.

When conducting a pat down:

1. Use loud, clear verbal commands throughout the process.
2. Be aware of verbal and non-verbal cues that indicate the probability of aggressive behavior. Remember that you are in the danger zone.
3. Visually scan the subject while assuming the interview stance.
4. Have the subject lift their arms to tighten clothing so you can visually search potential concealment areas, such as the waistline.
5. Have the subject move their hands away from their body.
6. Have the subject place their hands in a way so they can be controlled.
7. Physically control the subject’s hands.

8. Keep the subject off balance.
9. Conduct the pat down in a predetermined pattern.
10. Follow up with appropriate action(s).

If you find a weapon, take it and place it beyond the subject's reach in a safe location. If handcuffing is not tactically sound, follow up with appropriate action(s). (See Figure 4-32)



Figure 4-32: Pat down

Custodial Search Technique

A ***custodial search technique*** is used when a subject is taken into custody in an unsecured environment. Unlike the pat down, this is a complete search of the subject.

Perform a custodial search of a subject in a systematic and predetermined pattern using the ***quadrant search approach***; this divides the body into four sections horizontally and vertically. During this close contact inside the danger zone, you are most vulnerable to a subject's physical assault. For this reason, handcuff first and then search.

The primary purpose of a custodial search is to detect potential weapons or contraband. By searching the subject's body, you should be able to detect items hidden in their clothing or on their body. You may search inside the waistband and pockets; however, you must be careful to avoid being injured by sharp objects, for example, needles and razor blades.

Follow agency policies regarding searching a subject of the opposite sex. You may modify the hand position to avoid the appearance of inappropriate contact. If possible, there should be a witness to the search.

When searching a handcuffed subject, do the following:

1. Use loud, clear verbal commands throughout the process.
2. Keep the subject off balance.
3. Physically control the subject's hands.
4. Conduct the search in a predetermined pattern. The groin is one of the most commonly overlooked areas. Remain professional and focus on conducting a proper, thorough search.
5. Follow up with appropriate action(s). (See Figure 4-33)



Figure 4-33: Custodial search

Inmate Search Techniques

Searches of inmates are primarily designed to uncover contraband, prevent escapes, maintain sanitary standards, and eliminate safety hazards. There are three types of inmate searches: clothed, strip/unclothed, and body cavity.

CLOTHED SEARCH

Clothed searches of inmates can be conducted at random by officers during the course of their daily routine. A female officer may conduct a search of a clothed male inmate. A male officer will conduct a clothed search of a female inmate only during an emergency situation as determined by the shift supervisor. The only exception to this provision is an instance when time and circumstances do not permit the presence of a female officer or consultation with the shift supervisor. If there is an imminent threat of physical violence, a search may be needed to secure the inmate to prevent injury to staff or other inmates.

Like a custodial search, a clothed search follows the quadrant search approach. In an institutional setting, however, handcuffing is not required because there is little risk of escape. Officers should be aware, though, of their vulnerability to a physical assault.

To conduct a clothed search:

1. Use loud, clear verbal commands throughout the process.
2. Remove or have the inmate remove the contents of their pockets and take off their shoes and hat.
3. Inspect the shoes, hat, and personal effects before proceeding.
4. Keep the inmate off balance.
5. Maintain visual contact with the inmate's hands (for example, have the inmate face the wall with hands on the wall).
6. Conduct the search in a predetermined pattern.
7. Follow up with appropriate action(s).

STRIP/UNCLOTHED SEARCH

A strip/unclothed search is done visually. The officer does not touch the inmate during the search.

Strip/unclothed searches of an inmate may be conducted only by correctional officers who are of the same sex as the inmate, except in emergency circumstances. Inmates will generally be unclothed and searched upon their arrival at the correctional institution after returning from court, other institutions, any place where they may have come in contact with the public, or after an escape or attempted escape. There may be other occasions for a strip/unclothed search based on agency policies, or if there is reason to believe an inmate possesses contraband.

Before you can conduct a strip/unclothed search, you must move the inmate out of view of the inmate population. Only the inmate and staff involved will be present during the search.

To conduct a strip/unclothed search:

1. Use loud, clear verbal commands throughout the process.
2. Have the inmate remove all clothing.
3. Search the inmate's hair, ears, and mouth (dentures must be removed).
4. Visually check the entire body including armpits, hands, pubic region, between the toes, soles of the feet, inner portions of the legs, and groove between the buttocks. Any bandages or casts should be thoroughly examined by medical staff.
5. Search every article of clothing and personal property, including collars, cuffs, lapels, seams, and linings. Examine shoes for split soles, false linings, and removable insoles or heels.
6. Follow up per agency policies based on the results of the search.

BODY CAVITY SEARCH

Body cavity searches of inmates may be done only by appropriate health services staff members according to agency policies.

- HL437.1. Demonstrate conducting physical frisks and searches**

4

Unit 3: Defensive Tactics Techniques Lesson 8: Blocks and Strikes

Lesson Goal

At the end of this lesson, you will be able to demonstrate blocking techniques and properly executed and effective strikes to distract, incapacitate, or gain control of a subject.

Blocks

Blocks are reaction techniques using the arms, legs, or body to deflect or redirect an impending strike from a subject to areas of the body.

This lesson covers blocks to defend the upper and mid areas of the body.

UPPER AREA BLOCK

In the upper area, use the arms to protect from the neckline to the top of the head. The officer can transition to another action, such as counterstrikes. (See Figure 4-34)



Figure 4-34: Upper area block

MID AREA BLOCK

In the mid area, use the arms to protect the torso and the face. The officer can transition to another action, such as counterstrikes. (See Figure 4-35)

- ☑ **HL438.1. Demonstrate blocking techniques**



Figure 4-35: Mid area block

Strikes

An **empty-hand striking technique** is any impact technique using hands, arms, elbows, feet, legs, knees, or head to strike a subject in an offensive or defensive situation. The entire body can be used as a weapon. This could include punching, hitting, kicking, or slapping.

Striking techniques have specific target areas. Some target areas involve nerve motor points in muscles. When struck, the impact may cause disruption of nerve tissue leading to incapacitation or motor dysfunction. **Temporary motor dysfunction** is a type of incapacitation that causes temporary impairment of muscle control, such as a cramp. Strikes to the skeletal structure are also effective.

Target Areas—Empty-Hand Strikes

DF means deadly force, and NDF means non-deadly force. (See Figure 4-44)

The expected effect of NDF strikes is to disable or cause temporary motor dysfunction.

Front of Shoulder (NDF)—Strike with an empty hand.

Top of Forearm (NDF)—Strike with an empty hand.

Inside of Forearm (NDF)—Strike with an empty hand.

Outside of Thigh (NDF)—Strike with an empty hand, leg, or knee.

Inside of Thigh (NDF)—Strike with an empty hand, leg, or knee.

Center of Abdomen (NDF)—Strike with an empty hand.

Top of Calf (NDF)—Strike with an empty hand, foot, knee, or leg.

Chest (NDF)—Strike with an empty hand.

Side of Neck (NDF)—Strike with an empty hand.

Head (NDF)—Strike with an empty hand. Strikes to certain areas of the head have the potential for injury depending on the amount of force used.

Throat (DF)—Strike with an empty hand. Striking the throat is considered deadly force.

Eyes (NDF)—Strike with an empty hand. Striking the eyes is considered non-deadly force, but gouging the eyes is considered deadly force.

Groin (NDF)—Strike with an empty hand, knee, or leg. Striking a subject in the groin may be an effective escape from a close-quarter body hold.

HL438.2. Identify target areas for empty-hand strikes

DF - Deadly force
NDF - Non deadly force

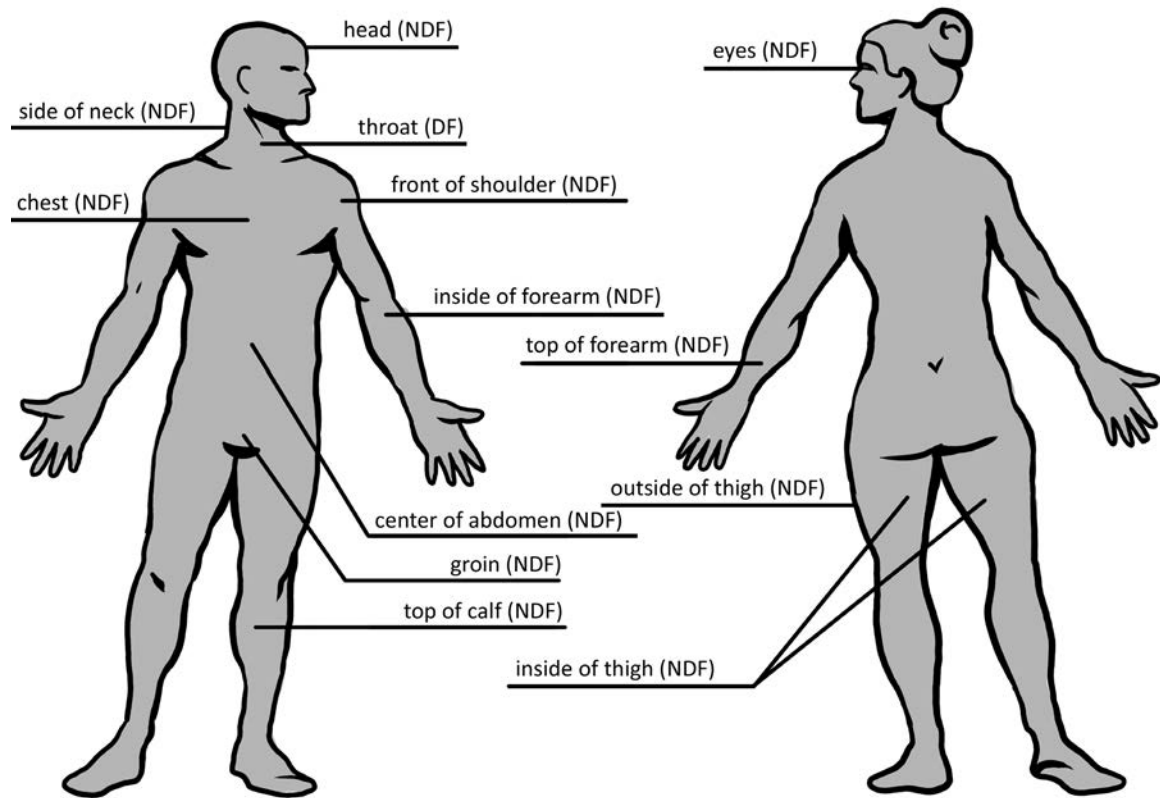


Figure 4-36: Empty hand target areas

There are two methods of delivering strikes: penetration and snap-back.

A penetrating strike is typically used to strike a muscle. The penetration of the muscle and nerves in the target area results in a full transfer of kinetic energy that increases the power of the strike. All targets are struck with the intention of preventing or stopping aggressive action.

A **snap-back** strike is delivered and then retracted very quickly, thus enabling multiple strikes, creating distance, setting up the next techniques, and causing distraction to the subject. A snap-back may be delivered with any body part used for striking, kicking, punching, and so on. A boxer's jab is one example of a snap-back.

Swinging and thrusting are two types of strikes. A swinging strike generates less power on impact due to the greater amount of surface area of the target. A thrusting strike magnifies the delivered power due to the smaller surface area making contact with the target area.

Two variables account for the amount of power generated in a strike; the amount of mass delivered with the striking weapon (that is, fist, foot, baton) and the velocity (speed) at which it is delivered. To generate maximum power effectively, you need a wide stable stance. Twist your upper torso and hips into the strike to allow the maximum amount of mass to complement the striking weapon. The faster the strike, the more power you will generate.

HL438.3. Demonstrate striking techniques

Some strikes may be used as a diversion technique. ***Diversion*** is a technique that interrupts the subject's concentration so that energy is redirected from the current focus. Diversion techniques can be used to gain space when you are held in a close-quarter body hold and can assist in applying other defensive tactics, such as takedowns and transporters. In certain situations, any strike can be used as a diversion.

HL438.4. Demonstrate diversion techniques

This section covers several types of striking and kicking techniques:

- palm heel strike
- punches
- hammer fist strike
- backfist strike
- elbow strike
- knee strike
- front kick
- angle kick

PALM HEEL STRIKE

You can use the palm heel strike to defuse a situation and gain control of a subject. This strike may be delivered to the center of the subject's chest primarily as a diversion technique or to the face as an incapacitating technique.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Identify the target area.
4. Thrust the hand forward, striking the target area with the palm heel of the hand.
5. Rotate your shoulders and hips to deliver the strike.
6. Follow up with appropriate action(s). (See Figure 4-37)



Figure 4-37: Palm heel strike

PUNCHES

You can punch to gain control of a situation by stunning the subject before using other techniques, such as a takedown followed by handcuffing.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Identify the target area.
4. Make a fist. To make a proper fist, roll the fingers, tuck, and lock into the palm of the hand with thumb pressure.
5. Use the knuckles to strike the specific target area.
6. Follow up with appropriate action(s). (See Figure 4-38)

You can use punches from multiple angles and deliver punches to different areas of the body. Examples include jabs, crosses, hooks, upper cuts, overhands, and strikes with the back of the hand, forearm, or knuckles, or a variety of combinations.



Figure 4-38: Punches

HAMMER FIST STRIKE

The hammer fist strike is one of the most powerful strikes you can use. A properly delivered strike usually causes the subject to release their grip in a situation where the subject suddenly grabs your wrist, equipment, or part of your clothing. Using a hammer fist temporarily disables the subject and lets you escalate, de-escalate, or disengage.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Identify the target area.
4. Make a fist.
5. Use the bottom of the fist to strike the target area.
6. Follow up with appropriate action(s). (See Figure 4-39)



Figure 4-39: Hammer fist strike

BACKFIST STRIKE

When attacking from the rear, a properly delivered backfist strike can often give you a tactical advantage and may incapacitate or break the concentration of the attacker.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Identify the target area.
4. Make a fist.
5. Use the back of the fist to strike the target area.
6. Follow up with appropriate action(s). (See Figure 4-40)



Figure 4-40: Backfist strike

ELBOW STRIKE

You can use the elbow strike as an initial or follow-up strike to incapacitate the subject and create distance when you are close to the subject. This strike is not executed with the tip of the elbow but with the area of the arm about 1 inch below or above the elbow.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Identify the target area.
4. Make a proper fist.
5. Bend your elbow to a 90° angle.
6. Rotate your shoulders and hips to deliver the strike.
7. Follow up with appropriate action(s). (See Figure 4-41)



Figure 4-41: Elbow strike

KNEE STRIKE

You can use the knee strike when you are near a resistant or combative subject. Use it to gain control or distance.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Identify the target area.
4. Drive your knee forward into the target area.
5. Follow up with appropriate action(s). (See Figure 4-42)



Figure 4-42: Knee strike

FRONT KICK

When an aggressive subject advances toward you, use the front kick to stop the subject's forward momentum.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Transfer your balance to the support leg.
3. Lifting the knee, snap the foot forward.
4. Strike the target with either the ball or bridge of the foot.
5. Follow up with appropriate action(s). (See Figure 4-43)



Figure 4-43: Front kick

ANGLE KICK

The angle kick can disable a subject who begins to attack you. For maximum effectiveness, use a penetrating strike. This kick can be delivered without getting close to the subject.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Transfer your balance to the support leg.
3. Lift the knee of the kicking leg and rotate the hip.
4. Either snap or thrust the leg toward the target area.
5. Strike the target with the shin or top of the foot.
6. Follow up with appropriate action(s). (See Figure 4-44)

HL438.5. Demonstrate kicking techniques

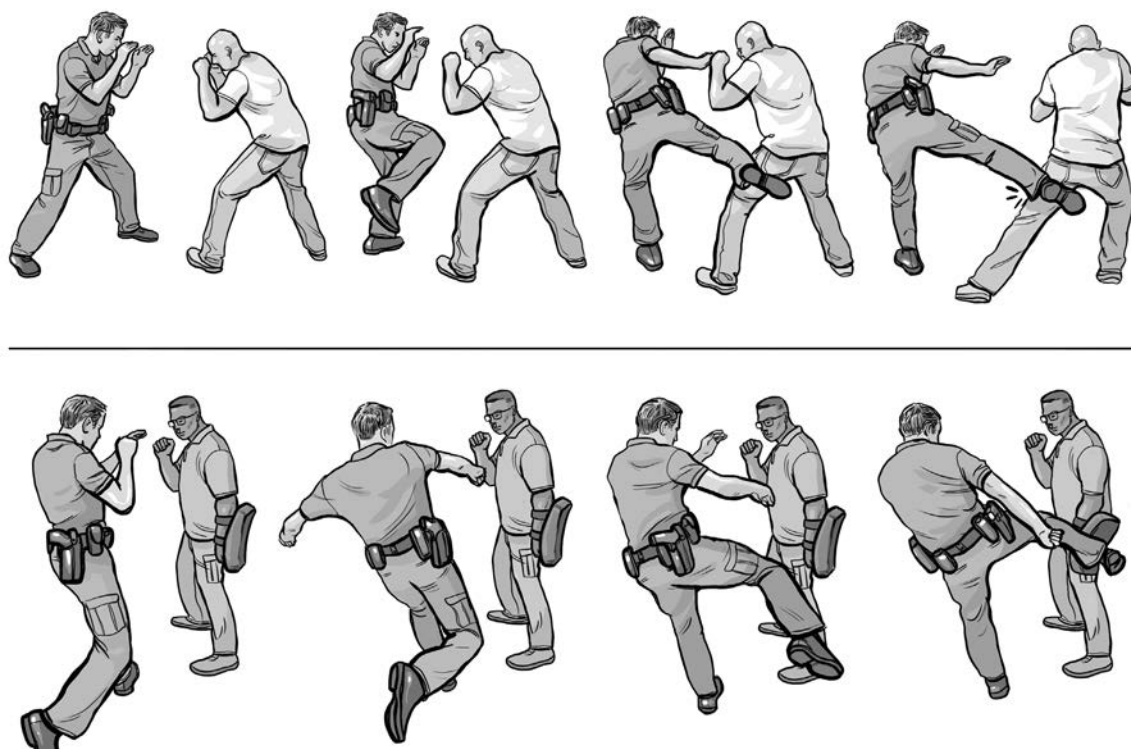


Figure 4-44: Angle kicks

4

Unit 3: Defensive Tactics Techniques Lesson 9: Takedowns

Lesson Goal

At the end of this lesson, you will be able to demonstrate proper takedown techniques.

Takedowns are techniques used to bring a resisting subject from a standing position to the ground, making it easier to control them. After a takedown, you may escalate, de-escalate, or disengage, depending on your assessment of the situation.

Most takedowns use mechanical compliance or balance displacement to bring the subject safely to the ground.

This section covers several types of takedown techniques:

- straight arm takedown
- hammer lock takedown
- shoulder lock takedown
- rear takedown
- front takedown
- hip roll

Straight Arm Takedown

This technique is versatile and allows you to move into a control position for a resistant subject. The key to this technique is to maintain control of the subject's straight arm.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position, usually an escort position.
3. Slightly pull the subject off balance, straightening their right arm, pulling their wrist downward with their palm toward you to your right hip.
4. Apply downward pressure to the elbow while maintaining control of the wrist.
5. A strike or diversion may be necessary to complete the technique.
6. Move your right leg rearward, as needed, to rotate your hips clockwise.
7. Drop to your left knee (optional) and place the subject in a prone position. Note: Depending on the surface, placing a knee on the ground may not be advisable.
8. Follow up with appropriate action(s). (See Figure 4-45)



Figure 4-45: Straight arm takedown

Hammer Lock Takedown

From a hammer lock transporter (restrained or unrestrained):

1. Use loud, clear verbal commands throughout the application of the technique.
2. A strike or diversion may be necessary to complete the technique.
3. Move your right leg rearward, as needed, to rotate your hips clockwise.
4. Drop to your left knee (optional) and place the subject in a prone position. Note: Depending on the surface, placing a knee on the ground may not be advisable.
5. Follow up with appropriate action(s). (See Figure 4-46)



Figure 4-46: Hammer lock takedown

Shoulder Lock Takedown

From a shoulder lock transporter (restrained or unrestrained):

1. Use loud, clear verbal commands throughout the application of the technique.
2. A strike or diversion may be necessary to complete the technique.
3. Move your right leg rearward, as needed, to rotate your hips clockwise.
4. Drop to your left knee (optional) and place the subject in a prone position. Note: Depending on the surface, placing a knee on the ground may not be advisable.
5. Follow up with appropriate action(s). (See Figure 4-47)



Figure 4-47: Shoulder lock takedown

The shoulder lock can be used from multiple positions, including from the clinch or on a handcuffed subject. (See Figure 4-48)



Figure 4-48: Shoulder lock takedown from clinch

Rear Takedown

This technique is versatile and allows you to take down a resistant subject and establish control. The key to this technique is to maintain control of the subject's waist.

From an upright grappling position:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Take an extended step behind the subject and lower your center of gravity, establishing a good base.
3. Once established behind the subject, place a hand on each side of the subject near the waistline/hip.
4. Extend one leg and plant your foot directly behind the subject's heel.
5. Sit down, twisting the subject back with you.
6. Continue the twist/spinning motion, following the subject to the ground. You should end up in a side mount or full mount position.
7. Follow up with appropriate action(s). (See Figure 4-49)

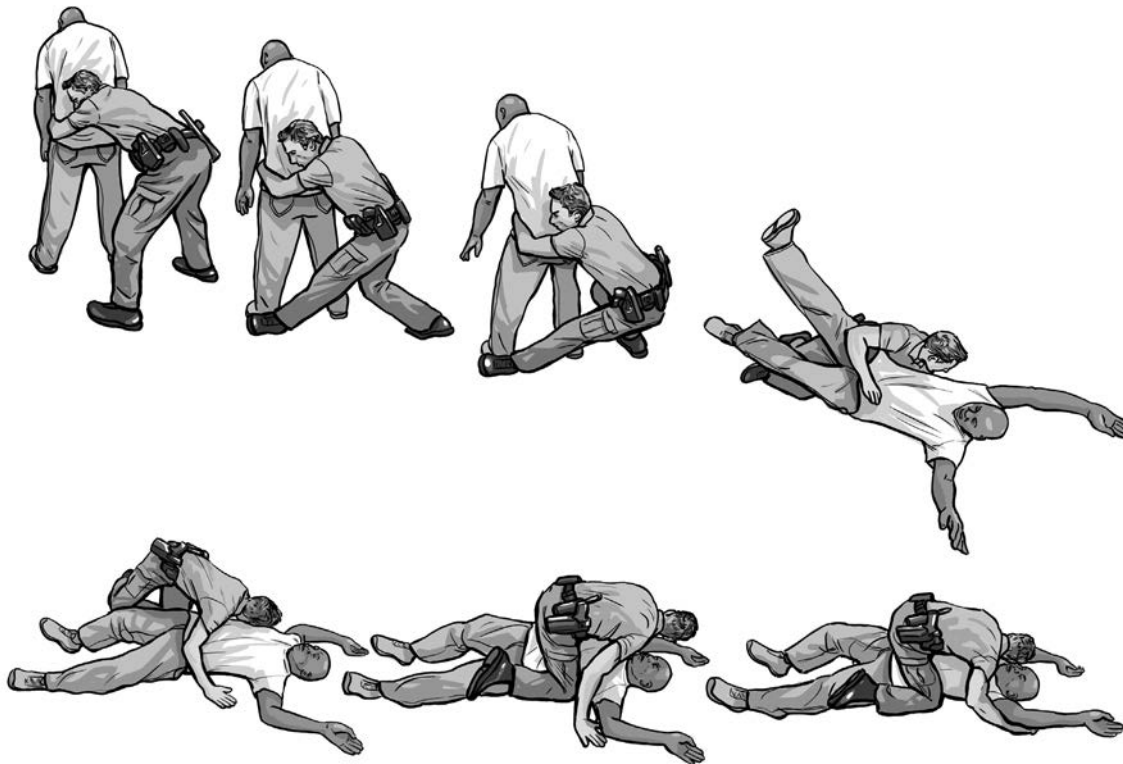


Figure 4-49: Rear takedown

Front Takedown

If at any time during a body lock, your position is more to the front of the subject than to the side or rear, a front takedown may be a more appropriate technique than the rear takedown.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Grasp the subject's body as close to their hips as possible pulling them close to you while using your head to push their upper body back, causing the subject to be off balance.
3. If needed, use your left leg to hook the subject's right leg below their knee.
4. Drag their leg toward and then behind you, lifting the subject's leg up and back while simultaneously pushing their upper body down with your head into their chest, forcing them to the ground.
5. Follow up with appropriate action(s). (See Figure 4-50)

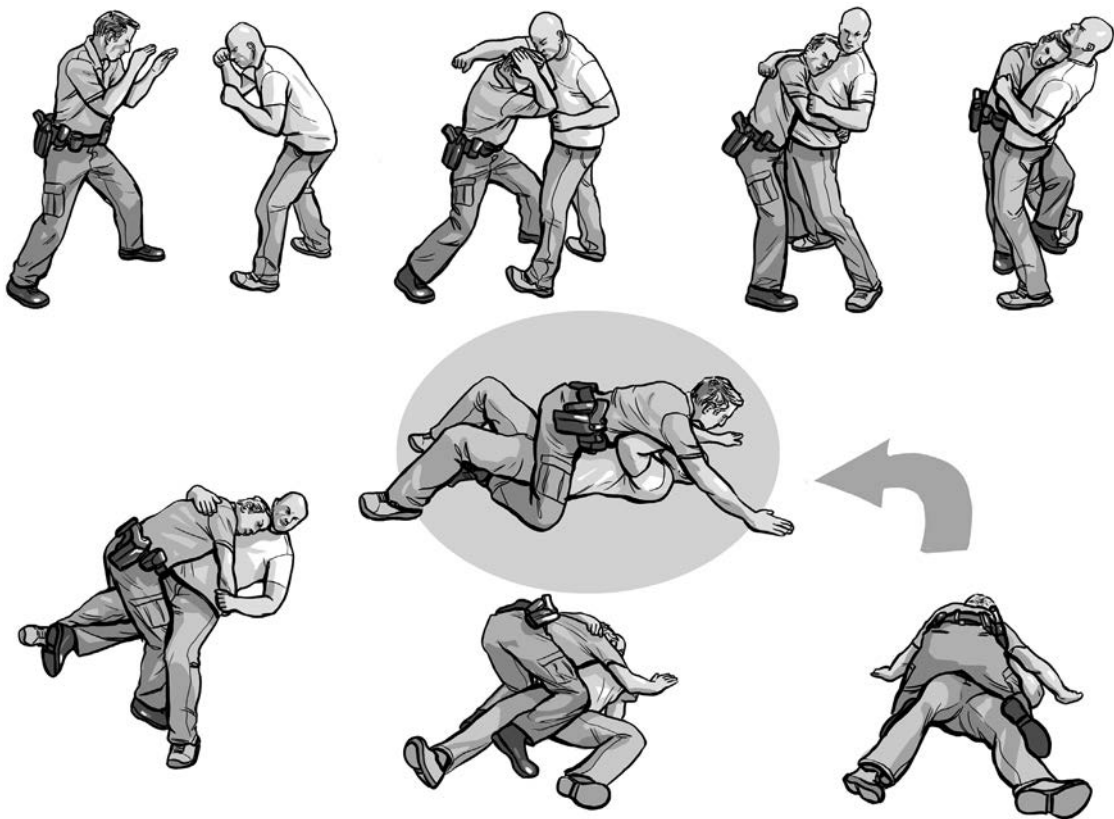


Figure 4-50: Front takedown

Hip Roll

A hip roll is an effective defense against a subject who closes the gap and tries to control your upper body.

From an upright grappling position:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Place your hip into the subject's lower abdomen. Your right hip should move past the subject's right hip.
3. Lower your center of gravity.
4. Pull the subject over the hip and direct them to the ground. (See Figure 4-51)

HL439.1. Demonstrate takedown techniques

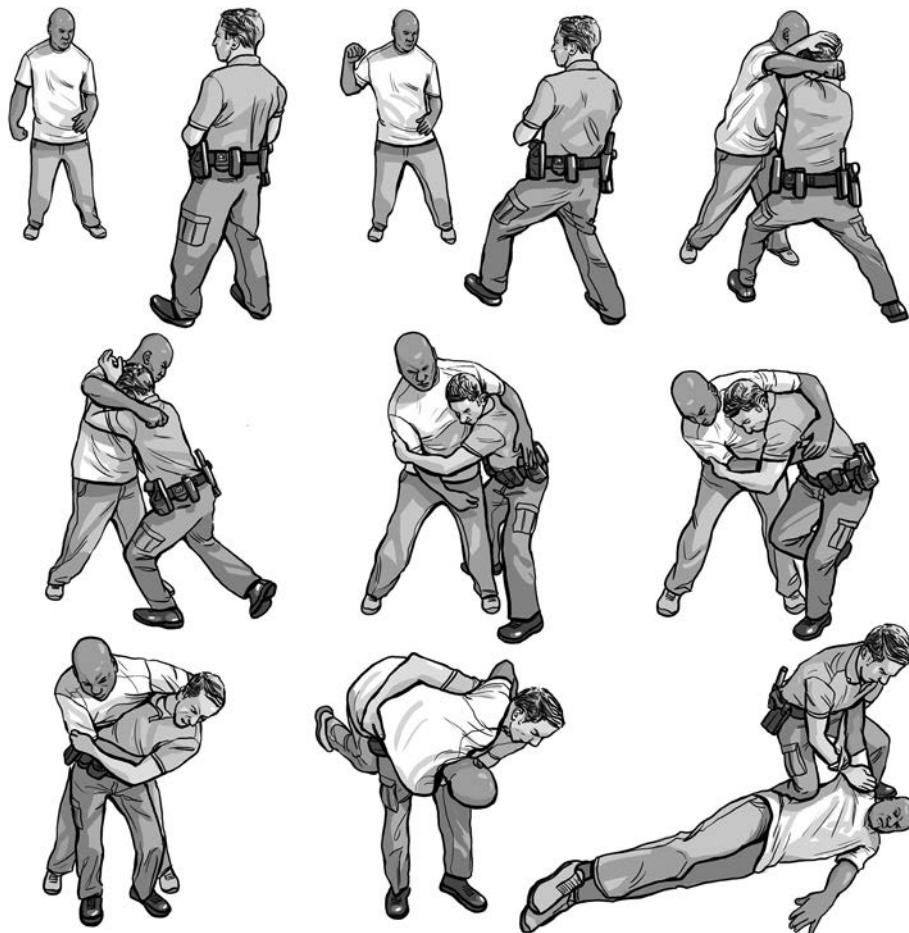


Figure 4-51: Hip roll

4

Unit 3: Defensive Tactics Techniques Lesson 10: Upright Grappling and Body Hold Escapes

Lesson Goal

At the end of this lesson, you will be able to demonstrate proper upright grappling and body hold escape techniques.

One of the most common attacks an officer may face is an upright grappling position. **Grappling** is the use of body mechanics to leverage or control another person. When engaged in a grappling hold, consider methods of escaping, stabilizing, or controlling a resistant subject. With any sudden attack, preventing and breaking free should be your first priority.

There are several types of upright grappling body holds covered in this lesson:

- escape from front chokehold
- escape from rear chokehold
- escape from front body hold over/under arms
- escape from rear body hold over/under arms
- escape from headlock
- escape from front football tackle
- diversions
 - ▶ head butt
 - ▶ foot stomp
 - ▶ shin scrape

HL4310.1. Demonstrate upright grappling and body hold escape techniques

Defend and Escape From a Front Chokehold

The purpose of the escape from a front chokehold is to break away from a subject who grabs you around the throat from the front. This requires maintaining balance, disengaging, and following up with other techniques. You may also need to apply a diversion technique to escape. Subject and officer factors dictate what diversion to use and when.

The front choke is life-threatening. Execute this technique immediately:

If possible, use loud, clear verbal commands throughout the application of the technique.

1. Tuck your chin and shrug your shoulders.
2. Step straight back with your right leg and raise your left arm as you swing that arm up and over the subject's arm to break the hold (windmill).
3. Follow up with appropriate action(s). (See Figure 4-52)
4. Other effective escapes from a front chokehold can also include pressure to the jugular notch and evasive movements.



Figure 4-52: Defend and escape from a front chokehold

Defend and Escape From a Rear Chokehold

The rear chokehold is usually the result of a surprise attack or a struggle with a combative subject. Escape is crucial. Any chokehold can cause serious injury or unconsciousness. If you are unconscious, you cannot defend yourself from a subsequent use of deadly force.

If possible, use loud, clear verbal commands throughout the application of the technique.

1. Tuck your chin and shrug your shoulders.
2. Lower your center of gravity and raise your arm on the side they are choking you with.
3. Protect your airway with your other hand.
4. Create space between your hips and the subject's.
5. Windmill your raised arm in a downward motion between their hip and yours as you turn into the subject, grabbing their upper back. This should free you from the choke.
6. Follow up with appropriate action(s). (See Figure 4-53)



Figure 4-53: Defend and escape from a rear chokehold

Escape From Front Body Hold Over/Under Arms

A front body hold is usually the result of a surprise attack. A subject applying this type of hold on you can cause serious injury. Use your hands, feet, and legs to perform a diversion technique and escape.

Use loud, clear verbal commands throughout the application of the technique.

1. Lower your center of gravity.
2. Perform one or more striking techniques or pressure points to the appropriate target areas.
3. Follow up with appropriate action(s).
4. For escaping over the arms, create distance between you and the subject by putting your palms on the subject's hips (hip check).
5. For escape from under the arms, push the head away and follow up with appropriate action(s). (See Figure 4-54)



Figure 4-54: Escape from front body hold over/under arms

Escape From Rear Body Hold Over/Under Arms

A rear body hold is usually the result of a surprise attack. A subject who grabs you in a rear body hold can exert force strong enough to the ribcage that breathing becomes difficult or a serious injury may occur. Immediate escape is imperative.

Use loud, clear verbal commands throughout the application of the technique.

1. Trap hands and lower your center of gravity.
2. Perform one or more striking techniques or finger peel to break the subject's grip.
3. Follow up with appropriate action(s). (See Figure 4-55)



Figure 4-55: Escape from rear body hold over/under arms

Escape From Headlock

The headlock is usually the result of a surprise attack or a struggle with a combative subject. Being in a headlock for an extended period can cause serious injury. Escape is crucial. To escape from a headlock, you must react quickly and apply leverage.

When a subject applies a headlock, turn your face into the subject's torso to establish an airway and protect vital areas of your face.

Strikes and diversion techniques are effective for escaping from a headlock. A wide stance is necessary to establish good balance.

ESCAPE FROM SIDE HEADLOCK

Use loud, clear verbal commands throughout the application of the technique.

1. Establish an airway, and a wide stance.
2. Perform one or more striking techniques or pressure points to the appropriate target areas, if needed.
3. If the subject tries to strike with their non-choking arm, reach behind the subject and secure their striking arm with your hand by grabbing their forearm.
4. Perform a rear takedown.
5. Follow up with appropriate action(s). (See Figures 4-56 and 4-57)



Figure 4-56: Escape from side headlock A



Figure 4-57: Escape from side headlock B

ESCAPE FROM FRONT HEADLOCK

Use loud, clear verbal commands throughout the application of the technique.

1. Establish an airway and a wide stance.
2. Perform one or more striking techniques or pressure points to the appropriate target areas, if needed.
3. Bring your right arm over the subject's left shoulder and maintain downward pressure.
4. Quickly step around the subject's lead leg using your leg to place the subject off balance. This should place you on the subject's left side.
5. Use your right leg to buckle the subject's left leg, while driving them down with your shoulder and head pressure.
6. As the subject falls, move past their left leg, while maintaining constant shoulder and head contact with the subject's chest.
7. Guide the subject as they fall to the ground, ending in side control. (See Figure 4-58)

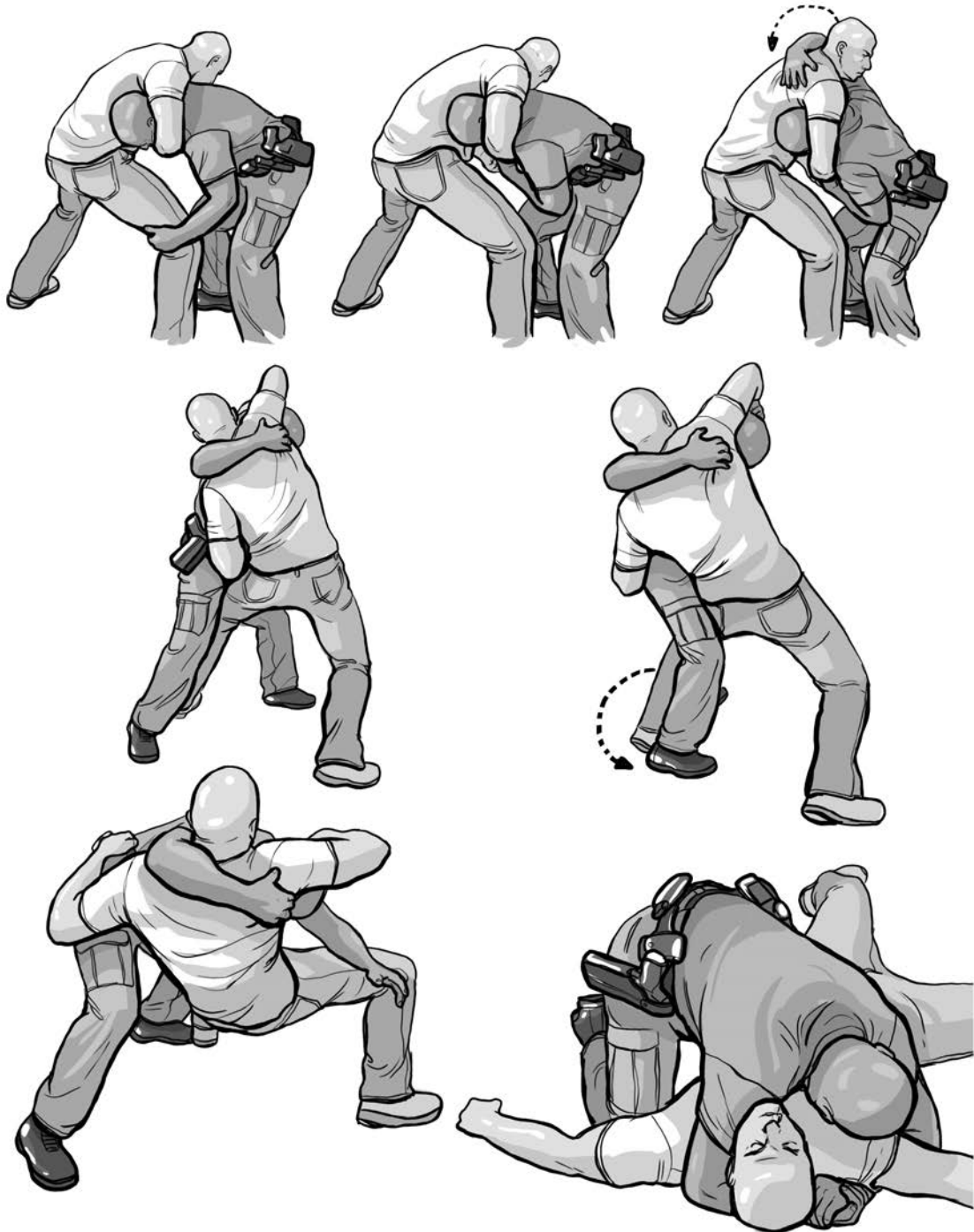


Figure 4-58: Escape from front headlock

Escape From Front Football Tackle

The football tackle is usually the result of a surprise attack or a struggle with a combative subject. Avoid being taken to the ground; instead drive the subject to the ground.

Use loud, clear verbal commands throughout the application of the technique.

1. Raise your arms in an offensive ready position.
2. Stop the subject's forward motion by driving your hips forward, then shooting your legs backward while putting your body weight on the subject's back.
3. Follow up with appropriate action(s). (See Figure 4-59)

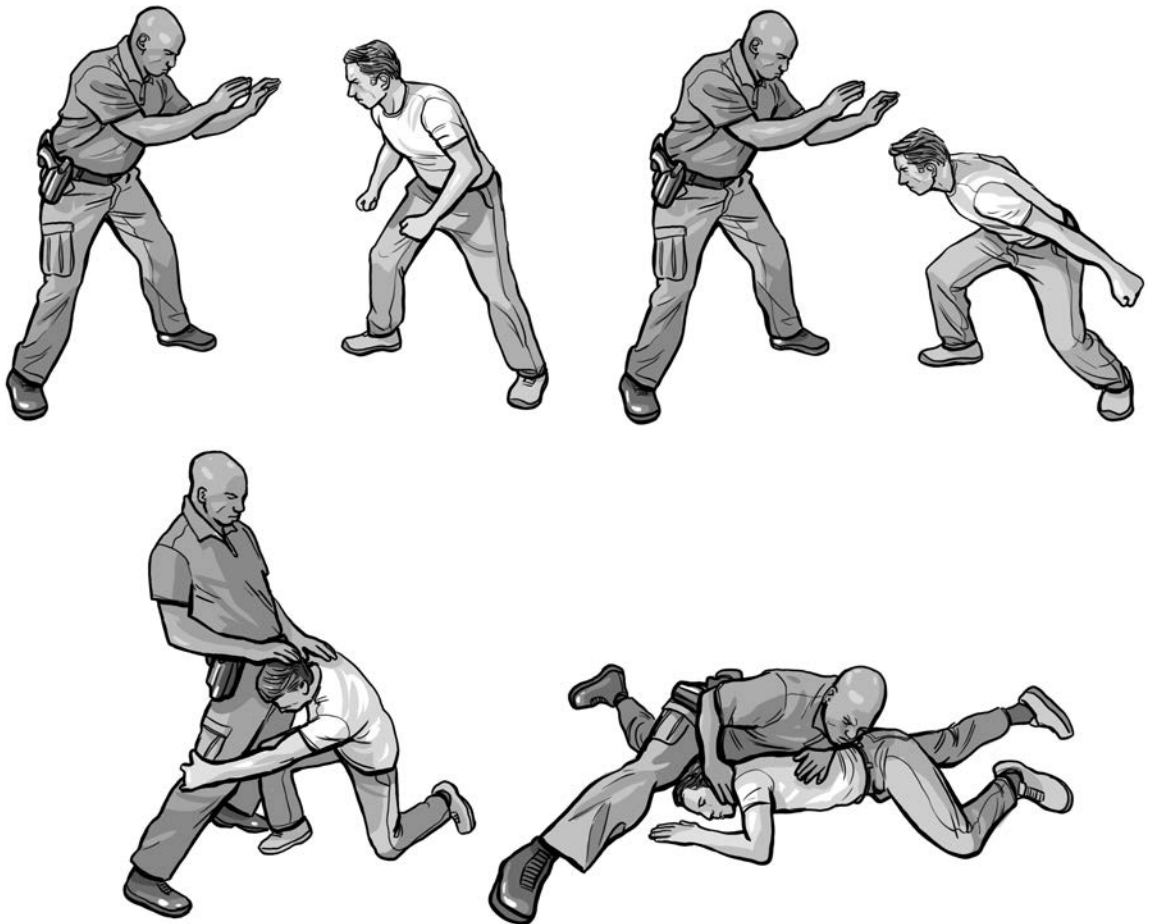


Figure 4-59: Escape from front football tackle

Diversions

These diversion techniques inflict pain and can temporarily divert a subject's attention, redirecting the subject's attack. They can also be used to gain space when you are held in a close-quarter body hold.

HEAD BUTT

Use loud, clear verbal commands throughout the application of the technique.

1. Assume an appropriate position.
2. Identify the target area.
3. The best target area for a head butt is the soft tissue of the subject's face or head.
4. Using the top of the forehead or the back of the head, thrust the head into the target area.
5. Follow up with appropriate action(s). (See Figure 4-60)



Figure 4-60: Head butt

FOOT STOMP

The foot stomp is very effective when a subject attacks from the front or from the rear in close quarters.

Use loud, clear verbal commands throughout the application of the technique.

1. Assume an appropriate position.
2. Transfer your weight to one leg.
3. Lift the other leg, bending at the knee.
4. Using the heel of the foot, deliver a downward thrust to the subject's foot.
5. Follow up with appropriate action(s). (See Figure 4-61)

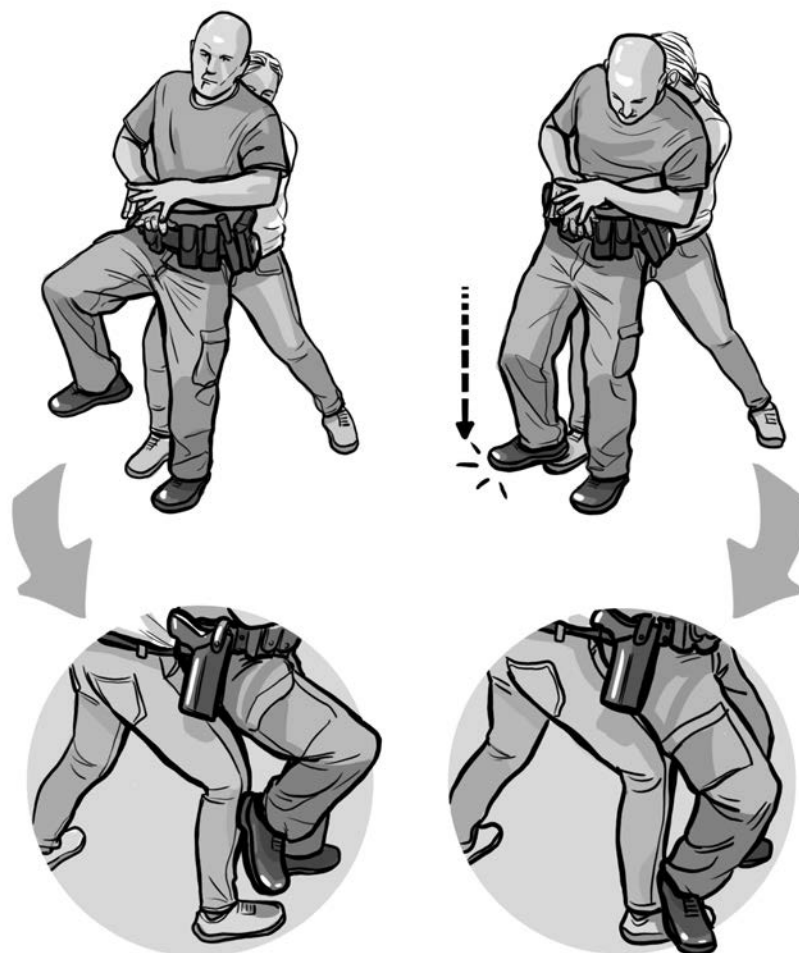


Figure 4-61: Foot stomp

SHIN SCRAPE

With this technique, raise your foot and apply downward pressure on the subject's shin. It does not require much effort or strength, but, properly performed, the shin scrape is very effective in allowing you to escape from a body hold.

Use loud, clear verbal commands throughout the application of the technique.

1. Assume an appropriate position.
2. Transfer your weight to one leg.
3. Lift the other leg, bending at the knee.
4. Turning the foot either to the inside or to the outside, deliver a downward scraping thrust along the subject's shin.
5. Follow up with appropriate action(s). (See Figure 4-62)



Figure 4-62: Shin scrape

4

Unit 3: Defensive Tactics Techniques Lesson 11: Vascular Neck Restraints

Lesson Goal

At the end of this lesson, you will be able to demonstrate a simulation of a vascular neck restraint technique.

Vascular neck restraints should only be used when deadly force is authorized as per recommendations in both the 2020 national Consensus Policy and the Florida Police Chiefs Association report, Use of Force Policy and Related Issues.

Note: This lesson is optional for law enforcement, corrections, and correctional probation.

The **vascular neck restraint** compresses certain veins and arteries in the neck to cause a subject to lose consciousness briefly. The technique is not to be confused with a chokehold. Section 943.1735 F.S., defines a chokehold as the intentional and prolonged application of force to the throat, windpipe, or airway of another person that prevents the intake of air. The term does not include any hold involving contact with another person's neck that is not intended to prevent the intake of air. While recruits are not trained to use chokeholds, employing agencies may authorize the use of a chokehold if the officer perceives an immediate threat of serious bodily injury or death to himself, herself, or another person.

Historically, the vascular neck restraint has been favored for its high probability of effectiveness in controlling a resistant subject. When not applied correctly, this technique can be extremely dangerous and, in some cases, deadly. However, research establishes the physiology of this technique, when used properly, as safe and useable in the general population.

The vascular neck restraint is not recommended on elderly persons, pregnant people, children, or people with apparent disabilities due to their unique physiology.

Standard Vascular Neck Restraint

Apply a standard vascular neck restraint by following these steps. Use loud, clear verbal commands throughout the application of the technique.

1. Encircle the subject's neck with your right arm so you can apply equal pressure to each side of the neck using your forearm and bicep by positioning your elbow in front of the subject's throat.
2. With your right hand palm down and your left hand palm up, grab hands.
3. Variation: With your right hand palm down, grab your left bicep. Place your left palm behind the subject's head.
4. Bring your right wrist to your shoulder to apply equal pressure to the sides of the neck.
5. Stabilize the subject's head with your head.

6. Compress the neck until you get compliance or unconsciousness. When applied correctly, unconsciousness could occur in less than 10 seconds.
7. Follow up with appropriate action(s). (See Figure 4-63)

Because this is a vascular restraint, releasing the hold will quickly replenish the blood flow and immediately revive the subject. The subject should regain consciousness within about 30 seconds. If not, render medical aid.

HL4311.1. Demonstrate a simulation of a vascular neck restraint technique



Figure 4-63: Standard vascular neck restraint – basic position and variation

4

Unit 3: Defensive Tactics Techniques Lesson 12: Ground Control

Lesson Goal

At the end of this lesson, you will be able to demonstrate basic techniques to defend yourself, escape from an attack, and control a subject while on the ground.

Ground fights present unique challenges to criminal justice officers because of the officers' equipment and the likelihood of a sudden deadly force assault. Other factors that complicate a ground fight include general fitness level, physical size, maneuverability, loss of visibility, multiple subjects, environmental conditions, and the inability to disengage immediately.

Some positive features of ground fights include:

- The subject is close to you, allowing you to keep and maintain physical control.
- The subject does not have the support of a strong stance to generate power for striking.
- The subject is usually working against time and fearful that you may receive backup or other assistance.

Some negative features of ground fights include:

- The subject has immediate access to all of your equipment.
- The ground is often a rough surface that can quickly scratch and tear the skin.
- Equipment can cause pain or reduce movement as you roll on the ground.
- The subject has easy access to your vital areas.

Ground fighting is an anaerobic physical activity that will quickly tire you. A ground fight is exhausting and requires tremendous bursts of energy for short periods. **Stalling** is a tactical method of safely controlling a suspect until you physically recover or reassess the situation, or backup arrives. The stalling techniques presented here are based on leverage, not strength.

Stalling techniques for ground control covered in this lesson include:

- guard stall
- side control
- full mount
- full mount stall

HL4312.1. Demonstrate ground control techniques

Ground escape techniques covered in this lesson include:

- ground defense position
- guard break
- defend and escape from side control
- bridge and roll
- elbow escape
- defend and escape from a rear mount

HL4312.2. Demonstrate ground escape techniques

Ground Defense Position

If you are knocked to the ground and cannot immediately recover to the standing position, go to a ground defense position. While in the ground defense position, you may have the ability to access a weapon or recover to a standing position.

Use loud, clear verbal commands throughout the application of the technique.

1. From the foundation position, tuck your chin to your chest, with your arms and hands up protecting vital areas. Your legs will be up, knees bent toward the chest, and feet slightly angled.
2. Defend by kicking the subject in the knees, shins, or other available targets.
3. Lift your hips off the ground and use your feet to rotate in a circular motion tracking the subject's movements.
4. Follow up with appropriate action(s). (See Figure 4-64)



Figure 4-64: Ground defense position

Guard

In the guard, one person is on their back with the other person positioned between their legs. The person on their back is subject to a variety of attacks such as strikes from different angles and being choked. (See Figure 4-65)



Figure 4-65: Guard

Guard Stall

The purpose of the guard stall is to prevent the subject from mounting you.

Follow these steps for the guard stall. Use loud, clear verbal commands throughout the application of the technique.

1. The subject is positioned between your legs as you lie on your back.
2. If possible, cross your ankles behind the subject's back. If you can't cross your ankles, squeeze your legs together around the subject's waist.
3. Pull the subject down on top of you, chest-to-chest. (See Figure 4-66)

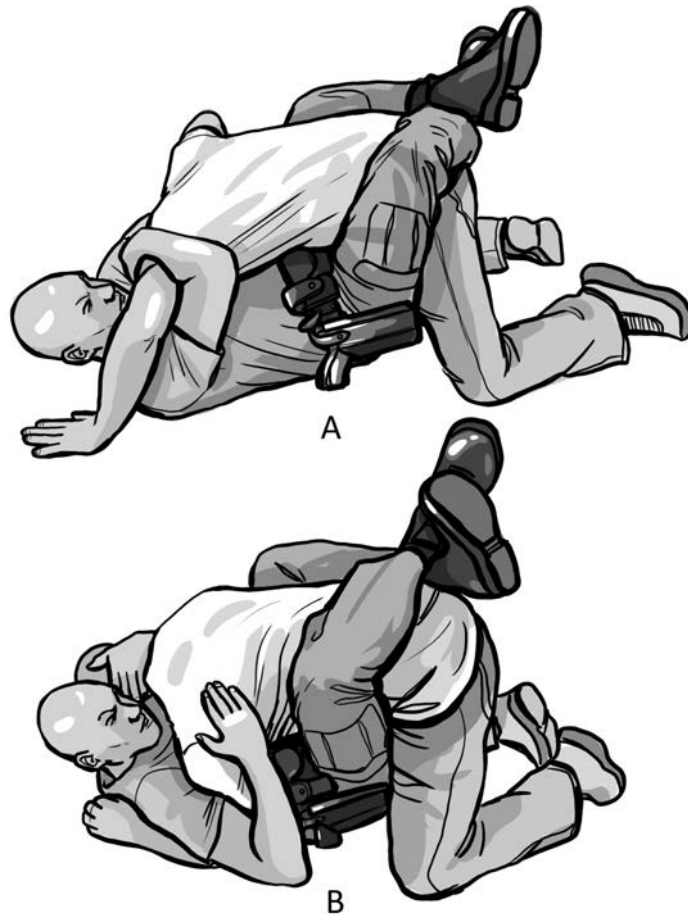


Figure 4-66: Guard stall

Guard Break

This position begins with you in the subject's guard. A strike or diversion may be necessary to complete the technique.

Use loud, clear verbal commands throughout the application of the technique.

1. Control the subject's hips by placing both of your palms on the subject's torso and applying downward pressure.
2. Bring your right leg up and plant that foot as close as possible to the subject's hips while maintaining downward pressure on the subject's hips with your palms.
3. Come to a standing position and slightly turn your left foot outward.
4. Using your left elbow/hand, simultaneously apply pressure to the subject's inner thigh area. This should result in the subject's legs opening.
5. Create distance between you and the subject and follow up with appropriate action(s). (See Figure 4-67)

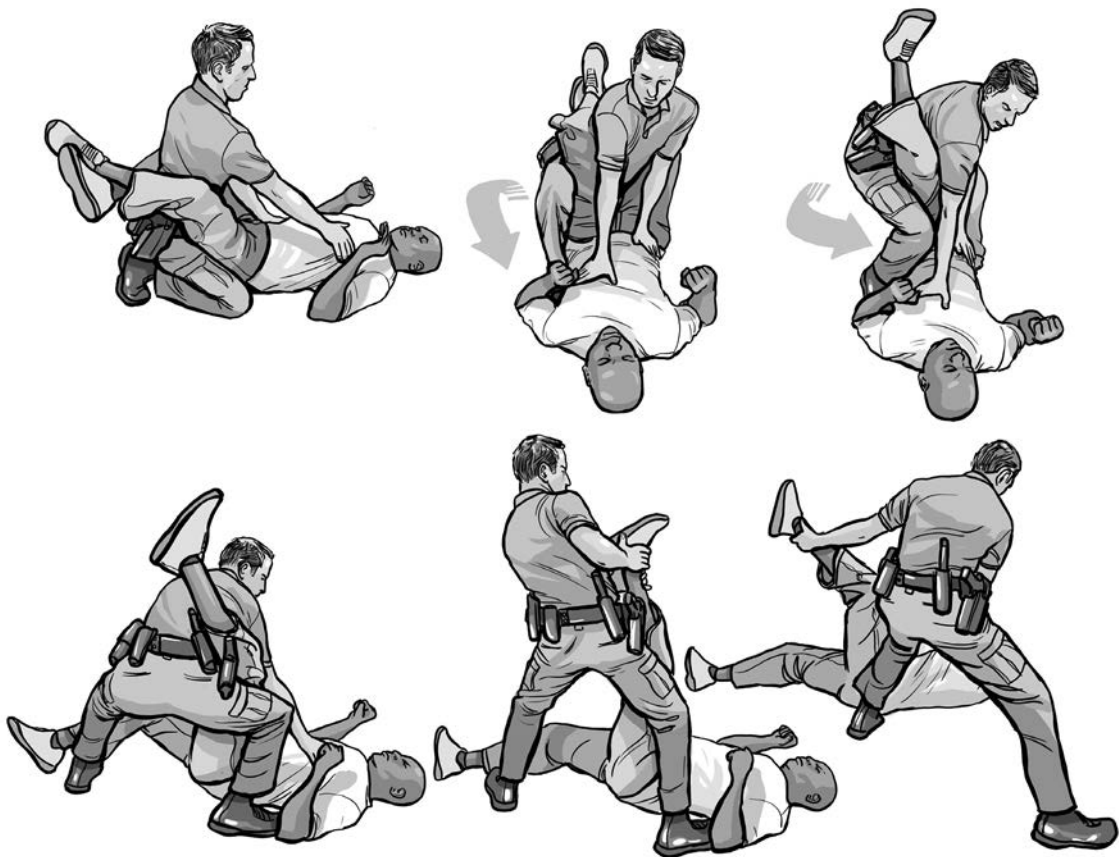


Figure 4-67: Guard break

Side Control

The most basic of the stalling positions is side control. This hold uses leverage tactics to hold the subject down while keeping you in a strategic position to prevent the subject from accessing your weapon or attacking critical areas, such as the head or throat. To effectively execute this technique, you must minimize space between your head and the subject's head.

Follow these steps for side control. Use loud, clear verbal commands throughout the application of the technique.

1. The subject is on their back.
2. From the side, maintain chest-to-chest contact using your body weight to control the subject beneath you.
3. Follow up with appropriate action(s). (See Figure 4-68)

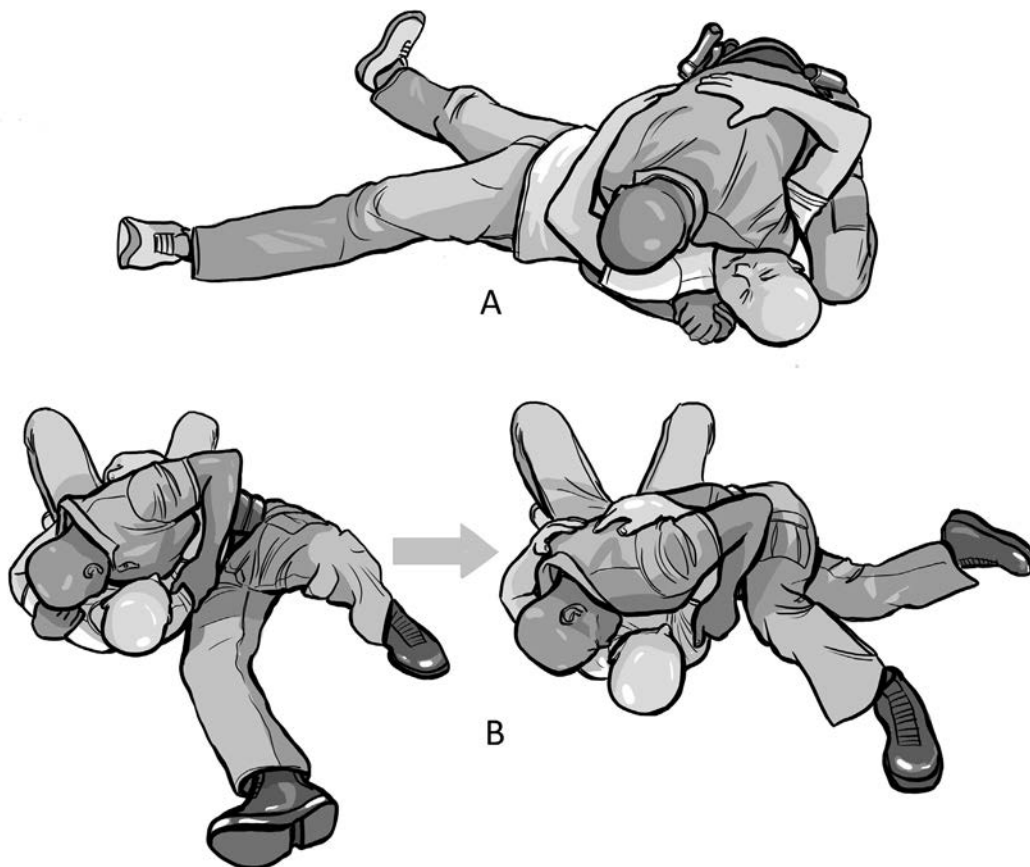


Figure 4-68: Side control

Defend and Escape From Side Control

When a person is controlling you from the side pressing down against you with their chest or using their arms to control your head and hips, they may prevent you from moving or escaping. It is also easy for the subject to deliver strikes and disarm you.

This can be one of the worst positions to be caught in. You must be able to escape, escalate, or get to your weapon.

Use loud, clear verbal commands throughout the application of the following technique.

From the ground defense position:

1. As the subject attacks from the right side, bring your left arm across and underneath the subject's neck. Push up, lifting the subject's head to gain distance.
2. Place your right hand on the subject's left hip, blocking any hip movement. Note: If the subject is striking you, you must control their arm instead of their hip.
3. Push off with one foot, force your hips up, and push out toward the opposite side. At the same time, place your right hand on the subject's hip to control, push away, and escape.
4. If you are unable to escape, recover to the guard position.
5. Follow up with appropriate action(s). (See Figure 4-69)



Figure 4-69: Defend and escape from side control

Full Mount

During a ground fight, a person may sit on top of another's chest, stomach, or waist and use their body weight to hold the opponent down. This, a full mount, is considered the most dominant position in ground fighting. The person on their back is subject to a variety of attacks, such as strikes from different angles and chokeholds. The person on top can establish control, use it as a stalling technique, or deliver strikes.

Follow these steps for the full mount:

1. Use loud, clear verbal commands throughout the application of the technique.
2. Straddle the subject using your body weight to control them. (See Figure 4-70)



Figure 4-70: Full mount

Full Mount Stall

Possibly the worst tactical position that you can find yourself in is when a subject has you on your back and is sitting on your chest. The full mount stall gives an officer an opportunity to survive a barrage of punches to the face. You will remain on the bottom, but the attacker will not be able to strike you in the face or throat. Your firearm will be out of reach covered by the subject's legs.

Follow these steps for a full mount stall. Use loud, clear verbal commands throughout the application of the technique.

1. The subject sits on your midsection as you lie on your back.
2. Sit up and grab the subject around the upper body with both arms.
3. Pull the subject down on top of you.
4. Move your head left or right to breathe and avoid attack.
5. From this position, you may continue to hold the subject, escalate, or disengage. (See Figure 4-71)



Figure 4-71: Full mount stall

Bridge and Roll

The objective of this technique is to defend and escape. Use loud, clear verbal commands throughout the application of the technique.

From the **supine position** (lying on the back face up):

1. The subject mounts your midsection.
2. Use blocking techniques to prevent strikes or choke attempts.
3. If needed, thrust your hips up to form a bridge, forcing the subject to post and allowing you to control their arms.
4. Control the subject's leg by placing your foot to the outside of the subject's leg.
5. Control the subject's arm on the same side by pulling it tight to your body.
6. Push up with your foot and drive your hips up to a bridge, thrusting the subject upward while you roll the subject onto their back. You will end up on top and between the subject's legs (the guard position).
7. Follow up with appropriate action(s). (See Figure 4-72)

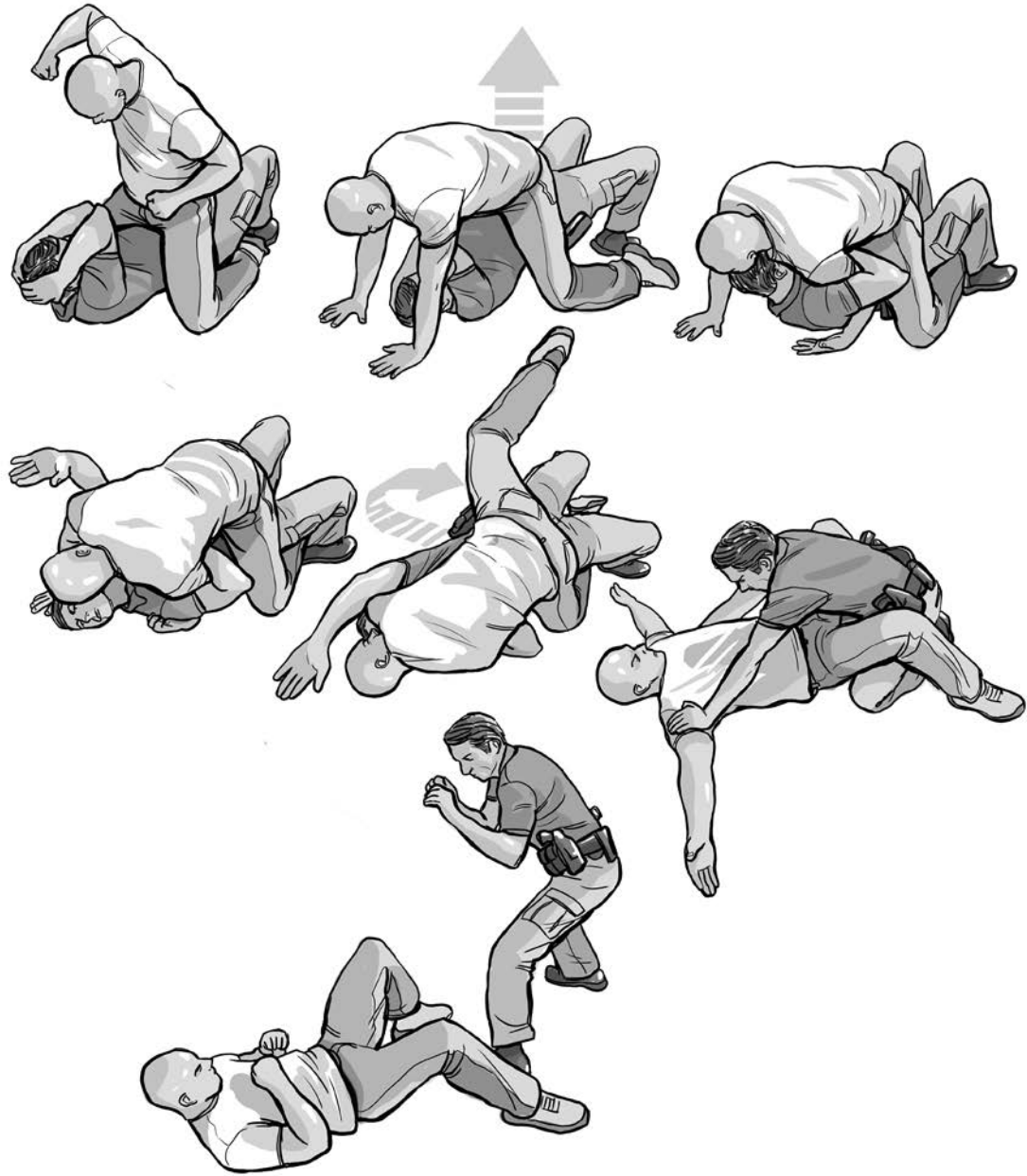


Figure 4-72: Bridge and roll

Elbow Escape

This position begins with you on your back as the subject has mounted you. Use loud, clear verbal commands throughout the application of the technique.

1. Bridge your hips and turn your body about 45° to your left.
2. Place your left leg flat on the ground.
3. Use your left elbow to push the subject's right knee away from you.
4. At the same time, slide your left leg under the subject's knee as space is cleared.
5. Hook your right leg behind the subject's right calf area.
6. Turn toward the subject and create space using the shrimping technique.
7. Escape to a standing position or place the subject in your guard.
8. Follow up with appropriate action(s). (See Figure 4-73)

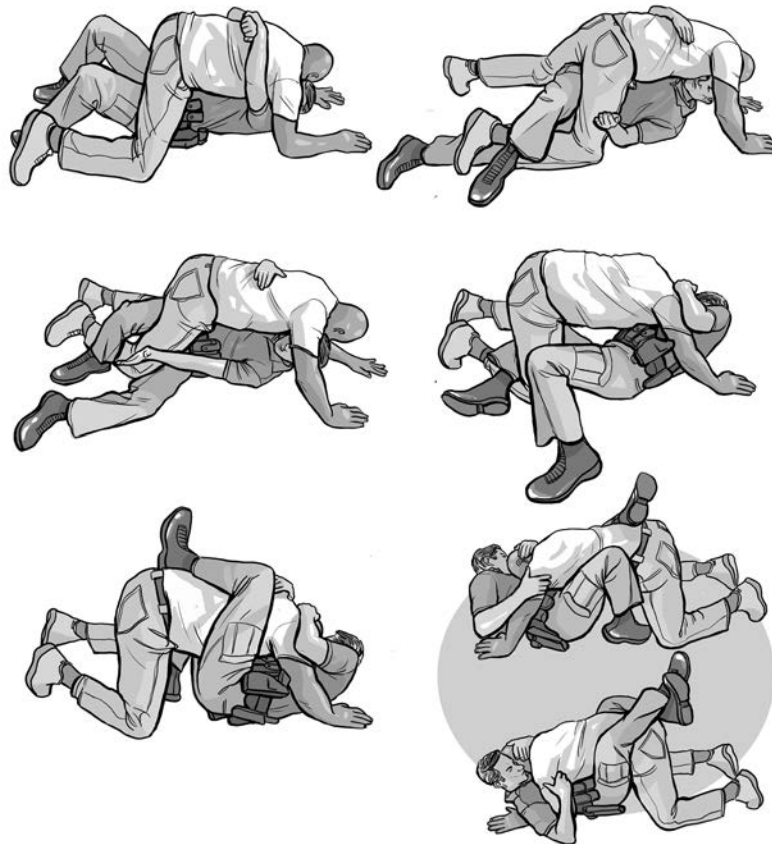


Figure 4-73: Elbow escape

Defend and Escape From a Rear Mount

When you are in a ground fight, the subject may sit on top of your back and use their body weight to hold you down. In this position, you are subject to a variety of attacks and strikes to the back of the head and neck. If you have a weapon, it may be vulnerable.

Use loud, clear verbal commands throughout the application of the following technique.

From the prone position:

1. The subject mounts your lower back and places their legs to the outside of your legs to control you. The subject holds you down with their body weight.
2. Keep your hands around your head for protection from strikes and chokes.
3. Create space between you and the subject.
4. Turn onto your back as quickly as possible.
5. Follow up with an escape from full mount (bridge and roll/elbow escape). (See Figure 4-74)

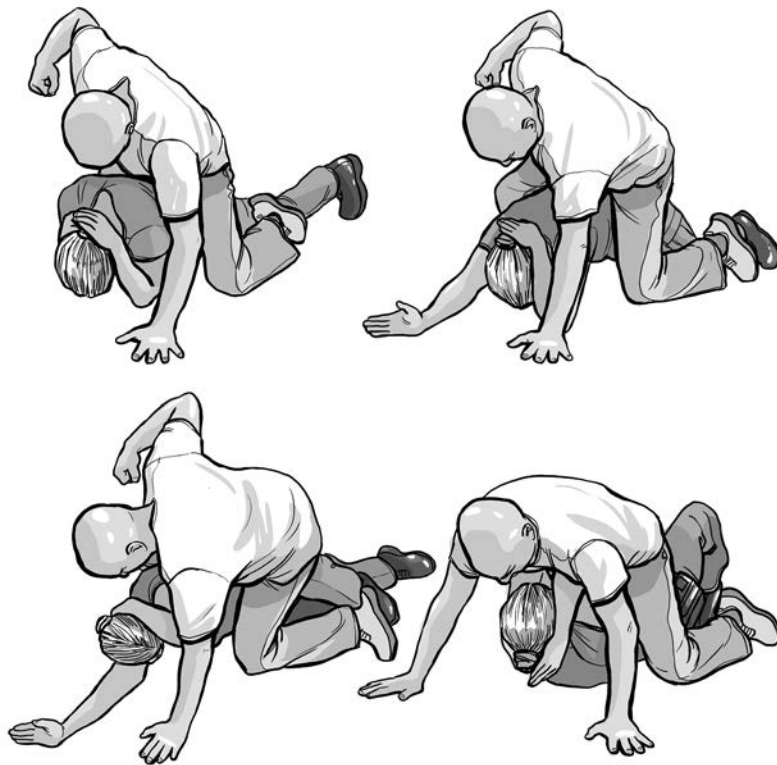


Figure 4-74: Defend and escape from a rear mount

4

Unit 3: Defensive Tactics Techniques Lesson 13: Impact Weapons

Lesson Goal

At the end of this lesson, you will be able to demonstrate the proper use and application of intermediate weapons.

Note: This lesson is optional for law enforcement, corrections, and correctional probation.

Intermediate weapons are tools used when empty-handed control is ineffective, but the subject's level of resistance does not merit deadly force. Though intermediate weapons may cause death or great bodily harm, they are not fundamentally designed to do so.

A strike with an impact weapon affects a subject psychologically when they see an officer use the weapon in a controlled, competent manner. It gives the impression of a well-trained officer and emphasizes their authority and officer presence.

The most common types of intermediate weapons include the following:

- impact weapons, such as batons or weapons of opportunity
- specialty impact weapons such as bean bag rounds (lead shot covered in a small fabric pillow, typically fired from a shotgun) or baton rounds (plastic or rubber bullets)
- electronic control devices, such as a CEW
- chemical agents

An **impact weapon** is any object used for striking. Impact weapons may disable or cause temporary motor dysfunction.

The most common impact weapon is the baton. Even though new intermediate weapons have been developed, such as chemical agents and CEWs, the baton remains a standard tool for some criminal justice agencies.

The baton is not the only impact weapon available to an officer. Any item an officer has at hand may be used as a potential impact weapon when needed, such as a broomstick, flashlight, clipboard, or radio. These unconventional impact weapons are also known as **weapons of opportunity**.

An **interview stance with an impact weapon** is a low-profile stance with the weapon held partially hidden behind the leg.

An **offensive ready stance with an impact weapon** is a high-profile stance with the weapon held at a shoulder position to enable a rapid strike.

An impact weapon can strike specific target areas.

Target Areas—Impact Weapons Strikes
DF means deadly force, and NDF means non-deadly force. (See Figure 4-75)
The expected effect of NDF strikes is to disable or cause temporary motor dysfunction.
Front of Shoulder (NDF) —Jab with an impact weapon.
Top of Forearm (NDF) —Strike with an impact weapon.
Inside of Forearm (NDF) —Strike with an impact weapon.
Outside of Thigh (NDF) —Strike with an impact weapon.
Inside of Thigh (NDF) —Strike with an impact weapon.
Center of Abdomen (NDF) —Jab with an impact weapon.
Top of Calf (NDF) —Strike with an impact weapon.
Side of Neck (DF) —Striking the side of the neck with an impact weapon is deadly force.
Head (DF) —Striking the head with an impact weapon is deadly force.
Throat (DF) —Striking the throat with an impact weapon is deadly force.
Groin (DF) —Striking the groin with an impact weapon is deadly force.

DF - Deadly force
NDF - Non deadly force

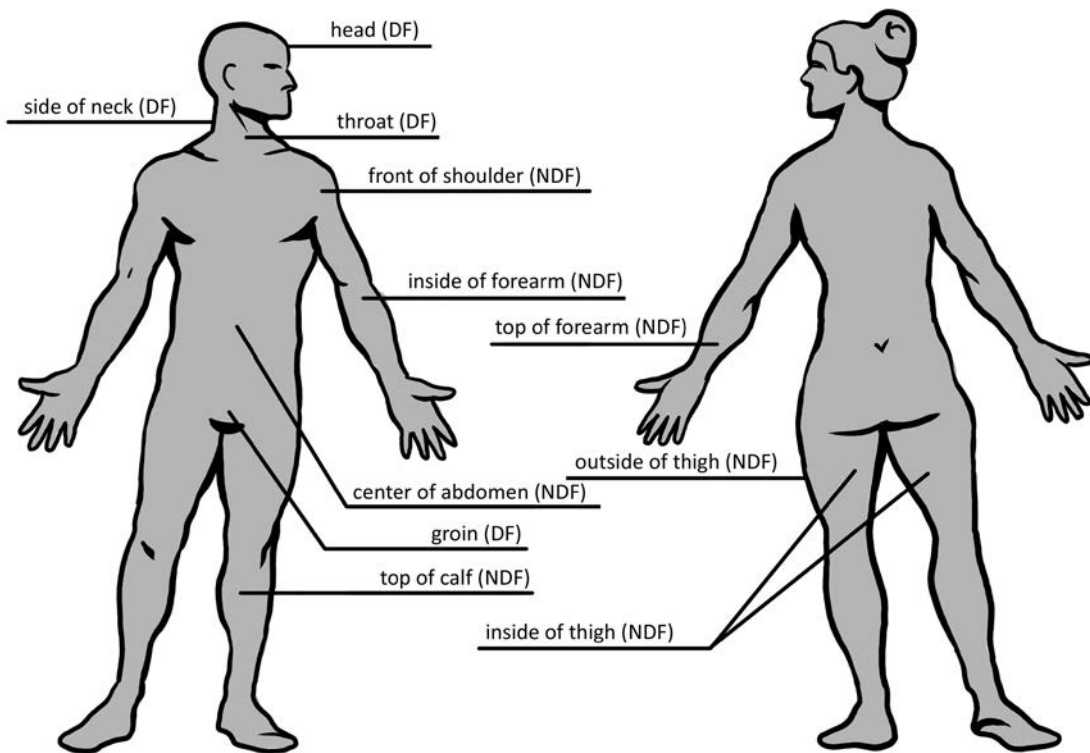


Figure 4-75: Target areas—impact weapon strikes

HL4313.1. Identify target areas for impact weapon strikes

The most common techniques using an impact weapon are thrusts, swings, and blocks.

Impact Weapon Thrusts

This technique can be executed in all directions with the tip, back, or shaft of the impact weapon. Generally, the weapon is thrust in a straight line into a target.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Hold the impact weapon with one or both hands.
4. Thrust the impact weapon into an appropriate target area.
5. Follow up with appropriate action(s). (See Figure 4-76)



Figure 4-76: Impact weapon thrust

Impact Weapon Swings

This technique can be executed with the shaft or edge of the impact weapon. Generally, the weapon is swung in a circular motion to the target.

This technique is also appropriate for use with weapons of opportunity, such as a flashlight, radio, or cell phone.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate position.
3. Hold the impact weapon with one or both hands.
4. Swing the impact weapon to an appropriate target area.
5. Follow up with appropriate action(s). (See Figure 4-77)



Figure 4-77: Impact weapon swing

Impact Weapon Blocks

Blocks are reaction techniques. A block places the impact weapon between the officer and the subject. Scan blocks pull across the body. Power blocks push against the attacking arm.

1. Use loud, clear verbal commands throughout the application of the technique.
2. Assume an appropriate hand position.
3. Hold the impact weapon with one or both hands.
4. Sweep or push the impact weapon across the front of the body, defending against attack.
5. Follow up with appropriate action(s). (See Figure 4-78)

HL4313.2. Demonstrate impact weapon techniques



Figure 4-78: Impact weapon block

Electronic Control Devices

Electronic control devices (ECD), or **electronic immobilization devices**, use a high voltage, low-power electrical charge to induce involuntary muscle contractions that temporarily disable a non-compliant subject. It is considered safe when used on people, but it will cause extreme muscular tension and may cause temporary loss of balance or coordination.

Types of electronic control devices include conducted electrical weapon (CEW), handheld stun gun, electronic shield, electronic belt, and electronic sleeve.

4

Unit 3: Defensive Tactics Techniques Lesson 14: Chemical Agents

Lesson Goal

At the end of this lesson, you will know the effects of a chemical agent through contamination and decontamination procedures.

Types of Chemical Agents

Criminal justice officers primarily use two types of chemical agents to control resistant subjects: OC (oleoresin capsicum) or CS (orthochlorobenzal-malononitrile).

Both are generally used in the form of handheld canisters and chemical projectiles. Special operations units may use other deployment systems, such as pepper foggers or gas guns.

OC, commonly called pepper spray, is an inflammatory agent that causes tearing and involuntary closing of the eyes, nasal discharge, sneezing, disorientation, and a sensation of respiratory distress. The skin will turn red due to the inflammation and show mild signs of puffiness. These effects wear off generally in 20–30 minutes, but in some cases, they may last longer.

Although OC has become the preferred chemical agent of criminal justice agencies worldwide, CS may also be used.

CS is an irritant agent that causes burning and tearing eyes, nasal discharge, and skin and upper respiratory irritation. The chemical, when making contact with skin, gives the sensation of pain by activating and irritating the neural transmitters of the body. Though there is no actual burning caused by the chemical, there is the sensation of an intense burn once contaminated.

HL4314.1. Identify the types of chemical agents used by criminal justice officers

Contents of OC Spray

Oleoresin capsicum is a natural derivative of the cayenne pepper, although there are some synthetic forms. The active ingredient in OC is known as capsaicin, which produces the heat felt when it makes contact with human tissue.

HL4314.2. Identify the active ingredient in oleoresin capsicum

The heat value of capsicum is measured in **Scoville heat units (SHU)**. The SHU scale was originally designed for determining the heat properties (burning sensation) of peppers for the restaurant industry. Bell peppers are at the low end of the scale, and cayenne pepper is higher on the scale. This is a fitting measurement for a chemical agent like OC which is in essence nothing more than a vegetable product voluntarily

ingested by countless people in the form of food and medicine. Though it is true that OC is hot, SHUs are not equated with thermal degrees and, as such, do not present the burning dangers associated with fire.

HL4314.3. Identify the use of the Scoville heat unit (SHU) in measuring the burning effect of chemical agents

Within the formula, capsicum is mixed with a propellant consisting of carbon dioxide, nitrogen, or isobutane, whose function is to expel the active ingredient from the canister. In addition, the formula will include water, vegetable oil, or alcohol-based solutions, which hold the capsicum suspended so that the material does not sink to the bottom. This solution allows the capsicum material to remain suspended so that it is discharged evenly with every spray. You do not need to shake the canister before deployment.

Alcohol-based sprays can create a potential fire hazard if sprayed directly into a flame or used in conjunction with electronic control devices (ECD). However, alcohol-based sprays adhere better to skin, making them more effective.

Effects of OC

OC has been proved to be highly effective on a majority of the population. There may be circumstances in which OC will not deliver the expected results. Any of the following factors could influence the results of the OC: a poorly placed spray where the OC does not make contact with the subject's face, the subject's mindset or past experience with the chemical agent, drug use, psychosis, or a high pain tolerance.

This chemical agent has the most desired effects when sprayed directly at the subject's face. Use caution when discharging any chemical directly into the eyes due to the compressed nature of the chemical, which discharges at a potentially dangerous speed. The effects of a direct discharge into the eyes has been known to cause slight tears in the eye membranes, which could lead to complications.

When OC enters the eyes, it causes them to close. The subject will feel an intense burning sensation and the capillaries of the eyes will dilate, causing the eyes to appear bloodshot. If the chemicals are inhaled, they will often cause coughing and gasping. If the gag reflex is activated, the chemicals may cause gagging and even vomiting. These are common reactions due to the irritation of the skin and slight swelling of the lining of the throat. The nasal cavity will also swell, causing sneezing and significant discharge of mucus. Officers should always use caution when approaching subjects who have been contaminated, to prevent cross-contamination.

OC is particularly effective on moist areas of the body, including lips, tongue, and sweaty areas. A subject's reaction to being sprayed can include a loss of balance, loss of coordination, anger, anxiety, fear, or panic.

HL4314.4. Identify the physical effects of a chemical agent on a subject

Officers are required to follow certain standards of care for each person contaminated by OC. Watch each contaminated person until they recover. If the person displays unusual behavior, immediately seek medical attention. If symptoms are acute, stabilize the subject, maintain an open airway, and ensure continuous breathing and proper circulation. The manufacturer's Safety Data Sheet (SDS) for the chemical agent used should be easily accessible.

HL4314.5. Describe the correct responses to a subject's prolonged or severe reactions to chemical agent contamination

The OC Canister

Follow the manufacturer's recommendations to maintain the canister in working order.

Though chemical canisters may dent or bend, there is generally no need to be concerned with the canisters leaking. Major manufacturers of these chemical contaminants have intentionally designed the canisters to be soft, pliable, and resistant to cracking and splitting. (See Figure 4-79)

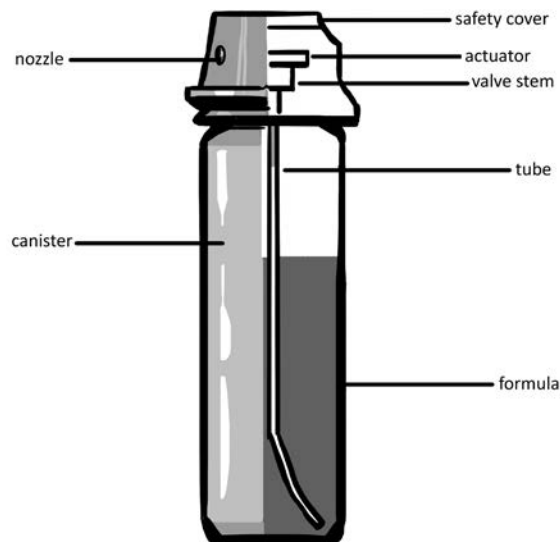


Figure 4-79: Chemical agent canister nomenclature

Decontamination Procedures

Decontamination procedures are an essential component of the proper use of chemical agents. The chemical agent's effects will wear off in time; however, decontamination may decrease the period of discomfort. Whenever a subject is contaminated, follow the decontamination procedures according to agency policies. This standard of care should take place as soon as the subject is under control.

When you must use a chemical agent on a suspect or encounter a person who has been accidentally contaminated, do not leave that person unattended while the effects of the contaminant are evident.

PSYCHOLOGICAL DECONTAMINATION

Contamination by a chemical agent may also have psychological effects on the exposed person. Tell the contaminated person to remain calm and reassure them that the contaminant causes no lasting effects and should dissipate within 20–30 minutes. This repeated reassurance will help prevent anxiety and panic, behaviors that can endanger you and others.

PHYSICAL DECONTAMINATION

While psychologically decontaminating the subject, an officer may also guide the person through the process of physical decontamination.

Strobing

After contamination, the person should never wipe or rub their eyes with their fingers. Doing so may rub small particles into the eye, which can ultimately damage the cornea. Instead, the person should begin by strobing their eyes. **Strobing** is forcefully blinking the eyes using all the muscles in the face, including those in the forehead. This forceful blinking helps clear the vision and activates the tear ducts. Tears help clear the eyes and wash away particles of contaminant.

Breathing

Tell the person to concentrate on breathing to draw their attention from the burning sensation caused by the contaminant. Focusing on the discomfort may cause the person to shut down and panic. A rhythmic inhale through the mouth and then a forceful exhale through the nose will cause the mucous glands to begin working and the nose to run. This will clear the nasal passages and sinuses of mucus containing contaminant particles.

Removing Contaminants

After strobing the eyes and breathing rhythmically, the person may remove contaminants from their skin. This will reduce the chemical agent's effects.

Air

The chemical agent's effects will wear off in time by mere exposure to air, for example by standing in a breeze or in front of a fan.

Water

The person should use a large amount of running water to irrigate their eyes and facial skin.

Decontaminant Solutions

There is no absolute antidote for chemical agents, but decontaminant solutions, such as baby shampoo, may decrease contamination effects. Many manufacturers produce solutions that are easy to carry in patrol vehicles and require little or no cleanup. The eyes should be rinsed with water and dabbed with an uncontaminated towel to lift the contaminant from skin. Scrubbing or using oil-based soaps to decontaminate can cause the contaminant to adhere to the skin and prolong decontamination time.

Medical personnel should treat prolonged or severe reactions.

HL4314.6. Identify decontamination procedures for contamination from a chemical agent

Documentation

Using a chemical agent is considered a use of force and should be documented according to agency policies. Document the contamination and the decontamination procedures taken.

4

Unit 3: Defensive Tactics Techniques Lesson 15: Weapon Retention

Lesson Goal

At the end of this lesson, you will be able to demonstrate safe and effective methods of retaining weaponry.

During a confrontation with a subject, an officer must control their weapons to prevent the suspect from taking them. Maintaining an appropriate reactionary gap is one of the most effective methods to prevent being disarmed. This becomes more difficult in close-quarter combat situations. You must protect your weapons along with your vital areas while engaged in a fight.

The following techniques are covered in this lesson:

- holstered intermediate weapon retention
- drawn baton retention
- holstered handgun retention
- drawn handgun retention

HL4315.1. Demonstrate weapon retention techniques

Holstered Intermediate Weapon Retention

This technique is applicable to all intermediate weapons worn on the belt, such as a baton, chemical agent canister, or CEW.

The best defense against a subject grabbing your intermediate weapon is to maintain the reactionary gap. This technique works with an attempted front or rear grab. Use loud, clear verbal commands throughout the application of the technique.

1. Adjust your stance to maintain balance.
2. Secure the weapon by forcefully applying downward pressure on the weapon or on top of the subject's hand keeping the weapon in the holster.
3. Deliver strikes to appropriate target areas as you rotate your body to break the subject's grip.
4. Follow up with appropriate action(s). (See Figure 4-80)



Figure 4-80: Holstered intermediate weapon retention

Drawn Baton Retention

This technique works on one-handed and two-handed grabs. Use loud, clear verbal commands throughout the application of the technique.

When the subject grabs the drawn baton:

1. Adjust your stance to maintain balance.
2. Rotate the long end of the baton upward and from the left to the right, to release the subject's grip.
3. Pull the baton back and away.
4. Follow up with appropriate action(s). (See Figure 4-81)

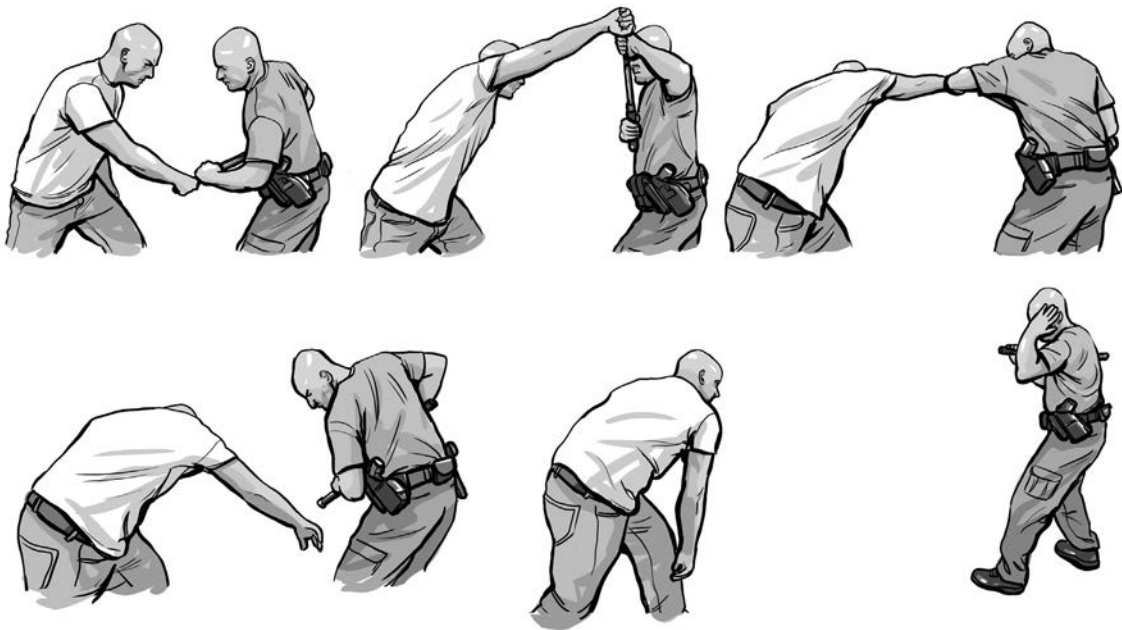


Figure 4-81: Drawn baton retention

Holstered Handgun Retention

This technique should not be used unless the holster is firmly affixed to the belt. The best defense against a subject grabbing your handgun is to maintain the reactionary gap. Use loud, clear verbal commands throughout the application of the technique.

When a subject grabs your holstered handgun:

1. Adjust your stance to maintain balance.
2. Secure the weapon by forcefully applying downward pressure on the firearm or on top of the subject's hand keeping the weapon in the holster.
3. Deliver strikes to appropriate target areas as you rotate your body to break the subject's grip.
4. Follow up with appropriate action(s). (See Figure 4-82)

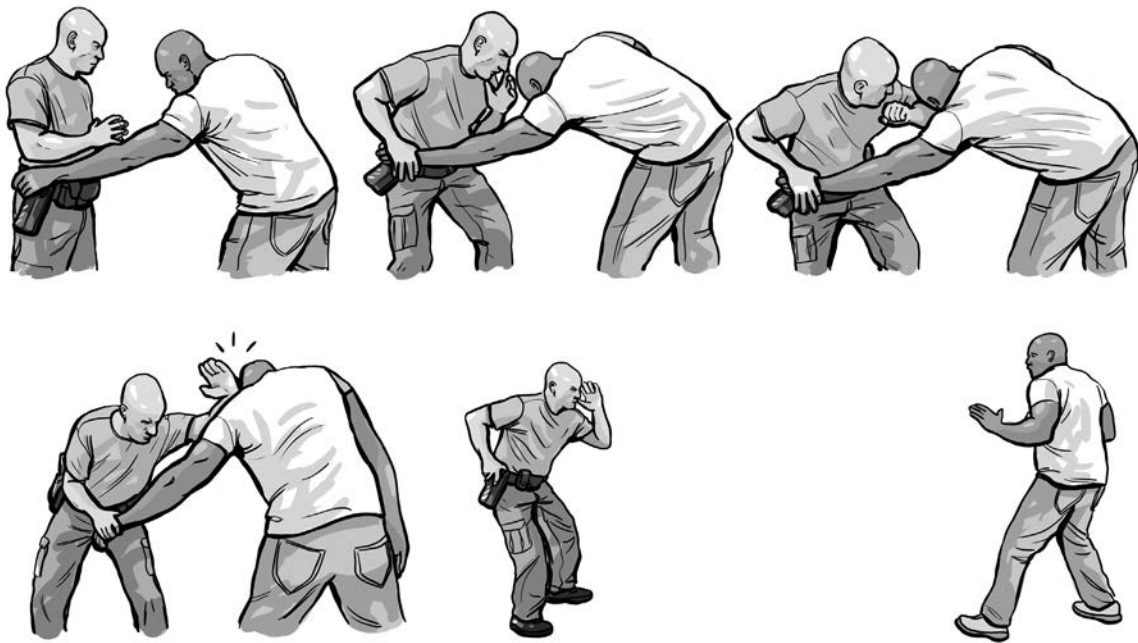


Figure 4-82: Holstered handgun retention

Drawn Handgun Retention

Use the cradle handgun retention technique when the subject grabs a drawn handgun's barrel. The person holding a handgun's barrel has greater leverage than the person holding its grip. The cradle changes the leverage to the officer's advantage. Use loud, clear verbal commands throughout the application of the technique.

When a subject grabs your handgun:

1. Widen your stance and lower your center of gravity.
2. Step forward and bring the handgun closer to your chest.
3. Wrap your non-weapon arm under the handgun and the subject's hand and clamp them tightly to your chest.
4. Lever the gun barrel upward to release it from the subject's grasp.
5. Create distance from the subject by stepping back while pulling your cradled handgun downward.
6. Follow up with appropriate action(s). (See Figure 4-83)



Figure 4-83: Drawn handgun retention

4

Unit 3: Defensive Tactics Techniques Lesson 16: Handgun Defense

Lesson Goal

At the end of this lesson, you will be able to demonstrate safe and effective methods of handgun defense.

Handgun defense techniques are a last resort when an officer believes that the subject, who has a handgun, is going to shoot them.

Many factors affect an officer's decision to employ handgun defense techniques:

- the proximity of the officer to the subject
- the officer's belief that the subject is going to shoot them
- the presence of other potential victims in the immediate area
- the consideration of other reasonable options
- the mindset and commitment to challenge the subject regardless of personal injury or initial failure

These techniques rely on several principles to be effective:

- surprise—do not telegraph to the subject that you plan to counterattack. **Telegraphing** is small eye, hand, or foot movements in the direction that you plan to move.
- action is faster than reaction—when you enter the danger zone to deal with a subject, you are the initiator. The subject must react to your threat.
- verbal distraction—reaction time increases when a subject processes two or more pieces of information at the same time. For example, ask the subject a question immediately before taking action.
- physical proximity—to initiate this technique, the subject's handgun must be within arm's reach.

HL4316.1. Demonstrate handgun defense techniques

Although this lesson pertains to the handgun, you can apply the same concepts to a long gun. Your primary objective is to get the muzzle pointed away from you.

After you are in position and make the decision to initiate a handgun defense technique, speed, intensity, and follow-through are most important.

Handgun Cycles of Operation

If you grab a revolver with the hammer cocked, you may stop it from firing by grabbing the hammer and preventing the firing pin from striking.

If you grab the revolver's cylinder, you may prevent it from cycling to the next round.

If you grab over the top of a semiautomatic pistol, you may stop the slide from cycling. However, one shot may fire, and the barrel will become very hot. You may also experience temporary flash blindness.

General Guidelines

General guidelines for encountering a subject with a handgun at close proximity include:

- Move your body out of the way.
- Control the weapon.
- Follow up with appropriate action(s).

This could occur in multiple positions (for example, standing or on the ground).

4

Unit 3: Defensive Tactics Techniques

Lesson 17: Defense Against Edged Weapons

Lesson Goal

At the end of this lesson, you will be able to demonstrate how to defend against an attacker who is using an edged weapon.

You may encounter a situation where a subject is armed with an edged weapon. Knife fighting is a sophisticated technique, and this portion of the curriculum provides only a basic knowledge of an edged-weapon attack.

Defense against an edged weapon, bottle, club, or other blunt instrument may require a deadly-force response. Use empty-hand techniques against edged-weapon attacks only when you have no other options.

An edged-weapon attack that involves distance or an impending threat gives you time to plan and respond to the attack. If the attack happens suddenly and up close, you have limited options. Your best defense may be the use of empty-hand techniques. You usually have no time to disengage or select a weapon for defense.

If you identify a threat early on, your response can be much more effective. The longer it takes you to identify the attack, the less time you have to react. Awareness will help you recognize cues and early warning signs. Use redirecting techniques to avoid or redirect an attack to give you time to disengage and escape.

The minimum safe distance for an officer to be able to react to an edged-weapon attack without injury is about 25 feet.

Before an incident occurs, mentally prepare to be cut. Develop a survival mindset to continue to fight, regardless of your injuries, until you are able to stop the aggression. Never give up.

Use obstacles, such as furniture, a vehicle, or clothing to create a barrier between you and the subject. Obstacles can slow down an attack and allow you to defend or to disengage from a situation, giving you time to use force options, control, or escape.

HL4317.1. Demonstrate defense against edged-weapons techniques

Knife Patterns

A knife-wielding subject is likely to use one of the following attack patterns (See Figure 4-84):

- straight thrust
- overhead attack with one or two hands
- forehand slash

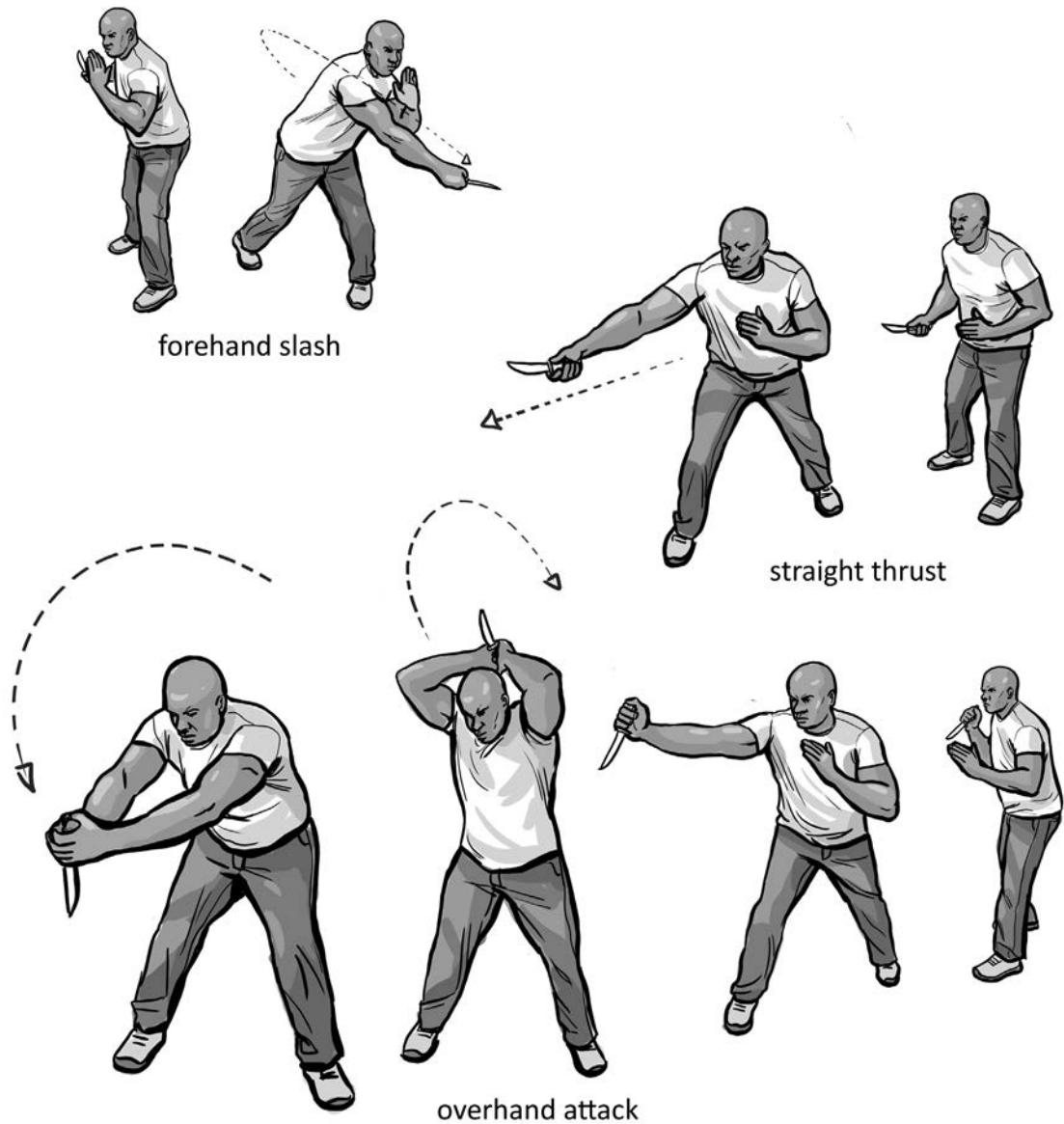


Figure 4-84: Knife patterns

Defensive Movements

The following movements may be used to defend against a spontaneous, close-quarter, edged-weapon attack:

- evade—move or pivot away from the attacker.
- secure—capture the weapon arm and secure it.
- redirect—redirect the weapon arm.

Use loud verbal commands before, during, and after the attack.

Techniques for defense against edged weapons covered in this lesson include:

- redirection and evasion techniques
- defense against an overhead stab or forehand slash with an edged weapon

Redirection and Evasion Techniques

Use redirection and evasive movements to avoid or redirect an edged-weapon attack. Evasion is simply shifting your body or sidestepping to avoid the attack. Redirection is using your hands to move the subject away. Using evasive and redirecting tactics may allow time to disengage, escape, or use other force options.

When redirecting, move in on an angle or circle away from the attacker. Most people can run faster going forward than backward, so the attacker has the advantage. By circling or angling away from the attack, you force the attacker to adjust their direction of travel.

REDIRECTION TECHNIQUE (1)

Use loud, clear verbal commands throughout the application of the technique.

1. As the subject attacks, pivot backward to evade the subject's forward movement.
2. Bring both hands up in front of your face to protect vital areas.
3. Push, slap, or strike the subject's arm or shoulder to create distance from the weapon.
4. Move away from the subject at an angle or circle.
5. Follow up with appropriate action(s). (See Figure 4-85)



Figure 4-85: Redirection technique 1

REDIRECTION TECHNIQUE (2)

Use loud, clear verbal commands throughout the application of the technique.

1. Block the subject's lower right arm with your left arm and bring the subject's arm across your centerline.
2. Use your right hand to reach across the subject's body and grasp the back of their right arm just above the elbow.
3. Slightly pull the subject off balance, straightening their arm, pulling their right wrist downward with their palm toward you to your right hip.
4. Apply downward pressure to the elbow while maintaining control of the wrist.
5. A strike or diversion may be necessary to complete the technique.
6. Move your right leg rearward, rotating your hips clockwise.
7. Drop to your left knee and place the subject in a prone position.
8. Follow up with appropriate action(s). (See Figure 4-86)



Figure 4-86: Redirection technique 2

Defense Against an Overhead Stab or Forehand Slash With an Edged Weapon

Use loud, clear verbal commands throughout the application of the technique.

1. Palm strike the subject's upper right arm near the shoulder with both hands to stop the movement of the weapon arm.
2. Capture and secure the subject's right arm by encircling it with your left arm. At the same time, deliver multiple disabling strikes.
3. Follow up with appropriate action(s). (See Figure 4-87)

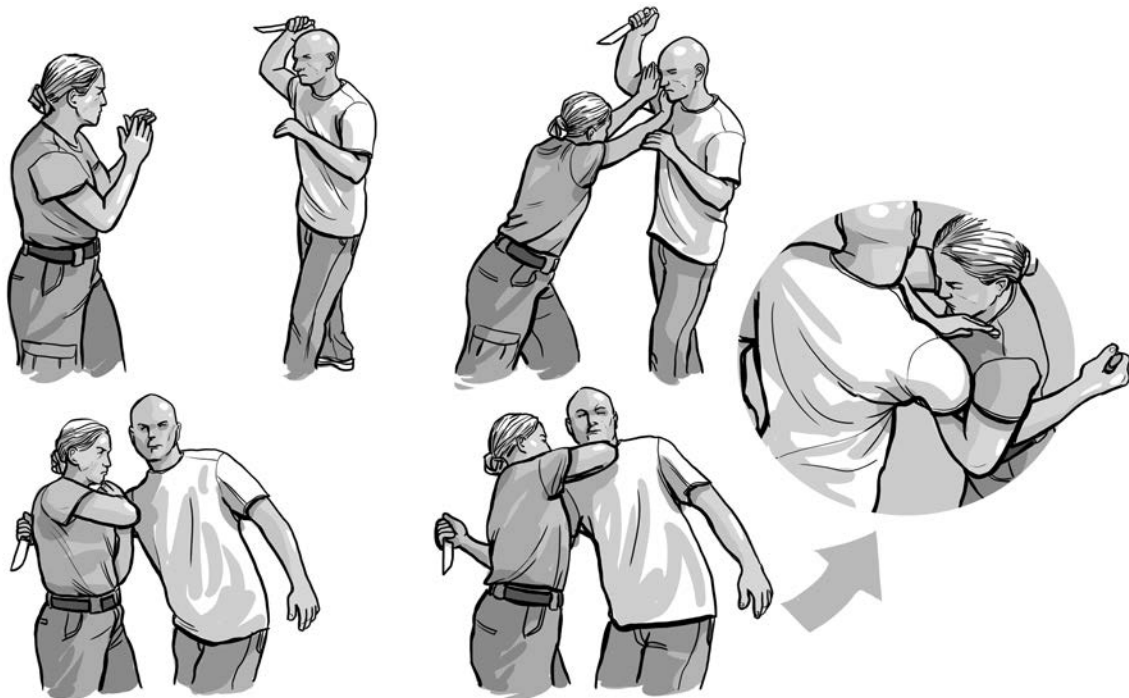


Figure 4-87: Defense against an overhead stab or forehand slash with an edged weapon

4

Unit 3: Defensive Tactics Techniques Lesson 18: Deadly Force Techniques

Lesson Goal

At the end of this lesson, you will be able to demonstrate a simulation of deadly force techniques.

Deadly force is usually associated with the use of a firearm. However, certain empty-hand techniques and unconventional weapons can be used effectively in a deadly force encounter.

Empty-hand techniques become deadly force when they have the capability of causing great bodily harm or even death. A good example is a ground fight that turns into a deadly threat when a subject attempts to choke or bite you, gouge your eyes, or grab your gun. If you cannot access a weapon, then an empty-hand technique may help stop or disable your attacker, giving you the chance to recover to a different position.

Some empty-hand techniques can become deadly force if applied to a specific target area of the body. Some examples of deadly force techniques may include, but are not limited to, elbow strike, throat strike, and eye gouge.

HL4318.1. Demonstrate the simulation of deadly force techniques

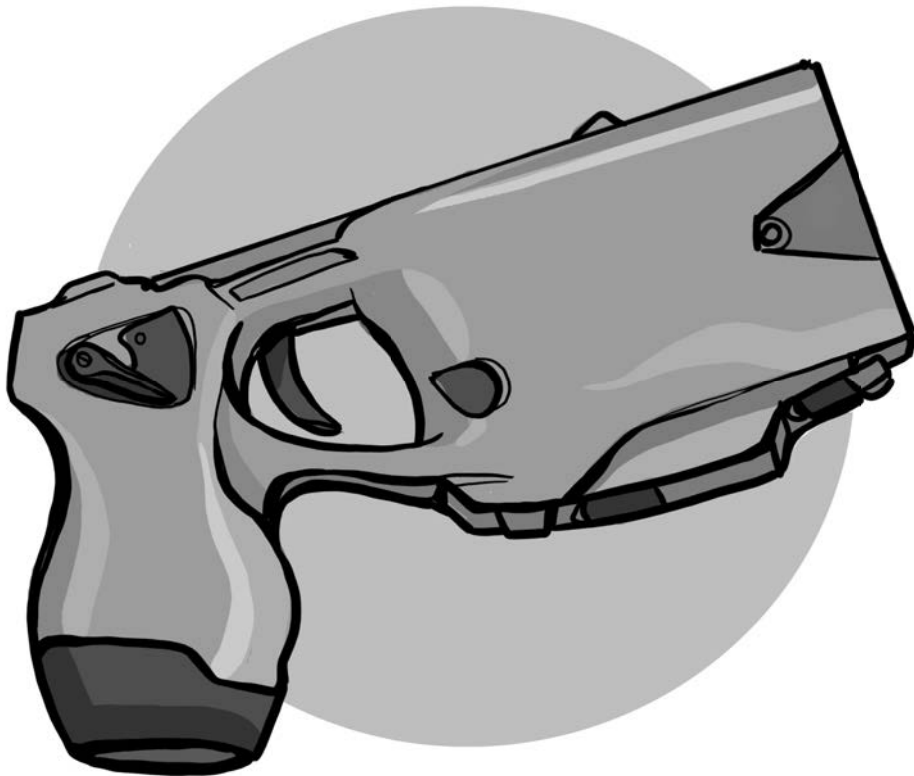
Using Alternative Weapons

Any item an officer has at hand may be used as a potential weapon in a time of need. In fact, any extension of the body may be a weapon, such as a flashlight, radio, ballpoint pen, keys, or pocket knife. It is the use of the item that qualifies the item as a weapon. For instance, a firearm is just a firearm until it is used for a defensive purpose; however, an ashtray or coffee mug, which is not perceived as a weapon, becomes a weapon if used to strike someone.

A deadly weapon is any item used to cause death or great bodily harm. For example, a ballpoint pen directed to the eye becomes a deadly weapon. An officer in a deadly force situation should use unconventional weapons if available and necessary.

5

**CONDUCTED ELECTRICAL WEAPON/
DART-FIRING STUN GUN**



5

Conducted Electrical Weapon/ Dart-Firing Stun Gun Use of the Conducted Electrical Weapon

Lesson Goal

At the end of this course, you will know the legal and use of force aspects of using a stun gun or CEW, how using a stun gun or CEW affects the human body, and how to operate a stun gun or CEW safely.

The use and effects of conducted electrical weapons have been a topic of discussion in the media, among law enforcement officers and administrators, and within the scientific and medical professions. This chapter introduces you to the basics of the conducted electrical weapon (CEW), particularly the dart-firing stun gun, and provides information about its practical use based on statutory requirements.

CEW Basics

A **conducted electrical weapon (CEW)** is a device that uses a high-voltage, low-ampere electrical charge to induce pain compliance or involuntary muscle contractions that can, in the case of a dart-firing stun gun, temporarily incapacitate a noncompliant subject. An **ampere** is a measure of electrical current or power.

A CEW has several forms and names:

- basic stun gun
- dart-firing stun gun (DFSG)
- electronic immobilization device
- conducted energy device
- electronic control device

In 2006, the Florida Legislature created s. 943.1717, F.S. This legislation governs the training and use of DFSGs by criminal justice officers in Florida. While the Florida Statutes refer to “dart-firing stun guns,” most law enforcement agencies use the term “conducted electrical weapon.” This chapter uses CEW to refer to all forms of stun guns, including DFSGs, and provides a general overview of how a CEW operates within the law. The Criminal Justice Standards and Training Commission does not endorse any specific type or brand of CEW.

HL500.1. Provide the statutory and commonly used definitions of a CEW

MAINTENANCE, CARE, AND STORAGE

Most CEWs have basic maintenance requirements. Keep the device clean and dry as much as possible. If it gets wet, make sure to turn it off and place it in a clean, dry place until it dries completely. Never test the device while it is still wet. Store the device according to the manufacturer’s recommendation and your agency policies. Avoid prolonged storage in extreme temperatures.

Authorization to Use a CEW

The Florida Statutes require law enforcement officers authorized to operate a CEW to attend a CJSTC-approved CEW course. Officers attend this training during basic recruit training or through an equivalent training course that their employing agency provides. If your agency allows you to carry a CEW, they may require you to go through more agency training before you can operate a CEW. In addition, the CJSTC requires that you attend at least one hour of annual training on CEW use if your agency allows you to carry and use a CEW.

HL500.2. Describe how an officer becomes authorized to use a CEW

When to Use a CEW

Your training, experience, and assessment of all relevant circumstances determine the appropriate and necessary use of a CEW. The statutory guidelines in s. 943.1717, F.S., provide the minimum criteria for use of a CEW. A decision to use a dart-firing stun gun must involve an arrest or a custodial situation, and during the situation, the subject escalates resistance from passive physical resistance to active physical resistance and either of the following applies:

- The subject has the apparent ability to physically threaten the officer or others.
- The subject is preparing or attempting to flee or escape.

HL500.3. Describe the statutory guidelines for when to use a CEW

Using a dart-firing stun gun must involve an arrest or a custodial situation, where the subject escalates from passive to active physical resistance, and has the apparent ability to physically threaten you or others, or is attempting to flee or escape.

How a CEW Works

A CEW disrupts the body's communication system by generating a high-voltage, low-current electrical charge. In simple terms, the charge has a lot of pressure behind it, but not much intensity. Since it has a high voltage, the charge will pass through heavy clothing and skin, but it is not intense enough to damage the subject's body unless you apply it for extended periods. For example, if lightning strikes someone or they stick a finger in an electrical outlet, the electric current can maim or even kill, but, in smaller doses, electricity is harmless. A low current does not injure a subject even if the voltage is high. However, a high current can injure a person even if the voltage is low.

HL500.4. Describe how a CEW works to control a subject

CEWs use electrodes or probes and an electrical charge to control a subject. In the case of a basic stun gun, the electrodes attach to the front of the CEW. With a DFSG, the probes are projectiles that fire from the CEW and embed into the subject.

For a CEW to operate, electricity must be able to flow between the electrodes on a stun gun or the probes from a DFSG. The electrodes on a stun gun are a fixed distance apart and provide limited pain compliance. The probes on the DFSG are not fixed, and the distance between them depends on how far away the subject is when delivered. The wider the probe spread on the target, the greater the effectiveness of the weapon. Electricity will not pass to another person in contact with the subject unless the other person makes direct contact between or on the probes. Exposing a subject who is standing in water to a CEW does not cause electrocution or increase the power applied. Electricity can pass through clothing and even some bullet-resistant materials, though.

The charge combines with the electrical signals from the subject's brain, making it very difficult for the subject to decipher any messages. The person has a hard time telling their muscles to move and may become confused, unbalanced, or, in the case of a DFSG, incapacitated. The current, sometimes generated with a pulse frequency, mimics the body's own electrical signals. The current will tell the subject's muscles to do a great deal of work in a short amount of time. Depending on shot placement, the subject's torso and limbs will respond in different ways.

BASIC STUN GUN

Basic stun guns have a simple design. They are about the size of a flashlight and typically operate using nine-volt batteries. The circuitry includes multiple transformers and components that boost the voltage in the circuit, typically between 20,000 and 150,000 volts, and reduce the amperage. The electrodes are simply two plates of conducting metal positioned in the circuit with a gap between them.

DFSG

A DFSG works the same way as a basic stun gun, except the two charged probes are not permanently attached to the device. Instead, they are at the ends of long conductive wires attached to the gun's electrical circuit. The DFSG uses the same basic firing mechanism as any compressed gas firing system or BB gun. Pulling the trigger opens the cartridge inside the gun, launching the probes through the air, with the attached conductive wires trailing behind.

The probes have small barbs so they will attach through a subject's clothing to their skin, allowing the current to travel down the wires into their body. The main advantage of this design is that it stuns subjects from a greater distance (typically 15 to 25 feet for patrol and 35 feet for SWAT). The disadvantage is that if only one probe hits the subject, the officer must reload and attempt a second contact. Some dart-firing stun guns have multiple cartridges that can deploy probes consecutively by pulling the trigger without reloading. Always reload in a safe manner; never place your hands in front of the cartridge, as a static electrical charge could cause the cartridge to deploy.

Officers can use a DFSG as a basic stun gun, but probe hits are usually more desirable. Probe hits:

- are more effective in obtaining neuromuscular incapacitation vs. pain compliance
- can be applied from a safer distance
- usually require fewer cycles
- generally cause fewer injuries

A **cycle** is the predetermined amount of time (usually five seconds) that a stun device will discharge automatically when activated. Some dart-firing stun guns have a built-in cartridge-identification system. When fired, the cartridge also releases dozens of confetti-sized cartridge-identification tags. This allows investigators to trace to whom the cartridge was issued or sold and the location of the deployment. Some CEWs have a computer system that records the time and date of shots, the duration or number of cycles, the battery level, and the internal temperature of the unit.

Using a DFSG as a Drive Stun

A drive stun occurs when the front of the DFSG, with or without a live cartridge, directly touches the body of the resisting subject, and the electrical charge passes to their body. The person's body fills the gap between the electrodes. The electrical pulses move from one electrode to the other and surge electricity into the subject's muscular and nervous systems.

In this mode, the DFSG works as a basic stun gun and is a pain-compliance tool only.

Circumstances when you may use a DFSG as a drive stun include:

- When the subject is too close to the DFSG or when a probe application would be hard to make, for example, if a subject and an officer are fighting, and the DFSG operator cannot get a clear shot on the subject. The drive stun does not incapacitate a subject but may help you take a subject into custody.
- When only one probe strikes a subject and the subject is rapidly moving closer, use the drive stun as a second probe to complete the cycle.
- When, after initially using a DFSG, you do not gain compliance or the subject increases resistance, apply the drive stun as a follow-up. Drive stun on a place on the body away from the embedded probes.
- When you use the DFSG with a live cartridge as a drive stun or make a close shot, and the subject increases resistance, apply the drive stun as a follow-up. Drive stun on a place on the body away from the embedded probes.

To initially use a DFSG as a drive stun (without firing the probes), apply the weapon directly to a subject. If the first choice of a target area is not effective, you may consider a different area of application, using an additional cycle of application, or an alternative force option.

HL500.5. Describe how to use a dart-firing stun gun (DFSG) as a drive stun

Because the drive stun does not cause incapacitation, you may find yourself in prolonged struggles with a violent subject, resulting in drive stunning several times in several locations on the body. This often results in multiple discharges, causing scratches on the subject's body, and numerous **signature marks**, which are burn marks left on a subject's body after a drive stun application.

Effects on the Human Body

Although the intended use of a CEW as a less lethal weapon is to prevent injury to the subject and other people present, the device has a very powerful physical effect. When CEW electrodes or probes hit a subject, they transmit electric impulses. These impulses interfere with communication between the muscular nervous system and the skeletal muscles. The muscle contractions after CEW exposure are due to the impulse interference, not the electric output. A subject may experience pain similar to the muscle pain one experiences after vigorous exercise. In the case of a dart-firing stun gun, this can cause physical incapacitation or **electro-muscular disruption (EMD)**. The subject may immediately lose control of their body and become incapable of any coordinated action. Possible effects of using a CEW on a subject could include the person:

- immediately falling to the ground
- yelling or screaming
- having involuntary muscle contractions
- freezing in place with legs locked
- feeling dazed for several seconds or minutes
- having vertigo or a temporary tingling sensation
- having critical incident amnesia, not remembering any pain
- showing minor signature marks from contact

The subject may not show any physical effects from the contact but may sustain injuries from falling because of the weapon's physical effects on their body. Sometimes these injuries are minor. Sometimes more severe injuries could occur. The fall that results from a stun, if it occurred from elevated heights or other hazardous areas, could cause significant injuries. Manufacturers' and independent studies assert that being stunned by a CEW has no residual medical impact. There is no basis to establish that CEWs pose unacceptable health risks when used appropriately on healthy subjects.

HL500.6. Describe the effects of using a CEW on the human body

Some debate exists about the number of cycles of applications that is reasonable. Several law enforcement groups have established 15 seconds of CEW exposure as a significant safety point. Experts in the field agree that there is no definitive number for how many exposures are necessary, but applying the reasonableness standard may help you decide. Exercise caution to prevent unnecessary cycles by following procedural justice protocols established by your agency. Avoid prolonged and repeated exposures; apply only the number of cycles reasonably necessary to capture or restrain the subject.

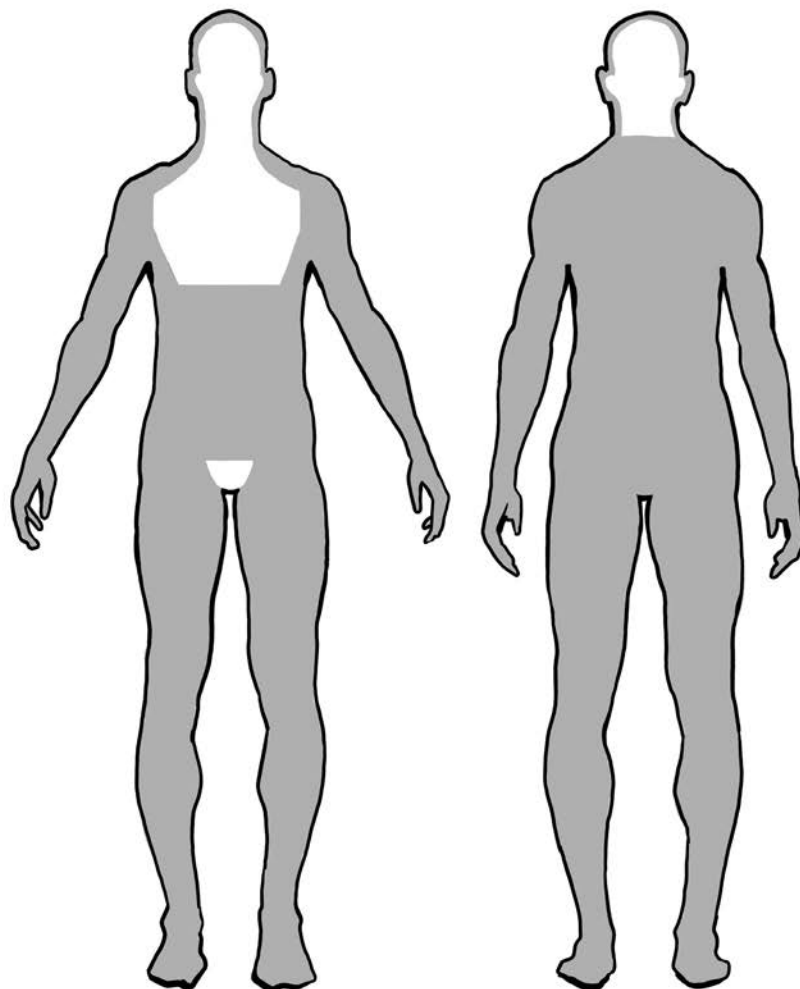
Target Areas

The primary target areas of a subject's body should be below the neck area for back shots. For front shots, the target area should be below the heart. Aim for areas with high nerve concentrations or large muscle mass, such as the abdomen, legs, inside of the thighs, back, and buttocks.

HL500.7. Describe appropriate target areas on a subject when using a CEW

Alternative target areas are the back near the shoulders or the back of the legs where, if clothed, the clothing fits tighter and the probes will conduct electricity to the subject more effectively. The physical positioning of a subject, the clothing they are wearing, and the way they are wearing clothing could play a big role in how effective the CEW is. It may not work at all or may stop working when the subject has loose-fitting or very thick clothing.

Avoid intentionally targeting a subject's head, throat, face, breast, chest, heart area, groin, genitals, or any known preexisting injury area when possible. These areas have a higher potential for causing injury to the subject. (See Figure 5-1)



Preferred target areas are illustrated in gray.
White areas should be avoided when possible.

Figure 5-1: Preferred target areas

Subject Considerations

For some subjects, it may be inappropriate to use a CEW as a restraining device. One example is a subject who is experiencing **drug-induced psychosis**, a form of psychosis from drug use that causes hallucinations, delusions, or positional asphyxia. Positional asphyxia, discussed in Chapter 2, is the inability to breathe because of the subject's body position.

HL500.8. Describe subject behaviors that can influence your decision to use a CEW

Pay attention to signs of drug-induced psychosis, which may include:

- unusual or psychotic behavior
- disorientation
- intense sweating, hot, feverish skin
- delirious or delusional behavior
- extreme paranoia behavior
- elevated pulse rate
- knowledge of the suspect's history of drug abuse or use

Some subjects who are under the influence of drugs or alcohol comply. Other subjects do not have a typical response to the CEW. As in any high-risk situation, be prepared to take another tactical action. The quickest and safest way to restrain a noncompliant subject exhibiting drug impairment is to use a CEW, if necessary. Then, using the least restrictive means, restrain the subject at the earliest possible point in the encounter, and notify EMS as soon as possible.

If a subject is pregnant, ill, or physically impaired, such as blind or deaf, avoid using a CEW for compliance. Your agency will have policies and procedures for these situations.

Use of Force Considerations

You will recall from Defensive Tactics that the basis for analysis of use of force claims is the Fourth Amendment's objective reasonableness standard (*Graham v. Connor*). Keeping this in mind, you must be able to articulate why you chose to use a CEW. According to s. 943.1717, F.S., officers may decide to use a CEW only when a subject is resisting actively and physically.

The court established law on the use of a CEW in the case of *Draper v. Reynolds*, 369 F3d 1270 (11th Cir. 2004). Video of this traffic stop led the court to conclude that if the officer attempted handcuffing without the use of the CEW, the situation would have escalated into a serious physical struggle. The one-time shock of a subject with a CEW was not excessive force and was reasonably proportionate when the subject repeatedly refused verbal commands and became hostile, belligerent, and uncooperative during the stop.

As described in s. 790.01, F.S., a dart-firing stun gun is a nonlethal (a force level not intended to cause death or great bodily harm) weapon. Many law enforcement agencies, however, describe the CEW as "less lethal."

HL500.9. Describe the statutory use of force guidelines for using a CEW

Tactical Considerations

Use verbal commands first to gain control of a situation. You can avoid many physical encounters by verbal de-escalation. By disengaging or de-escalating, you give the subject another opportunity to comply with your commands and avoid the use of the CEW. If you exhaust all verbal efforts to de-escalate the situation or if verbal commands or physical control are not feasible, the use of a CEW may be appropriate. However, you must give the subject a reasonable opportunity to comply with your directions. Warn the subject of the device's imminent use if they continue to be noncompliant, and when appropriate. For example, "If you don't comply, I will have to stun you."

Not every situation where a subject displays an active physical resistance calls for using a CEW. During these encounters, continually assess whether to engage or disengage and decide on the appropriate force option. If you decide to use a CEW, expect to articulate in court that based on training, experience, and assessment of the circumstances, the use of the device was the best force option for the situation. You must not use a CEW for verbal defiance, belligerence, punishment, or horseplay.

Do not use a CEW to coerce a subject to give statements or perform an illegal act. Using a CEW in a disciplinary manner without lawful authority may violate a subject's civil rights. You and your agency may be liable for injuries to the subject.

Using a CEW is not a substitute for using a firearm when the situation requires lethal force. This does not exclude CEW use in place of a firearm when you have the time, reasonable cover, and a backup officer. Once making the decision to use a CEW, consider a number of tactical factors:

- What is the most effective area of the body to target?
- What is the physical environment around the subject?
- Are there officer safety concerns, or danger to the subject or nearby public?
- Do you have available cover or concealment if the CEW does not work properly?
- Do you have any time constraints?
- Is backup present or on the way?
- At what point in the encounter might you require more CEW applications?

HL500.10. Describe tactical factors involved in deciding when to use a CEW

Safety Considerations

Observe the subject continually and be aware of the methods they may use to defeat a CEW; especially notice where a subject's hands are. Consider a number of safety factors before using a CEW. For instance, if you encounter a subject in an elevated location, such as upon a ledge or stairwell, if you fire a CEW the subject may fall and get hurt. If a subject is operating a vehicle or machinery, they could lose control of the vehicle and endanger other people's lives. A subject could drown when hit with a CEW if they are in or near water. If a subject is in an environment containing hazardous materials or potentially flammable, volatile,

or explosive materials, the CEW could ignite the material and burn the subject. If you use OC spray on a subject, the CEW could set the subject on fire. Follow your agency policies and procedures regarding using OC sprays and CEWs.

HL500.11. Describe subject and officer safety concerns when using a CEW

USING BACKUP

Try to have at least one backup officer present to handcuff the subject after you gain compliance. You will be operating the CEW while the backup officer moves in and secures the subject. While the cycle is active, the backup officer may not be able to manipulate the subject's arms or legs to handcuff them. At this point, the person is usually no longer trying to resist and wants to comply, but has little or no muscular control and may appear to be resisting. As a safety precaution, the backup officer should be aware of the subject's potential uncontrollable overreaction in these situations.

After Care

Based on your training and agency policies, consider removing the probes if all signs of resistance are gone. Treat removed probes as biohazard sharps. You have a duty to render first aid after using a CEW when you know, or it is evident, that the person detained or in custody is injured or requires medical attention. Provide first aid or seek additional medical assistance when it is reasonable, based on the totality of the circumstances, and without jeopardizing your health or safety. If there is excessive bleeding, get immediate medical attention for the subject. Look for and treat any possible secondary injuries, and seek medical attention if required. Trained medical professionals should remove all deeply embedded probes or probes that penetrate sensitive tissue areas (for example, neck, face, groin, and breast). Monitor anyone in custody who has been subjected to CEW use, even if the subject is receiving medical care.

HL500.12. Describe how to care for an in-custody subject after using a CEW

Documenting CEW Use

Your agency will require prompt and accurate reporting of the decision to use a CEW, including an explanation of each use and cycle of application. Always prepare clear and complete reports. Specific report forms and requirements vary by agency and may include:

- the subject's threats, behaviors, and actions
- each trigger pull or cycle (each use or application of force)
- each mode of use
- each injury or allegation of injury
- your justification for using a CEW
- your justification for each mode used

- the medical status and condition of the subject
- an accurate timetable for the events of the entire incident, if possible

HL500.13. Describe how to document using a CEW

Current CEW Policy Issues and Trends

Be familiar with updated department policies, procedures, and case law regarding the use of CEWs. Be aware of current trends that subjects may try to use when threatened with a CEW. For example, some people now keep objects or shields under their clothing in case they encounter a law enforcement officer. As a result, the use of a CEW is ineffective. Another trend is a subject's stop, drop, and roll drill to pull out darts. If a subject begins to roll, close the distance, move with the subject, and keep sufficient slack in the wire to maintain electrical contact. Subjects may wait for the cycle to stop, then pull out the darts and possibly begin to run away. Be prepared to close in and use a drive stun or transition to another force option to stop the subject from escaping.

In Florida, a person can lawfully carry a CEW openly or in a concealed manner without a permit. The CEW must be less lethal (not intended to cause death or great bodily harm) and designed solely for defensive purposes. The person must be carrying the CEW for use as lawful self-defense.

HL500.14. Recognize the importance of remaining current on CEW policy issues and trends

6

CRIMINAL JUSTICE OFFICER PHYSICAL FITNESS TRAINING



6

Criminal Justice Officer Physical Fitness Training Fitness Training

Learning Goal

At the end of this course, you should be able to demonstrate improvement in your overall fitness and understand the importance of adopting a commitment to lifelong fitness.

This chapter provides the physical fitness training requirements for the Florida Basic Recruit Training Programs. As a student in basic training, you should understand what level of physical fitness is expected of you during the training academy. A physical fitness assessment will be conducted in the first two weeks of training and again in the last two weeks of training. This course explains each part of the two assessments. Your score for each part will be recorded separately and retained as part of your training record.

Physical Training Requirements

Job analyses have shown several physical tasks are necessary to perform essential job duties of a criminal justice officer. Physical fitness is an underlying and predictive factor for effectively performing tasks such as:

- sustained pursuit using aerobic power
- sprints using anaerobic power
- dodging using aerobic or anaerobic power and flexibility
- lifting and carrying using muscular strength and endurance, and anaerobic power
- dragging, pulling, and pushing using muscular strength and endurance, and anaerobic power
- jumping and vaulting using anaerobic power, and leg power and strength
- crawling using muscular endurance and flexibility
- use of force using muscular strength and endurance, and anaerobic power
- use of force using muscular strength and endurance, and aerobic power

HL600.1. Explain why physical training requirements are necessary for a criminal justice officer

Members of the Cooper Institute for Aerobics Research (CIAR) have conducted many studies over the years (Collingwood, Hoffman, & Smith, 2004) to define the specific areas and levels of physical fitness. The areas and levels that have been determined are consistent with the essential functions of a criminal justice officer's job.

Five physical fitness components will be measured at the beginning and at the end of your Basic Recruit Training Program. These components are:

1. Vertical Jump—measures leg power and consists of measuring how high a student jumps.
2. One-Minute Sit-Ups—measures abdominal or trunk muscular endurance. While students lie on their backs, they will be given one minute to do as many bent leg sit-ups as possible.
3. 300-Meter Run—measures anaerobic power, or the ability to make an intense burst of effort for a short time period or distance. This component requires students to sprint 300 meters.
4. Maximum Push-Ups—measures the muscular endurance of the upper body and consists of doing as many push-ups as possible until muscular fatigue develops.
5. 1.5-Mile Run—measures aerobic power or cardiovascular endurance (stamina over time). To complete this component, the student must run or walk, as fast as possible, for a distance of 1.5 miles.

HL600.2. Describe each of the five parts of the required physical assessments in a Commission-approved Basic Recruit Training Program

At this time, the Criminal Justice Standards and Training Commission does not mandate entry-level physical fitness or wellness standards. However, a trainee should enter the Basic Recruit Training Program at a fitness level that will provide them with the potential to successfully complete all of the physical fitness goals by the last two weeks of training.

Students must come prepared to participate in all components of the assessment during the first week of training. Your training academy may provide information about proven workout routines you can follow to prepare yourself for the five exercises in the physical fitness assessments.

Students who are injured during basic training and unable to complete testing upon exiting, must successfully complete the training and testing at a later date when approved by their physician. A student cannot earn a graduation certificate until completing all of the required training and testing.

Vertical Jump

PURPOSE

This exercise is a measure of jumping or explosive power.

EQUIPMENT

1. vertical measuring apparatus fixed to a smooth wall
2. some way to mark extension when jumping (for example, chalk dust or Velcro) between each set of an exercise

HOW TO PREPARE FOR THE VERTICAL JUMP



Figure 6-1: Vertical jump

A good way to prepare for this component is to do plyometric (stretching and sudden contracting of muscles) training. The basic plyometric exercise routine consists of three exercises: double-leg vertical jump, double-leg hop, and single-leg vertical jump. Perform each exercise with one set of 10 repetitions, three days a week. Do the repetitions without stopping, and rest three minutes before starting the next exercise.

DOUBLE-LEG VERTICAL JUMP

Intensity level: High

Starting position: Stand with your feet shoulder-width apart.

Direction of jump: Vertical

Arm action: Double-arm action

Starting action: Begin by moving arms forcibly back and forth and jump as high as possible.

Ascent: Thrust arms upward vigorously, reaching as high as possible.

Descent: When your feet hit the ground, jump again immediately without a stutter step.

DOUBLE-LEG HOP

Intensity level: Medium

Starting position: Stand with your feet shoulder-width apart.

Direction of jump: Horizontal

Arm action: Double-arm action

Starting action: Begin by moving arms forcibly back and forth with a leaning action.

Ascent: Think about “hanging” in the air.

Descent: Land in the starting position and immediately repeat the movement.

SINGLE-LEG VERTICAL JUMP

Intensity level: High

Starting position: Stand with one foot on the ground.

Direction of jump: Vertical

Arm action: Double-arm action

Starting action: Rapidly move arms back and forth and jump as high as possible.

Ascent: Thrust your arms upward vigorously, reaching as high as possible.

Descent: When your foot hits the ground, jump again immediately without a stutter step.

(Place emphasis on maximum height and quick, explosive takeoffs. Repeat this exercise with the opposite leg after a brief rest of 15–30 seconds.)

PROCEDURES FOR TESTING

1. Stand with your feet together and with one side of your body toward the wall, and reach up as high as possible to mark your standard reach.
2. Jump as high as possible and mark the highest point of your jump. Jump from both feet in a stationary stance. You can pump and thrust your arms upward.
3. Your score is the total inches, to the nearest $\frac{1}{2}$ inch, above the standard reach mark.
4. Record the best score after three trials. (See Figure 6-1)

HL600.3. Demonstrate the vertical jump in the required entry and exit assessments

One-Minute Sit-Ups



Figure 6-2: One-minute sit-ups

PURPOSE

This component of the assessment measures abdominal muscular endurance.

HOW TO PREPARE FOR SIT-UPS

1. Estimate the maximum number of correct sit-ups you can do in one minute. Multiply that number by 0.75 (75%). Round the result to the lowest number. This will be the number of repetitions (sit-ups) you will do per set.
2. Warm up with some light activity of your choice, such as riding a stationary bike, walking or jogging on the treadmill, or doing light calisthenics.
3. Perform the number of sit-ups (correct form) determined in the calculation done in No. 1 above.
4. Rest no longer than 60 seconds, and do another set of repetitions.
5. Repeat No. 3 and No. 4 until you have done three to five sets of repetitions. Even though the last sets may be difficult, maintain proper form. If you have to hesitate longer on the floor on the last sets to finish every repetition, then do so, but rest no longer than what is necessary to recuperate. It is important you complete all the repetitions.
6. Do this routine every other day. Increase the number of repetitions per set by one or two each week.

If you are unable to do at least five repetitions per set, modify your routines to perform sufficient repetitions to address muscular endurance. Follow a crunch or curl routine for your abdominals, and get assistance when using leg exercises (multi-hip machine or leg lifts). Also, you could use an abdominal machine in a fitness facility using a light enough resistance to get in 15 repetitions per set for three sets.

PROCEDURES FOR TESTING

1. Start by lying on your back, with knees bent, heels flat on the floor, and fingers laced and held behind the head. Avoid pulling your head with your hands. Your buttocks must remain on the floor, and do not thrust your hips.
2. Have a partner hold your feet down.
3. Then, perform as many correct sit-ups as possible in one minute.
4. In the up position, touch your elbows to your knees and fall downward until your shoulder blades touch the floor.
5. Record the best score after the one-minute time limit has expired. Your score equals the total number of correct sit-ups.
6. Rest only in the up position (if you need to rest). Breathe as normal as possible; and make sure you do not hold your breath. (See Figure 6-2)

HL600.4. Demonstrate one-minute sit-ups in the required entry and exit assessments

300-Meter Run

PURPOSE

This exercise measures anaerobic power.

EQUIPMENT

1. stopwatch
2. 400-meter running track, or any measured 300-meter flat surface with sufficient distance for slowing to a stop

HOW TO PREPARE FOR THE 300-METER RUN

To prepare for this component, do interval training. First, time yourself running 110 yards with all-out effort. This will be your initial time. Second, divide your initial time by 0.80 to get your training time.

PROCEDURES FOR TESTING

1. Warm up and stretch before testing.
2. Run 300 meters at your maximum level of effort.
3. Record the amount of time it took to complete the required distance.
4. Walk for 3–5 minutes immediately after the test to cool down. This is an important safety practice.

You may walk, if necessary. However, the time spent walking will be recorded as time walked and not time ran.

HL600.5. Demonstrate the 300-meter run in the required entry and exit assessments

Maximum Push-Ups

PURPOSE

This component measures the muscular endurance of the upper body (anterior deltoid, pectoralis major, triceps).

HOW TO PREPARE FOR PUSH-UPS

1. Estimate the maximum number of correct push-ups you can do in one minute. Multiply that number by 0.75 (75%). Round the result to the lowest number. This will be the number of repetitions you will do per set.
2. Warm up with some light activity of your choice, such as riding a stationary bike, walking or jogging on the treadmill, or doing light calisthenics.
3. Perform the number of push-ups (correct form) determined in the calculation done in No. 1 above.
4. Rest no longer than 60 seconds, and do another set of repetitions.
5. Repeat No. 3 and No. 4 until you have done three to five sets of repetitions. Even though the last sets may be difficult, maintain proper form. If you have to hesitate longer on the floor on the last sets to finish every repetition, then do so, but rest no longer than what is necessary to recuperate. It is important you complete all the repetitions.
6. Do this routine every other day. Increase the number of repetitions per set by one or two each week.

Women may prepare for the push-ups using either the standard push-up or the modified knee push-up.

If you are unable to do at least five repetitions per set, adjust the above calculations to modified push-ups (from the knees) to keep the number of repetitions high enough to address muscular endurance. Get assistance in designing a strength routine using select machines, including chest, arms, and torso exercises.

PROCEDURES FOR TESTING—STANDARD PUSH-UPS

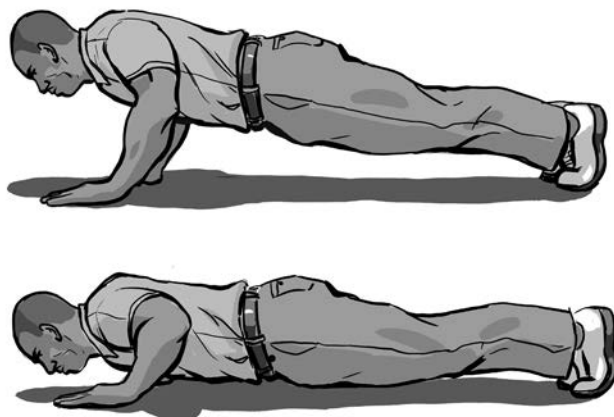


Figure 6-3: Standard push-up

1. Place hands shoulder-width apart, with your fingers pointing forward.
2. Start from the up position, with your arms fully extended, your elbows locked, and only your hands and feet touching the floor. Keep your back straight at all times and lower your chest to about 3 inches from the floor. A small rubber ball or sponge (3 inches in dimension) can be placed below you on the floor to check for distance. Then, return to the up position with your elbows fully locked. This counts for one repetition.
3. When you elect to stop or cannot continue, the instructor will record your total number of correct push-ups as the score. Your score equals the total number of correct push-ups.
4. Rest only in the up position. Your back must remain straight while resting. There is no time limit for this exercise. (See Figure 6-4)

Female students may choose to do standard or modified push-ups.

PROCEDURES FOR TESTING—MODIFIED (KNEE) PUSH-UPS FOR WOMEN

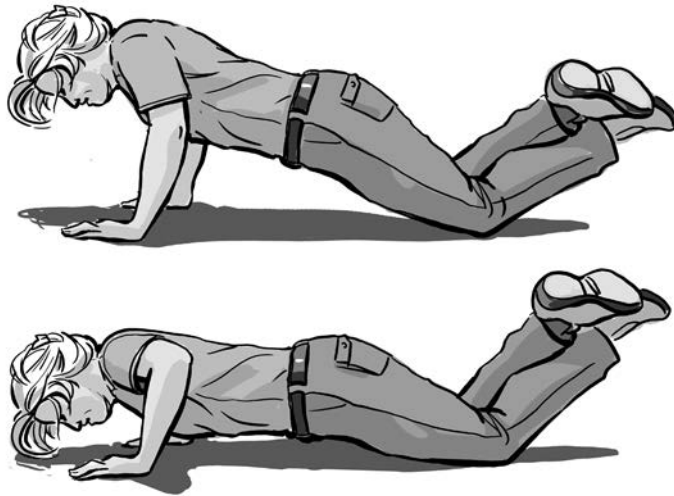


Figure 6-4: Modified push-up

1. Place your hands shoulder-width apart, with your fingers pointing forward.
2. Start from the up position, with your arms fully extended and your elbows locked. Keep your knees bent and your ankles crossed. Only your hands and knees should touch the floor. Keep your back straight at all times and lower your chest to about 3 inches from the floor. A small rubber ball or sponge (3 inches in dimension) can be placed below you on the floor to check for distance. Then, return to the up position with your elbows fully locked. This counts for one repetition.
3. When you elect to stop or cannot continue, the instructor will record your total number of correct push-ups as the score. Your score equals the total number of correct push-ups.
4. Rest only in the up position. Your back must remain straight while resting. There is no time limit for this exercise. (See Figure 6-4)

HL600.6. Demonstrate the maximum push-ups in the required entry and exit assessments

1.5-Mile Run

PURPOSE

The 1.5-mile run is a measure of aerobic power (cardiovascular endurance). The objective in the 1.5-mile run is to cover the distance as fast as possible.

EQUIPMENT

1. stopwatch
2. indoor or outdoor track or another suitable flat running area measured to 1.5 miles

HOW TO PREPARE FOR THE 1.5-MILE RUN

To prepare for this test, gradually increase your running endurance. Begin at the level you can accommodate, and use a workout format that involves walking and running. Run a short distance, walk for a while, and run again. Begin slowly and proceed to the next level by improving your overall running or walking time.

PROCEDURES FOR TESTING

1. Warm up and stretch thoroughly before running.
2. Run 1.5 miles as fast as possible.
3. Finish times should be recorded.
4. Upon completing the run, walk for 3-5 minutes immediately following the run to cool down.

You may walk, if necessary. However, the time spent walking will be recorded as time walked and not time ran.

HL600.7. Demonstrate the 1.5-mile run in the required entry and exit assessments

Acknowledgement: *Our thanks to the Indiana Law Enforcement Academy for allowing us to use their materials in developing the physical fitness course materials.*

GLOSSARY

A

abdominal evisceration: an open wound where organs protrude from the abdominal cavity (First Aid)

ability: the capacity a subject has to carry out his or her intent to cause death or great bodily harm (Defensive Tactics)

action: the mechanism of a firearm involved with presenting the round or cartridge for firing, and in removing the spent casing and introducing a fresh round or cartridge. This is also known as “cycling the gun.” (Firearms)

active resistance: a subject’s use of physically evasive movements directed toward the officer; examples include bracing, tensing, pushing, or pulling to prevent the officer from establishing control over the subject (Defensive Tactics)

acuity: sharpness of vision (Vehicle Operations)

aggressive resistance: a subject’s attacking movements toward an officer that may cause injury but are not likely to cause death or great bodily harm to the officer or others (Defensive Tactics)

airborne pathogens: pathogens spread from person to person through the air; caused by breathing in microscopic, disease-causing microorganisms (First Aid)

ampere: the measure of electrical current or power (DFSG)

amputation: loss or removal of all or part of an arm or leg (First Aid)

anti-lock braking system (ABS): an electronic braking system that monitors and controls each of the wheels during braking to keep them from locking (Vehicle Operations)

apex: the center point of any curve (Vehicle Operations)

arterial bleeding: bright red blood spurting from a wound, indicating a severed or damaged artery (First Aid)

asthma: a respiratory condition that results from the narrowing of airway passages, causing breathing difficulties (First Aid)

B

balance: a position in which the head is over the hips, and weight is distributed evenly between the feet; necessary for performing defensive tactics (Defensive Tactics)

balance displacement: a controlling technique used to break the subject’s balance through the use of leverage principles (Defensive Tactics)

bandages: coverings that hold dressings in place and do not touch the wound, usually made of gauze or other absorbent material (First Aid)

barricade position: a position behind cover (Firearms)

block: reactionary techniques using the arms, legs, or body to deflect or redirect a subject's impending strike to other areas of the body (Defensive Tactics)

bloodborne pathogens: pathogenic microorganisms in human body fluids (First Aid)

body movement: how an officer approaches a subject or enters a scene (Defensive Tactics)

bruising: an obvious discoloration (black and blue) of the soft tissue at the injury site (First Aid)

C

caliber: the measurement used to identify different cartridge (projectile) sizes (Firearms)

capillary bleeding: dark red blood oozing from a wound, indicating damaged capillaries (First Aid)

cardiovascular training: any exercise that elevates the heart rate to a range between 60% and 85% of the maximum rate (Defensive Tactics)

cartridge parts and types (Firearms)

parts

bullet: the portion of the cartridge that becomes a projectile when in flight

case/casings: the metal or plastic container that holds all parts of a round of ammunition: primer, powder charge, and bullet

headstamp: markings found on the head of ammunition that indicate the caliber or gauge and identify the manufacturer

powder: the propellant used in most firearms; produces a large volume of gas when ignited

primer: the detonating mixture used to ignite the propellant or powder charge

rim: the edge on the base of a cartridge case that stops the progress of the case into the chamber

round: the complete ammunition cartridge that contains all parts of ammunition; a military term meaning one single cartridge

caster effect: the tendency for a vehicle travelling forward to straighten from a turn when the driver releases the steering wheel (Vehicle Operations)

central nervous system: located in the brain and spinal cord; its components are the body's mainframe computer where all communication and control originate (First Aid)

chest seal: a type of airtight dressing applied to a penetrating trauma to the chest cavity that can limit air flow entering a wound and control air flow exiting a wound (First Aid)

circulatory system: the system that pumps blood throughout the body; it consists of the heart, veins, capillaries, arteries, and blood (First Aid)

clinch: a technique that involves holding a person tightly in a close position; used with striking techniques to transition to a takedown, or as a stalling technique (Defensive Tactics)

closed chest injury: results from blunt trauma to the chest area; damages internal organs and/or causes internal bleeding (First Aid)

closed fracture: a fracture in which the skin at the injury site remains intact (First Aid)

closed soft-tissue injury: any injury that is bleeding internally or has pooling blood under the skin (First Aid)

color vision: the ability to distinguish colors (Vehicle Operations)

command presence: an officer's demeanor and the way they exhibit confidence through personal appearance, erect posture, alertness, and attention to surroundings (Defensive Tactics)

communication: the exchanging of information through verbal and nonverbal methods; provides valuable insight into the likelihood of cooperation and compliance of a subject (Defensive Tactics)

complex motor skills: a combination of fine and gross motor skills using hand and eye coordination timed to a single event (Defensive Tactics)

compliance: the verbal and/or physical yielding to an officer's authority without apparent threat of resistance or violence (Defensive Tactics)

concealment: an object or group of objects that creates a visual barrier between an officer and a threat but may not stop a projectile (Firearms)

conducted electrical weapon (CEW): a device that uses a high-voltage, low-power electrical charge to induce pain compliance or involuntary muscle contractions that can, in the case of a dart-firing stun gun, temporarily incapacitate a noncompliant subject (also known as a dart-firing stun gun, electronic control device, electronic immobilization device, and conducted energy device) (CEW/DFSG)

constant radius: a turn that remains the same throughout, getting neither wider nor smaller (Vehicle Operations)

counter steering: turning the vehicle's front tires in the desired direction to regain traction (Vehicle Operations)

cover: anything that creates a bullet-resistant barrier between an officer and a threat (Firearms)

CS: a type of chemical agent commonly used by law enforcement usually in the form of hand-held canisters and chemical projectiles (Defensive Tactics)

custodial search technique: a complete search of the subject used when a subject is taken into custody in an unsecured environment (Defensive Tactics)

cycle: the predetermined amount of time (usually five seconds) that a stun device will discharge automatically when activated (CEW/DFSG)

D

danger zone: the area within the reactionary gap (Defensive Tactics)

deadly force: force that is likely to cause death or great bodily harm (Defensive Tactics)

deadly force resistance: a subject's hostile, attacking movements, with or without a weapon, that create a reasonable perception by the officer that the subject intends to cause and has the capability of causing death or great bodily harm to the officer or others (Defensive Tactics)

decreasing radius: a turn that gets tighter during the turn much like a circle getting smaller (Vehicle Operations)

de-escalation: decreasing the use of force or resistance (Defensive Tactics)

defensive tactics: a system of controlled defensive and offensive body movements that criminal justice officers use to respond to a subject's aggression or resistance (Defensive Tactics)

depth perception: the ability to judge distance and perceive space to determine how far away an object is (Vehicle Operations)

diabetes: a disease in which the body does not produce or properly use insulin (First Aid)

dialogue: controlled, non-emotional communication between an officer and a subject, aimed at problem solving and communication (Defensive Tactics)

direct threat care/hot zone/care under fire: describes a scene that can include an active threat, multiple active threats, or any imminent danger (First Aid)

disengagement: the discontinuing of commands or the physical use of force; breaking away from a subject (Defensive Tactics)

dislocation: an injury occurring when the end of a bone comes out of its socket at the joint (First Aid)

distraction: a technique that interrupts the subject's concentration so that energy is redirected from the current focus (Defensive Tactics)

diversion: a technique that interrupts the subject's concentration so that energy is redirected from the current focus (Defensive Tactics)

double feed (handgun): a failure to extract the round in the chamber and a new round being fed from the magazine (Firearms)

dressings: sterile pad or compress applied directly to a wound to promote healing and protect the wound from further harm (First Aid)

drug-induced psychosis: a form of psychosis which can result from drug use, typically causing hallucinations, delusions, or positional asphyxia (inability to breathe because of body position) (CEW/DFSG)

duty to act: the duty to take some action to prevent harm to another and for the failure of which an officer may be liable depending on the relationship of the parties and the circumstances (First Aid)

E

electro-muscular disruption (EMD): physical incapacitation caused when DFSG probes hit a subject, transmitting electric impulses that interfere with the electric impulses used by the human nerve system to communicate with the skeletal muscles (CEW/DFSG)

electronic control device (ECD) or electronic immobilization device: a device that uses a high voltage, low-power electrical charge to induce involuntary muscle contractions that temporarily incapacitate a non-compliant subject (also known as electronic immobilization device, conducted energy weapon (CEW), or conducted energy device (CED)) (Defensive Tactics)

empty-hand striking technique: any impact technique using hands, arms, elbows, feet, legs, knees, or head to strike a subject in an offensive or defensive situation (Defensive Tactics)

EMS system: a network of trained professionals linked to provide advanced, out-of-hospital care for victims of a sudden traumatic injury or illness (First Aid)

escalation: increasing the use of force or resistance (Defensive Tactics)

escort: a technique used to move a subject from one point to another without using pain compliance; provides minimal control of the subject through leverage (Defensive Tactics)

evacuation care/cold zone/tactical evacuation care: describes a scene in which you are moving towards transporting an injured officer to a medical treatment facility (First Aid)

evasion: shifting one's body or side stepping to avoid an attack (Defensive Tactics)

expressed consent: consent that is clearly and unmistakably stated (First Aid)

eye-targeting: looking in the desired direction of travel to avoid an obstacle and steering in that direction (Vehicle Operations)

F

failure to eject (stovepipe): a weapon malfunction that occurs when a fired round does not completely eject (Firearms)

failure to extract: a weapon malfunction that occurs when a spent casing remains in the chamber while a new cartridge enters the chamber (Firearms)

failure to feed: a weapon malfunction that occurs when the cartridge fails to feed into the chamber (Firearms)

failure to fire: a weapon malfunction that occurs when the trigger is pulled, but the round fails to detonate (Firearms)

fine motor skills: the muscle control required to make small, precise movements (Defensive Tactics)

flail chest: a closed chest injury that occurs when two or more adjacent ribs are fractured in two or more places and become free floating (First Aid)

follow-through: the maintenance of sight alignment before, during, and after firing a round (Firearms)

Force Guidelines: a framework for making decisions involving the reasonable use of force by criminal justice officers (Defensive Tactics)

fracture: a bone break (First Aid)

frostbite: a localized injury from overexposure to cold (First Aid)

full thickness burn: a third-degree burn that damages all skin layers and affects muscles and nerves; causes skin to look waxy, white, or charred (First Aid)

G

gauge: a measurement of shotgun bores derived from the number of bore-sized balls of lead per pound (Firearms)

Good Samaritan Act: protects a first-aid provider from liability for medical care performed in good faith or medical care similar to that expected of another first-aid provider with equal training (First Aid)

grappling: the use of body mechanics to control a subject (Defensive Tactics)

gross motor skills: the movements of the large or major muscles of the body used in tasks such as running, punching, or kicking (Defensive Tactics)

H

handcuffs: temporary restraining devices used frequently to control a subject (Defensive Tactics)

handgun: a semiautomatic pistol or revolver (Firearms)

head butt: a striking technique using the frontal lobe or back of the head to make contact with the subject's face, head, or other target area, to inflict pain, temporarily divert a subject's attention, and redirect the physical power of the subject's attack (Defensive Tactics)

heart attack: caused by oxygen deprivation to part of the heart, typically from a blocked blood vessel, possibly leading to cardiac arrest (First Aid)

hemostatic gauze: wound dressing containing an agent that promotes blood clotting (First Aid)

HIPAA: protects the rights of patients and restricts the release of patient information (First Aid)

hyperthermia: occurs when the body cannot recover from fluid loss due to a heat-related situation (First Aid)

hypothermia: the excessive cooling of the body's core temperature (First Aid)

I

impact weapon: any object used for striking (Defensive Tactics)

implied consent: consent inferred from conduct rather than from direct expression (First Aid)

increasing radius: a turn that becomes wider during the turn much like a circle getting larger (Vehicle Operations)

indirect threat care/warm zone/tactical field care: describes a scene in which the officer is out of imminent danger and but not yet in a safer zone (First Aid)

informed consent: a person's agreement to allow something to happen, made with full knowledge of the risks involved and the alternatives (First Aid)

insulin: the hormone needed to convert sugar, starches, and other food into energy needed for daily life (First Aid)

intent: an offender's intention to voluntarily make the bodily movement which becomes the act to commit a criminal offense (Defensive Tactics)

intermediate weapon: a tool used when empty-handed control is ineffective, but the subject's level of resistance does not merit deadly force; baton, OC spray, conducted electrical weapon (Defensive Tactics)

interview stance with an impact weapon: a low-profile stance with the weapon held partially hidden behind the leg (Defensive Tactics)

J

joint manipulation: a method of gaining control over a subject by bending or twisting a joint in a direction that will cause pain or discomfort to the joint (Defensive Tactics)

L

less lethal weapon: a weapon that is not fundamentally designed to cause death or great bodily harm (Defensive Tactics)

leverage: using a great force against a weaker resistance (Defensive Tactics)

M

malfunction: a condition that prevents a weapon from operating normally (Firearms)

mechanical compliance: a method used to gain control over a subject by applying pressure or leverage on a joint by locking it up so that no movement of the joint is possible, causing the subject to comply with verbal direction (Defensive Tactics)

medical alert: a bracelet, necklace, or card that alerts medical personnel to a specific medical condition (First Aid)

motor dysfunction: a method of gaining control over a subject by using an incapacitation technique that causes temporary impairment of muscular control (Defensive Tactics)

muscular system: the system that gives the body shape, protects internal organs, and provides body movement (First Aid)

N

negligence: failure to exercise the standard of care that a reasonably prudent person would have exercised in a similar situation; conduct that falls below the legal standard established to protect others against unreasonable risk of harm, except for conduct that is intentionally, wantonly, or willfully disregarding of other's rights (First Aid)

nervous system: the system that controls voluntary and involuntary body activity, supports higher mental functions such as thought and emotion, allows the individual to be aware of and react to the environment, and keeps the rest of the body's systems working together (First Aid)

night vision: the ability to see clearly in darkness (Vehicle Operations)

O

objective reasonableness: a term the courts have used to describe the process for evaluating the appropriateness of an officer's response to a subject's resistance (Defensive Tactics)

OC: commonly called pepper spray; a type of chemical agent commonly used by law enforcement, usually in the form of handheld canisters and chemical projectiles (Defensive Tactics)

offensive ready stance with an impact weapon: a high-profile stance with the weapon held at a shoulder position to enable a rapid strike (Defensive Tactics)

officer presence: an officer's ability to convey to subjects and onlookers that he or she is ready and able to take control (Defensive Tactics)

open chest injury: an injury that occurs when penetration, such as a knife stab, opens the chest area (First Aid)

open fracture: a fracture where the skin at the injury site is broken, and the bone may protrude through the skin (First Aid)

opportunity: a subject's capacity for carrying out an intention to cause death or great bodily harm to others (Defensive Tactics)

oversteer: the tendency of a vehicle to steer into a sharper turn than the driver intends (Vehicle Operations)

P

pain compliance: a subject's response to a combination of pain and verbal commands to stop resisting (Defensive Tactics)

partial thickness burn: second-degree burn that damages the first two skin layers, which blister and feel very painful (First Aid)

passive resistance: a subject's verbal and/or physical refusal to comply with an officer's lawful direction causing the officer to use physical techniques to establish control (Defensive Tactics)

pat down: a physical frisk of a subject conducted in a predetermined pattern to locate weapons (Defensive Tactics)

penetrating strike: striking a muscle so that the striking object penetrates the muscle and nerves of the target area; a full transfer of kinetic energy that increases the power of the strike (Defensive Tactics)

peripheral nervous system: the system of nerves that connect to the spinal cord and branch out to every other part of the body; it serves as a two-way communication system (First Aid)

peripheral vision: the ability to see above, below, and to the sides (Vehicle Operations)

physical control: achieving compliance or custody through the use of empty-hand or leverage-enhanced techniques, such as pain compliance, transporters, restraint devices, takedowns, and striking techniques (Defensive Tactics)

pitch: a vehicular motion that occurs during acceleration or braking and causes the transfer of a vehicle's weight from front to rear or rear to front (Vehicle Operations)

placenta: the organ that nourishes the developing fetus in the uterus during pregnancy (First Aid)

plain touch/feel doctrine: permits an officer to seize any object "whose contour or mass" he or she identifies as apparent contraband during a pat down (Defensive Tactics)

point shooting: a technique used when a shooter cannot use the sights on the weapon or he or she has no time to align the sight properly; the firearm is viewed as an extension of the arm and pointed at the target (Firearms)

positional asphyxia: a type of asphyxia that happens when the position of a person's body interferes with their ability to breathe. Positional asphyxia can happen if a suspect is placed face down, with their chest on a hard surface, arms restrained behind their back, and left in this position for a significant period of time. It can also happen as a result of accident or illness that places someone in a breathing-restricted position they are unable to get out of. (First Aid)

posting: supporting the balance of the body using a limb (Defensive Tactics)

pressure points: techniques used to control resistant behavior by using pain compliance (Defensive Tactics)

prone position: lying on the stomach face down (Defensive Tactics)

PSI: pounds per square inch; used to measure tire inflation (Vehicle Operations)

pursuit: an active attempt when an officer drives an authorized emergency vehicle (with emergency equipment activated), to apprehend occupants of a moving vehicle if the driver such occupants' vehicle increases vehicle speed, takes other evasive actions, or refuses to stop in an apparent attempt to avoid apprehension (Vehicle Operations)

Pursuit Immobilization Technique (PIT): pursuit termination technique in which an officer stops a violator's vehicle by using the police vehicle to apply force to either the rear right or left side of the violator's vehicle to end the pursuit (Vehicle Operations)

Q

quadrant search approach: dividing the body into four sections horizontally and vertically during a search (Defensive Tactics)

R

radius: the distance from the center to the outside of a circle (Vehicle Operations)

reaction time principle: the amount of time it takes for the brain to process a physical threat and for the body to respond (Defensive Tactics)

reactionary gap: the distance an officer must keep between him- or herself and the subject in order to react effectively against a sudden threat (Defensive Tactics)

reasonable suspicion: the facts or circumstances that reasonably indicate that a person has committed, is committing, or is about to commit a violation of the law (Defensive Tactics)

recovery position: a position where the patient is rolled over (preferably onto the left side) with knees slightly bent; helps maintain an open airway if the patient vomits and may prevent positional asphyxia (First Aid)

redirection: using one's hands to move the subject away (Defensive Tactics)

relative positioning: an officer's position in relation to the subject (Defensive Tactics)

respiratory system: the system that delivers oxygen to and removes carbon dioxide from the blood (First Aid)

restraint device: a tool such as handcuffs designed to temporarily restrain a subject's movements (Defensive Tactics)

rifled slug: a single, hollow lead bullet (Firearms)

roadblock: use of vehicles, barricades, cones, or other objects to partially or completely block traffic flow (Vehicle Operations)

roll: a vehicular motion that occurs when turning and that shifts the vehicle's weight from side to side (Vehicle Operations)

rolling friction: traction created when a vehicle's tires constantly rotate against the road surface without losing contact (Vehicle Operations)

S

safety check: performed each time you pick up, put down, or hand a firearm to another person, and involves pulling back the slide to the locked position or opening the cylinder or bolt to physically and visually check that the firearm is not loaded (Firearms)

Scoville heat unit (SHU): a measure of the heat properties (burning sensation) of capsicum in OC spray (Defensive Tactics)

search: a government intrusion into a place in which a person has a reasonable expectation of privacy (Defensive Tactics)

seizure: a burst of uncontrolled electrical activity between cells in the brain (First Aid)

shock: failure of the heart and blood vessels (circulatory system) to maintain enough oxygen-rich blood flowing to the vital organs of the body (First Aid)

shrimping: the movement in a hip escape; moving from side to side while avoiding or defending against an attack (Defensive Tactics)

sight alignment: the relationship of the front sight and rear sight with the shooter's eye (Firearms)

sight picture: the relationship between the eye, front sight, rear sight, and target (Firearms)

signature marks: the marks left on a subject's body after drive stun applications (CEW/DFSG)

skeletal system: the supporting framework for the body, giving it shape and protecting vital organs; attains mobility from the attached muscles and manufactures red blood cells (First Aid)

skid: the loss of rolling friction and traction that occurs when a vehicle's wheels lock and do not turn while the vehicle is still moving (Vehicle Operations)

skin: the protective covering for the inside of the body; it provides a barrier against bacteria and other harmful substances and organisms; it acts as a communication organ and helps regulate body temperature (First Aid)

snap-back: a strike that is retracted very quickly, thus enabling multiple strikes, creating distance, setting up the next techniques, and causing distraction to the subject (Defensive Tactics)

squib load: a weapon malfunction that occurs when the primer ignites and there is no burn or partial burn of the powder charge (Firearms)

stabilization: immobilizing the subject's head so the subject cannot move or escape (Defensive Tactics)

stalling: a tactical method of safely controlling a suspect until an officer can physically recover, reassess the situation, or backup arrives (Defensive Tactics)

stance: the posture a shooter assumes while firing a shot (Firearms)

strobing: forcefully blinking the eyes using all the muscles in the face, including those in the forehead (Defensive Tactics)

stroke: damage to part of the brain due to the rupture or blockage of a blood vessel (First Aid)

submit: to completely relinquish control to another (Defensive Tactics)

sucking chest injury: a type of open chest injury, such as a gunshot wound, in which air and blood escapes into the area surrounding the lungs, creating a change in the pressure in the chest cavity (First Aid)

superficial burn: a first-degree burn that damages the first layer of skin; becomes red and feels very painful (First Aid)

supine position: lying on the back face up (Defensive Tactics)

support hand: the hand that assists the shooting hand (Firearms)

survival stress: a measure of anxiety caused by an appraisal of a stimulus that leads to an extreme state of arousal (also known as fear-induced stress) (Defensive Tactics)

swelling: the soft tissue that is raised when blood or other body fluids pool beneath the skin at the injury site (First Aid)

T

takedowns: techniques used to bring a resisting subject from a standing position to the ground, making it easier to control him or her (Defensive Tactics)

telegraphing: small eye, hand, or foot movements in the direction that an officer plans to move (Defensive Tactics)

temporary motor dysfunction: a type of incapacitation that causes temporary impairment of muscle control (Defensive Tactics)

totality of circumstances: a test that considers the overall facts of a situation to determine if an officer had the authority to detain someone for committing a crime or to perform a legal search (Defensive Tactics)

touch: nonthreatening, noncustodial physical contact that can be used to support or emphasize a verbal command (Defensive Tactics)

touch pressure: touching the location of a nerve or sensitive area and applying continual, uninterrupted pressure with the tip of the finger(s) or thumb until the subject complies (Defensive Tactics)

tourniquet: a device that restricts blood flow to an extremity such as an arm or leg (First Aid)

transporter/come-along hold: a technique used to move a subject from one point to another with pain compliance and/or mechanical compliance (Defensive Tactics)

traumatic brain injury (TBI): a brain injury that occurs when sudden trauma causes damage to the brain, usually by a blow to the head (First Aid)

triage: a system of sorting and classifying of patients; determines order in which patients receive medical attention (First Aid)

trigger control: results when the trigger finger pulls the trigger straight back with increasing yet constant and steady pressure until the firearm discharges (Firearms)

U

umbilical cord: narrow cord of tissue that connects a developing embryo, or fetus, with the placenta during pregnancy (First Aid)

understeer: the tendency of a vehicle to turn less sharply than the driver intends (Vehicle Operations)

V

vascular neck restraint: a physical restraint compressing certain veins and arteries in the neck to cause a subject to lose consciousness for a brief period of time (Defensive Tactics)

venous bleeding: bleeding where dark red blood flows steadily from a wound, indicating a severed or damaged vein (First Aid)

verbal direction: the use of proper, clear, and concise commands to let a subject know what an officer needs or expects him or her to do (Defensive Tactics)

visual control: the ability to see both the subject's hands and to know that those hands hold no weapons (Defensive Tactics)

W

weapon of opportunity: an item an officer has at hand that can be used as a potential impact weapon when needed, such as a broomstick, flashlight, clipboard, or radio (Defensive Tactics)

wheel tracking: an occurrence that causes the rear wheels to follow a tighter path than the path the front wheels traveled in a turn (Vehicle Operations)

Y

yaw: the transfer of a vehicle's weight causing an end-for-end motion resulting in the vehicle turning 180° on a horizontal plane (Vehicle Operations)

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