

## Introduction (1 of 3)

- Patient assessment is very important.
- EMTs must master the patient assessment process.
- Patient assessment is used, to some degree, in every patient encounter.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Introduction (2 of 3)

- Five main parts:
  - Scene size-up
  - Primary assessment
  - History taking
  - Secondary assessment
  - Reassessment

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Introduction (3 of 3)

- Rarely does one sign or symptom reveal the patient's status.
  - Symptom: subjective condition the patient feels and tells you about
  - Sign: objective condition you can observe about the patient

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Scene Size-up (1 of 2)

- How you prepare for a specific situation
- Begins with the dispatcher's basic information
- Is combined with an inspection of the scene

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Scene Size-up (2 of 2)

- Steps
  - Ensure scene safety.
  - Determine the mechanism of injury/nature of illness.
  - Take standard precautions.
  - Determine the number of patients.
  - Consider additional/specialized resources.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Ensure Scene Safety (1 of 6)

- The prehospital setting is not a controlled and isolated scene.
- It is:
  - Unpredictable
  - Dangerous
  - Unforgiving

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Ensure Scene Safety (2 of 6)

- Ensure your own safety first and your patient's second.
- Wear a public safety vest.
- Look for possible dangers as you approach the scene.
- Typically the way you enter an area is the way you will leave.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Ensure Scene Safety (3 of 6)

- Consider difficult terrain.
- Consider traffic safety issues.
- Consider environmental conditions.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Ensure Scene Safety (4 of 6)

- If appropriate, help protect bystanders from becoming patients.
- Forms of hazards:
  - Chemical and biologic
  - Electricity from downed lines or lightning
  - Water hazards, fires, explosions
  - Potentially toxic environments

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Ensure Scene Safety (5 of 6)

- Forms of hazards (cont'd):
  - Hazards found at every motor vehicle collision scene



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Ensure Scene Safety (6 of 6)

- Occasionally, you will not be able to enter a scene safely.
  - If the scene is unsafe, make it safe.
  - If this is not possible, do not enter.
  - Request law enforcement or other assistance.
  - Beware of scenes with potential for violence.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (1 of 7)

- To care for trauma patients, you must understand the mechanism of injury (MOI).
- Fragile and easily injured areas include:
  - Brain
  - Spinal cord
  - Eyes

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (2 of 7)

- You can use the MOI as a guide to predict the potential for a serious injury.
- Evaluate three factors:
  - Amount of force applied to the body
  - Length of time the force was applied
  - Areas of the body that are involved

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (3 of 7)

- Blunt trauma
  - The force occurs over a broad area.
  - Skin is usually not broken.
  - Tissues and organs below the area of impact may be damaged.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (4 of 7)

- Penetrating trauma
  - The force of the injury occurs at a small point of contact between the skin and the object.
  - Open wound with high potential for infection

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (5 of 7)

- Penetrating trauma (cont'd)
  - The severity of the injury depends on:
    - The characteristics of the penetrating object
    - The amount of force or energy
    - The part of the body affected

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (6 of 7)

- For medical patients, determine the nature of illness (NOI).
- Similarities between MOI and NOI
  - Both require you to search for clues.
- Talk with the patient, family, or bystanders.
- Use your senses to check for clues.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Mechanism of Injury/Nature of Illness (7 of 7)

- Be aware of scenes with more than one patient with similar signs or symptoms.
  - Example: carbon monoxide poisoning
  - Could be an unhealthy situation for the EMT as well

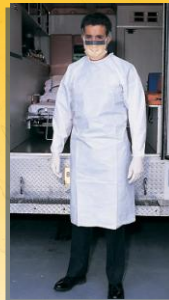
© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Importance of MOI and NOI

- Considering the MOI or NOI early can be of value in preparing to care for the patient.
- You may be tempted to categorize the patient immediately as either trauma or medical.
  - Fundamentals of good patient assessment are the same.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Take Standard Precautions (1 of 3)



- Wear personal protective equipment (PPE).
  - Should be adapted to the prehospital task at hand

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Take Standard Precautions (2 of 3)

- Standard precautions have been developed for use in dealing with:
  - Objects
  - Blood
  - Body fluids
  - Other potential exposure risks of communicable disease

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Take Standard Precautions (3 of 3)

- When you step out of the EMS vehicle, standard precautions must have been taken or initiated.
  - At a minimum, gloves must be in place.
  - Consider glasses and a mask.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Number of Patients (1 of 2)

- During scene size-up, accurately identify the total number of patients.
  - Critical in determining the need for additional resources
- When there are multiple patients, use the incident command system, call for additional units, then begin triage.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Number of Patients (2 of 2)




Source: © Peter Willard, The St. Augustine Record/AP Photos

- Triage is the process of sorting patients based on the severity of each patient's condition.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

### Consider Additional/Specialized Resources (1 of 4)



- Some situations may require:
  - More ambulances
  - Specialized resources

Source: Courtesy of Tempe Fire Department

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

### Consider Additional/Specialized Resources (2 of 4)

- Specialized resources include:
  - Advanced life support (ALS)
  - Air medical support
  - Fire departments, who may handle high-angle rescue, hazardous materials, water rescue
  - Search and rescue teams


© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

### Consider Additional/Specialized Resources (3 of 4)

- To determine if you require additional resources, ask yourself:
  - How many patient's are there?
  - What is the nature of their condition?
  - Who contacted EMS?
  - Does the scene pose a threat to me, my patient, or others?

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com


### Consider Additional/Specialized Resources (4 of 4)



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Primary Assessment


- Begins when you greet your patient
- The goal is to identify and initiate treatment of immediate or potential life threats.
- The patient's vital signs will determine the extent of your treatment.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Form a General Impression (1 of 3)

- Formed to determine the priority of care
- Based on your immediate assessment
- Make a note of the person's:
  - Age, sex, and race
  - Level of distress
  - Overall appearance



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Form a General Impression (2 of 3)

- Position yourself lower than the patient.
- Introduce yourself.
- Address the patient by name.
- Ask about the chief complaint.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Form a General Impression (3 of 3)

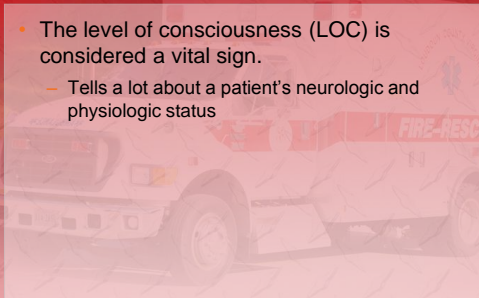
- Assess the patient's skin color and condition.
- Determine if the patient's condition is:
  - Stable
  - Stable but potentially unstable
  - Unstable



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (1 of 9)

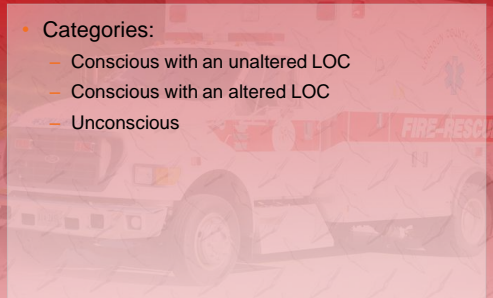
- The level of consciousness (LOC) is considered a vital sign.
  - Tells a lot about a patient's neurologic and physiologic status



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (2 of 9)

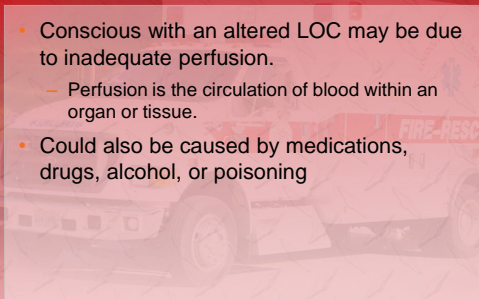
- Categories:
  - Conscious with an unaltered LOC
  - Conscious with an altered LOC
  - Unconscious



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (3 of 9)

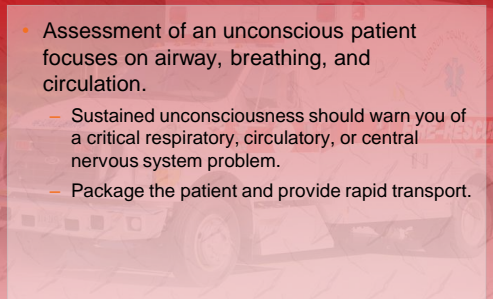
- Conscious with an altered LOC may be due to inadequate perfusion.
  - Perfusion is the circulation of blood within an organ or tissue.
- Could also be caused by medications, drugs, alcohol, or poisoning



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (4 of 9)

- Assessment of an unconscious patient focuses on airway, breathing, and circulation.
  - Sustained unconsciousness should warn you of a critical respiratory, circulatory, or central nervous system problem.
  - Package the patient and provide rapid transport.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (5 of 9)

- To assess for responsiveness, use the mnemonic AVPU:
  - Awake and alert
  - Responsive to Verbal stimuli
  - Responsive to Pain
  - Unresponsive

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (6 of 9)

Test responsiveness to painful stimuli



Pinch earlobe



Press down on bone above eye



Pinch neck muscles

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (7 of 9)

- Orientation tests mental status.
- Evaluates a person's ability to remember:
  - Person
  - Place
  - Time
  - Event

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (8 of 9)

- Evaluates long-term memory, intermediate-term memory, and short-term memory
- The Glasgow Coma Scale (GCS) score can be helpful in providing additional information on mental status changes.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Level of Consciousness (9 of 9)

- Uses parameters that test a patient's eye opening, best verbal response, and best motor response

Eye Opening	Best Verbal Response	Best Motor Response
Spontaneous 4	Oriented conversation 5	Obeys commands 6
In response to speech 3	Confused conversation 4	Localizes pain 5
In response to pain 2	Inappropriate words 3	Withdraws to pain 4
None 1	Incomprehensible sounds 2	Abnormal flexion 3
	None 1	Abnormal extension 2
		None 1

Score 13-15 may indicate mild dysfunction, although 15 is the score a person with no neurologic disabilities would receive.  
Score 9-12 may indicate moderate dysfunction.  
Score 8 or less is indicative of severe dysfunction.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Pupils (1 of 5)

- Diameter and reactivity to light reflect the status of the brain's:
  - Perfusion
  - Oxygenation
  - Condition

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Pupils (2 of 5)

- The pupil is a circular opening in the center of the pigmented iris of the eye.
  - The pupils are normally round and of approximately equal size.
  - In the absence of any light, the pupils will become fully relaxed and dilated.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Pupils (3 of 5)



Constricted



Dilated



Unequal

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Pupils (4 of 5)

- A small number of the population exhibit unequal pupils (anisocoria).
- Causes of depressed brain function:
  - Injury of the brain or brain stem
  - Trauma or stroke
  - Brain tumor
  - Inadequate oxygenation or perfusion
  - Drugs or toxins

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Pupils (5 of 5)

- PEARRL is a useful assessment guide:
  - Pupils
  - Equal
  - And
  - Round
  - Regular in size
  - React to Light

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess the Airway (1 of 4)

- Moving through the primary assessment, always be alert for signs of airway obstruction.
- Determine if the airway is open (patent) and adequate.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess the Airway (2 of 4)

- Responsive patients
  - Patients who are talking or crying have an open airway.
  - Watch and listen to how patients speak.
  - If you identify an airway problem, stop the assessment and obtain a patent airway.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Assess the Airway (3 of 4)

- Unresponsive patients
  - Immediately assess the airway.
  - Use the modified jaw-thrust technique when necessary.
  - Use the head tilt–chin lift technique when necessary.
  - Relaxation of the tongue muscles is a cause of airway obstruction.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess the Airway (4 of 4)

- Signs of obstruction in an unconscious patient:
  - Obvious trauma, blood, or obstruction
  - Noisy breathing (snoring, bubbling, gurgling, crowing, abnormal sounds)
  - Extremely shallow or absent breathing

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (1 of 13)

- Make sure the patient's breathing is present and adequate.
- Assess breathing by:
  - Watching the chest rise and fall
  - Feeling for air through the mouth and nose
  - Listening to breath sounds with a stethoscope over each lung

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (2 of 13)

- Obtain the following information:
  - Respiratory rate
  - Rhythm—regular or irregular
  - Quality/character of breathing
  - Depth of breathing

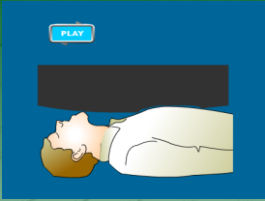
© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (3 of 13)

- Ask yourself these questions:
  - Does the patient appear to be choking?
  - Is the respiratory rate too fast or too slow?
  - Are the patient's respirations shallow or deep?
  - Is the patient cyanotic (blue)?

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (4 of 13)



- Ask yourself these questions (cont'd):
  - Do I hear abnormal sounds when listening to the lungs?
  - Is the patient moving air into and out of the lungs on both sides?

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (5 of 13)

- Administer supplemental oxygen if:
  - Respirations are too fast (more than 20 breaths/min)
  - Respirations are too shallow
  - Respirations are too slow (fewer than 12 breaths/min)



## Assess Breathing (6 of 13)

- Consider providing positive-pressure ventilations with an airway adjunct when:
  - Respirations exceed 24 breaths/min
  - Respirations are fewer than 8 breaths/min



## Assess Breathing (7 of 13)

- Respiratory rate
  - A normal rate in adults ranges from 12 to 20 breaths/min.
  - Children breathe at even faster rates.
  - Count the number of breaths in a 30-second period and multiply by two.



## Assess Breathing (8 of 13)

- Respiratory rate (cont'd)
  - While counting respirations, also note the rhythm.

Age	Range (breaths/min)
Adults and adolescents	12 to 20
Children (1 to 12 years)	15 to 30
Infants	25 to 50

Note: Ranges presented in other courses may vary.



## Assess Breathing (9 of 13)

- Quality of breathing
  - Listen to breath sounds on each side of the chest.
  - Normal breathing is silent.
  - You can always hear a patient's breath sounds better from the patient's back.



## Assess Breathing (10 of 13)



## Assess Breathing (11 of 13)

- What are you listening for?
  - Normal breath sounds
  - Wheezing breath sounds
  - Rales
  - Rhonchi
  - Stridor



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (12 of 13)

- Depth of breathing
  - Amount of air the patient exchanges depends on the rate and tidal volume
  - Nasal flaring and seesaw breathing in pediatric patients indicate inadequate breathing.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Breathing (13 of 13)



Source: Courtesy of Health Resources and Services Administration, Maternal and Child Health Bureau, Emergency Medical Service for Children Program

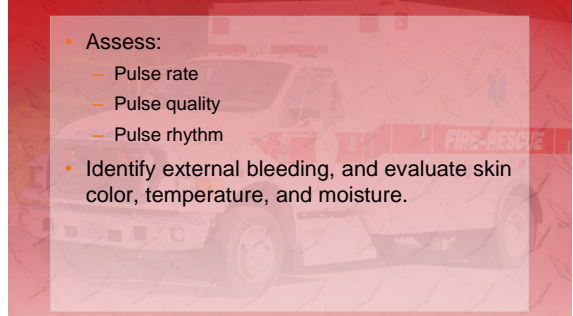
- Depth of breathing
  - Normal breathing is an effortless process that does not affect speech, posture, or positioning.
  - Tripod position
  - Sniffing position



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (1 of 16)

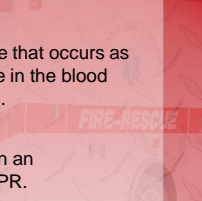
- Assess:
  - Pulse rate
  - Pulse quality
  - Pulse rhythm
- Identify external bleeding, and evaluate skin color, temperature, and moisture.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (2 of 16)

- Assess pulse
  - The pulse is the pressure wave that occurs as each heartbeat causes a surge in the blood circulating through the arteries.
  - Palpate (feel) the pulse.
  - If you cannot palpate a pulse in an unresponsive patient, begin CPR.



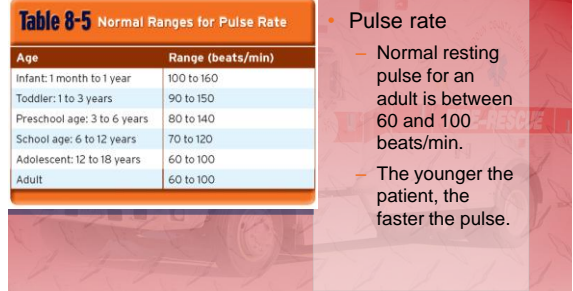
© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (3 of 16)

**Table 8-5** Normal Ranges for Pulse Rate

Age	Range (beats/min)
Infant: 1 month to 1 year	100 to 160
Toddler: 1 to 3 years	90 to 150
Preschool age: 3 to 6 years	80 to 140
School age: 6 to 12 years	70 to 120
Adolescent: 12 to 18 years	60 to 100
Adult	60 to 100

- Pulse rate
  - Normal resting pulse for an adult is between 60 and 100 beats/min.
  - The younger the patient, the faster the pulse.



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (4 of 16)

- Pulse quality
  - Describe a stronger than normal pulse as “bounding.”
  - A pulse that is weak and difficult to feel is described as “weak” or “thready.”

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (5 of 16)

- Pulse rhythm
  - Determine whether it is regular or irregular.
  - When the interval between each ventricular contraction is short, the pulse is rapid.
  - When the interval is longer, the pulse is slower.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (6 of 16)

- The skin
  - A normally functioning circulatory system perfuses the skin with oxygenated blood.
  - Evaluate the patient’s skin color, temperature, moisture, and capillary refill.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (7 of 16)

- Skin color
  - Determined by the blood circulating through vessels and the amount and type of pigment present in the skin
  - Poor circulation will cause the skin to appear pale, white, ashen, or gray.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (8 of 16)



Source: © St. Bartholomew's Hospital, London/Photo Researchers, Inc.

- Skin color (cont'd)
  - When blood is not properly saturated with oxygen, it appears bluish.
  - Changes in skin color may result from chronic illness.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (9 of 16)

- Skin temperature
  - Normal skin will be warm to the touch (98.6°F).
  - Abnormal skin temperatures are hot, cool, cold, and clammy.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (10 of 16)

- Skin moisture
  - Dry skin is normal.
  - Skin that is wet, moist, or excessively dry and hot suggests a problem.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (11 of 16)

- Capillary refill
  - Evaluated to assess the ability of the circulatory system to restore blood to the capillary system
  - Press on the patient's fingernail.
  - Remove the pressure.
  - The nail bed should restore to its normal pink color.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (12 of 16)

- Capillary refill (cont'd)
  - Should be restored to normal within 2 seconds



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (13 of 16)

- Assess and control external bleeding.
  - Bleeding from a large vein is characterized by a steady flow of blood.
  - Bleeding from an artery is characterized by a spurting flow of blood.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (14 of 16)

- Controlling external bleeding can be simple.
  - Apply direct pressure.
  - If bleeding from the arms or legs, elevate the extremity.
  - When direct pressure and elevation are unsuccessful, apply a tourniquet.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (15 of 16)

- Identify and treat life threats.
  - You must determine the life threat and quickly address it.
  - There will be a loss of meaningful communication between you and the patient.
  - Loss of consciousness occurs.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Circulation (16 of 16)

- Identify and treat life threats (cont'd)
  - The jaw muscles become slack, leading to airway obstruction.
  - The patient stops breathing.
  - The heart cannot function without oxygen.
  - Brain cells become damaged.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Perform a Rapid Scan (1 of 2)

- Scan the body to identify injuries that must be managed or protected immediately.
  - Take 60 to 90 seconds to perform.
  - Not a focused physical examination

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Perform a Rapid Scan (2 of 2)



- Follow the steps in **Skill Drill 8-1**.
- Determine if there is spinal injury during this stage of the assessment process.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Priority of Patient Care and Transport (1 of 6)

- Rapid scan assists in determining transport priority.
- High-priority patients include those with any of the following conditions:
  - Difficulty breathing
  - Poor general impression
  - Unresponsive with no gag or cough reflex

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Priority of Patient Care and Transport (2 of 6)

- High-priority patients (cont'd):
  - Severe chest pain
  - Pale skin or other signs of poor perfusion
  - Complicated childbirth
  - Uncontrolled bleeding

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Priority of Patient Care and Transport (3 of 6)

- High-priority patients (cont'd):
  - Responsive but unable to follow commands
  - Severe pain in any area of the body
  - Inability to move any part of the body

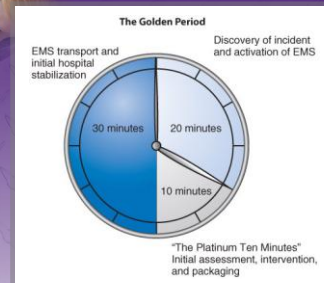
© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Priority of Patient Care and Transport (4 of 6)

- The Golden Period is the time from injury to definitive care.
  - Treatment of shock and traumatic injuries should occur.
  - Aim to assess, stabilize, package, and begin transport within 10 minutes (“Platinum 10”).

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Priority of Patient Care and Transport (5 of 6)



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Determine Priority of Patient Care and Transport (6 of 6)

- Transport decisions should be made at this point, based on:
  - Patient's condition
  - Availability of advanced care
  - Distance of transport
  - Local protocols

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## History Taking (1 of 3)

- Provides detail about the chief complaint and signs and symptoms
- Includes demographic information:
  - Date of the incident
  - Times of assessments and interventions
  - Patient's age, sex, race, past medical history, and current health status

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## History Taking (2 of 3)

- Investigate the chief complaint.
  - Make introductions, make the patient feel comfortable, and obtain permission to treat.
  - Ask a few simple, open-ended questions.
  - Refer to the patient as Mr., Ms., or Mrs., using the patient's last name.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## History Taking (3 of 3)

- If the patient is unresponsive, clues about the incident may be obtained from:
  - Family members present
  - A person who may have witnessed the situation
  - Medical alert jewelry

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Obtain a SAMPLE History (1 of 5)

- Use the mnemonic SAMPLE to obtain the following information:
  - Signs and symptoms
  - Allergies
  - Medications
  - Pertinent past medical history
  - Last oral intake
  - Events leading up to the injury/illness

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Obtain a SAMPLE History (2 of 5)

- Use the OPQRST mnemonic to assess pain.
  - Onset
  - Provocation or palliation
  - Quality
  - Region/radiation
  - Severity
  - Timing

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Obtain a SAMPLE History (3 of 5)

- Document pertinent negatives.
  - Negative findings that warrant no care or intervention
- Taking history on sensitive topics
  - Alcohol and drugs
    - Signs may be confusing, hidden, or disguised.
    - History may be unreliable.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Obtain a SAMPLE History (4 of 5)

- Physical abuse or violence
  - Report all physical abuse or domestic violence to the appropriate authorities.
  - Follow local protocols.
  - Do not accuse; instead, immediately involve law enforcement.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Obtain a SAMPLE History (5 of 5)

- Sexual history
  - Consider all female patients of childbearing age who report lower abdominal pain to be pregnant.
  - Inquire about urinary symptoms with male patients.
  - Ask all patients about the potential for sexually transmitted diseases.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (1 of 13)

- Silence
  - Patience is extremely important.
  - Use a close-ended question that requires a simple yes or no answer.
  - Consider whether the silence is a clue to the patient's chief complaint.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Special Challenges in Obtaining Patient History (2 of 13)

- Overly talkative
  - Reasons why a patient may be overly talkative:
    - Excessive caffeine consumption
    - Nervousness
    - Ingestion of cocaine, crack, or methamphetamines

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (3 of 13)

- Multiple symptoms
  - Expect multiple symptoms in the geriatric group.
  - Prioritize the patient's complaints as you would in triage.
  - Start with the most serious and end with the least serious.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (4 of 13)

- Anxiety
  - Expect anxious patients to show signs of psychological shock:
    - Pallor
    - Diaphoresis
    - Shortness of breath
    - Numbness in the hands and feet
    - Dizziness or light-headedness

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (5 of 13)

- Anger and hostility
  - Friends, family, or bystanders may direct their anger and rage toward you.
  - Remain calm, reassuring, and gentle.
  - If the scene is not safe or secured, get it secured.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (6 of 13)

- Intoxication
  - Do not put an intoxicated patient in a position where he or she feels threatened.
  - Potential for violence and a physical confrontation is high.
  - Alcohol dulls a patient's senses.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (7 of 13)

- Crying
  - A patient who cries may be sad, in pain, or emotionally overwhelmed.
  - Remain calm and be patient, reassuring, and confident, and maintain a soft voice.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (8 of 13)

- Depression
  - Among the leading causes of disability worldwide
  - Symptoms include sadness, hopelessness, restlessness, irritability, sleeping and eating disorders, and a decreased energy level.
  - Be a good listener.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (9 of 13)

- Confusing behavior or history
  - Conditions such as hypoxia, stroke, diabetes, trauma, medications, and other drugs could alter a patient's explanation of events.
  - Geriatric patients could have dementia, delirium, or Alzheimer disease.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (10 of 13)

- Limited cognitive abilities
  - These patients are considered developmentally handicapped.
  - Keep your questions simple, and limit the use of medical terms.
  - Rely on the presence of family, caregivers, and friends to supply answers.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (11 of 13)

- Language barriers
  - Find an interpreter, if possible.
  - If not, determine if the patient understands who you are.
  - Keep questions straightforward and brief.
  - Use hand gestures.
  - Be aware of the language diversity in your community.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (12 of 13)

- Hearing problems
  - Ask questions slowly and clearly.
  - Use a stethoscope to function as a hearing aid.
  - Learn simple sign language during your career.
  - Use a pencil and paper.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Special Challenges in Obtaining Patient History (13 of 13)

- Visual impairments
  - Identify yourself verbally when you enter the scene.
  - Return any items that have been moved to their previous positions.
  - Explain to the patient what is happening in each step of the assessment and history-taking process.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Secondary Assessment (1 of 3)

- Performed at the scene, in the back of the ambulance en route to the hospital, or not at all
- Purpose is to perform a systematic physical examination of the patient
- May be a full-body scan or an assessment that focuses on a certain area of the body

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Secondary Assessment (2 of 3)

- How and what to assess:
  - Inspection—Look at the patient for abnormalities.
  - Palpation—Touch or feel the patient for abnormalities.
  - Auscultation—Listen to the sounds a body makes by using a stethoscope.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Secondary Assessment (3 of 3)

- Use the mnemonic DCAP-BTLS.
  - Deformities
  - Contusions
  - Abrasions
  - Punctures/penetration
  - Burns
  - Tenderness
  - Lacerations
  - Swelling

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Vital Signs (1 of 6)

- Use the appropriate monitoring devices.
  - These devices should never replace your comprehensive assessment of the patient.
- Pulse oximetry
  - A newer assessment tool to evaluate oxygenation



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Vital Signs (2 of 6)

- Pulse oximetry (cont'd)
  - Measures the oxygen saturation of hemoglobin in the capillary beds
  - Patients with difficulty breathing should receive oxygen regardless of their pulse oximetry value.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Vital Signs (3 of 6)

- Noninvasive blood pressure measurement
  - The sphygmomanometer (blood pressure cuff) is used to measure blood pressure.



Source: © WadData, Inc./Shutterstock, Inc.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Vital Signs (4 of 6)



© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Vital Signs (5 of 6)

- End-tidal carbon dioxide
  - Carbon dioxide is the by-product of aerobic cellular metabolism and reflects the amount of oxygen being consumed.
  - Capnography is a noninvasive method.
  - End-tidal CO<sub>2</sub> is the partial pressure or maximal concentration of CO<sub>2</sub> at the end of an exhaled breath.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Assess Vital Signs (6 of 6)

- End-tidal carbon dioxide (cont'd)
  - The normal range is 35 to 45 mm Hg, or 5% to 6% CO<sub>2</sub>.
  - Colorimetric devices provide continuous end-tidal monitoring.
  - Capnometry and capnography provide a digital reading and waveform.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Full-Body Scan

- Systematic head-to-toe examination
- Goal is to identify injuries or causes missed during the primary assessment's rapid scan.
- Follow the steps in **Skill Drill 8-2** to perform a full-body scan on a patient with no spinal injuries.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (1 of 16)

- Performed on patients who have sustained nonsignificant MOIs or on responsive medical patients
- Based on the chief complaint
- Goal is to focus your attention on the immediate problem

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (2 of 16)

- Respiratory system
  - Expose the patient's chest.
  - Look for signs of airway obstruction.
  - Inspect for symmetry.
  - Listen to breath sounds.
  - Measure the respiratory rate.
  - Reevaluate pulse rate and skin and blood pressure.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (3 of 16)

- Cardiovascular system
  - Look for trauma to the chest.
  - Reevaluate pulse, respiratory rate, and blood pressure.
  - Reevaluate the skin.
  - Check and compare distal pulses.
  - Consider auscultation for abnormal heart sounds.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (4 of 16)

- Blood pressure
  - Pressure of circulating blood against the walls of the arteries
  - A drop in blood pressure indicates:
    - A loss of blood
    - A loss of vascular tone
    - A cardiac pumping problem

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (5 of 16)

- Blood pressure (cont'd)
  - Decreased blood pressure is a late sign of shock.
  - High blood pressure may result in a rupture or other critical damage in the arterial system.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (6 of 16)

- A blood pressure cuff contains the following components:
  - A wide outer cuff
  - An inflatable wide bladder
  - A ball-pump with a one-way valve
  - A pressure gauge

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (7 of 16)



- Follow the steps in **Skill Drill 8-3** to measure blood pressure by auscultation.
- The palpation (feeling) method can also be used.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (8 of 16)

- Normal blood pressure
  - Hypotension: Blood pressure is lower than normal.
  - Hypertension: Blood pressure is higher than normal.

**Table 8-6** Normal Range for Blood Pressure

Age	Range, mm Hg
Adults	90 to 140 (systolic)
Children (ages 1 to 8 years)	80 to 110 (systolic)
Infants (newborn to age 1 year)	50 to 95 (systolic)

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Focused Assessment (9 of 16)

- Neurologic system
  - Should be performed with any patient who has:
    - Changes in mental status
    - A possible head injury
    - Stupor
    - Dizziness/drowsiness
    - Syncope

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Focused Assessment (10 of 16)

- Neurologic system (cont'd)
  - Evaluate the level of consciousness and orientation.
  - Assess the patient's thought process.
  - Inspect the head for trauma.
  - Check for bilateral muscle strength and weaknesses.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Focused Assessment (11 of 16)

- Musculoskeletal system
  - Assess for posture and look at joints.
  - Always compare the right side with the left.
  - Look for trauma to the abdomen and for distention.
  - Palpate the abdomen for tenderness, rigidity, and patient guarding.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Focused Assessment (12 of 16)

- Pelvis
  - Inspect for symmetry and any obvious signs of injury, bleeding, and deformity.
- Extremities
  - Inspect for symmetry, cuts, bruises, swelling, obvious injuries, and bleeding.
  - Palpate for deformities.
  - Check pulse and motor and sensory functions.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Focused Assessment (13 of 16)

- Posterior body
  - Inspect the back for tenderness, deformity, symmetry, and open wounds.
  - Palpate the spine from the neck to the pelvis for tenderness and deformity.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com



## Focused Assessment (14 of 16)

- Anatomic regions
- Head, neck, and cervical spine
  - Palpate the scalp and skull.
  - Check the patient's eyes.
  - Check the color of the sclera.
  - Assess the patient's cheekbones.
  - Check the patient's ears and nose for fluid.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (15 of 16)

- Head, neck, and cervical spine (cont'd)
  - Check the upper (maxillae) and lower (mandible) jaw.
  - Open the patient's mouth and look for any broken or missing teeth.
  - Note any unusual odors in the mouth.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Focused Assessment (16 of 16)

- Chest
- Abdomen
  - Palpate the front and back of the abdomen.
  - Four quadrants:
    - Left upper quadrant (LUQ)
    - Left lower quadrant (LLQ)
    - Right upper quadrant (RUQ)
    - Right lower quadrant (RLQ)

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Reassessment (1 of 4)

- Perform at regular intervals during the assessment process
- Repeat the primary assessment.
- Reassess vital signs.
  - Compare the baseline vital signs obtained during the primary assessment.
  - Look for trends.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Reassessment (2 of 4)

- Reassess the chief complaint.
  - Ask and answer the following questions:
    - Is the current treatment improving the patient's condition?
    - Has an already identified problem gotten better?
    - Has an already identified problem gotten worse?
    - What is the nature of any newly identified problems?

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Reassessment (3 of 4)

- Recheck interventions.
  - Check all interventions.
  - Most important are the patient's ABCs.
  - Ensure management of bleeding.
  - Ensure adequacy of other interventions, and consider the need for new interventions.

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com

## Reassessment (4 of 4)

- Identify and treat changes in the patient's condition.
  - Document any changes, whether positive or negative.
- Reassess the patient.
  - Unstable patients: every 5 minutes
  - Stable patients: every 15 minutes

© 2011 Jones & Bartlett Learning, LLC  
www.jblearning.com