The Assessment

The Emergency Assessment



Assessment

- A good assessment begins with a systematic plan
- A good assessment assures that nothing is overlooked
- A good assessment gives the caregiver more confidence they can take care of the student.

Assessment—Its Elements

- Various mnemonic devices serve as tools within the assessment
- The assessment elements are known as the ABCDE assessment
 - A = Airway
 - B = Breathing and Bleeding Assessment
 - C = Circulation (Perfusion) Assessment
 - D = Disability (neurological) assessment
 - D = Determination (Sick Not Sick) Assessment
 - E = Exposure, Environmental, Emotional Assessment

The Assessment

The assessment should be thought of as a loop



The Vital Function Assessment

In 2010, the American Heart Association changed the traditional ABC portion of the assessment to the CAB assessment.

- C = Circulation (Check for a pulse, skin condition)
- A = Airway (Check for a clear airway)
- B= Breathing (Check for breathing and bleeding)

This is the "Life Function" assessment and is the assessment used for anyone who is unconscious.

The Assessment

Problems which effect the vital functions of cardiac function, the ability to breathe, severe bleeding, or mental status are treated as they are found.

All other problems are secondary problems and are managed after the vital functions are stabilized.

Assessment—Sick/Not Sick Priority



Sick

Sick – a priority victim, Emergent

Not Sick – Urgent, or Non-Urgent

Not Sick

- Not sick—someone who has something wrong but they are in no immediate danger.
 - Urgent or non-urgent
 - Not so sick -- Urgent
 - They can wait—Non-Urgent

Sick vs Not Sick

- Deciding SICK or NOT SICK is to determine the need to contact 911 and transport immediately
 - SICK = 911 is always called and the student is transported by ambulance to the hospital
 - NOT SICK
 - URGENT = 911 MAY need to be called and the student transported to the hospital.
 - NON-URGENT = the student be MAY need transport by an adult caregiver to a physician's office or home.

Sick vs Not sick

- The SICK Determination—911 is always called
 - Cardiac or Respiratory Arrest
 - Respiratory Distress or Failure
 - Bleeding that cannot be controlled with direct pressure
 - Temperature above 102 with mental status changes
 - Severe Burns or burns on the face or hands
 - Any loss of consciousness regardless how brief
 - Change in mental status for any reason
 - Rapid pulse without cause
 - Pale, cool, clammy skin

Not Sick--Urgent

- 911 maybe called
 - Minor Burns
 - Suspected fractures without circulatory compromise
 - Fevers of over 100 F (37.8 C)
 - GI symptoms (Nausea Vomiting diarrhea)
 - Lacerations requiring sutures (without excessive blood loss)
 - Abdominal pain after trauma event
 - Abnormal seizure in a student with a seizure history
 - Wheezing

Not Sick—Non-Urgent

Transport may be made by an adult caregiver

- Essentially well with symptoms of a noncommunicable illness
- Headache without fever or change in mental status
- Extremity injury—strains sprains without deformity, loss of function or circulatory compromise
- Abrasions or bruises with minor bleeding
- Mild abdominal pain without other symptoms (ie menstrual cramps)

The ASSESSMENT

First Steps

Scene Safety

- A scene is a living, breathing, ever changing element that needs to be constantly evaluated.
- If the scene poses a hazard to responder safety, that hazard needs to be evaluated.
- If the safety of the responder is ever in doubt, the operation stops until the hazard can be mitigated.

Scene Safety

- The most dangerous scene is the one we feel the most comfortable in.
- Never become complacent in an emergency
- Always have a plan of retreat.

Scene Safety

- Am I safe? Is my Team safe?
 - What is my degree of danger?
 - Can I enter the scene in relative safety?
 - Is there anything I can do to make it safe?
 - If "no" or "unknown" go no further

SCENE SAFETY

- Is the victim/patient safe?
- Can I safely remove the victim from the environment?
- Is there anything I can do to make it safe?
- If "no" or "unknown" go no further

Scene Safety— "I would _

 A small explosion and fire has occurred in the chemistry class. You were in a classroom conducting a health lecture just down the hallway about 40 feet from the chemistry classroom. Everyone has evacuated the room except for the teacher and one student who were nearest the explosion when it occurred. The other students complain of their eyes and throats burning and they are coughing. The fire alarm has sounded and the rest of the building is evacuating. What do you do?

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Scenario Answers

- 1) Is the scene safe or unsafe?
- 2) Is there anything you can do to m ake the scene safe?
- 3) How do you care for the victims still in the classroom?

Don't become part of the problem

Assessment—ABC or CAB The Vital Function Assessment

Assessment – First Steps

- Assessment of the victim begins on approach
 - The "from the door" or " at a distance" assessment
 - Position
 - Mental Status

Assessment – From the Door

- Position of the victim
 - How is the victim
 - Sitting
 - Supported /unsupported
 - "Tripod position"
 - Standing
 - With or without assistance
 - Lying
 - Supine vs recumbent
 - A not so sick or a very sick person will lie down

Assessment—On approach

- Movement
 - Seizure activity
 - Attempting to get up or move
- Noises
 - Talking
 - Coughing
 - Stridor
 - Wheezing

Assessment—On Approach

- If the student or victim is awake and moving around observe for any threatening behavior.
- If the person is being aggressive or possesses a weapon, move away to a safe place and wait for assistance.

Assessment –At the Victim

- AVPU Assessment on arrival at the victim's side.
 - A = Awake, alert, arousable
 - V = Responds to verbal stimuli (Hey! Are you okay!")
 - Eye opening or moaning
 - P = Responds to physical stimuli
 - Eye opening, moaning, pushing or pulling away from the stimulus
 - Unresponsive

Primary Assessment--CAB

- Establish if the person is conscious or unconscious
 - "Hey, are you okay"
 - Tap on the shoulder
 - Rub the sternum



Assessment – First Steps

 If the student is unresponsive, difficult to wake up, or is minimally responsive, continue with the ABC or the CAB assessment

Assessment—Vital Functions

- If unresponsive or minimally responsive
 - ABC or CAB assessment
 - C= Circulation
 - Feel for a pulse



CAB Assessment

- A= Airway
 - Assess for an open (patent) airway
 - Can air pass
 freely through
 the nose or mouth?



CAB ASSESSMENT

- B = Breathing
- Does the victim seem to have more effort to breathe?
- Is there minimal chest movement? (shallow breathing)
- Is there adequate rate of breathing? (too slow or too fast?)
 - Look for the reason

CAB Assessment

- The purpose of this course is not to give instruction in CPR.
- In the next session, the step by step instruction will be reviewed of the CAB Assessment, CPR and use of the AED
 - American Heart Association, Basic Life Support
 - American Red Cross

Assessing Vital Signs

- Infants are not just small children
- Children are not just small adults
- Each have their normal vital sign parameters
- The assessment of vital signs should be done in comparison of what is normal for that age range of child.

Normal Respiratory Rates of School Aged Children

AGE	RESPIRATORY RATE
PRESCHOOL (3-6 years)	22-34
SCHOOL AGED (6-12 years)	18-30
ADOLESCENT (12-18 years)	12-16

Normal Pulse Rates in School Aged Children

AGE	PULSE RATE
PRESCHOOL(3-6 years)	90-150
SCHOOL AGE (6-12 years)	70-120
ADOLESCENT (12-18 years)	60-100

Low Normal Systolic Blood Pressures for School Aged Children

AGE	SYSTOLIC BLOOD PRESSURE
PRESCHOOL (3-6 years)	Greater than 75
SCHOOL AGED (6-12 years)	Greater than 80
ADOLESCENT (12-18 years)	Greater than 90

Perfusion vs Blood Pressure

- Perfusion is the ability of cardio pulmonary system to meet the oxygen demands of the vital organs (ie, Brain, Kidneys, Liver, Heart)
 - Through adequate oxygenation
 - Through adequate circulation.
 - Through adequate circulating volume

Perfusion vs Blood Pressure

- A problem with perfusion is demonstrated last in the blood pressure value.
- By the time the blood pressure drops, it may be too late.

Assessing Vital Signs

- Vital Signs should be measured with consideration given to circumstances
 - Has the student been exercising?
 - Is the student emotionally upset?
 - What medications or drugs has the student taken?
 - Is a fever present?

Completing the assessment

- We have performed the vital function assessment and we have determined the student's priority (SICK or NOT SICK)
- What's next? What other considerations in assessment should be made?

The Assessment

- Exposure, Environment, Emotional
 - A reminder to consider what the student has been exposed to (drugs, alcohol, hazardous material, injury mechanism, nature of illness ect)
 - Environment may include the home environment, potential abuse situation, nutritional resources, as well as environmental elements of temperature extremes.
 - Emotional may involve behavioral issues of medically complex or behaviorally challenged students

More Considerations; E = Environment, Exposure, Emotional

- Consider the environmental conditions the student was expose to
 - Temperature extremes
 - Physical activity
- Disease processes
 - Immunizations up to date
 - Exposure to communicable illness
 - Concomitant disease processes

Nature or Mechanism?

- What has caused this student to present in this way?
 - Mechanism: Traumatic incidents
 - Blunt or penetrating
 - Severity
 - Associated injuries
 - Nature; Illness
 - Chronic or acute
 - Underlying conditions

Head to toe Assessment

- Start at the head and move to the feet then assess the arms.
- Touch the areas you are assessing.
- If any immediate life threats present, stop and manage the life threat before continuing.

DOTS = for Head to Toe Assessment

- DOTS Mnemonic for assessing trauma
 - D = Deformities (angulations, asymmetry, not uniform)
 - O= Open Wounds (Lacerations, Abrasions, Burns, Punctures, Penetrations)
 - **T**= Tenderness



Assessment Tools

- Different Mnemonics and tools are used to aid in the assessment to recognize potentially life threatening circumstances.
- These tools are to guide the caregiver.

Assessment—First Steps

Assessment Triangle -- A Tool to use.
 Good for young children
 Who are not good at
 Describing what is
 Wrong with them



Using the Assessment Triangle

- Appearance/Activity= Mental Status
 - Alert,
 - Not alert
 - interactive with environment.
 - Appropriate responses
 - Inappropriate responses



Using the Assessment Triangle

- Work of Breathing =
 - Increased Effort,
 - Rate
 - Position
 - Sitting up and Leaning forward
 - Lying down



Using the Assessment Triangle

- Circulation to skin=
 - Pink
 - Warm
 - Dry or
 - Pale , Ashen, or marbled
 - Cool
 - Moist



CIRCULATION

The SAMPLE Assessment

- The SAMPLE assessment is a mnemonic to ask questions about the current medical history and to discover potential underlying problems.
 - S = Signs and symptoms
 - A = Allergies
 - M= Current Medications
 - L = Lasts
 - Last oral intake
 - Last medication dose
 - Last menstrual period
 - E=Events leading up to...

Severity Assessment—OPQRST

- O = Onset—What were you doing when this started?
- P = Provoke/Paliate What makes it worse or better Problem – How does the Student describe the Problem.
- Q = Quality Dull, sharp, burning
- R = Radiation- Does it stay in one place or does it go somewhere else?
- S = Severity –on a scale of 1-10, how bad is this episode?
 - = Signs and Symptoms related to the problem
- T = Time—When did this start? Sudden or Gradual?

Pain, or Severity Assessment

- How does this pain or this episode compare to other pain or previous episodes?
- The 0-10 pain Scale
 - 1 is no pain or no symptoms
 - 10 is the worst pain or the worst episode or is as bad "as the time they put me in ICU".
 - Wong-Baker



TICLS Assessment for Children

- T = Tone.
 - Muscle Tone (Alert or listless)
- I= Interactivity
 - Age appropriate responsiveness
- C = Consolability
 - Able to be comforted



with food or toys or primary caregiver presence.

TICLS Assessment Con't

- L = Look or gaze
 - Focused or looking off in the distance
- S = Speech or cry
 - Slurred speech
 - Age appropriate orientation
 - Weak effort to speak or cry
 - Raspy or hoarse

Medic Alert Tags—

Search as a part of the hands on Assessment



E= Exposure, Environment, Evaluation

Continuous Assessment

- Always go back and re-assess the interventions and repeat the assessment until help arrives or the student is handed over.
 - Sick-Emergent cases should have a reassessment every 2-5 minutes
 - Not Sick—Urgent should be reassessed every 5-10 minutes
 - Not Sick—Non- Urgent cases should be reassessed every 10-15 minutes

Pause for a knowledge check

 You are called because a student has collapsed in the hallway. As you approach the area you see a group of students gathered around someone laying prone on the floor. You see no movement from the victim despite other students shaking them.

Pause for a Knowledge check

- As you reach the student, what would your next action be?
 - Continue to shake them?
 - Tell everyone to go away the student is only faking?
 - Contact the principle for help to move the student to the health room?
 - Send one of the bystanders to call 911 and get an AED?
 - Would you classify the student as SICK or NOT SICK?

Pause for Knowledge Check

- You would have someone contact 911.
 - The student is unresponsive and the reason is not important at this moment.
 - Under the best of circumstances EMS has a 5-8 minute response time. In rural areas it might be much longer. It is more important to get EMS started and not waste time
 - Enlist the aid of the other students in the area to help guide EMS to your location.
- Because the student will not wake up, the classification is SICK.

Scenario

- In the gymnasium a student is on the floor complaining of severe pain in her left upper arm and shoulder and traveling down her arm to her fingertips. She is awake, has no difficulty breathing, did not bump her head and has no obvious bleeding. Her skin is flushed, warm and moist.
- 1) is this student SICK or NOT SICK?

Scenario: Answers

- This student can be determined to be NOT SICK.
 She shows no life threats.
- So what next for this student?

Scenario

A 5th grade student is brought to the health aid office after lunch period. She is complaining of severe abdominal pain that has gotten worse throughout the day. She is seated in a chair, leaning over holding her abdomen and crying.

Scenario

- Let's do the assessment:
- AVPU= Awake and Talking
- CABDE =
 - C = She has a radial pulse—110
 - A & B= She is talking and crying
 - D = She knows where she is and what is going on.
 - E = She has had abdominal pain since waking up and it has gotten worse.

Other Considerations

- SAMPLE Assessment
 - S= Signs and Symptoms –She is holding her lower abdomen and leaning forward.
 - Allergies= She has no medication allergies but is allergic to strawberries and environmental allergens
 - Medications She takes an OTC antihistamine for her environmental allergies
 - Past medical—None significant
 - Events leading up to—Was at lunch and began to vomit.

Scenario

- OPQRST Assessment
 - Onset –She woke with abdominal pain this morning but her mother insisted she got to school since she was not running a fever or having diarrhea.
 - Provocation/Palliation It is worse when she straightens up and feels better when she leans forward or lies down.
 - Quality She says it is a crampy type of pain.
 - Radiation/Referred It hurts more to the right side.
 - Severity—She says it is an 8/10
 - Time—This began when she woke up this morning and had gotten worse.

Vital Signs

- Pulse is 110
- Respirations are 18 and irregular
- Blood pressure is 100/70
- Temperature is 100.8
- Skin is warm and moist

Time to make a decision

- Is this student Sick or Not Sick?
- Is this student Emergent, Urgent, or Non-Urgent?
- What is your disposition of this student?
 - The mother is not available and is not answering her cell phone
 - The father is non-custodial parent living in another state
 - There is a maternal grandmother in the home