

EAST BAY REGIONAL PARK
DISTRICT
LIFEGUARD ACADEMY

Day 5



Inspection



Housekeeping

- Peak Season Availability due tomorrow.
- USLA knowledge review packets due day 8.
 - ▣ They were handed out last week
- Today's Theme: Teamwork
- Guest Speaker: David Goldner



Administering Emergency Oxygen Final Exam

15 questions

80% correct to pass

Pay Attention!

BRAIN GAMES
ANOTHER NEW
EPISODE
NEXT

EXPLORER



natgeotv.com



Introduction to Title 22

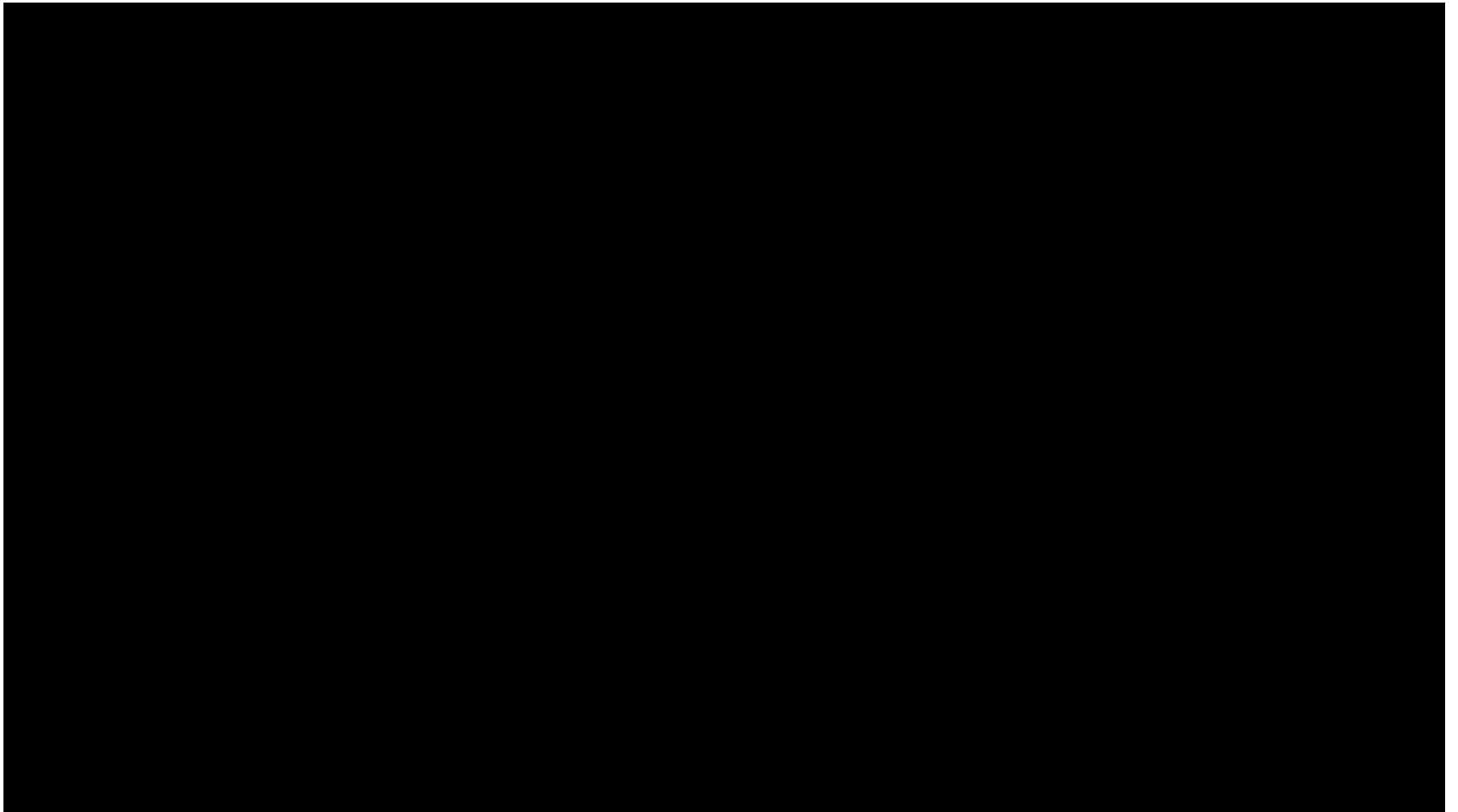
Title 22

- California law requires all ocean, public beach and public swimming pool lifeguards receive not less than 15 hours in first aid training and not less than six hours in CPR training
- The American Red Cross Title 22 course meets the required criteria.
- California law defines public safety personnel as fire fighters, peace officers and lifeguards
- The Title 22 first aid statute became law in 1987

Title 22

- Title 22 provides more information on many topics taught in the lifeguarding course
- Pay attention to everything, even if it seems like review as you will be tested on the Title 22 standards
- 4 exams that total 80 questions
 - ▣ Must pass each with 80% or better
- Key points packet distributed today will be your text for the course

Emergency Medical Responders



EMS Yesterday and Today

- ❑ Firefighters were the first EMRs trained in CPR and First Aid
- ❑ Developed in 1973 as a result of the enactment of the Emergency Medical Services Act by Congress
- ❑ Today, the National Highway Traffic Safety Administration (NHTSA) oversees the national EMS system.



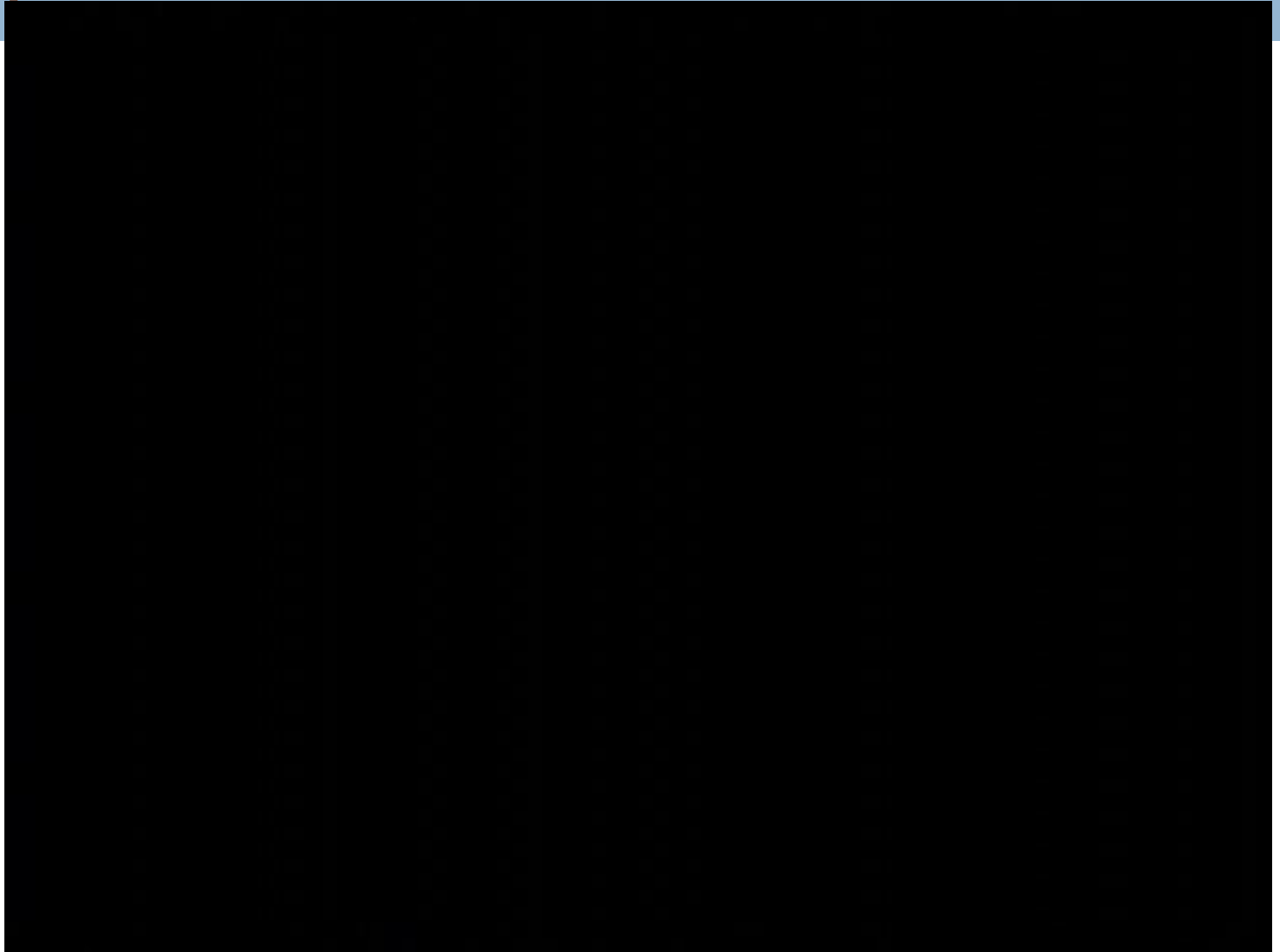
The Emergency Medical Services System and the First Responder

- Ten components, known as the NHTSA Technical Assistance Program Assessment Standards, make up an effective EMS system.
 - Regulation and policy
 - Resource management
 - Human resource training
 - Transportation
 - Facilities
 - Communication
 - Public information and education
 - Medical oversight
 - Trauma systems
 - Evaluation

Levels of Training

- There are four nationally recognized levels of training for prehospital emergency care
 - Emergency Medical Responder
 - Most basic
 - Provides care until more highly trained professional arrive
 - Professional rescuer with basic life support training
 - Emergency Medical Technician
 - Requires 110 hours of training
 - Assumes responsibility from EMR
 - Advanced Emergency Medical Technician
 - Additional training over EMT
 - Paramedic
 - Most highly trained prehospital responder

The Role of the Emergency Medical Responder



The Emergency Medical Responder

- Emergency Medical Responders have six primary responsibilities
 1. Ensure safety for self and bystanders
 2. Gain access to victim
 3. Identify any immediate life threatening conditions
 4. Summon more advanced medical personnel when needed
 5. Provide care for victim
 6. Assist more advanced medical personnel

The Emergency Medical Responder

- First responders also have several secondary responsibilities:
 - Summon specialized assistance
 - Control and direct bystanders
 - Document actions and observations
 - Reassure or comfort the victim's loved ones

The Job of the First Responder

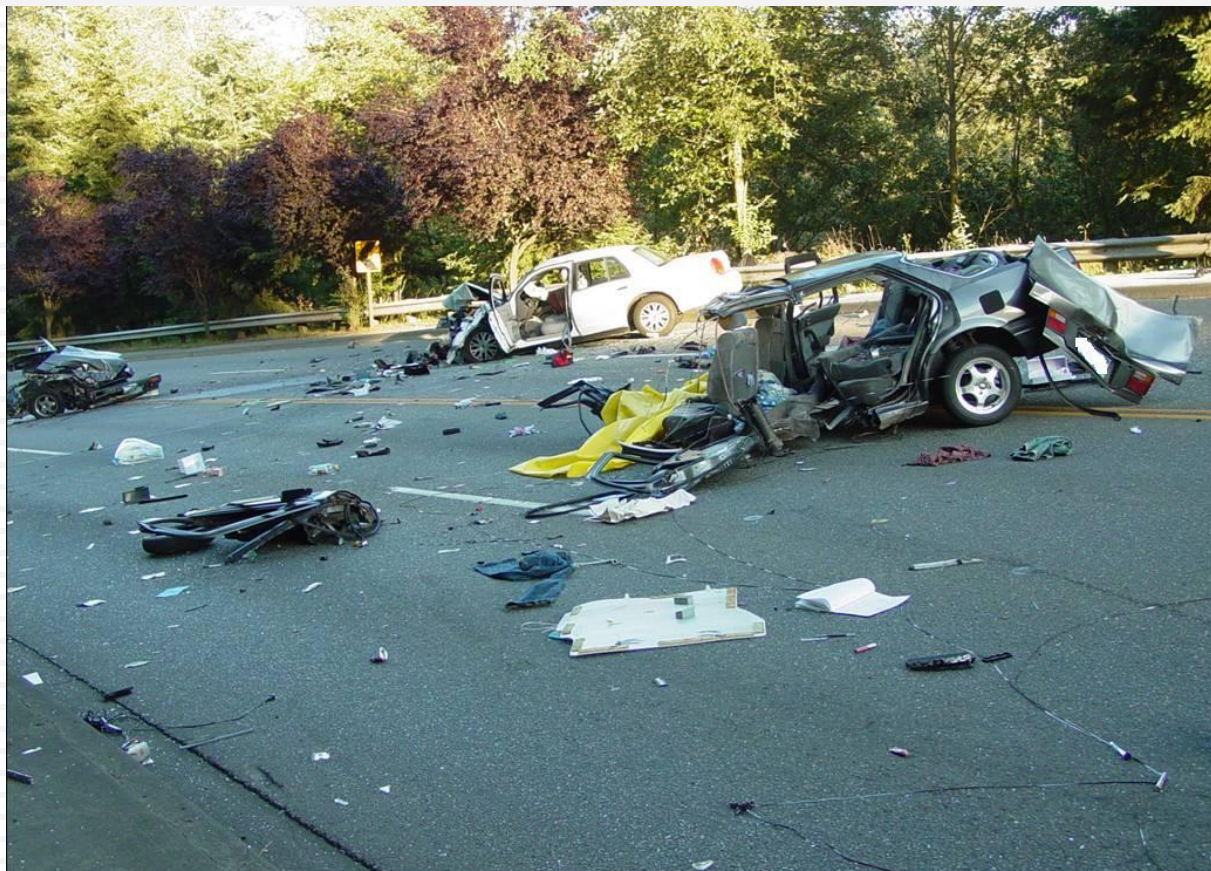
- All responders are expected to possess certain characteristics
 - Maintain caring attitude
 - Control fears
 - Present professional appearance
 - Maintain professional level skills and knowledge
 - Stay fit and healthy

Medical Direction

- Medical direction refers to the process by which a physician directs the care provided by out-of-hospital providers to individuals who are injured or ill.
- Typically a medical director assumes responsibility for the care provided, indirectly or directly
- EMS System must have medical direction to oversee their operation



Scene Size Up



Dispatch Information

- Information given by dispatch is essential because it gives the first clues about what you may encounter, including potential hazards.
- This clue will also affect the PPE and other equipment that may be required.
- May not always be accurate

Safety

□ Scene Safety

- Safety includes both personal safety and the safety of others
- Use each of your senses to size up the scene
 - Look and feel for hazards
 - Listen for unusual sounds or alarms
 - Smell to detect unusual or unexpected odors
- Always observe the scene for dangers such as traffic, unstable structures, downed electrical lines, leaking fuels, smoke, fire, glass, swift moving water, etc.



Guidelines for Personal Safety

- Take time to evaluate the scene.
- Wear appropriate personal protective equipment (PPE).
- Do not attempt to do anything you are not trained to do.
- Get the help needed by notifying additional personnel.

Guidelines for Others' Safety

- True scene safety is a continuous, not an initial, process.
- Never move a patient unless there is immediate danger.
- Continuously scan for possible hazards.
- Use appropriate emergency moves if in immediate danger.
- Be alert for potential bystander dangers.

Mechanism of Injury

- Vehicle collisions
 - Head-on crash
 - Rear-end crash
 - Side impact
 - Rotational impact
 - Rollover
- Blunt or penetrating injuries
- Falls
- Blast injuries

Nature of the Illness

- In some situations, you may be called to a scene because a person is ill and has no evidence of trauma, but patient has signs and symptoms of illness
- Recognizing the nature of the illness helps plan the steps to provide immediate care.
- The EMR needs to scan the scene for items that may provide clues to the problem and consider the patient's location and environment.

Additional Resources

- Advanced life support
- Air medical transport (Air Ambulance)
- Utility department
- Fire department
- Law enforcement
- Specialized resources, such as HAZMAT

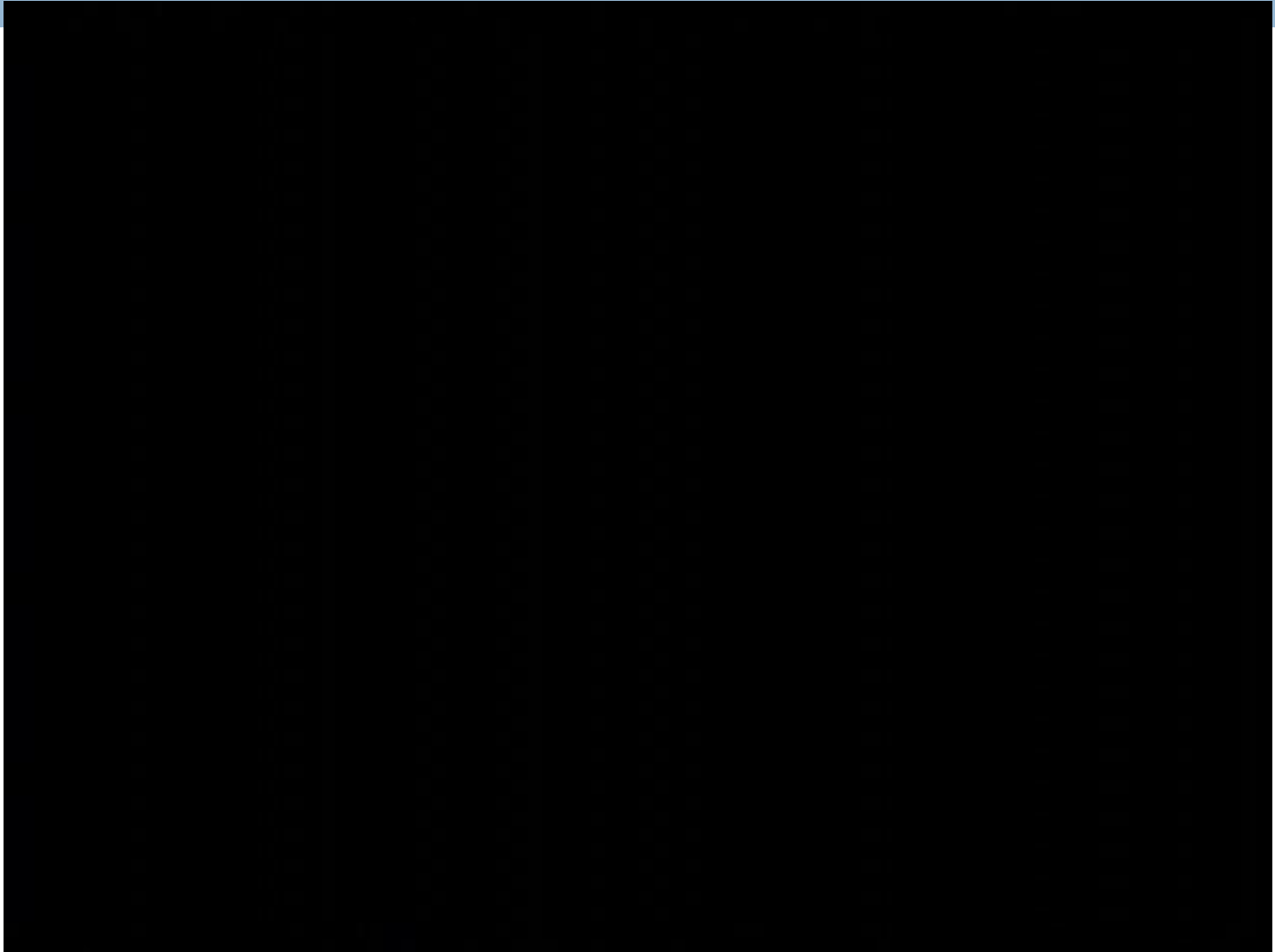


Primary Assessment

Primary Assessment

- What is the purpose of the primary assessment?

Performing a Primary Assessment



Importance of Scene Size Up

- Scene size-up must always be done before any care can be provided.
- Make sure the scene is safe for you, other rescuers, the patient and any bystander.
- If you lack the training and equipment, summon appropriate personnel
- Nothing is gained by risking your own safety

Recognizing all Patients

- Look carefully for more than one patient
- Its easy to overlook small children or infants if they aren't crying
- Look for “walking wounded” at traffic collisions

Summoning Advanced Personnel

- Unconsciousness or altered LOC
- Breathing problems
- Prolonged chest pain or persistent abdominal pain/pressure
- No pulse
- Seizures, stroke or severe burns
- Suspected head, neck or spinal injuries
- Severe external bleeding
- Suspected or open fracture

The Role of Bystanders

- Look for bystanders who are in potential danger and instruct them to move to safety
- Ask anyone present how many people are involved
- Ask bystanders if they can tell you what happened, or if they can help in other ways, such as indicating whether the patient has any medical problems or allergies.

General Impression of the Patient

- General impressions alert responders to serious problems that require assistance or resources
- Look for signs and symptoms
 - Signs are observed (i.e. bleeding, unusual skin signs, etc.)
 - Symptoms are what the patient reports (pain, nausea, etc.)
- As you perform the primary assessment, check for immediate life threatening conditions
 - This means assessing whether the patient is:
 - Conscious
 - Has open airway
 - Is breathing
 - Has pulse
 - Is not severely bleeding
- The need to determine if spinal precautions are necessary is based primarily on the general impression and MOI
 - Significant MOI would require spinal precautions

Level of Consciousness

- Identify yourself as an Emergency Medical Responder
- Obtain consent
- Approach from the front and ask:
 - ▣ What happened?
 - ▣ What is your name?
 - ▣ Where are you?
 - ▣ What day of the week is it?
- Adapt questions based on the age of the patient

LOC-AVPU

A = Alert

V = Verbal

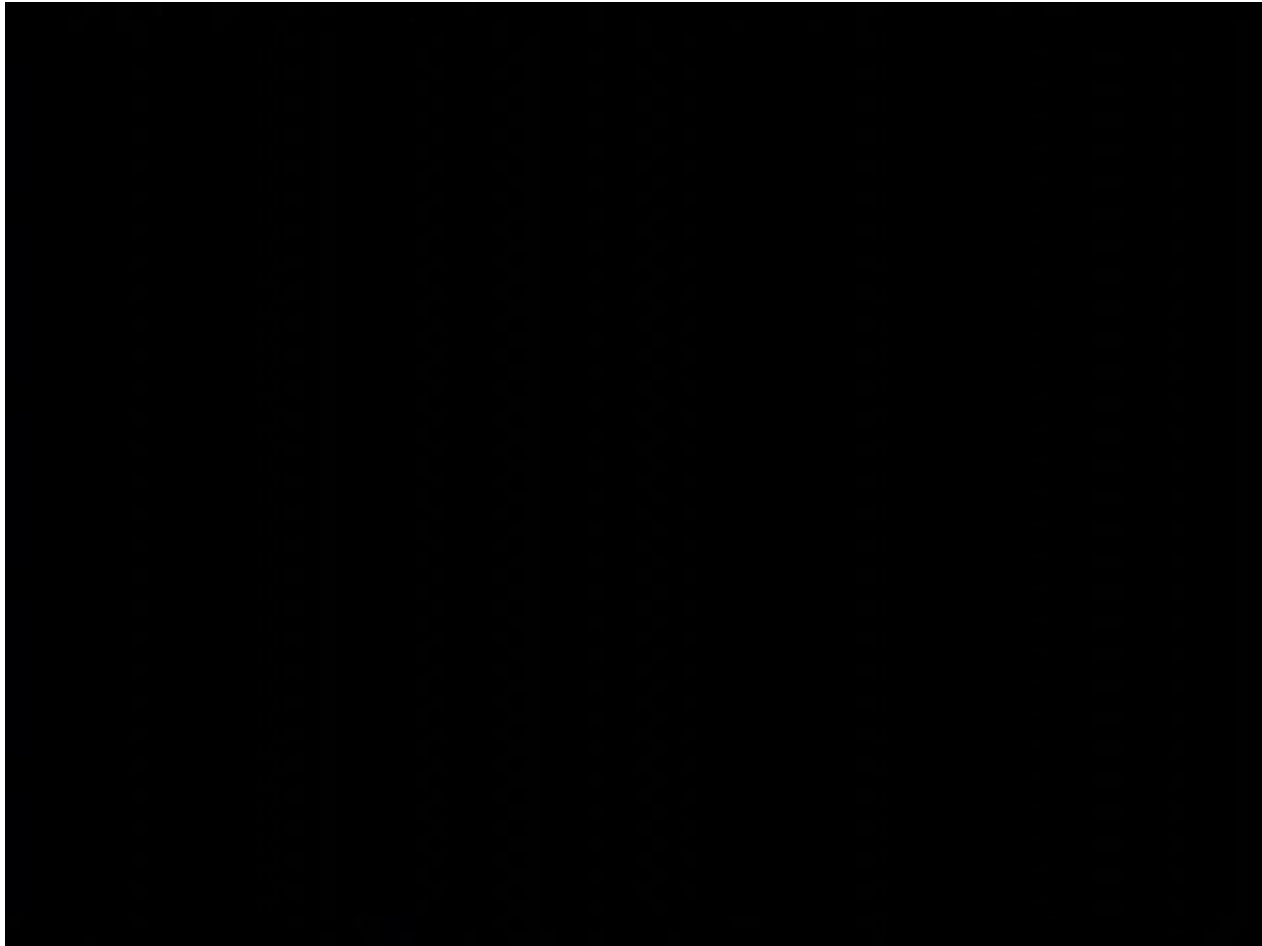
P = Painful

U = Unresponsive



History Taking and Secondary Assessment

History Taking and Secondary Assessment



Obtaining Focused/Medical History

- Once the primary survey is complete and no life threatening emergencies are found, proceed to the secondary assessment
- Three basic steps
 1. Interview victim and bystanders to get information about injury/illness
 2. Check the victim's vital signs
 3. Do a head to toe examination

Obtaining the Focused/Medical History

- Finding out as much information as possible is crucial
- Obtaining a history involves asking a patient about the incident and any existing medical conditions
 - ▣ It should not take much time
 - ▣ It may be done before or during the physical exam
- For responsive patients, a history is usually obtained first
- For patients with trauma or who are unresponsive, a history is usually performed after the physical exam

Components of a Patient History

- Chief complaint
 - Reason patient asks for help
- Mechanism of injury (MOI)/nature of illness
 - What caused person to be hurt or sick
- Pain
- Other relevant medical information

SAMPLE History

- **S**igns and symptoms
- **A**llergies
- **M**edications
- **P**ertinent past medical history
- **L**ast oral intake
- **E**vents leading up to the incident

Secondary Assessment

- Purpose: To locate and further assess the signs and symptoms of an injury or illness
- Head-to-toe exam
 - Focused Physical Exam Focused assessment
 - Examine patient systematically, with special emphasis on areas suggested by chief complaint
 - Detailed physical exam

DOTS

- **Used to identify signs of injury**
 - **D**eformities
 - **O**pen injuries
 - **T**enderness
 - **S**welling

Pain Assessment – OPQRST

- **O**nset
- **P**rovocation
- **Q**uality
- **R**egion/radiate
- **S**everity
- **T**ime

Rapid Trauma Assessment: DECAP-BTLS

- **D**eformities
- **C**ontusions
- **A**brasions
- **P**unctures/penetrations
- **B**urns
- **T**enderness
- **L**acerations
- **S**welling

Checking Vital Signs

- Checking vital signs can help determine how the body is responding to injury or illness.
- Watch for changes in vital signs
- The following should be checked:
 - ▣ LOC
 - AVPU, LOC X4
 - ▣ Pulse
 - Use radial artery for conscious, carotid for unconscious and brachial for infants
 - ▣ Breathing
 - Note irregular breathing
 - ▣ Skin Appearance and Temperature

Normal Pulse Rates

- Adult
 - ▣ 60-100 beats per minute
 - ▣ A well conditioned athlete may have a pulse of 60 beats per minute or less
- Children
 - ▣ 70-130 beats per minute (depending on age)
- Infants
 - ▣ 80-160 beats per minute (depending on age)

Pulse Problems

- Irregular pulse
- Weak or hard-to-find pulse
- Excessively fast or slow pulse



Normal Breathing Rates

- Adult
 - ▣ 12-20 breathes per minute
- Child
 - ▣ 15-30 breathes per minute
- Infant
 - ▣ 25-50 breathes per minute

Signs of Abnormal Breathing

- Shallow breathing
- Noisy Breathing
 - Gurgling
 - Whistling
 - Crowing
 - Snoring
- Increased effort to breathe
- Tripoding
- Painful breathing

Detailed Physical Exam

- Systematic exam that may be conducted once the focused history and physical exam have been completed.
- Not carried out on every patient
- Involves looking (inspection), listening (auscultation) and feeling (palpation).
 - Head
 - Neck
 - Back
 - Chest
 - Abdomen
 - Pelvis
 - Extremities

Head

- Inspect eyes for pupil dilation and reaction to light
- Inspect ears, nose and mouth for blood or fluid



Neck

- If there appears to be no injury to neck, ask victim to move head from side to side



Shoulders

- If there appears to be no injury to shoulder, ask victim to carefully shrug their shoulders



Chest

- Ask victim to take a deep breath and exhale



Abdomen

- Apply slight pressure to four abdominal quadrants
- Note if soft or rigid



Hips

- Place both hands on pelvis and push in gently



Legs

- If no apparent injury, ask victim to bend the knee
- Check feet and toes for CMSTP



Arms

- If no apparent injury, ask victim to bend elbow
- Check hands and fingers for CMSTP



Back

□ Palpate



Head to Toe Exam

- Once exam has been completed, care for any secondary injuries found
- If victim is not in pain, and has no apparent injuries, have victim rest in a sitting position for a while and then help him or her stand when ready

Ongoing Assessment

- Every 5 minutes if patient unstable; every 15 minutes if patient is stable
- Reassessment of—
 - Primary assessment
 - Vital signs
 - Chief complaint
 - Interventions or care provided



Medical Emergencies Part I

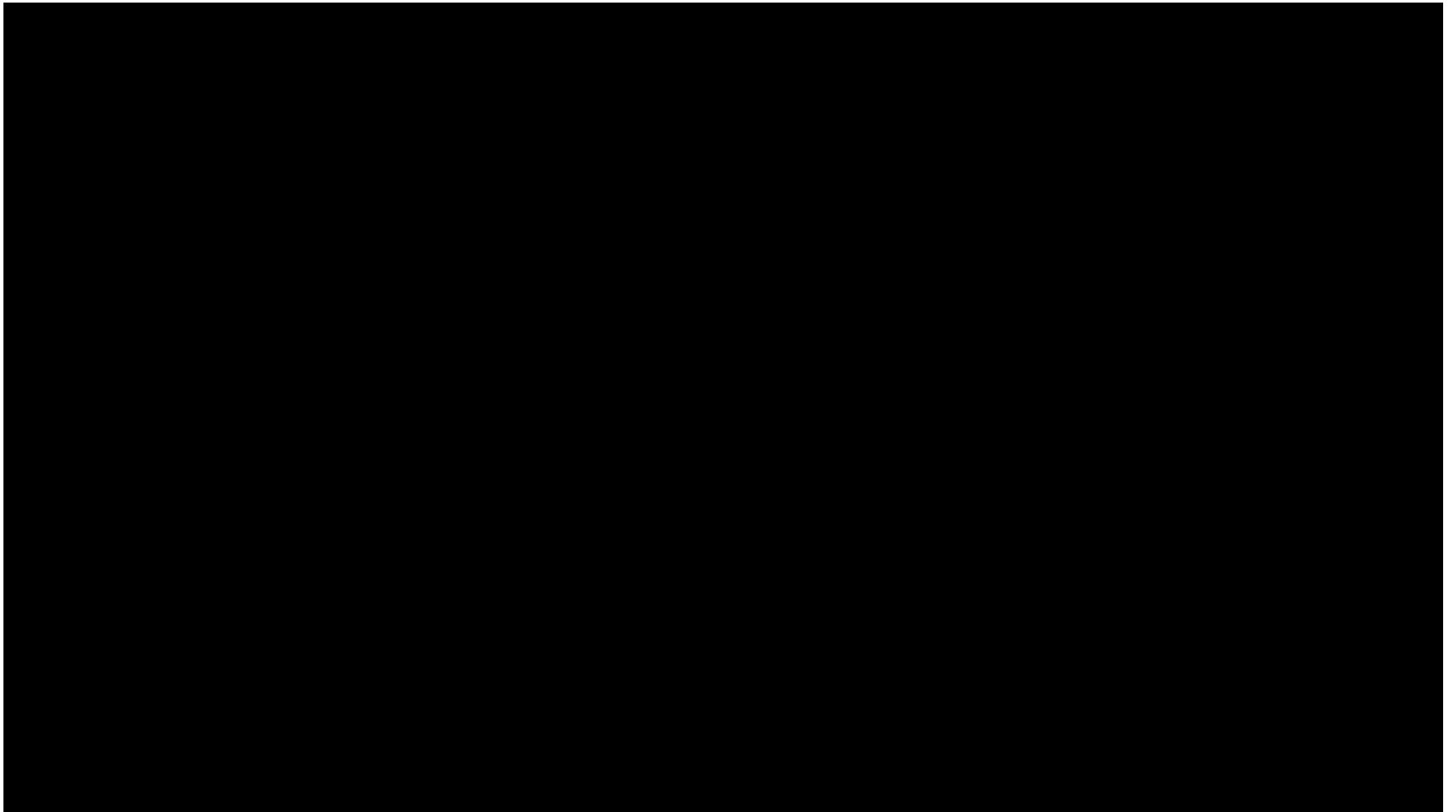
General Medical Complaints

- Guidelines for care are the same as for any emergency.
 - Size-up the scene.
 - Perform a primary assessment.
 - Conduct a SAMPLE history and secondary assessment.
 - Summon more advanced medical personnel.
 - Help the patient as necessary.
 - Keep the patient safe.



Altered Mental Status

Altered Mental Status



Altered Mental Status

- Sudden or gradual change in a person's LOC
- Drowsiness or confusion
- Partial or complete loss of consciousness

Causes of Altered Mental Status in Adults 1 of 2

- Fever or infection
- Poisoning or overdose
- Blood sugar/endocrine problems
- Head injury
- Inadequate oxygenation or ventilation

Causes of Altered Mental Status in Adults 2 of 2

- Conditions leading to decreased blood flow or oxygen to the brain
- Cardiac or diabetic emergencies
- Shock
- Stroke
- Behavioral illness
- Seizures

Fainting

- Caused by decreased blood flow or oxygen to the brain
- Can be caused by emotional shock, pain, overexertion or medical conditions
- Also known as syncope

Causes of Altered Mental Status in Children

- Respiratory failure
- Hypoxemia
- Shock
- Hypoglycemia
- Brain injury
- Seizures
- Poisoning or intentional overdose
- Sepsis
- Meningitis
- Hyperthermia or hypothermia

Care for Altered Mental Status

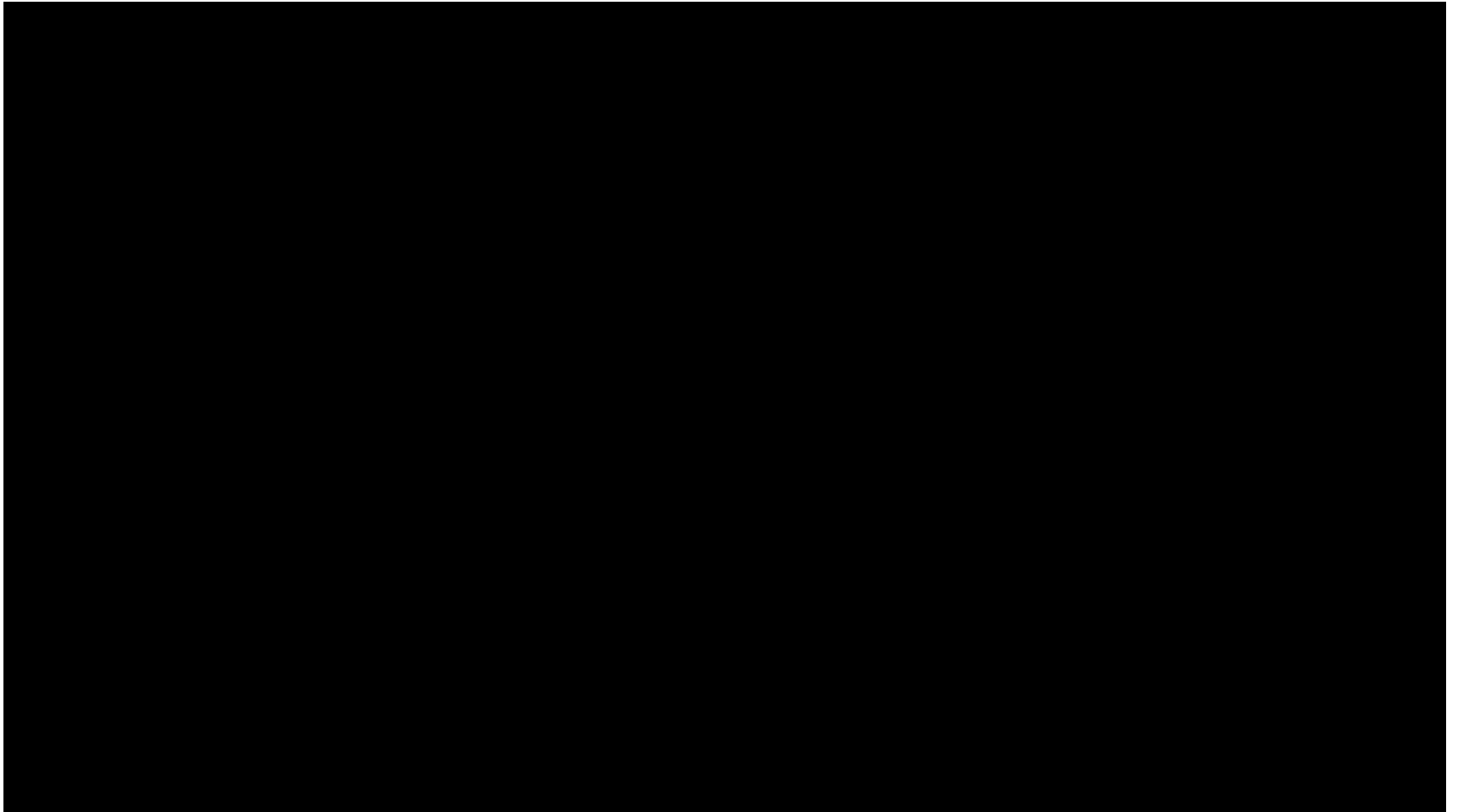
- Conduct primary and secondary assessments and SAMPLE history
- Perform ongoing assessment
- Ensure an open airway; place in a recovery position
- Give nothing to eat or drink
- Take spinal precautions if trauma is suspected
- Loosen restrictive clothing



Seizures

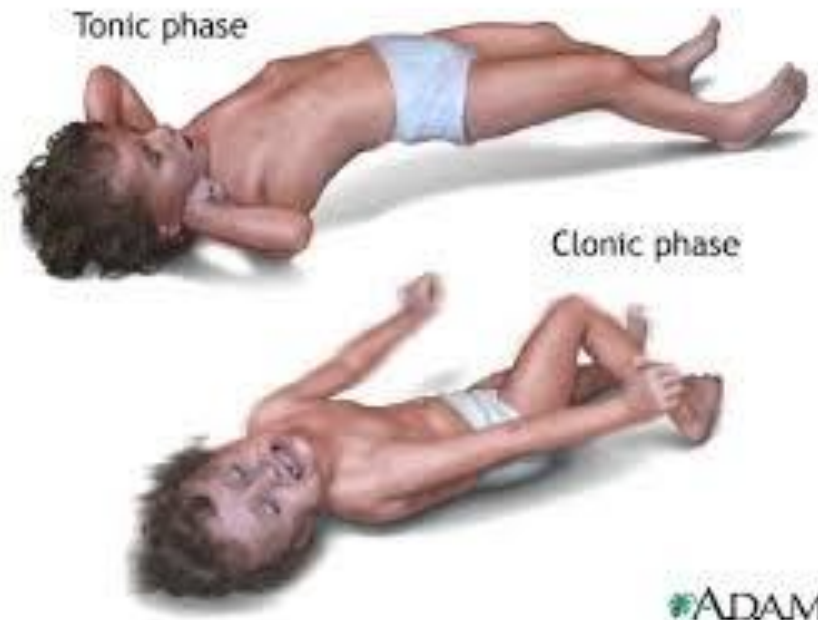


Seizure



Seizures

- A seizure is temporary abnormal electrical activity in the brain caused by injury, disease, fever, infection, metabolic disturbances or conditions that decrease oxygen levels.

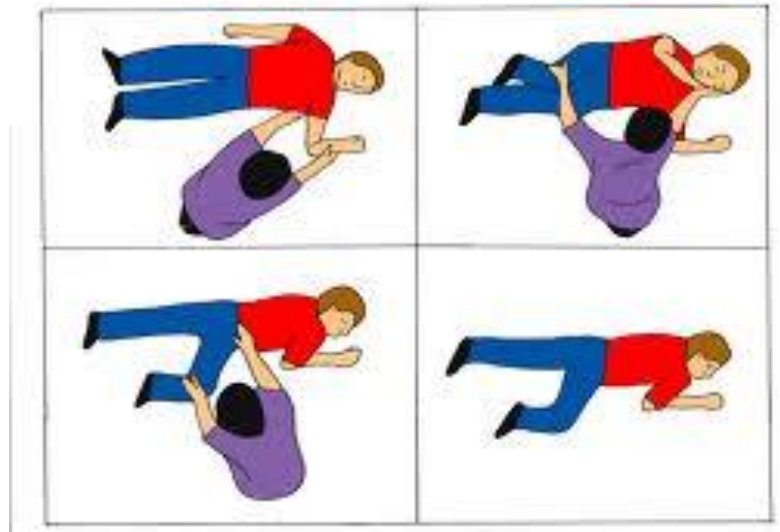


Types of Seizures

- Generalized tonic-clonic (grand mal)
- Partial
 - Simple
 - Complex
- Absence (petit mal)
- Febrile
 - Brought on by rapid increase in body temp (usually over 102 degrees)
 - Most common in children under 5 years old

Care for Seizures

- **Priorities**
 - Protecting the patient from injury
 - Managing the airway
- **DO NOT...**
 - Place anything in patient's mouth
 - Hold patient down



Patient Assessment

- BENAMES
- General Impression of Patient
- LOC
- ABC
- Permission to treat
- Age
- SAMPLE
- VITALS
- OPQRST

Skill Session

- Patient Assessment Responsive Victim
- Patient Assessment Unresponsive Victim

Tomorrow Day 6 Preview

Prepare for:

Lifeguarding Test section 2 – Lifeguarding Skills

-35 questions

Lunch

Travel to Temescal

Be there in 45 minutes