	Course Title:		FIRST AID/CPR	/AED REFRESHER (DSB)	
C	Certification:	STC # 07158040			
	cation Date:				
-	iration Date:				
R	eview Date:	04/29/19			
Time Block	Estimated Time	Learning Objective	Topic	Brief Overview of Topic/Instruction	Instructor
O700	O715	N/A	Introduction	Instructor Introduction and overview of course	Peters, Moon, Soltero
O715	O800	MODULE 1	Legal Issues, EMS System, Safety Protocols, and Emergency Patient Movement	Overview of: Good Samaritan Law, Duty to Act, Gaining Consent, Maintaining Patient Confidentiality, HIPAA: Law Enforcement Purposes, San Diego Trauma System, Critical Incident Response, Safety Protocols, PPE & Scene Safety, Mass Casualty/Triage, Triage Cards, Emergency Patient Movement, and Learning Activity #1	Peters
O800	O830	MODULE 2	Victim Assessment, Heart Attack, Sudden Cardiac Arrest, and Chain of Survival	Overview of: Initial Assessment, Focused Survey, Heart Attack Cause & Symptoms, Sudden Cardiac Arrest Cause & Symptoms, and steps in the Chain of Survival.	Peters
O830	1000	MODULE 3	Basic Life Support Review: CPR & AED	Overview of: CAB - Compression, Airway, Breathing, Adult - Child - Infant one person or two person CPR, AED use, Basic Airway Management, Pocket Mask & BVM, Reasons to stop CPR, and Learning Activity #2	Moon
1000	1100	MODULE 4	Management of Foreign Body Airway Obstruction: Choking, and Facial Injuries	Overview of: Signs of Choking, Adult / Child Choking - Conscious & Unconscious, Infant Choking, Heimlich Maneuver, and Learning Activity #3	Peters
1100	1200		LI	UNCH BREAK	
1200	1330	MODULE 5	Traumatic Medical Emergencies & Tactical Casualty Combat Care (TCCC)	Overview of: Types of Bleeding, Types of Open Wounds, Open Wound Care, Chest Injuries, Abdominal Injuries, Head-Neck-Spine Injury, Fractures & Dislocations, Sprains & Strains, Splinting, Shock, Stop the Bleed, TCCC: PMARCHP & DCAPBTLS, and Learning Activity #4	Moon
1330	1430	MODULE 6	Medical Emergencies, Environmental Emergencies, and Emergency Child Birth	Overview of: Chest Pain, Asthma/COPD, Allergic Reaction, Anaphylaxis, EpiPen, Adverse Reaction to Medication, Stroke, Seizures, Diabetic Emergencies, Alcohol/Drug Emergencies, Drowning, Heat Emergencies, Cold Emergencies, Emergency Child Birth, and Obstetrical Emergencies.	Soltero
1430	1500	MODULE 7	Burns, Poisoning, Bites & Stings, and CBRN	Overview of: Burn Types & Treatment, Burn Categories, CBRN protocols, Insect bites/stings, and Animal/human bites.	Soltero
1500	1530	MODULE 8	Psychological Emergencies, Suicide Prevention, Referral of Inmates to Medical, Dental, Health Complaints	Overview of: Psychological Emergencies - Schizophrenia, PTSD, Depression, Borderline Personality Disorder, Bipolar Disorder, Inmate Safety Program, Suicide Detection & Prevention, Inmate Grievance, and Inmate Requests.	Soltero
1530	1600	N/A	Written Exam, Evaluation, and Issue CPR Card	20 Question Exam, Review Exam, Course Evaluation, and Issue CPR Card to Students	Soltero, Moon, Peters

HOURS

# Legal Issues, EMS System, and Safety Protocols

First Aid/CPR/AED Refresher Module 1

#### **Good Samaritan Law**

#### Williams vs. State:

- Police officers are not under a general duty to aid another, and only owe a duty to the public at large, hence have no legal duty to aid a citizen in distress.
- Officers that comes to the aid of an injured or stranded motorist is simply a "Good Samaritan" and should be held only to that minimal standard of care.

#### How does it apply?

- I. Act Voluntarily
- II. Not being paid to give care
- III. Act within limits of training

## **Duty to Act**

- I. First responders have a special responsibility to provide care within the scope of their training.
- II. You are protected from lawsuits if you act in good faith and provide care to the best of your ability within the scope of your training.
- III. If you do not provide this standard of care, you could be found negligent.
- IV. Once care is initiated, you must remain with victim until relieved by someone of equal or higher training.

## **Gaining Consent**

- I. An adult has the right to refuse treatment.
- II. If the victim's untreated condition is degenerating to a life-threatening level, you have a responsibility to act regardless of nonconsent or flat refusal.
- III. Consent is implied if the victim is unconscious.

#### **Maintaining Patient Confidentiality**

Protected Information under the Health Insurance Portability & Accountability Act (HIPAA):

"Individually identifiable health information."

- Individual's past, present or future physical or mental health or condition.
- The provision of health care to the individual.
- Past, present, or future payment for the provision of health care to the individual, with identifiable information such as name, address, birth date, SSN.

#### **HIPAA: Law Enforcement Purposes**

Correctional facilities may disclose protected health information to law enforcement officials for law enforcement purposes under the following circumstances.

- Required by law (Court order, subpoenas, warrants, Admin requests);
- II. To identify or locate a suspect, fugitive, material witness, or missing person;
- III. L.E.O's request for information about a victim or suspected victim of a crime;
- IV. To alert L.E.O's of a person's death, if there is reason to believe the cause of death was criminal activity;
- V. When the health information is evidence of a crime that occurred on its premises;
- VI. When a health care provider needs to inform L.E.O's about the nature, location, victim, and perpetrator of a crime.

#### San Diego Trauma System

- UC San Diego Health San Diego, Adult Level 1
- Scripps Mercy Hospital San Diego, Adult Level 1
- Rady Children's Hospital *Kearny Mesa area, Pediatric Level 1*
- Palomar Medical Center North County, Adult Level 2
- Scripps Memorial Hospital La Jolla, Adult Level 2
- Sharp Memorial Hospital Kearny Mesa area, Adult Level 2

Source: Health & Human Services Ageny: San Diego County Trauma System

#### **Incident Command**

# CHAPTER 2

THE INCIDENT COMMAND
SYSTEM

# **Critical Incident Response**

- Establish Incident Command
- Establish clear lines of communication

  ✓ With EMS, other departments, other agencies.
- Evacuation Points
- Safety Protocols

 ${\bf *Operate\ in\ accordance\ with\ the\ Department's\ Emergency\ Operations\ Manual\ (Facility\ Specific)*}$ 

# Safety Protocol Pay(k)

### **Safety Protocols**

#### **Scene Priorities:**

- I. Situation evaluation
- II. Personal, public, victim safety
- III. Requesting additional resources
- IV. Scene control
- V. Victim assessment (Triage/TCCC)
- VI. Basic victim care (CPR/First Aid)
- VII. Witness / Involved party identification
- VIII. Evidence preservation



## **PPE & Scene Safety**

#### PPE:

- I. Protect routes of entry: Eyes, mouth, nose, skin
- II. Use a CPR mask/barrier
- III. Wash hands

#### **Scene Safety:**

- I. Scene size-up
- II. Common hazards
- III. How many involved?
- IV. Identify cause of illness or injury



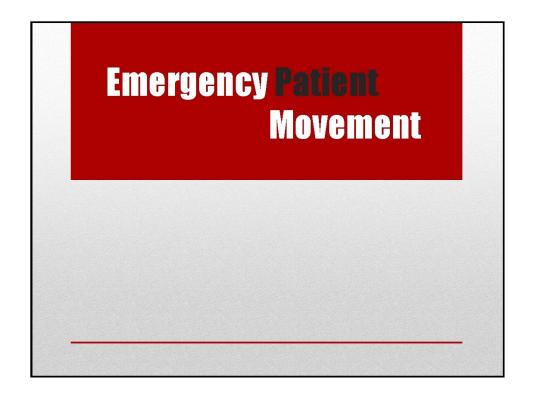




# Mass Casualty/Triage

- MINOR: Direct to a safe location away from other victims and hazards
- DELAYED: Receives treatment once all victims are classified and immediate have been treated
- **IMMEDIATE:** Receives treatment first once all victims are classified.
- NON-SALVAGEABLE: Deceased





#### **Emergency Patient Movement**

#### \*NEVER MOVE A VICTIM UNLESS IT IS ABSOLUTELY NECESSARY\*

**Imminent Danger**: Danger outweighs the risk of further injury from being moved.

- · Burning vehicle,
- Burning victim,
- Traffic approaching, etc.

**Unable to Survey**: When not possible to do an initial survey of victim, or unable to provide medical aid due to the victim's position.

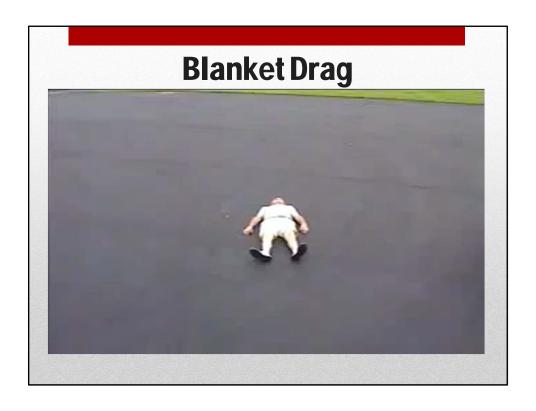
#### **Patient Movement cont.**

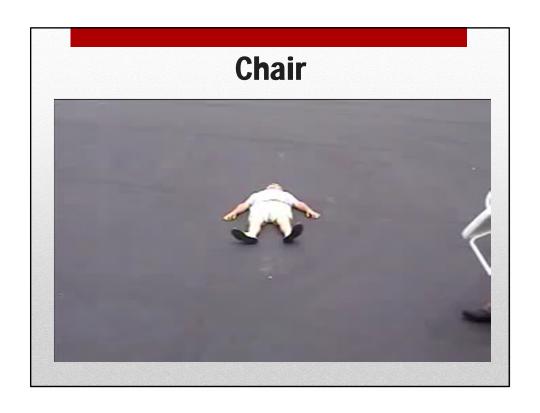
Plan Ahead: Perform a quick scene safety survey.

- *Is the scene safe to approach?*
- How are you going to move the victim?
- Where are you moving the victim to?
- What are you going to do after moving the victim?

**Communicate with the Victim**: Tell them why you are moving them and to where. Reassure the victim and keep them as calm as possible.

**Stabilize the Victim**: Move in a straight line, protecting the head, neck, and spine. Infants should be in car seats when moving them.









learning Activity #1

# Victim Assessment: Initial Assessment Focused Survey

First Aid/CPR/AED Refresher Module 2

#### **Victim Assessment**

#### **Performing Primary/Initial Assessment:**

- Check for major bleeding (Arterial Bleeding)
- Check airway and breathing
- Treat for shock

#### Performing Secondary Assessment/Focused Survey:

- · Check vital signs
- Check skin color, temperature, pulse, respiratory rate.
- Check head to toe looking for bruising, bleeding, broken bones, etc.

# **Obtaining Patient History**

Obtain patient history by observing and asking questions on the following subjects:

#### S.A.M.P.L.E:

**S:** Signs and symptoms

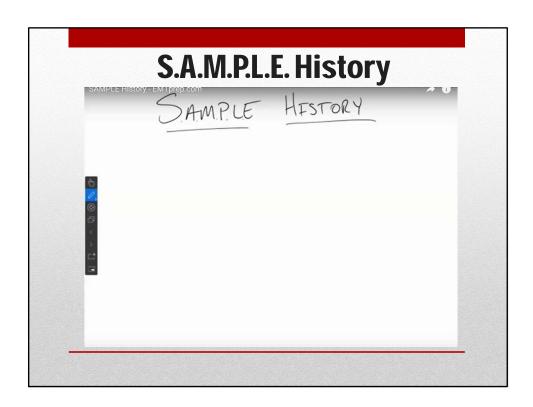
A: Allergies

M: Medication

P: Past medical history

**L:** Last oral intake (Food / Medicine)

**E:** Events leading to present illness

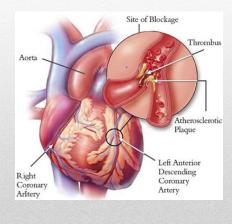


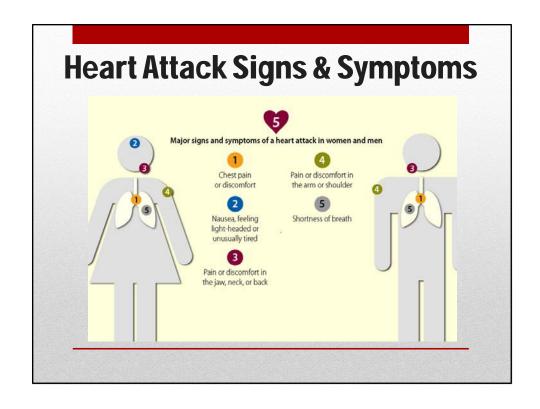
Heart Attack, Sudden Cardiac Arrest (SCA), and Chain of Survival



#### **Heart Attack**

- Caused by blood flow problems to the heart
- It is often caused by a blockage in a coronary artery
- Heart attacks result in death of heart muscle, and its severity is determined by the location and extend of the blockage.





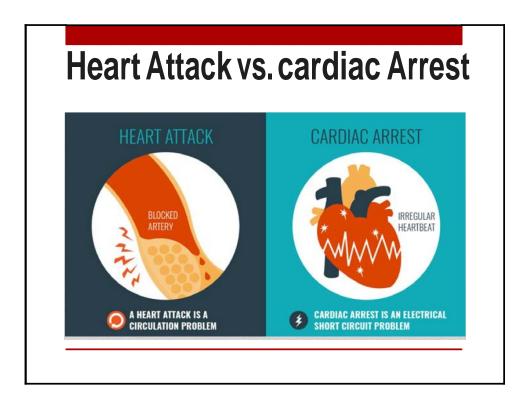
# **Sudden Cardiac Arrest (SCA)**

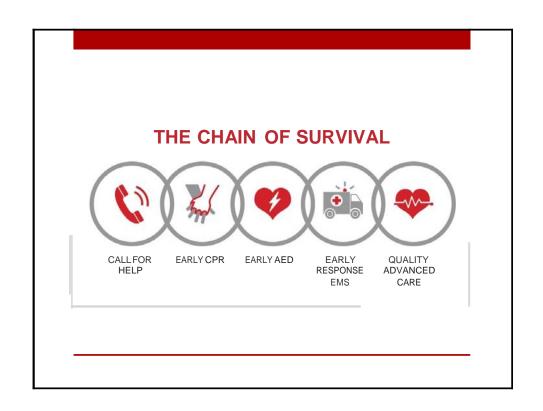
- Caused by electrical malfunction to the heart
- Caused by disorganized electrical pulses in the lower chambers (ventricles) making the heart quiver instead of pump/beat.
- SCA's occurs suddenly with little or no warning and it requires a shock from a defibrillator to survive.



Arrhythmia Origin = 1

# Signs & Symptoms of Cardiac Arrest Scroll to know more Cardiac Arrest Signs & Symptoms of Cardiac Arrest Extreme Dizziness Lose Consciousness





# Cardiopulmonary Resuscitation (CPR) & Automated External Defibrillator (AED).

First Aid/CPR/AED Refresher Module 3



#### **Basic Life Support (BLS) Review**

- Review of CAB: Compression, Airway, Breathing
- Review of Adult, Child and Infant One person CPR
- Review of Adult, Child and Infant Two person CPR
- Review of AED use.
- Review of Basic Airway Management
- Review of Pocket Mask and BVM
- Reasons to Stop CPR

#### **Victim Initial Assessment**

- Scene Safety.
- Check for responsiveness (Shout, tap, sternum rub).
- Check pulse for 5-10 seconds while looking and listening for breathing.
  - ✓ Radial: *Inner wrist of the thumb side*.
  - ✓ Dorsalis Pedis: *Top of the foot*.
  - ✓ Carotid: *Side of neck near Adams apple/vocal cord.*
  - ✓ Branchial (Infants): *Inside upper arm between elbow and shoulder.*

#### **Victim Initial Assessment Cont.**

- If not breathing or only gasping for air, and/or cannot detect a definitive pulse within 10 seconds, activate EMS.
- If available, call for additional immediate help and have them bring an AED.
- Start CPR: CAB Compression, Airway, Breathing
- Limit compression interruptions to less than 10 seconds.

#### **Adult 1 & 2 rescuer CPR**

- INITIAL ASSESSMENT
- NO PULSE, AND NOT BREATHING: Begin chest compressions
  - ✓ Compress the chest at least 2" inches deep and allow full recoil.
  - ✓ Two hand compression on lower half of breast bone.
  - ✓ 30 compressions (rate of 100-120 per min) and 2 breaths.
  - ✓ Same 30:2 ratio for both 1 and 2 rescuers.
  - ✓ For 2 rescuer, switch every 5 cycles or 2 minutes.
- HAS PULSE, BUT NOT BREATHING: Begin rescue breathing.
  - ✓ Mask: Check airway and begin rescue breathing at a rate of 1 breath every 5 seconds.

#### Child 1 & 2 rescuer CPR

- INITIAL ASSESSMENT
- CHILD: 1 year to signs of puberty.
- NO PULSE, AND NOT BREATHING: Begin chest compressions
  - ✓ Compress the chest at least 2" inches deep and allow full recoil.
  - ✓ Straight arm 1 hand or 2 hand compression on lower half of breast bone.
  - ✓ Compression rate of 100-120 per minute.
    - ❖ 30 compressions & 2 breaths for 1 rescuer
    - ❖ 15 compressions & 2 breaths for 2 rescuer
  - ✓ For 2 rescuer, switch every 5 cycles or 2 minutes.
- HAS PULSE, BUT NOT BREATHING: Begin rescue breathing.
  - ✓ Mask: Check airway and begin rescue breathing at a rate of 1 breath every 5 seconds.

#### Infant 1 & 2 rescuer CPR

- INITIAL ASSESSMENT Tap bottom of foot for responsiveness
- INFANT: Younger than a year old.
- NO PULSE, AND NOT BREATHING: Begin chest compressions
  - ✓ Compress the chest at least 1-1/2" inches deep and allow full recoil.
  - ✓ Two finger or Two thumb compression below the nipple line
  - ✓ Compression rate of 100-120 per minute.
    - ❖ 30 compressions & 2 "puffs" for 1 rescuer
    - ❖ 15 compressions & 2 "puffs" for 2 rescuer
  - ✓ For 2 rescuer, switch every 5 cycles or 2 minutes.
- HAS PULSE, BUT NOT BREATHING: Begin rescue breathing.
  - ✓ Mask: Check airway and begin rescue breathing at a rate of 1 "puff" every 3 seconds.

#### **Basic Airway Management**

- Head Tilt Chin Lift:

  ✓ No suspected head injury
- Modified Jaw Thrust:
   ✓ Suspected head injury



# Nasopharyngeal & Oropharyngeal

When a patient becomes unconscious, the muscles in the jaw commonly relax and can allow the tongue to slide back and obstruct the airway.





#### **Automated External Defibrillator**

- **Power** on the AED.
- Listen to the prompts from AED.
- Apply pads on bare chest (Size: Adult/Child).



- Place one pad on the right side of the chest and one pad on the left side of the chest below the left nipple (Patient's right and left side).
- Start and stop CPR when prompted by AED
- Press the **Charge** button when prompted by AED to deliver a charge.
- When prompted to **Clear** by AED ensure there's no physical contact between patient and others.
- Continue to follow prompts from AED.



#### Reasons to not start or stop CPR

- There is significant injury to you.
- Obvious signs of death: Decapitation, rigor mortis, shotgun blast to the head, burned beyond recognition, decomposition.
- Trapped inside a burning building.
- Pulse and breathing return to the victim.
- A notarized DNR in place.
- Relieved by qualified personnel.
- A physician orders you to stop CPR.

	ADULT	CHILD	INFANT	
Compression Rate	100 – 120 Compression rate per minute / Full recoil			
Compression Depth	2" Inches		1-1/2" Inches	
Compression to Ventilation Ratio	1 or 2 Rescuer 30:2	1 11050	uer: 30:2 uer: 15:2	
Hand Placement	2 Hand Lower sternum	2 or 1 Hand Lower sternum	2 Finger / 2 Thumb Below nipple line	

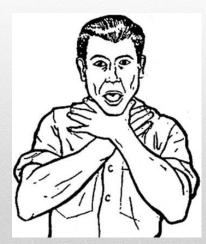


# Management of foreign body airway obstruction (Choking).

First Aid/CPR/AED Refresher Module 4

# **Signs of Choking**

- Clutching the throat
- Gasping or wheezing
- Unable to make noise or talk
- Bulging eyes
- Blue lips and fingers



# **Adult/Child Choking**

#### **CONSCIOUS:**

- · Look for sign of choking
- Ask: Are you choking? I'm trained in First Aid, can I help?
- Deliver X5 back blows between shoulder blades with heel of hand.
- Deliver X5 abdominal thrust (Heimlich maneuver) until airway obstruction is cleared or the patient is unconscious.
- If pregnant, perform chest thrusts instead of abdominal thrusts.

# **Adult/Child Choking**

#### **UNCONSCIOUS:**

- Assist patient onto their back
- Check for breathing
- If not breathing, start CPR

#### **Heimlich Maneuver**

- 1. Stand behind the patient und wrap your hands around he person's waist, above the navel and below the sternum.
- 2. Make a "C" with one had and a "Fist" with the oth r hand.
- 3. Place the fist into the ceter of the "C" and pull in anl up towards yourself.



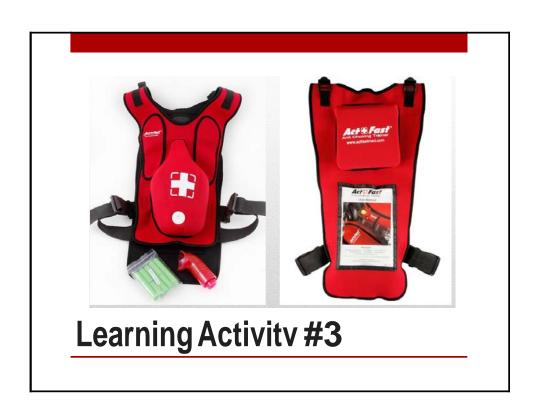
# **Infant Choking**

- Assume a seated position
- Always support the infants head.
- Place infant face down on your arm at a 45 degree angle and deliver X5 thumps between the shoulder blades with the heel of your hand.
- Turn the infant over while supporting the head and perform X5 chest thrusts using two fingers on the chest.
- Repeat until the obstruction is dislodged or infant goes unconscious.
- If unconscious, begin CPR.



# Officer Saves Baby





# **Traumatic Medical Emergencies - TCCC**

First Aid/CPR/AED Refresher Module 5

# **Head, Neck, and Spine Injury**

#### Suspect a head, neck or spine injury with:

- · Vehicular accident
- Fall from height greater than standing
- Violence
- Electrical shock/lightning
- Diving accident
- Contact sports
- Unresponsive for unknown reasons



# Head, Neck, and Spine Injury

#### Signs of head, neck or spine injury:

- Head Trauma Bleeding, bruising, swelling, soft spots
- Headache
- Nausea, vomiting
- Confusion, memory loss
- Slurred speech
- Impaired movement or sensation
- Blurred vision, unequal pupils
- Ringing in the ears
- Bleeding of fluid from nose, ears, eyes
- Seizures, unresponsiveness

#### **Head, Neck, and Spine Injury**

#### Care:

- Activate EMS
- Stabilize the head and neck together in the position found
- Treat the condition found Control bleeding
- Calm & reassure patient.
- Monitor for changes in response, breathing, & appearance
- Focus on preventing further injury by keeping person still
- Do not move unless:
  - ✓ Imminent danger
  - ✓ Cannot perform CPR
  - ✓ Airway management

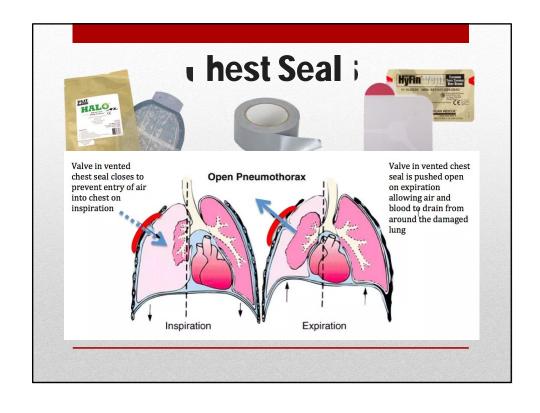
# **Chest Injuries**

#### Blunt Trauma with Compression: Ex. Car Accident

- Fractured bones / cartilage
- External/Internal bleeding
- Ruptured lungs, spleen and other organs

#### Penetrating Injury/Open Chest Wound: Ex. Gunshot

- Impaired breathing
- Vital organ damage
- Place victim on recovery positon if appropriate.
  - On injured side or flat on their back
  - Treat for shock and monitor CAB's



# **Abdominal Injuries**

#### Closed: No external bleeding

- Possible Internal Bleeding
- Recovery position if appropriate
- Place victim on their back with knees up if appropriate
- Treat for shock and monitor CAB's

#### Open: Bleeding - Exposed organs

- Recovery position if appropriate
- Place victim on their back with knees up if appropriate
- Apply a moist, sterile dressing over the wound
- Seal with an airtight bandage
- Treat for shock and monitor CAB's

# **Soft Tissue Injury & Wounds**

#### TYPES OF BLEEDING:

• Arterial: Bright red & spurts

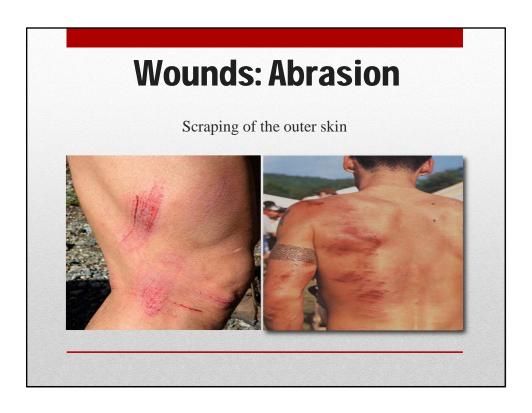
• Venous: Dark red & steady flow

• Capillary: Dark red & "oozes"

#### **OPEN WOUND:**

- Abrasion
- Incision
- Laceration

- Puncture
- Avulsions
- Amputations





## **Wounds: Laceration**

Jagged-edged wound caused by tearing/ripping of skin

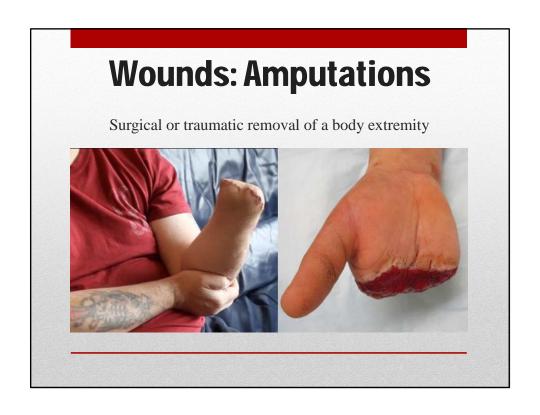


# **Wounds: Puncture**

Deep wound through the skin and other tissue



# 



# **Avulsions / Amputations**

- Place partially separated skin or tissue back in proper position before applying a dressing.
- Attempt to locate any amputated extremity.
- DO NOT immerse, pack in ice, or freeze separated part/extremity.
- Transport parts with victim for possible surgical replacement.

# **Wounds: Impaled Objects**

Do not attempt to remove the object, unless it is obstructing the airway. Remove each dressing as it becomes soaked with blood. After bleeding is controlled, leave the wound exposed without dressing. A blood soaked dressing can be fatal.





# **Open Wound Care**

- In all cases, monitor pulse below the injury site.
- Check capillary circulation by pinching fingertips or toes.
- If circulation is impaired, loosen bandage until circulation improves (DO NOT remove).
- Maintain pressure on the wound (if applicable).
- Reassure the victim and treat for shock.

## **Shock**

A state of not having enough blood flow to the tissues of the body as a result of problems with the circulatory system.

### **TYPES OF SHOCK:**

- Electric
   ✓ Electrical current passing through body causing organ damage/SCA
- **2.** Toxic 
  ✓ Bacterial: Antibiotics & Drainage of abscess
- 3. Cardiogenic/Hemorrhagic
  - ✓ Inadequate blood flow to ventricles
- 4. Septic
  - ✓ Organ injury/damage leading to infection









# **STOP THE BLEED!**



**1. Direct Pressure**✓ Typically applied by hand, elbows, and/or knees

# 2. Pressure Bandage/Dressing ✓ If direct pressure does not work ✓ Start furthest from heart

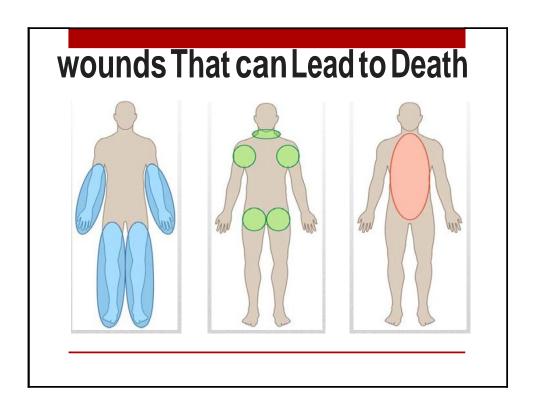
- 3. Tourniquet

  ✓ If pressure bandage alone does not work

  ✓ Constricts blood vessels against the bone

### 4. Hemostatic Dressing

- ✓ If tourniquet is not available or cannot be applied
  ✓ Only on junctional hemorrhages: Base of neck, shoulder, armpit, groin, butt
  ✓ Pack the dressing directly into the wound & wrap with pressure
- bandage











# TCCC: P.M.A.R.C.H.P

Patient Safety/Scene Safety: Self Aid - Buddy Aid

**Massive Hemorrhage/Direct Pressure:** Apply Tourniquet – Combat Gauze, Get off the "X", and Reassess all interventions

Airway/Head-Tilt Chin Lift/Jaw Thrust: Observe & listen for breathing sound, NPA or OPA, and Recovery position

Respirations/Expose Patient/Tiger Claw: Occlusive Dressing – Chest Seals, and Needle thoracentesis\* (Only if qualified)

**Circulation/Big Pipes – Little Pipes/Shock:** Secondary sweep, Administer fluids\* (Only if qualified), and Check for D.C.A.P.B.T.L.S.\*\*

**Head/Hypothermia:** Cover the patient to keep warm – Get patient off ground

**Pain Management:** Not qualified to administer pain medication at the First Responder level.

# TCCC: D.C.A.P.B.T.L.S.

- **✓** Deformities
- **✓** Contusions
- **✓ Abrasions**
- **✓**Punctures
- **✓Burns**
- **✓**Tenderness
- **✓**Lacerations
- **✓**Swelling



# Medical Emergencies, Environmental Emergencies, and Emergency Child Birth

First Aid/CPR/AED Refresher Module 6

# **Chest Pain**



# **Chest Pain**

- Perform an initial assessment
- Assist patient into a comfortable seated position
- Obtain patient history: SAMPLE
- Activate EMS if necessary

Chest pain could be a pre-cursor for a stroke or heart attack

# **Asthma & COPD**

### **Asthma: Chronic Disease**

• During an attack, muscles around the airway tighten and extra mucus is produced reducing air flow.

### Signs & Symptoms:

• Labored rapid breathing; Coughing/Wheezing; Shortness of breath; Chest tightens.

### **Treatment:**

• Inhaled medication which quickly opens pathways, dries mucus, and restores air flow.

# COPD

### **Chronic Obstructive Pulmonary Disease (COPD):**

• Progressive disease that affects the lungs, causing reduced airflow making it hard to breathe.

### **Common Causes of COPD:**

• Cigarette smoking; Second hand smoking; Air pollutants; Chemical fumes; Dust.

### Emphysema:

• A chronic condition that may result in breathing emergency

### **Bronchitis:**

• Inflammation of bronchial tubes due to bacterial infection

# **Allergic Reaction & Anaphylaxis**

### **Allergic Reaction:**

- An overreaction of your body's immune system to something that doesn't usually cause problems for some people.
- Can cause swelling in airway and drop in blood pressure.

### Signs & Symptoms:

• Hives/Rash; Sneezing; Congestion; Tightness in the chest/throat; Swelling; Breathing difficulties; Vomit.

### Care:

• Activate EMS; Help person use their EpiPen; Repeat dose if signs persists and EMS will not arrive within 5-10 minutes; Monitor response, breathing, and signs of shock.

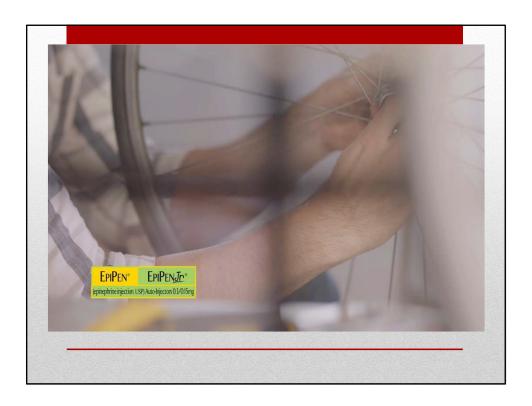
# **Epinephrine Auto-Injector: EpiPen**

### EpiPen:

- Brand name auto-injector that contains epinephrine or adrenaline.
- Epinephrine relaxes muscles while blocking the release of histamines allowing the user to resume normal respiration.

# "He thinks he's Bruce Lee"





# **Adverse Reaction to Medication**

- Activate EMS / Notify Medical Immediately
- Retrieve EpiPen if one is available
- Assist with administration of epinephrine if deemed necessary
- Monitor breathing until medical personnel arrives

# **Stroke**

A Cerebrovascular Accident (CVA/Stroke) occurs when blood flow to the brain is interrupted, or a blood vessel in the brain ruptures and creates pressure on the brain tissue.

### **Indicators:**

• Unequal pupil size; Impaired, slurred speech; Paralysis on one side of the body; Numbness or weakness of a limb; Weak facial muscles; Convulsions.

### **Stroke Victim Assessment:**

• Activate EMS; Conduct Focused Survey; Look for medical alert ID; Monitor CAB's; Do not give victim anything by mouth

# **Seizures**

A seizure is the result of a surge of energy through the brain. When the energy is disrupted, the brain cells continue to fire electrical energy causing the victim to convulse involuntarily.

### **Indicators:**

• Lethargy; Slurred speech, Impaired gait; Uncontrollable jerking; Eyes rolling.

### **Seizure Victim Assessment:**

• Do not restrain them. Move objects out of the way. Cushion the victim's head.

# **Diabetic Emergencies**

Diabetes is a non-contagious metabolism disorder. It is caused by an imbalance of insulin in the body and glucose in the bloodstream. **Diabetic emergency qualifies as a medical emergency.** 

### **Types of Diabetes:**

- **Type 1:** People with this type produce no insulin and they must use insulin injections to control their blood glucose.
- Type 2: People with this type produce insulin. However, the insulin secreted by their pancreas is either insufficient or the body is unable to recognize the insulin.

# **Diabetic Coma/Insulin Shock**

### **Diabetic Coma:** Hyperglycemia (+)

- Occurs when the body has too much sugar and not enough insulin.
- Skin is red, warm, and dry. Breathing is labored and fruity.
- Slow onset, restless and confusion.
- May appear intoxicated, with a weak rapid pulse.

### **Insulin Shock:** Hypoglycemia (-)

- Occurs when the body has too much insulin and not enough sugar.
- Skin is pale, cold, moist, and clammy.
- Can come on suddenly, aggressive behavior, fainting, and seizure.
- May appear intoxicated, with rapid pulse.

# **Alcohol & Drug Emergencies**

### **Alcohol Withdrawal Symptoms:**

• Headaches | Nausea | Vomiting | Anxiety | Seizures

### Librium (Chlordiazepoxide):

 Used to treat anxiety, alcohol withdrawal symptoms, and tremor.

# **Alcohol & Drug Emergencies**

### **Opioid Overdose:**

 Results in unresponsiveness and respiratory arrest (breathing stops), which leads to cardiac arrest.

### Naloxone (Narcan):

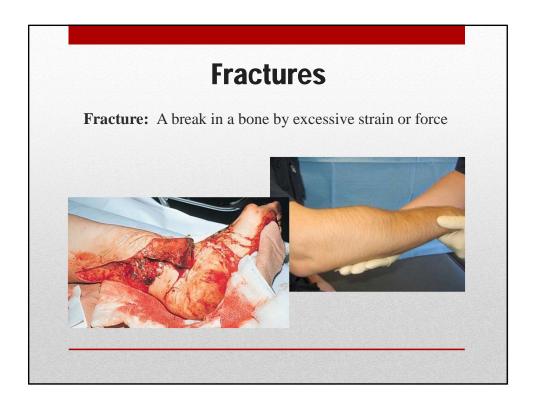
- Prescription medication that can quickly reverse an opioid overdose.
- Comes as a nasal spray.
- Naloxone and CPR can be used together for a person with suspected opioid overdose
- Activate EMS

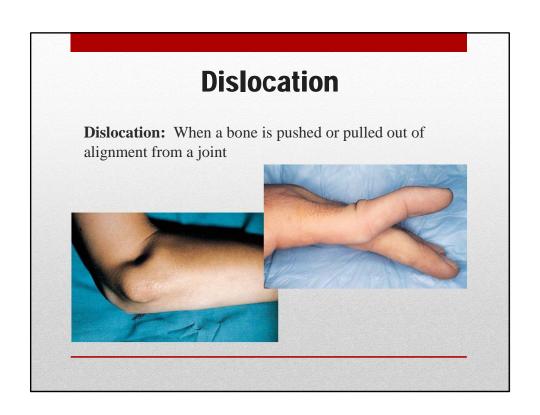
# **Facial Injuries**

- OBJECTS IN THE EYE
  - Small Blinking & Tears / Large Cover both eyes
- CHEMICALS IN THE EYE
  - Flush immediately / Affected eye lower / 20 mins
- BODILY FLUIDS IN THE EYE
  - Running water Eye wash station / Exposure
- NOSE BLEED
  - Lean forward / Ice pack on bridge of nose

# **Facial Injuries**

- DENTAL EMERGENCIES
  - 30 Mins / Egg white, milk, saliva / Bite side
- BLEEDING FROM THE MOUTH
  - Clean cloth or gauze / Direct pressure / Forward
- JAW INJURY
  - Immobilize w/gauze roll, shirt, necktie / Airway





# **Sprains & Strains**

**Sprains:** Stretched or tearing of ligaments **Strains:** Stretched or tearing of muscle





# **Splinting**



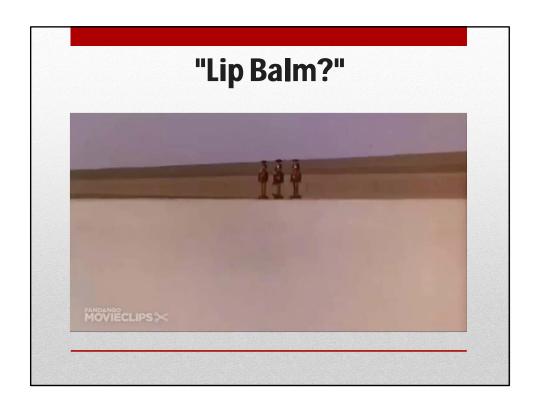
Splints are used to immobilize fractures, dislocations, and severe sprains. Splinting reduces the movement of injured muscles and bones.

### Only Splint an Injury if;

- Medical responders are delayed
- You transport a person with a minor injury

Don't forget to check pulse before splinting Check pulse and capillary refill after splinting





# **Heat Emergencies**

Occurs when the body is unable to get rid of excess heat, and the internal temperature rises to a level that causes pain, organ damage, or even death.

### **Heat Cramps:**

- Caused by loss of too much salt due to prolonged perspiration resulting in dehydration.
- Painful muscle spasms in the leg/abdomen & lightheaded.

### **Heat Exhaustion:**

- A form of shock that occurs when the body becomes dehydrated.
- Pale, clammy skin, rapid pulse, profuse sweating, weakness, nausea.

### **Heat Cramps/Exhaustion Treatment:**

• Remove Victim from source of heat, and have victim rest in cool area. Provide water in small amounts. No caffeinated beverages

# **Heat Stroke**

Occurs when the body is unable to get rid of excess heat, and the internal temperature rises to a level that causes pain, organ damage, or even death.

### **Heat Stroke: Life Threatening**

- Occurs when the body's internal temperature rises abnormally high.
- Skin is red, hot, and dry No more sweat left.
- Pulse is rapid and irregular with shallow breathing.
- Victim may experience confusion, unconsciousness, and possibly seizures

### **Heat Stroke Treatment:**

- Activate EMS and monitor CAB's.
- Remove victim from source of heat and loosen/remove clothing.
- Cool the victim rapidly: Dousing or wrapping victim with cool water; Ice pack on neck, groin, or armpits.
- Treat for shock

# **Cold Emergencies**

Occurs when the body internal core temperature drops, affecting its system

### Mild-Moderate Hypothermia:

- Violent shivering, numbness, fatigue, confusion, cold skin
- Rapid breathing and pulse

### **Treatment of Mild-Moderate Hypothermia:**

- Move victim to warm environment
- Remove any wet clothing and replace with dry clothes
- Re-warm the victim slowly and give warm liquids
- Keep victim moving to increase circulation
- Monitor CAB's and do not give caffeinated or alcoholic drinks

# **Severe Hypothermia**

Occurs when the body internal core temperature drops, affecting its system

### Severe Hypothermia:

- Lack of shivering, rigid muscles and joints.
- *Slow shallow breathing, dilated pupils, and irregular slow pulse.*
- Decreased level of consciousness w/gray-blue skin color.

### **Treatment Severe Hypothermia:**

- Same as before plus:
  - ✓ CPR if victim has no pulse and is not breathing
  - ✓ Rescue Breathing if victim has a pulse but is not breathing

# **Frostnip**

### Frostnip:

- Superficial freezing of skins outer layer.
- Numbness pale skin color
- Skin feels flexible to the touch
- Tingling or burning sensation to the area upon warming

### **Frostnip Treatment:**

- Remove victim from the source of cold
- Remove/loosen any clothing that may restrict circulation to the area.



# **Frostbite**

### **Frostbite:**

- Freezing of tissue below the skin's surface
- Skin feels stiff to the touch
- Waxy blotchy skin color
- Pain to the area upon warming

### **Frostbite Treatment:**

- Immobilize and protect area
- Wrap in a dry, loose bandage
- Wrap each digit separately
- Do not rub affected area
- Do not allow frozen area to refreeze after warming.



# **Drowning**

- 1. Move victim safely onto land
- 2. Assess victim (CAB's)
- **3.** Treat with rescue breathing/CPR as needed



# **Emergency Child Birth**

# **Emergency Child Birth**

### First Responder Actions During Labor & Childbirth:

- 1. Activate EMS.
- 2. Determine if the woman can be transported (Only if she is in 1<sup>st</sup> stage of labor).
- 3. Use PPE properly.
- 4. Prevent explosive delivery with gentle pressure on the infant's head.
- 5. Dry infants as quickly as possible and keep newborn at the same level as mom.
- 6. Keep newborns covered as they lose 70% of their body heat through their heads.
- 7. Delivery of placenta will occur approximately 30 minutes after childbirth.
- 8. Do not pull on the umbilical cord to assist with delivery of placenta.

# **Stages of Labor**

### 1st Stage:

 From onset of contractions to cervical dilation (Safe to transport)

### 2<sup>nd</sup> Stage:

• From full dilation of the cervix to the delivery of the baby (Prepare for delivery)

### 3rd Stage:

• From delivery of the infant to the delivery of the placenta (Post delivery care)

# **Obstetrical Emergencies**

# Excessive bleeding prior to delivery: • Possible torn or separated placenta.

- Absorb blood with towels and arrange for immediate transport.

### **Limb Presentation:**

 When one arm or leg is delivered first, prevent the delivery from continuing by placing the mother in a knee to chest position. Arrange for immediate transport.

### **Breech Presentation:**

• When both feet are delivered first, prevent the delivery from continuing by placing the mother in a knee to chest position. Arrange for immediate transport.

### **Prolapsed Umbilical Cord:**

When the umbilical cord protrudes from the opening before the baby is born, prevent the delivery from continuing by placing the mother in a knee to chest position. Arrange for immediate transport.

# **Burns**, Poisoning, CBRN, and Bites & Stings

First Aid/CPR/AED Refresher Module 7



# **Burns Types & Treatment**

### Thermal:

- Remove victim from heat source
- · Cool area with cool water
- Apply dry sterile dressing and bandage loosely

### Chemical:

- If dry powder: Brush away as much as possible before flushing with water (Do not rub)
- Remove clothing and jewelry and flush for 15-30 minutes
- Cover with dry sterile dressing

### **Electrical**

- Scene safety before proceeding/Turn off power source
- Examine for external wounds (Entrance & Exit).

\*\*Always active EMS as soon as possible and treat for shock\*\*

# **Burn Categories**

### First Degree:

- Damage to the outer layer of skin (epidermis)
- Causes pain, redness, and swelling (Ex. Sunburn)
- · Damage usually heals itself



# Burn Categories Second Degree: Damage to the outer and second layer of skin (dermis) Nerves, hair follicles, and sweat glands are affected Intense pain, redness, swelling, blistering Damage results in slight scarring

# **Burn Categories**

### **Third Degree:**

- Damage to epidermis, dermis, fatty layer and muscle beneath the skin (Full thickness)
- Skin appears dry, leathery and discolored
- May require skin grafting to heal
- Damage results in dense scar formation



# **Burn Categories**

### **Fourth Degree:**

- Damage to bones and underlying organs
- Likely Non-Salvageable



# **Poisoning**

### **Ingestion:**

• Medication, cleaning products, chemicals, illegal drugs

### **Inhalation:**

• Gases, fumes (Carbon monoxide), glue, paint, pesticides

### **Injection:**

• Snake bite, insect sting, hypodermic needle

### **Absorption:**

• Primarily through the skin by chemicals, pesticides, fertilizers.

Call poison control before the person looks or feels sick!!!

1-800-222-1222

Save it on your phone

# **CBRN**



### Chemical | Biological | Radiological | Nuclear

- Be aware of possible secondary devise if explosion occurs
- Safety protocols
- Park unit facing safe exit route
- From a vantage point, reassure victims that help is on the way
- Wait for proper equipment and help at a safe location
- Safely isolate and deny entry to unauthorized personnel and secure a perimeter
- If you become contaminated, report to DECON
- Be prepared to change location if situation worsens or wind shifts

# **CBRN**

### Contact dispatch with the following:

- Exact location of reporting unit
- Suggested safe access route and staging areas
- Observed CBRN indicators
- Wind direction and water conditions
- Plume (cloud/vapor) direction, color of smoke / plume
- *Orientation of victims (position and pattern)*
- Number of apparent victims
- Types of symptoms or injury
- Witness statements or observations





# **Insect Bites & Stings**

- Insect stings commonly cause pain, swelling, itching and redness
- If a bee stinger is visible, scrape it off with a straight edged object
- Apply an ice pack wrapped in moist cloth to reduce pain & swelling
- Monitor the person for at least 30 minutes for signs of severe allergic reaction
- If person has difficulty breathing, severe swelling, nausea, or dizziness, activate EMS
- Help with epinephrine auto-injector if needed

# **Animal/Human Bites**

The primary concern with animal bites is bleeding and infection. Rabies can be transmitted through a bite from a bat, skunk, raccoon, fox, coyote, and other mammals.

Rabies can be fatal after neurological symptoms have developed. If you are bitten by an animal suspected of having rabies, consult with your doctor as soon as possible.

If you are bitten by an animal that is known to have rabies, you'll receive a series of shots to prevent the rabies virus from infecting you.

- Fast Acting Shot (Immune Globulin) near the bite site
- Series of 4 shots over 14 days.

# **Snakebite**

- Do not try to capture the snake
- Do not suction, apply ice, or a tourniquet
- Wash the wound with soap and water
- Remove jewelry and wrap and elastic bandage around the entire bitten arm/leg, starting furthest from the heart
- Use overlapping turns to wrap snugly, but sill allow a finger to slip through the bandage
- Do not approach a dead or dying snake
- Assist with administration of EpiPen



Psychological Emergencies, Suicide Prevention, Referral of Inmates to Medical, Dental, Health Complaints

First Aid/CPR/AED Refresher Module 8

# **Psychological Emergencies**

### **SCHIZOPHRENIA:**

Schizophrenia is a chronic and severe <u>mental disorder</u> that affects how a person thinks, feels, and behaves. People with schizophrenia may seem like they have lost touch with reality.

- PSYCHOLOGICAL: Hallucination, paranoia, hearing voices, fear, persecutory delusion
- MOOD: Anger, anxiety, apathy, feeling detached from self, general discontent, loss of interest in activities, inappropriate emotional response

# **Psychological Emergencies**

### POST TRAUMATIC STRESS DISORDER:

PTSD is a <u>disorder</u> that develops in some people who have experienced a shocking, scary, or dangerous event. Not every traumatized person develops ongoing (chronic) or even short-term (acute) PTSD. Not everyone with PTSD has been through a dangerous event.

- PSYCHOLOGICAL: Flashback, fear, severe anxiety, mistrust
- MOOD: Loss of interest or pleasure in activities, guilt, loneliness

# **Psychological Emergencies**

**DEPRESSION:** (Major Depressive Disorder | Clinical Depression) A common but serious <u>mood disorder</u>. It causes severe symptoms that affect how you feel, think, and handle daily activities, such as sleeping, eating, or working

- MOOD: Anxiety, apathy, general discontent, guilt, hopelessness, loss of interest or pleasure in activities, mood swings, or sadness
- BEHAVIORAL: Agitation, excessive crying, irritability or social isolation
- COGNITIVE: Lack of concentration, slowness in activity, or thoughts of suicide

# **Psychological Emergencies**

### BORDERLINE PERSONALITY DISORDER:

Borderline personality disorder is a <u>mental illness</u> marked by an ongoing pattern of varying moods, self-image, and behavior. These symptoms often result in impulsive actions and problems in relationships.

- BEHAVIORAL: Antisocial behavior, compulsive behavior, hostility, impulsivity, irritability, self-destructive behavior, self-harm, social isolation, or lack of restrain
- MOOD: Anger, anxiety, general discontent, guilt, loneliness, mood swings, or sadness

# **Psychological Emergencies**

### **BIPOLAR DISORDER:**

Bipolar disorder, also known as manic-depressive illness, is a <u>brain</u> <u>disorder</u> that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks.

- MOOD: Mood swings, sadness, elevated mood, anger, anxiety, apathy, apprehension, euphoria, hopelessness
- BEHAVIORAL: Irritability, disorganized behavior, aggression, hyperactivity, impulsivity, restlessness, self-harm

Source: National Institute of Mental Health

# **Suicide Prevention**

### **Inside the Facility:**

- Inmate Safety Program
- Enhanced Observation Housing
- · Safety Cells

### **Outside of the Facility:**

• EMS / EPU – 5150 (Harm to self, others, or gravely disabled)

### Off Duty:

- Peer Support / Critical Incident Response Team
  - The Counseling Team
  - Communication Center to request a Peer Support Member

# Referral

### **INMATE GRIEVANCE:**

- Must be signed by receiving party absent exigent circumstances
- Medical grievances must be delivered to medical and it should not be entered into JIMS by receiving deputy
- Inmate Grievance Form (J-22)
- DSB P&P Section N.1 Grievance Procedures

### **INMATE REQUEST:**

- Must be processed in an efficient and expeditious manner
- Inmate Request Form (J-21)
- Sick, Dental, and Mental Health Request Form (J-212 form ENG)
- DSB P&P Section N.3 Inmate Request Forms