

3. First Aid

Overview

This section discusses the following topics:

- Basic First Aid
- First Aid Kits
- Burn Treatment
- Chemical Exposure
- CPR
- Electrical Contact
- Heat and Cold Treatments
- Frostbite and Hypothermia Prevention
- Insect Sting Treatment (See Section 5)

First Aid is the immediate care given to a person who is injured or is suddenly ill. It can mean the difference between life and death, and between rapid recovery and long hospitalization. It is recommended all necessary employees be trained in Basic First Aid and Cardio Pulmonary Resuscitation (CPR).

The information in this section provides an overall guide to first aid activities. It is not a self-teaching course, but merely reviews some aspects of first aid techniques for those who have received training in first aid. The information is very general.

It is important employees be familiar with the contents of this section and local emergency procedures to be better prepared to assist fellow employees in an emergency. Details for first aid treatment are found in the American Red Cross Text Book on First Aid. In accordance with the authorized agency, first aid/CPR retraining is provided as required.

Employees should know how to treat traumatic shock, give artificial respiration, and control bleeding. Preplanning for a potential emergency situation is most valuable. All employees should be aware of the medical services available and how to obtain them.

Reference required for workers near electricity (OSHA_1910.268(c)(3) and 1910.268(o)(1)(ii))

NOTE: At FairPoint, this includes the Outside Plant, Inside Plant and Maintenance workgroups, and may also include the Inside and Outside Engineers depending on their job/work functions.

Workers in the vicinity of electrical power sources must be aware of the location(s) of these power sources in relation to the workers and co-workers, and take all necessary precautions (engineering, PPE, etc) to protect themselves and their co-workers from accidental exposure.

Employees engaged in overhead line work should know the essential elements of pole top rescue. They should also be familiar with resuscitation techniques and how to apply such techniques in an elevated position.

Where first aid kits are supplied, employees should know the location, contents, and be familiar with the instructions included in the first aid kit. Employees should learn to use this equipment, so they can render treatment when needed. Except for minor injuries, obtain the service of a physician.

CAUTION: When performing immediate emergency first aid, handling or contact with body fluids, such as blood, may be hazardous to your health. Use barriers such as gloves, safety eyeglasses, and rescue breathers when rendering first aid. Refer to the Blood borne Pathogen Standard (Section 20).

References

American Red Cross Text Book on First Aid
OSHA Standard 29 CFR 1910.268(b)(3)
OSHA Standard 29 CFR 1910.268(c)(3)
OSHA Standard 29 CFR 1910.268(o)(1)
OSHA Standard 29 CFR 1910.268 (o)(3)

Basic First Aid

Complete the following when faced with a person who is injured or suddenly ill:

1. Recognize an emergency exists.
2. Decide to act.
3. Call the local emergency telephone number or 911 for help.
4. Provide care until help arrives.

First Aid Kits

The following items should be included at a minimum in all first aid kits:

1" x 3.5" Adhesive Bandage	2 Pair Nitrite Gloves
PVP Wipes	CPR Microshield Rescue
Breather	Vinyl Gloves
Sting-Kill Wipes	8" x 10 " Compress
*Poison Ivy Towelet	40 inch Triangular
Hand wipes, Antimicrobial	*Hydrocortisone

***1910.268(b)(3):** OSHA requires employees to inspect first aid kits monthly and add or replace needed items.

Burn Treatment

Burns are classified in one of the following ways:

- First Degree – reddened skin
- Second Degree – reddened skin and blisters
- Third Degree – skin destroyed, tissues damaged and charring

To treat burns, complete the following procedure:

Burn Treatment Table

Step	Action
1.	Cut away loose clothing, but do not remove clothing that is stuck to a burn.
2.	Immerse first and second-degree burns in cold water for relief of pain. Note: Avoid rubbing the body. Do not break blisters.
3.	Cover the burned skin with a moist sterile dressing after soaking.
4.	Immobilize and then elevate severely burned limbs.

Do not use ice, lotion, or ointment on a burn. Treat the person for shock. Check for breathing problems and treat accordingly.

If it is a burn from a chemical splash, FLUSH with water for 15 minutes. Carefully remove the contaminated clothing of a chemical burn victim.

Chemical Exposure

Treat chemical overexposure seriously. If the person inhaled or was splashed by a poisonous substance, follow the procedures below:

Chemical Exposure Table

Chemical Exposure	Action
Eyes	Flush with water for 15 minutes.
Skin	Flush with water for 15 minutes.
Inhalation	Move to fresh air. Administer artificial respiration or CPR if necessary.
Swallowing	Get medical assistance. Call the local poison center and follow Material Safety Data Sheet (MSDS) instructions.

CPR

Whenever a person is found unconscious, call 911 then complete the following procedure:

CPR Treatment Table

Step	Action
1.	Check that it is safe to approach.
2.	Kneel beside the person and call the person's name.
3.	LOOK, LISTEN, and FEEL if the person does not respond. LOOK at the chest to determine breathing. LISTEN and FEEL for signs of breathing by placing your ear close to the person's mouth and nose.
4.	Start rescue breathing, described in the steps below, as soon as possible if the person is not breathing without endangering the rescuer.
5.	Loosen the clothes around the neck. Make sure nothing is blocking the mouth or throat.
6.	Tilt the person's head back to open the airway. Place the head slightly downhill if possible. A folded coat, blanket or similar object under the shoulders helps maintain the proper position. Tilt the head backward so the chin points straight upward.
7.	Grasp person's jaw and raise it upward until lower teeth are higher than upper teeth or place fingers on both sides of jaw near ear lobes and pull upward. Maintain jaw position throughout resuscitation period to prevent tongue from blocking air passage.
8.	Pinch the person's nose shut with thumb and forefinger.
9.	Take a deep breath and place your mouth over the person's mouth making an airtight contact. Or, close the person's mouth, take a deep breath, and place your mouth over the person's nose making an airtight contact. For infants , place your mouth over the mouth and nose. Place a porous cloth between you and the person to avoid direct

	contact.
10.	Blow two slow breaths into the person's mouth or nose until the chest rises. Blow gently for infants.
11.	Remove your mouth to let the person exhale. Turn your ear to hear an outrush of air.
12.	<p>Continue breathing. The first 8 or 10 breaths should be as rapid as the person is able to respond.</p> <p>Thereafter, the rate should be slowed to about 12 times a minute with one breath every five seconds. Do not stop until the person begins breathing or emergency help arrives.</p> <p>For infants, the rate should be about 20 times a minute with one breath every three seconds.</p> <p>If unable to get air into the person's lungs, go to Step 13. Otherwise, go to Step 14.</p> <p>Note 1: If it is necessary to move the person from imminent danger or to prepare for transport, do not interrupt rescue breathing for more than thirty seconds.</p> <p>Note 2: If another individual is available to help, change rescuers as smoothly as possible without breaking the breathing rhythm.</p>
13.	<p>If unable to get air into the person's lungs, check the position of the person's head and jaw. Also, check and clear the mouth of obstructions. Reposition the head and try again more forcefully to breathe into the person's mouth.</p> <p>If still unable to get air into the person, complete the following:</p> <ol style="list-style-type: none"> a. Turn person onto their side and strike four times forcibly between the shoulder blades. b. Roll person onto their back and give four quick manual thrusts upward on the abdomen between the rib cage and navel. c. Remove any obstructions from the mouth by using a hooking motion with your finger to sweep through the person's mouth. d. Retilt the person's head and start again to give rescue breathing. If unsuccessful, repeat the procedure until the air passage is

	<p>open and you can successfully inflate the lungs.</p> <p>e. Continue uninterrupted rescue breathing with one breath every five seconds (every 3 seconds for infants) until the person is breathing without help or until there are positive signs of death such as rigor mortis (stiffening of the body).</p> <p>Note 1: If it is necessary to move the person from imminent danger or to prepare for transport, do not interrupt rescue breathing for more than thirty seconds.</p> <p>Note 2: If another individual is available to help, change rescuers as smoothly as possible without breaking the breathing rhythm.</p>
14.	Watch the person carefully after he/she revives. Do not permit the person to exert himself/herself.
15.	Treat person to prevent shock.
16.	Transport the person to a doctor or hospital for examination and disposition.

Note: OSHA 29 CFR 1910.268(c)(3), 1910.268(o)(1) & 1910.268(o)(3): Employees working in manholes or near power lines or other high voltage electrical sources must be trained in First Aid and CPR.

Electrical Contact

To treat electric shock, complete the following procedure:

Electrical Contact Treatment Table

Step	Action
1.	Do not rush in and become a casualty.
2.	Deenergize or insulate the power source if possible.
3.	Remove person from electric lines with a dry, non-conductive material.
4.	Start rescue breathing when it is safe.

Heat and Cold Treatments

The following information is discussed as it relates to hot and cold treatments:

- Frostbite and Hypothermia Prevention
- Frostbite
- Hypothermia
- Heat Cramps
- Heat Exhaustion
- Heat Stroke

Heat Cramps

Heat cramps are muscular pains and spasms due to heavy exertion. They usually involve the abdominal muscles or the legs. It is accepted theory that the loss of water and salt from heavy exertion and sweating causes the cramps.

To treat heat cramps, complete the following procedure:

Heat Cramp Treatment Table

Step	Action
1.	Move the person to a cooler location.
2.	Give the person a half glass of water to drink every 15 minutes for an hour if the person can tolerate water and there are no other injuries.

Heat Exhaustion

Heat exhaustion usually occurs when people exercise heavily or work in a warm humid place and body fluids are lost through heavy sweating. Fluid loss causes blood flow to decrease in the vital organs resulting in a form of shock. With heat exhaustion, sweat does not evaporate as it should. As a result, the body does not cool effectively.

The usual signs and symptoms of heat exhaustion are cool, pale, and moist skin, heavy sweating, dilated pupils, headache, nausea, dizziness, and vomiting. Body temperature is nearly normal.

To treat heat exhaustion, complete the following procedure:

Heat Exhaustion Treatment Table

Step	Action
1.	Move the person to a cooler location.
2.	Place the person on their back with feet up.
3.	Remove or loosen the person's clothing.
4.	Cool the person by fanning and applying cold packs or wet towels and sheets.
5.	Care for shock.
6.	Give the person a half glass of water to drink every 15 minutes if the person can tolerate water.

Heat Stroke

In heat stroke, the person's temperature control system, which produces perspiration to cool the body, ceases working. The body temperature can rise and brain damage and death may result if the body is not cooled quickly. Heat stroke is life threatening; medical attention is required.

Hot red skin, very small pupils, and very high temperatures typify heat stroke symptoms. If the person was sweating from heavy work or exercise, his or her skin may be wet; otherwise it feels dry.

To treat heat stroke, complete the following procedure:

Heat Stroke Treatment Table

Step	Action
1.	Call the Emergency Medical Services (EMS).
2.	Move the person out of the heat.
3.	Cool the person by immersing in a cool bath or by fanning or wrapping with wet sheets. Note: Do not give anything by mouth.

Frostbite and Hypothermia Prevention

To prevent frostbite and hypothermia:

1. Layer clothing to allow for easy adjustment to temperature changes by adding or removing clothing.
2. Wear undergarments made of cotton, polypropylene or lightweight wool.
3. Choose outer garments made of wind resistant, waterproof material such as nylon.
4. Always wear a hat; a great deal of body heat is lost through the head.
5. Wear gloves, thick socks, scarves, and earmuffs to protect body parts.
6. Stay as dry as possible. Water cools the body more rapidly than air.
7. Wear waterproof boots when working in damp or snowy weather.
8. Work with a companion if possible. If working alone, notify someone of your location and set up a check-in time.

Frostbite

Frostbite is the most common injury caused by exposure to cold. It happens when ice crystals form in the body tissues.

The first sign of frostbite may be that the skin is slightly flushed. The skin color of the frostbitten area changes to white or grayish-yellow and finally grayish-blue. There is pain initially, but it goes away.

To treat frostbite, complete the following procedure:

Frostbite Treatment Table

Step	Action
1.	Move the person to a warm place.
2.	Immerse the frozen parts in warm water (100 – 105 degrees). Handle gently.
3.	If the fingers or toes are affected, put dry sterile gauze between them, loosely bandaging the injured parts.

Hypothermia

Hypothermia, also known as cold stress, occurs when a person's body gets so chilled that it cannot warm itself. Hypothermia can be fatal in a very short time if not properly treated.

The symptoms include shivering, dizziness, numbness, confusion, weakness, impaired judgment, impaired vision and drowsiness. As hypothermia progresses, the stages are shivering, apathy, loss of consciousness, decreasing pulse and breathing rate, and then death.

To treat hypothermia, complete the following procedure:

Hypothermia Treatment Table

Step	Action
1.	Seek medical help immediately.
2.	Move the person to a warm place.
3.	Remove wet clothes and wrap the person in blankets and warm clothes.