

FIRST AID **IN CONSTRUCTION**

COURSE OUTLINE

- **Sometimes "first aid" can be as simple as cleaning a fresh scrape on your arm and covering it with a bandage.**
 - Other times it could be as dramatic as helping a coworker in out of the sun and treating them for heat exhaustion.
- **To be able to help in these situations you need to understand:**
 - The injuries and illnesses that you could encounter on the job.
 - The steps you should and should not take to provide basic first aid.
 - Situations where you should call for emergency medical assistance.
- **One thing that's important to know in all situations is where the first aid kits are on every job site... in the project trailer, a JoBox, wherever.**
 - You don't want to be running around looking for one in the midst of an emergency.
 - So take a walk and locate them today!
- **Our ability to see is precious, so it's important to know what we can do to safeguard our vision and avoid making things worse when we deal with eye injuries.**
 - If you get a small particle of something in your eye, do not to rub it.
 - This can result in scratching the eye's surface.
- **Instead, allow the eye to flush the particle away naturally, with tears. You can help by:**
 - Blinking the eye repeatedly.
 - Pulling your eyelid out gently, then letting it slip back into place.
- **For stubborn particles, try rinsing the eye with water or artificial tears.**
 - If that doesn't work, see a doctor.
- **Cleaning solutions, solvents and other chemicals can cause serious burns if they get into our eyes.**
 - If you get splashed by one of these substances, stay calm and keep your eyes open.

- Closing them traps the chemicals against the eyes, where they will cause more damage.
- **Instead, go to the nearest source of clean water on the site and rinse the affected eye.**
 - Hold it open with your fingers.
 - Continue rinsing for at least 15 minutes, if possible.
 - Then call for medical assistance.
- **When seconds count, you don't want to have to go searching for emergency contact numbers.**
 - Make sure you know where to find them quickly.
 - Even better, program them into your phone, too.
- **If a large object such as a piece of glass, splinter or nail becomes embedded in a coworker's eye, do not try to remove it.**
 - Pulling it out could cause further damage.
- **Instead, call for medical assistance immediately.**
 - Cover the affected eye with an eye shield or the bottom half of a paper cup.
 - Secure it lightly in place.
 - Then wait for the EMTs, or get to a doctor.
- **Cuts, burns and abrasions are some of the most common injuries on a job site.**
 - Most minor cuts and scrapes may bleed little, if at all.
 - Clean them by rinsing with water.
- **You can also gently wash the area around the wound with soap, but don't get soap in the wound itself.**
 - Then pat the area dry, apply antibiotic cream and cover it with a sterile bandage.
- **When bleeding does occur, press a clean cloth, tissue, or piece of gauze directly over the wound to stop it.**
 - If blood soaks through, don't remove the covering.
 - Put more on top and continue to apply pressure.
 - When bleeding stops, cover with a sterile bandage.
 - Later, you'll want to clean and re-dress the injury.
- **To remove the scabbed bandage material:**
 - Soften with warm saline solution and proceed slowly.
 - Or see a doctor.

- **Serious wounds require medical attention. Call 911 when:**
 - The wound is deep or has gaping or jagged edges.
 - The bleeding will not stop.
 - Blood is spurting from the wound.
- **It's important to remember that coming into contact with another person's blood could infect you with a "bloodborne disease" such as Hepatitis B or AIDS.**
 - Avoid contact with anyone's blood but your own.
 - Before assisting a coworker with a bleeding injury, always put on a pair of sterile gloves (there should be a pair in your first aid kit).
- **Burns require a different approach.**
 - Since even minor burns can be very painful, hold them under cool (but not cold) running water to ease the discomfort.
 - You can then apply moisturizing cream, aloe vera gel or a burn treatment product.
- **If a blister forms, try not to break it. But if it does break:**
 - Leave the skin in place.
 - Clean the wound gently with soap and warm water.
 - Apply antibiotic cream.
 - Cover the area with a gauze bandage.
- **You should be able to find all the supplies you need to treat minor burns in your first aid kit.**
- **For more serious burns with large blistered areas or charring, call 911.**
 - While waiting for help, you can comfort the victim by elevating the burned area and applying a cool, moist bandage.
 - Do not immerse major burns in cold water (this can cause hypothermia and shock).
- **Most strains and sprains, and all fractures, should be considered serious injuries and evaluated by a doctor as soon as possible.**
- **For minor strains and sprains you can help to reduce swelling by remembering the acronym "RICE"... Rest, Ice, Compress, Elevate.**
 - To rest an injured limb or joint, simply don't use it (keep weight off it).
 - Apply ice for 20 minutes every hour.
 - Compress the injury by wrapping the joint or limb in an elastic bandage.
 - Elevate the area so that it's above the level of the heart.

- **Begin RICE therapy immediately after an injury, and continue it for 24 to 48 hours, or until you see a doctor.**
- **More severe injuries require different measures. Call for emergency assistance immediately if:**
 - A person's limb or joint appears to be deformed.
 - A bone is protruding from their skin.
 - You think they may have broken bones in their head, neck or back.
- **You should also get help if the victim:**
 - Feels severe pain or numbness.
 - Can't move the injured joint or limb.
 - Has the limb buckle when they try to use it.
- **In these cases, don't move the person unless it's necessary to prevent them from suffering additional injuries.**
- **Don't try to realign a broken bone yourself, or push in a bone that's sticking out.**
- **If the injured person feels dizzy, is breathing rapidly, has pale, clammy skin and enlarged pupils, they may be going into "shock".**
- **"Shock" is a life-threatening condition that occurs when your system tries to cope with an injury by redirecting the blood flow within the body.**
 - This can cause some organs to get too little blood, and can result in organ damage or even death if nothing is done to stop it.
- **If you suspect that a coworker is going into shock:**
 - Call for emergency assistance (if you haven't done so already).
 - Help them lie down.
 - Elevate their legs and feet slightly, if possible.
 - Cover them so they stay warm
 - Stay with them until help arrives.
- **When a person is having a heart attack, or going into cardiac arrest, it's a serious situation.**
 - Their life is in immediate danger.
- **A heart attack occurs when the blood supply to the heart muscle stops, and the muscle tissue begins to die as a result.**

- **A victim of a heart attack usually feels a sharp pain in the center of their chest, or between their shoulder blades.**
 - Often mistaken for indigestion or heartburn, the discomfort may spread to the shoulders, neck and arms as well.
- **Other symptoms of a heart attack include shortness of breath, sweaty or clammy skin, lightheadedness, nausea and vomiting.**
- **If you believe someone is having a heart attack:**
 - Have them sit down.
 - Loosen their clothing, especially at the collar.
 - Ask them if they use any medicine, such as nitroglycerin, for a heart condition.
 - If they do, help them take it immediately.
- **If the pain does not stop within 3 minutes of taking their medication, or they don't have it with them, call for emergency medical help.**
- **If the person suddenly stops responding to you, or stops breathing, they may be going into cardiac arrest.**
 - This is when the heart either begins to beat abnormally or stops beating completely.
- **Tap them on the shoulder and shout, “Are you OK?” If they show no reaction:**
 - Have someone call 911.
 - Begin CPR immediately.
 - Use an AED (Automated External Defibrillator) if one is available and you know how to operate it.
- **CPR and the use of an AED can significantly increase the victim's chances of survival.**
 - If you don't know how to perform CPR or use an AED, get help from someone on the site who does.
 - Consider getting trained in these skills yourself (it could save a coworker's life).
- **Choking occurs when a foreign object, usually food, lodges in a person's throat or windpipe, and prevents them from breathing.**

- **A person who is choking will be unable to talk. They may:**
 - Cough and gag.
 - Make squeaky sounds when trying to breathe.
 - Clutch at their throat.
 - Make frantic gestures.
- **Unless the blockage is removed, they can lose consciousness and die of suffocation in minutes.**
- **If a coworker begins choking, you need to help them immediately.**
 - Have someone call for emergency assistance, if possible.
 - If you are alone with the victim, only call for assistance after you help them.
- **To clear their airway use the "Five and Five" procedure. Begin by giving 5 blows to the victim's back:**
 - Standing beside the person, place one arm across their chest for support.
 - Bend them over at the waist so the upper body is parallel with the ground.
 - Deliver five separate back blows between the shoulder blades with the heel of your hand.
- **Then, perform 5 "abdominal thrusts":**
 - Standing behind the person, wrap your arms around their waist and lean them forward slightly.
 - Make a fist with one hand, position it above the person's navel and grasp the fist with your other hand.
 - Press hard into the abdomen with a quick, upward thrust, as if you are trying to lift the victim off their feet.
- **After delivering 5 abdominal thrusts, give 5 more back blows.**
 - Continue alternating between them, "five and five", until the blockage comes out.
- **If you begin to choke and no one is around to help you, you can perform abdominal thrusts on yourself:**
 - Place a fist slightly above your navel and grasp the fist with your other hand.
 - Deliver quick inward and upward thrusts against your upper abdomen.
- **Another approach is to bend over a hard surface, such as a work table or tailgate of a pickup truck, and thrust your upper abdomen against it.**
 - Keep it up until the blockage is expelled and you can breathe freely again.

- **Our body has automatic "cooling processes" that normally bring our temperature down when we get overheated.**
- **Sometimes those processes get out of whack... and when they do, "heat-related illnesses" such as heat exhaustion and heat stroke can occur.**
- **For example, sweating helps cool us by "evaporation", but the process also drains our system of the water and "electrolytes" that keep our body functioning normally.**
- **When our water and electrolyte levels get too low, we begin to suffer from "heat exhaustion".**
 - Symptoms of heat exhaustion include excessive sweating, cold and clammy skin, headache, dizziness, weakness and nausea.
- **If you believe a coworker is suffering from heat exhaustion:**
 - Get them into a cool or air-conditioned area.
 - Loosen their outer clothing.
 - Have them drink cool liquids, such as water, or sports drinks that contain electrolytes... but nothing that contains caffeine or alcohol.
 - Cool them down by spraying or sponging them with water, fanning them, or applying ice packs if they are available.
- **If the victim doesn't recover within 60 minutes, they should be taken to a clinic or emergency room to be evaluated by a doctor.**
- **Sometimes the body's natural cooling system can break down completely.**
 - Then we stop sweating and our temperature can go through the roof.
 - This is known as "heat stroke".
 - It can severely damage internal organs, including the brain, and can even be fatal.
- **The skin of a heat stroke victim will be hot and dry.**
 - They may stagger and appear to be confused.
 - Eventually they may have seizures and lose consciousness.
- **If you suspect someone has heat stroke, call for medical assistance immediately.**
 - Get the victim out of the heat.
 - Give them the same cooling treatments as for heat exhaustion.
 - Stay with them until help arrives.

*** * * SUMMARY * * ***

- **You should know how to use first aid to help treat minor illnesses and injuries.**
- **Locate the first aid kits on your job site, and know how to use the supplies in them.**
- **Learn to recognize injuries and medical conditions that require emergency assistance.**
- **Make sure you can find local emergency numbers quickly (program them into your cell phone).**
- **Know how to use the "abdominal thrust" and "Five and Five" procedures to help someone who is choking.**
- **Consider getting trained in CPR and how to use an AED.**
- **By knowing when someone needs first aid, and what you can do to assist them, you can help minimize the impact of a coworker's injury... or even save a life!**