

First Aid, CPR & Emergency Medical Response	Page 1
Absolute Pipeline Maintenance & Consulting Master Safety & Health Program	Rev. Date 6/2/2009

Applicable OSHA Standard: 29 CFR 1926.50 Medical services and first aid

1. Purpose & Scope

- 1.1. Personal injury is not uncommon in the plant and pipeline services workplace. These injuries are usually minor cuts or burns but can be as severe as acute effects of chemical exposure or incidents such as heart attacks or strokes.
- 1.2. This written plan and policy, along with accompanying materials, will be utilized by Site Supervisors and Company employees to ensure that medical services and first aid are available at each work location.
- 1.3. This policy applies to all employees and subcontractors at work locations that are controlled by Absolute Pipeline Maintenance & Consulting

2. General Requirements

- 2.1. The Company will ensure the availability of medical personnel for advice and consultation on matters of occupational health.
- 2.2. Provisions will be made prior to commencement of the project for prompt medical attention in case of serious injury.
- 2.3. In the absence of medical care that is within 3–4 minutes of the worksite, a person who has a valid certificate in first aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, will be available at the worksite to render first aid.
- 2.4. First aid supplies will be easily accessible when required.
- 2.5. The contents of the first aid kit will be placed in a weatherproof container with individual sealed packages for each type of item, and will be checked by the Company Safety Representative before being sent out on each job, and at least weekly on each job by the Site Supervisor to ensure that the expended items are replaced.
- 2.6. First aid supplies will be readily available.
- 2.7. An example of the minimal contents of a generic first aid kit is described in American National Standard (ANSI) Z308.1-1978 "Minimum Requirements for Industrial Unit-Type First-aid Kits." The contents of the kit listed in the ANSI standard should be adequate for small worksites. When larger operations or multiple operations are being conducted at the same location, employers should determine the need for additional first aid kits at the worksite, additional types of first aid equipment and supplies and additional quantities and types of supplies and equipment in the first aid kits. For purposes of this program, the Company will provide a first aid kit or station at the workplace that is in accordance with ANSI standards.

- 2.8. Work locations may have unique or changing first aid needs and may need to enhance the first aid kits maintained at these locations.
- 2.9. In areas where 911 is not available, the telephone numbers of the physicians, hospitals, or ambulances will be conspicuously posted by the Site Supervisor. See Emergency Phone List form at Appendix 1 of this section.
- 2.10. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body will be provided within the work area for immediate emergency use. Quick drenching may be accomplished by use of portable eyewash and body wash stations, or stations designed for this purpose that are plumbed into an appropriate water supply.

3. First Aid & Emergency Medical Response

- 3.1. Proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service, will be provided. The Site Supervisor will be responsible for confirming the availability of emergency medical services assistance should they be needed, and confirming that arrangements are in place for transporting injured persons to a physician or hospital.
- 3.2. In most situations communication to obtain emergency medical assistance will be provided by land-line telephone, cellular telephone or two-way radio. The Site Supervisor will ensure that such communications capabilities are available at the jobsite prior to commencing work.
- 3.3. The initial responsibility for first aid rests with the first person(s) at the scene, who should react quickly but in a calm and reassuring manner.
- 3.4. The person assuming responsibility should immediately summon medical help (be explicit in reporting suspected types of injury or illness, location of victim, and type of assistance required).
- 3.5. Send people to meet the emergency medical services (EMS) personnel at highway intersections, entrance roadways or as needed to help direct them to scene. The injured person should not be moved except where necessary to prevent further injury.
- 3.6. The names of persons on the jobsite who are trained in CPR and first aid should be posted by the telephone or other communications method when possible, or posted in a prominent place.
- 3.7. The number to call for medical emergencies (911) will also be posted by your telephone.
- 3.8. All first aid, chemical exposures and medical emergencies will be reported to the Site Supervisor so that immediate response can be made and proper accident reporting procedures followed.

4. **General First Aid For Minor Injuries**

- 4.1. For purposes of this policy, general first aid is defined as any one-time treatment and any follow up visit for the purpose of observation, treatment of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care.
- 4.2. Minor injuries should be initially treated with self-administered first aid unless assistance of another person is required. This limits the exposure of other persons to potential pathogens in the blood, body fluids and tissues of the injured person.
- 4.3. Minor injuries requiring general first aid should always be reported to a supervisor and recorded on the First Aid Report form maintained at each work location at the first aid station. This is important because a minor injury may indicate a hazardous situation that should be corrected to prevent a serious future injury. It is also important to document a minor injury as having been "work related" if the injury later leads to serious complications, such as from an infected cut.

5. **Personal Protection During First Aid**

- 5.1. OSHA requires adherence to "Universal Precautions" when employees respond to emergencies which provide potential exposure to blood and other potentially infectious materials. "Universal Precautions" stresses that all patients should be assumed to be infectious for HIV and other bloodborne pathogens. NOTE: See the Company's written safety program on *Bloodborne Pathogens*.
- 5.2. Persons responding to a medical emergency should be protected from exposure to blood and other potentially infectious materials. Protection can be achieved through adherence to work practices designed to minimize or eliminate exposure and through the use of personal protective equipment (i.e., gloves, masks, and protective clothing), which provide a barrier between the worker and the exposure source.
- 5.3. For most situations in which first aid is given, the following guidelines should be adequate:
- 5.4. For bleeding control with minimal bleeding and for handling and cleaning instruments with microbial contamination, disposable gloves alone should be sufficient.
- 5.5. For bleeding control with spurting blood, disposable gloves, a gown, a mask, and protective eye wear are recommended.
- 5.6. For measuring temperature or measuring blood pressure, no protection is required.
- 5.7. After emergency care has been administered, hands and other skin surfaces should be washed immediately and thoroughly with warm water and soap if contaminated with blood, other body fluids to which universal precautions apply, or potentially contaminated articles. Hands should always be washed after gloves are removed, even if the gloves appear to be intact.

6. Requirement to Report Work-Related Injuries & Illnesses

- 6.1. All work-related injuries and illnesses will be reported and treated as soon as possible after occurrence.
- 6.2. If a Company employee becomes injured or ill due to a work-related injury or illness and is in need of immediate medical assistance, this will be reported to the Site Supervisor.
- 6.3. Failure to report minor injuries or to receive medical treatment may result in serious infections or complications to the health of the employee.
- 6.4. A First Aid Station is located at each work location and jobsite. Each First Aid Station will be stocked with basic supplies specified in the inventory on the next page. Each First Aid Station will also contain First Aid Report forms.
- 6.5. When first aid is rendered, the supervisor will note treatment on the First Aid Report form. In the event the employee refuses first aid and/or examination by a doctor, this will be noted in the First Aid Report.

IMPORTANT: If an employee declines first aid and/or medical treatment for a reported on-the-job injury after the Site Supervisor recommends it, the employee will NOT be allowed to continue work. Site Supervisors will discuss each such situation with the Company Safety Representative or the Personnel Dept. BEFORE allowing the employee to return to duty.

- 6.6. The Site Supervisor or someone designated by the Site Supervisor will be responsible for checking and maintaining the First Aid Station(s) at the work location.

This person will take a regular inventory of supplies and make sure that the station or kit remains adequately stocked. The following first aid supplies checklist will be used as a guide to ensure proper stocking of the station.

7. First Aid Supplies

- 7.1. Workplaces vary widely in their degree of hazard, location, size, amount of staff training and availability of professional medical service. Because of these significant variables, OSHA standards (1910.151 and 1926.50) do not require specific first aid kit contents.

However, because some employers may find it useful to refer to a list of basic first aid supplies, federal OSHA provided a reference to this type of information by adding non-mandatory Appendix A to the standard. Appendix A references ANSI Z308.1-1 978, "Minimum Requirements for Industrial Unit-Type First-aid Kits." This ANSI standard was revised in 1998 and re-titled: "Minimum Requirements for Workplace First Aid Kits."

First aid kits in compliance with this standard will provide a basic range of products to deal with most types of injuries encountered in the workplace.

The assortment of required items was developed based on treatment for the following potential injuries: major wounds, minor wounds (cuts and abrasions), minor burns and eye injuries.

ANSI Z308.1-1 998 includes the following recommended basic contents of a first aid kit.

ANSI Z308.1 -1998 – <i>Minimum Requirements for Workplace First Aid Kits</i>	
Basic kit – minimum contents NOTE: * means recommended but not required	
Item	Minimum quantity
Absorbent compress, 32 sq. in. (81.3 sq. cm.) with no side smaller than 4 in. (10 cm.)	1
Adhesive bandages, 1 in. x 3 in. (2.5 cm. x 7.5 cm.)	16
Adhesive tape, 5 yd. (457.2 cm.) total	1
Antiseptic, 0.5g (0.14 fl. oz.) applications	10
Burn treatment, 0.5g (0.14 fl. oz.) applications	6
Medical exam gloves	2 pair
Sterile pads, 3 in. x 3 in. (7.5 x 7.5 cm.)	4
Triangular bandage, 40 in. x 40 in. x 56 in. (101 cm. x 101 cm. x 142 cm.)	1
Protective Rubber Gloves (Surgical Type) as PPE barrier against bloodborne pathogens*	2 pair *
Protective CPR Mask w/One-Way Valve*	1 each *
Optional contents	

Optional items and sizes should be added to the basic contents listed above to augment a first aid kit, based on the specific hazards existing in a particular work environment.

Optional items addressed in ANSI Z308.1-1 998 (listed below) must meet the minimum requirements of Section 5.3 of that standard. Items not addressed by the ANSI standard must comply with standards or regulations, where applicable, established by the U.S. Food and Drug Administration (FDA), the current edition of the U.S. Pharmacopoeia/National Formulary (USP/NF) or other standards-writing body.

Bandage compress –	2 in. x 2 in.	4
Bandage compress –	3 in. x 3 in.	2
Bandage compress –	4 in. x 4 in.	1
Eye covering with means of attachment		1
Eye wash –	1 fl. oz. (30 ml)	1
Cold pack –	4 in. x 5 in.	1
Roller bandage –	2 in. (5 cm)	2
Roller bandage –	4 in. (10 cm)	1

8. Heat-Related Illnesses

- 8.1. Heat is a serious hazard outdoors in hot weather and indoors when the work exposes personnel to unusually hot temperatures and high humidity. A person's body builds up heat when at work, and sweats to get rid of extra heat.
- 8.2. But there are times when this cannot happen as it should – for example outdoors in the summer, on a humid day and without shade in an area where heat radiates from the surroundings. This may be a time when the body simply cannot cool off fast enough.
- 8.3. Too much heat can make a person tired, hurt job performance, and increase the chance of injury. Overheating can cause skin rash on the minor side, and progress into a range of conditions that can be life-threatening. Effects of physical overheating include:
 - 8.3.1. Dehydration. When the body loses water, a person cannot cool off fast enough, but will feel thirsty and weak.
 - 8.3.2. Cramps. The heat can cause muscle cramps, even after a person leaves work.

- 8.3.3. Heat exhaustion. The victim feels tired, nauseous, headachy, and giddy (dizzy and silly). The skin is damp and looks ruddy or flushed. Fainting may occur.
- 8.3.4. Heat stroke. This is a life-threatening condition. The victim may have hot, dry skin and a high temperature. The skin dryness is because the body's ability to sweat is compromised or has shut down. Victims may feel confused, suffer convulsions or lose consciousness. Heat stroke can kill quickly and emergency medical assistance is urgently needed.
- 8.4. A person's risk of developing heat stress depends on several factors. These include physical condition, the weather (temperature AND humidity), clothing worn, quickness of movement and how much physical demand is being placed on the body (lifting, heavy work), if there is air circulation over the body, whether the person is in direct sunlight, and whether they are taking medication. Evaluation of workplace conditions using the Wet-Bulb Globe Temperature Index is one precise way to estimate the risk of heat stress.
- 8.5. Types Of Heat Sickness (in a progressing order of seriousness)
- 8.5.1. HEAT RASH is recognized by tiny, red, blister-like eruptions on the skin and by a prickly, itchy, burning sensation. First Aid: Bathe skin to prevent infection and put on dry clothes.
- 8.5.2. SUNBURN is caused by the exposure of unprotected skin to ultraviolet light. Symptoms of first degree sunburn are red, painful skin. Second degree sunburn causes blistering and/or peeling. First Aid: Skin lotions, topical anesthetics and staying in a shaded area.
- 8.5.3. HEAT CRAMPS bring painful muscle spasms. First Aid: Water and/or electrolyte replacement beverage. Get medical assistance.
- 8.5.4. HEAT EXHAUSTION results from loss of too much water or salt from the body. It causes cool, moist skin, obvious sweating and rapid pulse (more than 150 beats per minute). It may or may not cause fever. First Aid: Water and/or electrolyte replacement beverage.
- 8.5.5. HEAT STROKE (thermoregulatory failure) is characterized by hot, dry skin, a flushed face, body temperature of 105 degrees F (40.6" C) or higher, rapid pulse and brain disorders such as headaches, confusion, delirium or unconsciousness. Usually, there is an absence of sweating because the body's "cooling system" has shut down. There may also be difficulty breathing, constricted pupils, high blood pressure, strange behavior, weakness, nausea or vomiting. First Aid: This is a potentially LIFE-THREATENING condition. The victim must be removed from the heat source and the body temperature lowered as quickly as possible. Immerse in water (garden hose, shower, bath tub) or cover and massage the body with wet cool soaked towels or sheets. DO NOT give liquids to an unconscious person. Call for emergency medical assistance immediately.

8.6. Protective Measure To Avoid Heat Stress

8.6.1. Here is advice that employees can be given toward preventing heat-related illness:

8.6.1.1. Drink a lot of cool water all day before you feel thirsty. Every 15 minutes, you may need a cup of water (5 to 7 ounces).

8.6.1.2. Keep taking rest breaks. Rest in a cool, shady spot. Use fans.

8.6.1.3. Wear light-colored clothing, made of cotton.

8.6.1.4. Do the heaviest work in the coolest time of the day.

8.6.1.5. Work in the shade.

8.6.1.6. For heavy work in hot areas, take turns with other workers, so some can rest.

8.6.1.7. If you travel to a warm area for a new job, you need time for your body to get used to the heat. Be extra careful the first two weeks on the job.

8.6.1.8. If you work in protective clothing, you need more rest breaks. You may also need to check your temperature and heart rate.

8.7. OSHA does not have a special rule for heat. But because heat stress is known as a serious hazard, workers are protected under the General Duty Clause of the Occupational Safety and Health Act.

The clause says employers must provide "employment free from recognized hazards causing or likely to cause physical harm."

9. Administrative And Work Practice Controls

9.1. Heat stress often can be reduced by rescheduling work. Sometimes, strenuous tasks can be postponed until a cooler time of day or a cooler season. Heavy jobs will be spread out over longer periods of time, allowing employees to pace themselves appropriately and to take work breaks as needed.

9.2. Employees will be trained in the causes, symptoms, treatment and prevention of heat stress.

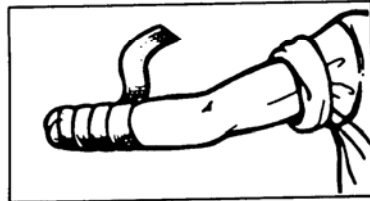
Emergency Procedure for a Severed Body Part Call 9-1-1 for Emergency Medical Service immediately. Transport the Patient and the severed part to the health care facility as quickly as possible.



Keep the Patient from eating and drinking in case he is later placed under anesthesia.



Do not allow the Patient to drink alcohol to "deaden" the pain.



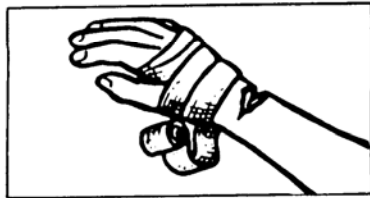
DRESSING THE REMAINING PART OF THE LIMB. Wrap the end of the limb in a compressive dressing so bleeding is stopped. Do not wrap it so tightly that blood flow is cut off to healthy tissue.



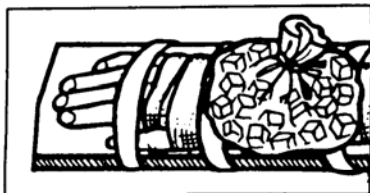
CARING FOR THE SEVERED PART. Wrap the severed part in a terrycloth towel, paper towel or piece of gauze.



PLACE THE SEVERED PART in a clean plastic bag or plastic container and seal it so that it is waterproof. Store plastic bag on ice.



WHEN A LIMB OR DIGIT IS PARTIALLY SEVERED. Wrap the injury with a compressive dressing tightly enough to stop blood flow.



SPLINT THE INJURED AREA by wrapping it securely to a piece of rigid material. Splints should only be used if you need to move a patient.

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APPENDIX 1

Emergency Phone List

CALLING FROM
FIRE
POLICE
AMBULANCE
DOCTOR
HOSPITAL
COMPANY SAFETY COORDINATOR
HELICOPTER AMBULANCE