

**PEORIA AREA EMS SYSTEM
PREHOSPITAL CARE MANUAL**

ENVIRONMENTAL EMERGENCIES PROTOCOLS

PEORIA AREA EMS SYSTEM
PREHOSPITAL CARE MANUAL

**Hazardous Materials
Exposure Protocol**

Injuries from hazardous materials incidents vary depending on the *manner* of exposure (inhalation, ingestion, injection or absorption), the *type* of material involved (acids, ammonia, chlorine, hydrocarbon solvents, sulfides, organophosphates) and the *amount* of exposure (time & concentration).

Harmful products are widely used in home gardening and cleaning, commercial agriculture and cleaning & industrial operations. Civil defense agencies have indicated the increasing threat concerning the use of *Weapons of Mass Destruction* (WMD) as a foreign and domestic terrorist tool. WMD represent an intentional hazardous materials incident.

Due to the magnitude and multiplicity of hazardous materials, this protocol focuses on a general approach to the patient involved in a hazardous materials incident. The substance container may have vital information for resuscitation of an exposed patient. Communication with Medical Control is the best way to obtain rapid and accurate advice on treatment guidelines for specific materials.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock. Remain uphill, upwind, upstream and upgrade of the incident. Stay out of the “Hot Zone” unless trained, equipped and authorized to enter.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Look for possible scene and patient contamination. Follow agency safety procedures.
3. Notify IEMA if needed at 1-800-782-7860.
4. The patient’s clothing should be completely removed to prevent continued exposure and the patient decontaminated **prior to** being placed in the ambulance for transport.
5. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient’s respirations with BVM if necessary.

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**Hazardous Materials
Exposure Protocol**

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport. Remain uphill, upwind, upstream and upgrade of the incident. Stay out of the “Hot Zone” unless trained, equipped and authorized to enter.

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2. Look for possible scene and patient contamination. Follow agency safety procedures.
3. Notify IEMA if needed at 1-800-782-7860.
4. The patient’s clothing should be completely removed to prevent continued exposure and the patient decontaminated **prior to** being placed in the ambulance for transport.
5. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient’s respirations with BVM if necessary.
6. **Proventil (Albuterol):** 2.5mg in 3mL of normal saline via nebulizer over 15 minutes if the patient has been exposed to an irritant gas (acids, ammonia, chlorine, carbon monoxide). May repeat Albuterol 2.5mg every **15 minutes** as needed (**with Medical Control order**).
7. Initiate ALS intercept if needed and transport as soon as possible.
8. **Contact Medical Control** and make sure the receiving hospital is aware of (**prior to arrival at the facility**) the patient’s exposure to hazardous materials and what decontamination procedures were followed at the scene.

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**Hazardous Materials
Exposure Protocol**

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport. Remain uphill, upwind, upstream and upgrade of the incident. Stay out of the "Hot Zone" unless trained, equipped and authorized to enter.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Look for possible scene and patient contamination. Follow agency safety procedures.
3. Notify IEMA if needed at 1-800-782-7860.
4. The patient's clothing should be completely removed to prevent continued exposure and the patient decontaminated **prior to** being placed in the ambulance for transport.
5. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
6. **Proventil (Albuterol):** 2.5mg in 3mL of normal saline via nebulizer over 15 minutes if the patient has been exposed to an irritant gas (acids, ammonia, chlorine, carbon monoxide). May repeat Albuterol 2.5mg every **15 minutes** as needed (**with Medical Control order**).
7. **Atropine:** 2mg IV or IM (**with Medical Control order only**) if suspected organophosphate poisoning (OPP) and signs & symptoms of "SLUDGE" are present (salivation, lacrimation, urination, defecation, gastroenteritis & emesis). Early indications of OPP include: headache, dizziness, weakness & nausea. Repeat Atropine 2mg IV or IM every **5 minutes** (**with Medical Control order**) or until signs & symptoms of "SLUDGE" subside.
8. Initiate ALS intercept and transport as soon as possible.
9. **Contact Medical Control** and make sure the receiving hospital is aware of the patient's exposure to hazardous materials (**prior to arrival at the facility**) and what decontamination procedures were followed at the scene.

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**Hazardous Materials
Exposure Protocol**

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport. Remain uphill, upwind, upstream and upgrade of the incident. Stay out of the "Hot Zone" unless trained, equipped and authorized to enter.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Look for possible scene and patient contamination. Follow agency safety procedures.
3. Notify IEMA if needed at 1-800-782-7860.
4. The patient's clothing should be completely removed to prevent continued exposure and the patient decontaminated **prior to** being placed in the ambulance for transport.
5. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM (or intubate) if necessary.
6. **Proventil (Albuterol):** 2.5mg in 3mL normal saline mixed with **Ipratropium (Atrovent):** 0.5mg via nebulizer over 15 minutes if the patient has been exposed to an irritant gas (acids, ammonia, chlorine, carbon monoxide). Repeat Albuterol 2.5mg with Atrovent 0.5mg every **15 minutes** as needed.
7. **Atropine:** 2mg IV or IM if suspected organophosphate poisoning (OPP) and signs & symptoms of "SLUDGE" are present (salivation, lacrimation, urination, defecation, gastroenteritis and emesis). Early indications of OPP include: headache, dizziness, weakness & nausea. Repeat Atropine 2mg IV or IM every **5 minutes (with Medical Control order)** or until signs & symptoms of "SLUDGE" subside.
8. Transport as soon as possible.
9. **Contact Medical Control** if needed and make sure the receiving hospital is aware of the patient's exposure to hazardous materials (**prior to arrival at the facility**) and what decontamination procedures were followed at the scene.

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**Hypothermic Emergencies
Protocol**

Injury and illness from environmental exposure varies depending on the *manner* of exposure (wet or dry) and the *amount* of exposure (time, temperature, wind chill factor, and ambient air). Cold weather emergencies range from localized frostbite to severe hypothermia with unresponsiveness and unconsciousness.

The patient's health and predisposing factors may increase the likelihood of environmental illness and injury. Patients suffering from trauma, shock, hypoglycemia and stroke are at greater risk of developing hypothermia. Newborns, infants, drug & alcohol abuse patients and the elderly have increased predisposition to hypothermia. The primary goal in the treatment of the patient at risk for hypothermia is to insulate the patient and prevent further heat loss.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Handle the patient as *gently* as possible.
3. Create a warm environment for the patient. Remove wet or frozen clothing and cover the patient with warm blankets. Prevent re-exposure to cold. Warm packs may be utilized for the neck (posterior), armpits, groin and along the thorax.
4. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
5. Do not rub frostbitten or frozen body parts. Protect injured parts (*e.g.* blisters) with light, sterile dressings and avoid pressure to the area.

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**Hypothermic Emergencies
Protocol**

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Handle the patient as *gently* as possible.
3. Create a warm environment for the patient. Remove wet or frozen clothing and cover the patient with warm blankets. Prevent re-exposure to cold. Warm packs may be utilized for the neck (posterior), armpits, groin and along the thorax.
4. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
5. Do not rub frostbitten or frozen body parts. Protect injured parts (*e.g.* blisters) with light, sterile dressings and avoid pressure to the area.
6. Treat other symptoms per the appropriate protocol.
7. Initiate ALS intercept if needed and transport as soon as possible.

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Handle the patient as *gently* as possible.
3. Create a warm environment for the patient. Remove wet or frozen clothing and cover the patient with warm blankets. Prevent re-exposure to cold. Warm packs may be utilized for the neck (posterior), armpits, groin and along the thorax.

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**Hypothermic Emergencies
Protocol**

ILS Care (continued)

4. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
5. **IV Fluid Therapy:** 500mL fluid bolus of warmed .9% Normal Saline.
6. Do not rub frostbitten or frozen body parts. Protect injured parts (e.g. blisters) with light, sterile dressings and avoid pressure to the area.
7. Treat other symptoms per the appropriate protocol.
8. Initiate ALS intercept if needed and transport as soon as possible.

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Handle the patient as *gently* as possible.
3. Create a warm environment for the patient. Remove wet or frozen clothing and cover the patient with warm blankets. Prevent re-exposure to cold. Warm packs may be utilized for the neck (posterior), armpits, groin and along the thorax.
4. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
5. **IV Fluid Therapy:** 500mL fluid bolus of warmed .9% Normal Saline.
6. Do not rub frostbitten or frozen body parts. Protect injured parts (e.g. blisters) with light, sterile dressings and avoid pressure to the area.

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**Hypothermic Emergencies
Protocol**

ALS Care (continued)

7. Treat other symptoms per the appropriate protocol.
8. Transport as soon as possible.

Critical Thinking Elements

- Do not thaw frozen parts in the field if there is a chance of refreezing. Protect frostbitten areas from refreezing.
- Patients with hypothermia should be considered at high risk for ventricular fibrillation. It is imperative that these patients be handled gently and not re-warmed aggressively.
- The presence of delirium, bradycardia, hypotension and/or cyanosis is usually indicative of severe hypothermia (core body temperature of less than 90 degrees Fahrenheit).

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**Heat-Related Emergencies
Protocol**

Injury and illness from heat exposure varies depending on the *manner* of exposure (sun, humidity, exertion) and the *amount* of exposure (time, temperature & ambient air).

Heat exposure emergencies range from localized cramping to severe hyperthermia (heat stroke) with unresponsiveness and unconsciousness. The patient's health, predisposing factors and medications may increase the likelihood of heat-related illness and injury. The primary goal in the treatment of the patient at risk for hyperthermia is to cool the patient and restore body fluids.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Move the patient to a cool environment. Remove clothing as necessary to make the patient comfortable. Cold packs may be utilized for the neck (posterior), armpits, groin and along the thorax. Do not cool the patient to a temperature that will cause them to shiver.
3. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.

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**Heat-Related Emergencies
Protocol**

BLS Care (continued)

2. Move the patient to a cool environment. Remove clothing as necessary to make the patient comfortable. Cold packs may be utilized for the neck (posterior), armpits, groin and along the thorax. Do not cool the patient to a temperature that will cause them to shiver.
3. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
4. Treat other symptoms per the appropriate protocol.
5. Initiate ALS intercept if needed and transport as soon as possible.

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Move the patient to a cool environment. Remove clothing as necessary to make the patient comfortable. Cold packs may be utilized for the neck (posterior), armpits, groin and along the thorax. Do not cool the patient to a temperature that will cause them to shiver.
3. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
4. **IV Fluid Therapy:** 500mL fluid bolus if the patient is hypotensive to achieve a systolic BP of at least 100mmHg.
5. Treat other symptoms per the appropriate protocol.
6. Initiate ALS intercept if needed and transport as soon as possible.

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**Heat-Related Emergencies
Protocol**

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Move the patient to a cool environment. Remove clothing as necessary to make the patient comfortable. Cold packs may be utilized for the neck (posterior), armpits, groin and along the thorax. Do not cool the patient to a temperature that will cause them to shiver.
3. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
4. **IV Fluid Therapy:** 500mL fluid bolus if the patient is hypotensive to achieve a systolic BP of at least 100mmHg.
5. Treat other symptoms per the appropriate protocol.
6. Transport as soon as possible.

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**Heat-Related Emergencies
Protocol**

Heat Disorders

Heat (Muscle) Cramps – Heat cramps are muscle cramps caused by overexertion and dehydration in the presence of high temperatures. Signs & symptoms include: *Normal or slightly elevated body temperature; generalized weakness; dizziness; warm, moist skin and cramps in the fingers, arms, legs or abdominal muscles.*

Heat Exhaustion – Heat exhaustion is an acute reaction to heat exposure and the most common heat-related illness a prehospital provider will encounter. Signs & symptoms include: *Increased body temperature; generalized weakness; cool, diaphoretic skin; rapid, shallow breathing; weak pulse; diarrhea; anxiety; headache and possible loss of consciousness .*

Heatstroke – Heatstroke occurs when the body's hypothalamic temperature regulation is lost. Cell death and damage to the brain, liver and kidneys can occur. Signs & symptoms include: *Cessation of sweating; very high core body temperature; hot, usually dry skin; deep, rapid, shallow respirations (which later slow); rapid, full pulse (which later slows); hypotension; confusion, disorientation or unconsciousness and possible seizures.*

Fever (Pyrexia) – A fever is the elevation of the body temperature above the normal temperature for that person (~ 98.6° F +/- 2 degrees). Fever is sometimes difficult to differentiate from heatstroke; however, there is usually a history of infection or illness with a fever.

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Burn Protocol

Burn injuries vary depending on the *type* of burn (thermal, electrical, chemical) and the *amount* of exposure (time and depth). Burn injuries range from localized redness to deep tissue destruction and airway compromise. Signs of burn injury include: blisters, pain, tissue destruction, charred tissue and singed hair.

The primary goal in the treatment of the burn patient is to stop the acute burning process by removing the patient from direct contact with the source of the burn and maintaining the patient's body fluids. Special attention should be given to limit further pain and damage of the burn to the patient. However, burn care should not interfere with lifesaving measures.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. Make sure the scene is safe to enter.
3. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
4. **THERMAL BURN TREATMENT:**
 - a) If the burn occurred within the last 20 minutes, reverse the burning process and cool the area by flushing the area with **1 Liter of sterile saline** (or sterile water if sterile saline is not available). The goal of cooling is to extinguish the burning process – not to systemically cool the patient. Fluid application should be held to a minimum and discontinued if the patient begins shivering.
 - b) Remove jewelry and loose clothing. Do not pull away clothing that is stuck to the burn.
 - c) Cover the wound with sterile dressings***
 - d) Place a sterile burn sheet on the stretcher. If the patient's posterior is burned, place a sterile burn pad on top of the sheet with the absorbent side toward the patient.
 - e) Place patient on the stretcher.
 - f) Cover the patient with additional sterile burn sheets and blanket to conserve body heat.

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Burn Protocol

First Responder Care (continued)

5. ELECTRICAL BURN TREATMENT:

- a) Assure that the power service has been cut off and remove the patient from the source of electricity.
- b) Fully immobilize the patient due to forces of electrical current and possible trauma.
- c) Assess for entry and exit wounds. No cooling or flushing is necessary due to the type of burn.
- d) Cover the burn with dry, sterile dressings.
- e) Closely monitor the patient.

6. CHEMICAL BURN TREATMENT:

- a) Consider possible scene and patient contamination and follow agency safety procedures.
- b) Note which chemical agent caused the burn and obtain the MSDS for that chemical (if possible).
- c) The patient's clothing should be completely removed to prevent continued exposure and the patient decontaminated **prior to** being placed in the ambulance for transport.
- d) **Dry chemical powder** should be brushed off before applying water.
- e) Irrigate the patient with sterile water and if the MSDS indicates use of water will not cause an adverse reaction. Body parts should be flushed for at least 1-2 minutes. Do not use sterile saline on chemical burns.
- f) Irrigate burns to the eye with sterile water for at least 20 minutes. Alkaline burns should receive continuous irrigation throughout transport.

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Includes all components of *First Responder Care*.
2. Initiate ALS intercept and transport as soon as possible.
3. **Contact Medical Control** as soon as possible for significant burns.

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Burn Protocol

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Includes all components of *First Responder Care*.
2. **IV Fluid Therapy:** 500mL fluid bolus. Repeat if necessary.
3. Initiate ALS intercept and transport as soon as possible.
4. **Contact Medical Control** as soon as possible for significant burns.

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Includes all components of *First Responder Care*.
2. Be prepared to intubate if necessary.
3. **IV Fluid Therapy:** 500mL fluid bolus. Repeat if necessary.
4. **Morphine Sulfate:** 2-5mg IV or IM *every 5 minutes* to reduce the patient's anxiety and severity of pain.
5. **Promethazine (Phenergan):** 12.5mg IV diluted with 10mL NS and administer over 60 seconds (if systolic BP > 90mmHg) or 12.5mg IM **for nausea and/or vomiting**. Promethazine 12.5mg IV or IM may be repeated one time in **15 minutes** to a total dose of 25mg.
6. *If the patient is allergic to Morphine or if Morphine is not effective:*
Fentanyl: 50mcg IV over 2 minutes for pain. Fentanyl 50mcg may be repeated one time in **5 minutes** to a total dose of 100mcg. If unable to establish IV access, may give Fentanyl 50mcg IM and repeat one time in **15 minutes** to a total of 100mcg.

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Burn Protocol

ALS Care (continued)

7. Transport and **Contact Medical Control** as soon as possible for significant burns.

Critical Thinking Elements

- *****WaterJel[®]** may be used for **THERMAL BURNS** (after the burn has been irrigated according to protocol) if it is available:
 1. Open the foil package, unfold dressing and apply to burn. **NOTE:** Do not remove burned clothing - apply gel-soaked dressing directly on top.
 2. Pour excess gel from the foil package directly onto the burn dressing or surrounding skin.
 3. Loosely wrap sterile gauze over the dressing to hold it in place.

WaterJel[®] helps reduce pain from burns, cools the skin to help prevent burn progression and helps protect the burn against airborne contamination. It is the only approved commercial burn care product in the Peoria Area EMS System.

- BurnJel[®] contains Lidocaine and may **NOT** be used in the Peoria Area EMS System.
- Treat other symptoms or trauma per the appropriate protocol (*e.g.* if someone suffers from smoke inhalation along with being burned, refer to the *Smoke Inhalation Protocol*).
- IV access should not be obtained through burned tissue unless no other site is available.
- Closely monitor the patient's response to IV fluids and assess for pulmonary edema.
- Closely monitor the patient's airway – have BVM, suction and/or intubation equipment readily available.
- Do not delay transport of a “Load and Go” trauma patient to care for burns.
- For chemical/powder burns, be aware of inhalation hazards and closely monitor for changes in respiratory status.
- **In patients with known renal failure, the Fentanyl dose must be reduced to 25mcg. The dose may be repeated one time to a maximum dose of 50mcg.**

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**Smoke Inhalation
Protocol**

Smoke inhalation injury is the result of various inhaled components of combustion and direct thermal injury to the airway. Signs and symptoms include: evidence of exposure to fire, stridor, wheezing, acute upper airway obstruction, chemical pneumonia and non-cardiac pulmonary edema. Effects of the exposure may be immediate or delayed several hours.

Carbon monoxide (CO) poisoning is a common secondary complication to smoke inhalation. Direct exposure to the gas is also common (especially in winter months). Signs and symptoms include: evidence of exposure to fire or natural gases produced by incomplete combustion, headache, dizziness, tinnitus, nausea, weakness, chest pain and ALOC.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient does not tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
3. Initiate ALS intercept and transport as soon as possible.

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**Smoke Inhalation
Protocol**

BLS Care (continued)

4. **Proventil (Albuterol)**: 2.5mg in 3mL of normal saline via nebulizer over 15 minutes. May repeat Albuterol 2.5mg every **15 minutes** as needed (**with Medical Control order**).
5. Contact the receiving hospital as soon as possible or Medical Control if necessary.

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient does not tolerate a mask. Be prepared to support the patient's respirations with BVM if necessary.
3. **Proventil (Albuterol)**: 2.5mg in 3mL of normal saline via nebulizer over 15 minutes. May repeat Albuterol 2.5mg every **15 minutes** as needed (**with Medical Control order**). In-line nebulizer may be utilized if patient is unresponsive/in respiratory arrest.
4. Initiate ALS intercept if needed and transport as soon as possible.
5. Contact the receiving hospital as soon as possible or Medical Control if necessary.

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.

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**Smoke Inhalation
Protocol**

ALS Care (continued)

2. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient does not tolerate a mask. Be prepared to support the patient's respirations with BVM (or intubate) if necessary.
3. **Proventil (Albuterol):** 2.5mg in 3mL normal saline mixed with **Ipratropium (Atrovent):** 0.5mg via nebulizer over **15 minutes**. Repeat Albuterol 2.5mg with Atrovent 0.5mg every 15 minutes as needed. In-line nebulizer may be utilized if the patient is unresponsive or in respiratory arrest.
4. Transport as soon as possible.
5. Contact the receiving hospital as soon as possible.

Critical Thinking Elements

- Any trauma patient that has sustained significant trauma (in addition to burn injuries) and meets Field Triage Criteria for trauma shall be transported to the Level I Trauma Center (OSF Saint Francis Medical Center) if transport time is < 30 minutes.
- Monitor the patient's airway closely.

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**Near Drowning
Protocol**

Near drowning results from submersion in water or other liquid for a period of time that does not result in irreversible death. The time interval of submersion that causes irreversible death is dependent on several factors such as: temperature of the water, the health of the victim and any trauma suffered during the event. All persons submerged 1 hour or less should be vigorously resuscitated in spite of apparent death. Initial care of the near drowning victim should begin in the water.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Routine Patient Care Protocol* and *Routine Trauma Care Protocol*.
2. Make sure the scene is safe. Use appropriate personnel and equipment for rescue.
3. Establish and maintain spinal immobilization.
4. **Oxygen:** 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask. Be prepared to clear the airway and support the patient's respirations with BVM if necessary.
5. Initiate **CPR** if indicated.
6. Treat respiratory and/or cardiac symptoms per the appropriate protocol.

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Includes all components of *First Responder Care*.
2. Initiate ALS intercept and transport as soon as possible.
3. Contact the receiving hospital as soon as possible.

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**Near Drowning
Protocol**

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Includes all components of *First Responder Care*.
2. Initiate ALS intercept and transport as soon as possible.
3. Contact the receiving hospital as soon as possible.

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Includes all components of *First Responder Care*.
2. Transport as soon as possible.
3. Contact the receiving hospital as soon as possible.