

Southern Illinois Regional EMS System

EE-5 POISONING / TOXIN EXPOSURE

ALS/ILS:

- Patient Assessment and Initial care protocol.
- Pay special attention to Scene Size-Up and Scene Safety.
 - Do not enter an unsafe environment.
 - Verify the possible need for patient decontamination has been addressed prior to initiating medical care.
 - Notify Medical Control and/or receiving facility of possible exposure hazard.
- Attempt to identify poison/toxin.
 - EMS should never transport any item or substance that would pose a danger to them during transport.

- Ingested Toxins:
 - Ensure scene safety
 - Contact Medical Control
 - Do not induce vomiting
 - Oxygen per O2 sat and perfusion status: 2-6 LPM cannula / 10-15 LPM NRB.
 - IV TKO
 - Treat any cardiac compromise through appropriate System protocol.
 - If ALOC, check blood glucose and follow appropriate System protocol.
 - Any contact with Poison Control must be coordinated through Medical Control.

- Inhaled Toxins:
 - Ensure scene safety
 - Remove patient from environment.
 - Oxygen 15LPM NRM or BVM
 - Some inhaled toxins may displace oxygen and O2 sat may not be reliable.
 - Contact Medical Control
 - IV TKO
 - Treat any cardiac compromise through appropriate System protocol.
 - If ALOC, check blood glucose and follow appropriate System protocol.
 - Any contact with Poison Control must be coordinated through Medical Control.

- Absorbed Toxins:
 - Ensure scene safety
 - Contact Medical Control
 - Using appropriate PPE, remove contaminated clothing.
 - Flush affected area
 - Liquid substance:
 - Irrigate with copious amounts of room temperature water.
 - Do not contaminate unaffected areas while flushing.
 - Dry substance:
 - With appropriate PPE, brush the remaining substance from skin.
 - Irrigate with copious amounts of room temperature water.
 - Do not contaminate unaffected areas while flushing.

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- Eyes:
 - Flush affected eyes continuously with water or saline.
 - Do not contaminate unaffected areas while flushing.
 - Consider the use of Morgan lenses if available.
- Injected Toxins / Envenomation
 - Ensure scene safety
 - Remove patient from environment, if necessary.
 - Assume animal involved is poisonous until proven otherwise.
 - Do not delay treatment or transport attempting to capture or kill the animal involved.
 - Oxygen per O2 sat and perfusion status: 2-6 LPM cannula / 10-15 LPM NRB.
 - Remove jewelry and tight clothing.
 - IV TKO rate: make sure IV is not in affected extremity.
 - Consider immobilization of the involved body part.
 - If extremity is involved, keep below level of the heart.
 - Keep the patient as still as possible to slow movement of venom.
 - Carry patient for transport.
 - If signs of envenomation are present on an extremity:
 - Apply a 1 inch wide constricting band 2 to 4 inches above the bite.
 - The band should be loose enough to allow a finger between the band and the skin.
 - Do not apply a band if more than 30 minutes has elapsed since the bite occurred.
 - Do not remove the band once applied until the victim until ordered by a physician.
 - Distal pulses must be checked regularly and documented.
 - The band must be adjusted as needed to maintain circulation.
 - DO NOT apply a tourniquet.
 - Do NOT apply ice or ice packs.
- NOTES
 - Patients that have intentionally exposed themselves to a toxic substance with suicidal intent must be treated with extra attention to continued personal safety.
 - Refer to Behavioral Emergencies protocol.
 - When flushing a patient exposed to a water reactive toxin, have copious amounts of water readily available prior to beginning irrigation.

LIST OF SPECIFIC POISONS/TOXIN CONDITIONS AND TREATMENTS

- Organophosphate Poisoning (Pesticide):
 - Notify Medical Control.
 - Oxygen 15LPM NRB.
 - Administer **Atropine 2mg IV/IO**:
 - Repeat Atropine every three minutes until SLUDGE-M effects are reversed:
 - Seeking: dry mouth, dried secretions, flushed skin.
 - Usual Atropine dose limitation does not apply.

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- Note “SLUDGE-M”:
 - Reaction from a vagal tone - salivation, lacrimation, urination, diarrhea, GI complaints, emesis, and miosis (pinpoint pupils)
- Cyanide Poisoning:
 - Notify Medical Control.
 - Oxygen 15LPB NRB.
 - Be prepared to run IV/IO wide open to combat cardiovascular collapse.
 - CPR as indicated.
 - Transport
 - Sources of cyanide poisoning:
 - Cherry, plum, peach, apricot seeds; sudan grass, sorghum, electroplating metal, dehairing animal hides, partial sterilization of soil, fumigation of mice, moths, bed bugs, cockroaches, termites or carpet beetles.
 - Other sources can result from fires, vehicle exhaust, industry byproducts/waste and solvents.
- Carbon Monoxide Poisoning:
 - Oxygen 15LPM NRB
 - Vomiting precautions.
 - Monitor ECG continuously.
 - Keep patient as quiet as possible to minimize tissue oxygen demands.
 - Contact Medical Control.
 - Treat patients with airway/respiratory compromise or cardiac arrest per appropriate System protocols.
 - Rapid transport to the nearest hospital.
 - Signs and symptoms include:
 - headache, weakness, dizziness, nausea, vomiting, flushing, and ringing in the ears.
- Opiates - Synthetic Opiates:
(Codeine, Darvon, Darvocet, Demerol, Dilaudid, Dolophine, Fentanyl, Heroin, Lortab, Methadone, Morphine, Percocet, Percodan, Roxanol, Talwin, Tylox, Vicodin) OR
Substance Unknown and Altered Mental Status:
 - Ensure scene safety
 - Oxygen 15LPM NRM or BVM
 - Contact Medical Control.
 - Administer **Naloxone 2mg** IV/IO/IM/Atomized
 - May repeat x 1 in 5 minutes if transient response noted.
 - If given intranasal and second dose is warranted, use the other nostril.
- Cyclic Antidepressant Overdose:
(Adapin, Amitriptyline, Amoxapine, Anafranil, Ascendin, Desipramine, Desyrel, Doxepin, Elavil, Endep, Imipramine, Ludiomil, Norpramine, Pamelor, Sinequan, Triavil, Trofanil, Vivactil and others)
 - Ensure scene safety

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- Oxygen 15LPM NRM or BVM
- Administer fluids IV wide open rate.
- Anticipate seizure activity and treat per Seizure protocol.
- Contact Medical Control.
- If hypotensive, ALOC, wide QRS complex or dysrhythmia:
 - (ALS)Give **Sodium Bicarbonate 1mEq/kg** slow IVP (over 1-2 minutes).

- Cocaine Overdose:
 - Ensure scene safety
 - Contact Medical Control.
 - Oxygen per O2 sat and perfusion status: 2-6 LPM cannula / 10-15 LPM NRB.
 - Anticipate dysrhythmias, chest pain, and/or hypertensive crisis.
 - Treat per appropriate System protocols.
 - Anticipate possibility of seizure activity:
 - Treat per Seizure protocol.

- Calcium Channel Blocker Overdose:
(Norvasc, Adalat, Adizem, Cardizem, Cardene, Procardia, Calan, Vascor, and Verapamil)
 - Oxygen per O2 sat and perfusion status: 2-6 LPM cannula / 10-15 LPM NRB.
 - Contact Medical Control
 - If P<60 and BP<90 systolic:
 - Treat per Bradydysrhythmias protocol.
 - If confirmed calcium channel blocker overdose with P<60 and BP<90 systolic and unresponsive to Bradydysthythmia protocol (atropine and transcutaneous pacing):
 - (ALS) Administer **Calcium Chloride 8-16 mg/kg** (10mL of a 10% solution) IV/IO:
 - Calcium Chloride can cause tissue necrosis.
 - Verify IV patency and monitor for signs of extravasation.
 - If patient does not respond to Calcium Chloride:
 - Administer **Glucagon 3mg** IV over 1 minute.

- Beta Blocker Overdose:
(Inderal, Propanolol, Corgard, Lopressor (Metoprolol), Atenolol (Tenormin),_Coreg)
 - Notify Medical Control.
 - Oxygen per O2 sat and perfusion status: 2-6 LPM cannula / 10-15 LPM NRB.
 - Treat with Atropine per Bradydysrhythmias protocol.
 - If unresponsive to Atropine:
 - Consider **Glucagon 1mg** IV/IO/IM.
 - Initial dose of 3mg IV/IO may be necessary.