Allergic Reaction/Anaphylaxis – Adult

Allergic reaction is suspected when there is a suspected exposure and patient(s) exhibit signs and symptoms consistent with an allergic reaction such as:

- ***Skin***: Hives, Itching, Flushing
- ***Respiratory:*** Wheezing, Dyspnea, Stridor, Sneezing, Coughing, Chest tightness
- ***Cardiovascular:*** Vasodilation, Tachycardia, Hypotension, Shock
- ***Gastrointestinal:*** Nausea, Vomiting, Cramping, Diarrhea
- ***CNS:*** Dizziness, Headache

Common allergens include venom (i.e. bee stings), foods, (i.e. nuts, berries, seafood), plant pollen, and medications.

Consider ***Mild, Moderate*** and ***Severe*** protocols to be hierarchical and building on prior intervention in Evolving Treatment Plan.

Allergic Reaction/Anaphylaxis – Adult-Mild

Symptomatic, no dyspnea, unremarkable vital signs.

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Maintain airway and administer oxygen as needed to maintain oxygen saturation of at least 95%.

  - Remove allergen
  - Check vital signs frequently
  - Begin transport, consider ALS intercept
  - Consider patient assisted medication

Paramedic Standing Orders

P

- ► Consider Diphenhydramine 25-50 mg, PO, IM, IV.

Allergic Reaction/Anaphylaxis – Adult-Moderate

Edema, hives, difficulty swallowing, facial swelling, etc., with stable vital signs BP ≥ 90 mmHg.

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Maintain airway and administer oxygen as needed to maintain oxygen saturation of at least 95%.
  - Remove allergen
  - Check vital signs frequently
  - Begin transport, consider ALS intercept
  - Consider patient assisted medication
- ► Consider Albuterol 2.5 mg in 3 ml of NS via nebulizer every 5 minutes x 4 total doses.
- ► Consider Epinephrine (1:1000) 0.3 mg IM.

Advanced Standing Orders

A

- ► Establish an IV at KVO or Saline Lock.

Paramedic Standing Orders

P

- ► Diphenhydramine 25-50 mg IM or IV.

Allergic Reaction/Anaphylaxis – Adult-Severe

Edema, hives, severe dyspnea, wheezing, unstable vital signs (systolic < 90 mmHg), cyanosis, hoarseness.

Basic Standing Orders

B

- Ensure adequate ABCs. Administer oxygen to keep SpO2 > 90%.
- If patient was exposed to an allergen **and** exhibits severe respiratory distress or shock, administer Epinephrine Autoinjector, or, Epinephrine (1:1 000) 0.3 mg (0.3 mL) IM.
- Consider Albuterol 2.5 mg in 3 mL of NS via Nebulizer every 5 minutes x 4 total doses.
- Begin transport and request ALS intercept.
- Monitor ABCs and Vital signs.
- Assist ventilations as needed.

Advanced Standing Orders

A

- Establish an IV at KVO or Saline Lock.

Paramedic Standing Orders

P

In addition to prior therapies, consider:

- Diphenhydramine 25-50 mg IM or IV.
- Methylprednisolone 125 mg IV push.
- For **Severe, Decompensating** patients:
  - Consider Epinephrine 1:100 000, 0.1 mg SLOW IV over 5-10 Minutes. May repeat as needed up to Total dose of 1.0 mg.
  - (Dilute 1 mL of Epinephrine 1:10 000 in 9 ml NS flush for 10 mL of 1:100 000 mL.)
- Consider early intubation.

Asthma/COPD/RAD (Reactive Airway Disease) - Adult

Basic Standing Orders

B

- Routine Patient Care.
- Wear N95 mask if bioterrorism related event or highly infectious agent suspected.
- Administer oxygen at the appropriate rate for the patient's condition and medical history.
- Patients with COPD who are on home oxygen, increase their rate by 1-2 liters per minute.
- Attempt to keep oxygen saturation above 90%; increase the rate with caution and observe for fatigue, decreased mentation, and respiratory failure.
- Request ALS intercept, transfer care upon arrival of ALS provider
- Assist patient with his/her own MDI, if appropriate; only MDIs containing beta adrenergic bronchodilators (e.g. albuterol, Ventolin, Proventil, Combivent) may be used: 2 puffs; repeat every 5 minutes as needed while transporting.
- Consider albuterol 2.5 mg in 3 ml normal saline via nebulizer prn every 5 minutes x 4 total doses.

Advanced Standing Orders

A

IV access and administer fluids to maintain systolic blood pressure >90 mmHg.

Consider Atrovent 0.5 mg in addition to Albuterol nebulizer, may administer 2 total doses.

Consider CPAP for patients in respiratory distress not related to asthma exacerbation. Titrate to max pressure of 10 cmH2O.

Paramedic Standing Orders

P

- For patients exhibiting symptoms of CHF refer to appropriate protocol.
- Consider methylprednisolone 125 mg IV.
- For patients who do not respond to nebulizer treatments or for impending respiratory failure, consider:
  - Epinephrine (1:1,000) 0.3mg (0.3 ml) IM.
  - Magnesium sulfate 2 grams in 100 ml 0.9% NaCl (normal saline) IV over 10 minutes.

Behavioral Emergencies - Adult

Basic Standing Orders

B

- Routine Patient Care
- Avoid areas/patients with potential weapons and avoid areas with only a single exit; do not allow patient to block exit.
- Keep environment calm by reducing stimuli. Transport in a non-emergent mode unless patient's condition requires Lights & Siren transport.
- Respect the dignity and privacy of the patient.
- Make eye contact when speaking to the patient.
- Speak calmly and in a non-judgmental manner; do not make sudden movements.
- Maintain non-threatening body language.
- Ask for permission to touch the patient before taking vital signs and explain what you're doing.
- Attempt to assess Blood Glucose levels and if out of normal range, treat per Hypoglycemia protocol.
- Make all efforts to rule out medical or traumatic causes of behavioral changes and treat as appropriate.

Advanced Standing Orders

A

- Consider IV access if medication administration anticipated.

Paramedic Standing Orders

P

- Apply cardiac monitor if clinically feasible, obtain 12 lead ECG and treat dysrhythmias as appropriate.
- Position patient to ensure breathing is not impaired.
- For dangerously agitated patients who are presenting a danger to themselves, crew and law enforcement officers on scene, consider:
  - Midazolam: 2 - 6 mg IV/IM/IN OR
  - Ketamine: 4 mg/kg IM to max dose of 400 mg IM.
  - NOTE: Reduce dose by 50% for patients greater than 70 yrs old. This applies to both medications listed.
- If chemical sedation utilized, once patient is complaint, crew shall monitor vital signs including EtCO2 & Temperature.
- In cases of hyperthermia, as soon as possible initiate IV fluid bolus.
- If patient condition degrades to cardiac arrest, consider early Sodium Bicarbonate 1 mEq/kg.

Diabetic Emergencies: Hypoglycemia

Basic Standing Orders

B

- Routine Patient Care.
- Obtain glucose reading via glucometer.
- If the patient can swallow and hypoglycemia is present, administer 15 grams oral glucose.
- If available and indicated, consider assisting family in administration of patient's glucagon 1 mg IM
- Consider ALS intercept.

Advanced Standing Orders

A

- IV access and administer fluids to maintain systolic blood pressure >90 mmHg.
- If glucose level is < 70 mg/dl with associated signs and symptoms, administer 5 mL/kg (0.5 g/kg) dextrose (D10) IV drip. Administer the D10 solution IV drip until patient regains normal level of consciousness or infusion complete. Re-check glucose 5 minutes after administration of dextrose or resolution of symptoms.
- Repeat dextrose (D10) drip en route to hospital if glucose level is less than 70mg/dL or patient remains symptomatic with signs of hypoglycemia.
- If unable to obtain IV access, administer glucagon 1 mg IM.
  NOTE: If Glucagon is administered, it should be performed while transporting the patient to the Emergency Department.

Diabetic Emergencies: Hyperglycemia

Basic Standing Orders

B

- Routine Patient Care.
- Obtain glucose reading via glucometer.
- Consider ALS intercept for abnormal vitals signs or altered level of consciousness.
- Maintain patent airway and adequate ventilations.
- Transport.

Advanced Standing Orders

A

- IV access and administer fluid to maintain systolic blood pressure >90 mmHg.
- Consider 500 mL fluid bolus. Repeat as necessary.

Paramedic Standing Orders

P

- Airway management as needed.

Non-transport of Insulin Dependent Diabetic

Historical Findings

1. Decreased level of consciousness without suspected trauma.
2. Prior medical history of insulin-dependent diabetes mellitus.
3. Following treatment, patient is conscious, alert to time, date and place, and requests that they not be transported to the hospital.
4. No other associated findings of serious illnesses or circumstances that may have contributed to the hypoglycemic episode, including excessive alcohol consumption, shortness of breath, chest pain or headaches.
5. The patient's history reveals circumstances that may have contributed to the hypoglycemic episode such as lack of oral intake or an insulin reaction.
6. Not on oral hypoglycemic medication such as glipizide, glyburide, or chlorpropamide.

Physical Findings

1. Patient is initially found to have a decreased level of consciousness.
2. Systolic blood pressure > 90 mm Hg or child with normal perfusion.
3. Patient has rapid glucose test of ≤ 70 mg/dL.
4. The patient responds quickly (< 10 minutes) to oral or IV glucose to normal level of consciousness.
5. Repeat rapid glucose test is > 100 mg/dL.

EKG Findings

1. Heart rate > 60.
2. Normal EKG.

Protocol

1. The patient is assessed and treated per the Diabetic Emergencies protocol.
2. Repeat blood pressure is at least 90 mm Hg, pulse rate is at least 60, and the repeat rapid glucose test is at least 100 mg/dL.
3. The patient is given instructions for follow-up care prior to being released.
4. The patient is released to the care of a responsible adult who will remain with the patient as an observer for at least one hour and can call 911 should the symptoms recur.

Notes

1. Patients who have extensive medical history or other signs and symptoms unrelated to insulin-dependent diabetes mellitus should be strongly encouraged to be transported.
2. If the patient is on an oral hypoglycemic medication such as glipizide, glyburide, or chlorpropamide, the hypoglycemic episode may last hours or days. Patients on oral hypoglycemic agents should be strongly encouraged to be transported, regardless of their response to field treatment.
3. When treating patients who warrant transportation based on the above criteria but who refuse transport, paramedics shall contact medical control for assistance.
4. Instructions for follow-up care should include the following:
    a. Take action to prevent a recurrent episode such as remain in the care of another adult observer, consume a light meal to maintain a sufficient blood glucose level, monitor their blood glucose, and advise their personal physician of this episode.
    b. Watch for signs and symptoms of another episode.
    c. If another episode occurs, contact 911 immediately!
5. EMS should provide the patient with verbal instructions on follow-up care following the patient refusal of transport. Additionally, crews must document what verbal directions they provided.

Fever (>101.5°F/38.5°C) – Adult

This protocol is **not** intended for patients suffering from environmental hyperthermia (Hyperthermia Protocol).

Basic Standing Orders

B

- Routine Patient Care.
- Wear N95 mask if bioterrorism related event or highly infectious agent suspected.
- Obtain temperature.
- Passive cooling; remove excessive clothing/bundling.
- Do not cool to induce shivering.

Paramedic Standing Orders

P

- No further interventions

Sepsis – Adult

Sepsis is a rapidly progressing, life threatening condition due to systemic infection. Sepsis must be recognized early and treated aggressively to prevent progression to shock and death.

Pre-Hospital Sepsis Alert Criteria:

Suspected/known source of infection AND 2 or more of the following:

- MAP < 65 mmHg;
- Resp Rate >22/min;
- New onset AMS or increasing mental status changes from baseline.

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Administer oxygen to maintain SpO2 greater than 90%, but less than 100%
- ► Ensure that EtCO2 is being monitored.
- ► Do not delay transport.
- ► If positive sepsis screen, notify receiving facility of "Sepsis Alert"

Advanced Standing Orders

A

- ► Initiate large bore IV access and administer fluid to maintain MAP >65 mmHg.
- ► Consider 30 mL/kg fluid bolus. Reassess frequently. Max total IVF of 3000 mL

Paramedic Standing Orders

P

- ► For patients remaining hypotensive following fluid bolus Consider initiating either:
  - Dopamine infusion 5-20 mcg/kg/min titrated to SBP of 90 mmHg; OR
  - Epinephrine infusion 2 - 10 mcg/min titrated to SBP of 90 mmHg.
  - NOTE: If one of the above medications is running at max dose and patient remains hypotensive, consider adding second vasoactive medication.

Nausea/Vomiting – Adult

Basic Standing Orders

B

- Routine Patient Care.

Advanced Standing Orders

A

- Consider IV access and administer fluids to maintain systolic blood pressure > 90mmHg.

Paramedic Standing Orders

P

- Ondansetron 4 mg IV/IM over 30 seconds. May repeat in 10 minutes.
  NOTE: Do not administer to women during 1st trimester of pregnancy.
- If no change in condition after repeating dose of Ondansetron, consider progressing to Promethazine.
- Promethazine 6.25 mg IV diluted in 10 ml of normal saline, which is administered over 2 minutes.
- May repeat once after 10 minutes if nausea persists.
- For dystonic reactions caused by EMS administration of promethazine administer diphenhydramine 25 mg IV/IM.

Non-Traumatic Abdominal Pain - Adult

This protocol should be used for patients that complain of abdominal pain without a history of trauma.

Assessment should include specific questions pertaining to the GI/GU systems.

Abdominal physical assessment includes:
Ask patient to point to area of pain (palpate this area last).
Gently palpate for tenderness, rebound tenderness, distension, rigidity, guarding, and pulsatile masses. Also palpate flank for costovertebral angle tenderness.

Abdominal history includes:

History of pain (OPQRST)
History of nausea/vomiting (color, bloody, coffee grounds)
History of bowel movement (last BM, diarrhea, bloody, tarry)
History of urine output (painful, dark, bloody)
History of abdominal surgery
History of acute onset of back pain
SAMPLE (attention to last meal)

Additional questions should be asked of the female patient regarding OB/GYN history. All female patients of childbearing age complaining of abdominal pain should be considered to have an ectopic pregnancy (even if vaginal bleeding is absent) until proven otherwise.

Non-traumatic abdominal pain can be caused by: appendicitis, cholecysistis, duodenal ulcer perforation, diverticulitis, abdominal aortic aneurysm, pelvic inflammatory disease and pancreatitis.

Basic Standing Order

B

- Routine Patient Care.
- Nothing by mouth.
- Consider administration of oxygen to maintain SpO2 > 90% but less 100%.
- Transport in position of comfort.
- Obtain 12 lead EKG if possible.

Advanced Standing Orders

A

- Establish IV with Saline Lock.

Paramedic Standing Orders

P

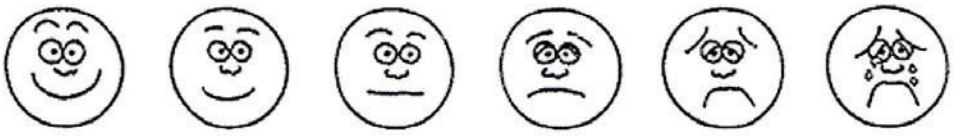
- Place patient on monitor.
- If signs of decreased perfusion or shock develop, initiate fluid resuscitation (See Trauma Assessment and Management Protocol).
- Be aware that ischemic cardiac pain can present as abdominal pain.
- If patient appears to be in distress, proceed to pain management protocol

Pain Management - Adult

Basic Standing Orders

B

- Routine Patient Care.
- Place the patient in a position of comfort if possible.
- Give reassurance, psychological support, and distraction.
- Use ample padding for long and short spinal immobilization devices. Use ample padding when splinting possible fractures, dislocations, sprains and strains. Elevate injured extremities if possible. Consider application of cold pack for 30 minutes.
- Have the patient rate their pain on a 0 to 10 (or similar) scale*.
- Reassess the patient's pain level and vital signs every 5 minutes. *0-10 Scale: Avoid coaching the patient, simply ask them to rate their pain on a scale from 0-10, where 0 is no pain at all and 10 is the worst pain ever experienced by the patient.
- *Wong-Baker "faces" scale: The faces correspond to numeric values from 0-10. The scale can be documented with the numeric value or the textual pain description.
- Consider ALS intercept if needed for pain management.



0	2	4	6	8	10
NO HURT	HURTS A LITTLE	HURTS A LITTLE MORE	HURTS EVEN MORE	HURTS WHOLE LOT	HURTS WORST

Pain Management – Adult - continued

Advanced Standing Orders

A

- IV access and administer fluids to maintain systolic blood pressure >90 mmHg.

Paramedic Standing Orders

P

- Unless the patient has altered mental status, the paramedic may consider:
  - Ketorolac: 30 mg IVP or 60 mg IM (no repeat) Consider as first line in renal colic. Avoid Ketorolac in patients with NSAID allergy, aspirin sensitive asthma, known peptic ulcer disease or if pregnant or nursing.
  - Morphine: 1 - 5 mg IV/IM every 5 - 10 minutes to a total of 10 mg titrated to pain and SBP > 90.
  - Fentanyl: 25 - 50 mcg slow IV or IN (see IN dosing chart, pg 235) every 5 - 10 minutes, as needed.
  - Ketamine: 20 - 30 mg, IV. **SLOW PUSH**. Preferred agent in patients who may not tolerate decreases in blood pressure.

NOTE:

- For hypoventilation from opiate administration by EMS personnel, administer naloxone 0.4 mg IV
- If nausea develops, refer to Nausea Protocol.

FOR ALL PATIENTS RECEIVING ANALGESIA, EtCO2 SHALL BE MONITORED.

Poisoning: Overdose-Adult

Basic Standing Orders

B

- Consider waiting for law enforcement to secure the scene for high index of suspicion of violence.
- Remove patient from additional exposure.
- Routine Patient Care. Ensure EtCO2 is monitored.
- Suspected Narcotic Overdose: Administer Naloxone 2-4 mg Intranasal (IN).
- Absorbed poison
  - Remove clothing and fully decontaminate.
  - If eye is involved, irrigate at least 20 minutes without delaying transport.
- Inhaled/injected poison:
  - Administer high-flow oxygen.
  - **Note**: Pulse oximetry may not be accurate for some toxic inhalation patients.
- Ingested poison:
  - Bring container to receiving hospital.
- Envenomations:
  - Immobilize extremity in dependent position. Consider ice pack for bee stings.
- Contact Poison Control at (800) 222-1222 as soon as practicable, OR review circumstances of overdose with medical control.
- For MCI related to organophosphate exposure see Nerve Agents & Organophosphates Adult.
- For suspected isolated cyanide poisoning see cyanide protocol.
- Consider ALS intercept/Air Medical Transport.

Poisoning: Overdose-Adult continued

Advanced Standing Orders

A

- IV access and administer fluids to maintain systolic blood pressure >90 mmHg.
- Suggested Narcotic Antidotes: Naloxone 0.4–2 mg IV push, IM, SQ, IN (see IN dosing chart, pg 237).
  If no response, may repeat dosing within range every 5 minutes.
- Note: If no response after 4 mg, consider alternate etiology of Altered mental Status.

Paramedic Standing Orders

Consider following suggested antidotes if available in symptomatic patients.

P

► Tricyclic	Sodium bicarbonate 1 mEq/kg IV.
► Beta-Blocker	Glucagon 2 – 5 mg IV, IM, SQ.
► Ca Channel Blocker	Calcium Chloride 1-2 g IV bolus followed by 20-40 mg/kg/hr infusion. Glucagon 2– 5 mg IV, IM, SQ.
► Dystonic Reaction	Diphenhydramine 25 – 50 mg IVP for dystonic reactions induced by antipsychotics, such as haloperidol, or anti-emetics such as prochlorperazine or promethazine.
► Organophosphates	Atropine: 2 mg IV every 5 min as needed. Pralidoxime: 1 -2 G IV over 30 - 60 min.
► Isolated Cyanide Poisoning:	Cyanokit®

Poisoning: Cyanide - Adult

Symptoms: headache, confusion, dyspnea, chest tightness, nausea.

Signs: change in LOC, seizure, dilated pupils, tachypnea + hypertension (early), bradypnea + hypotension (late), shock, vomiting.

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Decontamination concurrent with initial resuscitation
  - If patient exposed to gas only and does not have skin or ocular irritation, does not need decontamination.
  - If patient exposed to liquid, decontamination required. Avoid self-contamination.
- ► Consider ALS intercept/air medical transport.

Advanced Standing Orders

A

- ► Obtain IV access if situation permits.

Paramedic Standing Orders

P

- ► Hydroxocobalamin is the preferred treatment. If clinical suspicion of cyanide poisoning is high, hydroxocobalamin should be administered without delay.
- ► Hydroxocobalamin: 5 gm dose over 15 min. Using a Cyanokit**, The starting dose of CYANOKIT for adults is 5 gm (contained in a single vial) administered by IV infusion over 15 mins (Approximately 15ml/min)

  Depending upon the severity of the poisoning and the clinical response, a second dose of 5 gm may be administered by IV infusion for a total dose of 10 gm. The rate of infusion for the second dose may range from 15 minutes (for patients in extremis) to 120 minutes, as clinically indicated.

NOTE: ** Cyanokit ®: each kit contains one glass vial (200ml), each containing 5 gm lyophilized hydroxocobalamin for injection, one sterile transfer spike, one sterile IV infusion set, and one quick use reference guide. (Diluent is not included. NS is recommended)

Poisoning: Nerve Agents and Organophosphates MCI

Basic Standing Orders

B

Assessment of the Scene:

- Use dispatch information. Does something just not sound right about the information you are receiving from dispatch?
- FIGHT "***TUNNEL VISION***"! Look at the whole scene on arrival. Are you sure it's safe to enter? If you are not trained or equipped, DO NOT ENTER!
- Has there been a release of a known agent?
- Do you find multiple patients with signs and symptoms commensurate with nerve agent contamination?
- Are there multiple casualties at a large event or in a heavily populated area with no explained cause?
- Assess for SLUDGEM (salivation, lacrimation, urination, defecation, gastric upset, emesis, muscle twitching) and KILLERBs: (Bradycardia, Bronchorrhea, Bronchospasm).

General Patient Treatment

- Take body substance isolation precautions.
- Remove patient's clothing.
- Remove to cold zone after decontamination and monitor for symptoms.
- Administer oxygen if patient is hypoxic or in respiratory distress.
- Contact medical control for authorization to use DuoDote auto-injectors.
- If medical control cannot be contacted or is unavailable, the auto-injector may be administered if the following criteria are met:
  - **The patient is clearly having difficulty breathing (dyspnea, or bilateral wheezing),** *and*
  - **Has other evidence of nerve gas exposure,** *or*
  - **Has evidence of shock (altered mental status, diaphoresis, hypotensive).**
  - ***At least two symptoms of nerve agent poisoning should be identified before administering the DuoDote injector.***
- If the decision is made to inject, act quickly. Time can mean the difference between life and death for the affected patient(s).
- Obtain baseline vital signs.
- Complete the decontamination process.
- Treatment using DuoDote Auto-injectors only in Mass Casualty Incidents.
- Treatment using Diazepam Injector only in Casualty Incidents where ChemPaks are deployed.

Basic Standing Orders

B

General Patient Treatment continued:

- ► Antidotal therapy should be started as soon as symptoms appear.
- ► All injections must be given IM.
  - Refer to Procedure section for direction on how to utilize Auto-injector.
- ► After administering the first set of injections, wait 5 to 10 minutes.
- ► After administering one set of injections, you should initiate decontamination procedures, as necessary to allow the patient to be transported to a medical facility.

Basic Standing Orders

B

Procedure for Auto-Injector continued:

- Severe symptoms include unconsciousness, convulsions, apnea, flaccid paralysis.
- Mild/Moderate symptoms include sweating, muscle fasciculations, nausea, vomiting, weakness, dyspnea, anxiety, restlessness, confusion and constricted pupils.

Patient Monitoring Following Administration

- Patients may have symptoms re-develop even after administration of the antidote kit.
- Atropine may only be repeated every 10 - 15 minutes as needed. (Note: multiple doses of atropine may be needed.)
- Albuterol 2.5 mg in 3 ml normal saline via nebulizer.

Tag Color	Exposure, SLUDGEM	DuoDote Kit Diazepam Monitoring Interval	Repeat Dosing	Maintenance Dose
RED	Severe Symptoms	3 DuoDote kits 1 Adult Diazepam (10mg) Auto-injector	Diazepam Auto-Injector may be repeated 3 times at 10-15 min. intervals.	1 Adult DuoDote kit every hour for 3 hours
YELLOW	Mild to Moderate Symptoms	1 DuoDote kit for minor symptoms. Monitor every 10 minutes	If symptoms progress: 2 DuoDote kits & 1 Adult Diazepam Auto-injector. Diazepam may be repeated 3 times at 10-15 min. intervals.	
GREEN	No	None. Monitor every 10 minutes for evidence of exposure.		

Poisoning: Nerve Agents and Organophosphates MCI

Advanced Standing Orders

A

- ► Obtain IV access if situation permits.
- ► Consider administering Atrovent 0.5 mg in addition to Albuterol 2.5 mg in 3 ml normal saline via nebulizer.

Paramedic Standing Orders

P

- ► If field conditions permit, initiate cardiac monitoring and consider the administration of IV medications.
- ► If symptoms persist after the administration of 3 DuoDote kits
- Atropine: 2 mg IV, Repeat every 5 minutes until secretions cleared.
- Pralidoxime: 1-2 gram IV over 30–60 minutes.
- Diazepam 10 mg IM/IV repeat every 5 to 10 minutes as needed.

Instead of diazepam, may use

- Midazolam 2.5-5.0 mg IM/ IV/ IN (see IN dosing chart, pg 236), repeat every 5 to 10 minutes as needed.

Poisoning: Nerve Agents and Organophosphates MCI Provider Protection

Basic Standing Orders

B

- If first responder(s) display symptoms, notify dispatch immediately.
- All first responders will evacuate area until secured by Hazmat Team.
- Remove clothing and decontaminate yourself and/or assist other responders.
- Routine Patient Care.
- Assess for SLUDGEM (salivation, lacrimation, urination, defecation, gastric upset, emesis, muscle twitching) and KILLERB's (Bradycardia, Bronchorrhea, Bronchospasm).
- Use DuoDote Auto-Injectors only if nerve agent symptoms are present. DuoDote kits offer no prophylactic protection and use prior to appearance of symptoms may be harmful.
- DuoDote kits only have one syringe with Atropine and 2-PAM chloride given simultaneously. All injections must be given IM.
- Treatment using Diazepam Auto Injector only in Mass Casualty Incidents where ChemPaks are deployed.
- Severe symptoms include unconsciousness, convulsions, apnea, flaccid paralysis.
- Mild/Moderate symptoms include sweating, muscle fasciculations, nausea, vomiting, weakness, dyspnea, anxiety, restlessness, confusion and constricted pupils.
- Consider Albuterol 2.5 mg in 3 ml normal saline via nebulizer.

Paramedic Standing Orders

P

- If field conditions permit, initiate cardiac monitoring and consider the administration of IV medications.
- If symptoms persist after the administration of 3 DuoDote kits:
  - Atropine: 2 mg IV, Repeat every 5 minutes until secretions cleared.
  - Pralidoxime: 1-2 gram IV over 30–60 minutes.
  - Diazepam 10 mg IM/IV repeat every 5 to 10 minutes as needed.

  Instead of diazepam, may use either
  - Midazolam 2.5-5.0 mg IM/ IV/ IN (see IN dosing chart, pg 236), repeat every 5 to 10 minutes as needed.
- Consider Atrovent 0.5 mg with Albuterol 2.5 mg Nebulized for respiratory distress.

Poisoning: Radiation Injuries MCI

Exposure to radioactive source or radioactive materials/debris.

Basic Standing Orders

B

- ► Remove patient from scene and decontaminate by appropriately trained personnel.
- ► Wear N95 mask.
- ► Triage tools for mass casualty incident:
  - o If vomiting starts
    - ▪ Within 1 hour of exposure, survival is unlikely and patient should be tagged “Expectant.”
    - ▪ After less than 4 hours of exposure, patient needs immediate decontamination and evaluation and should be tagged “Immediate.”
    - ▪ After 4 hours, re-evaluation can be delayed 24 –72 hours if no other injury is present and patient should be tagged “Delayed.”
- ► Treat traumatic injuries and underlying medical conditions.
- ► Patients with residual contamination risk from wounds, shrapnel, and internal contamination should be wrapped in water-repellent dressings to reduce cross contamination.

Advanced Standing Orders

A

- ► IV access and administer fluids to adults hemodynamically unstable if situation permits.

Paramedic Standing Orders

P

- ► Consider anti-emetic.
- ► Consider pain control.

Seizures - Adult

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Do not attempt to restrain the patient; protect the patient from injury.
  - Suction as needed.
  - Consider nasopharyngeal airway.
  - Oxygen 15LPM via non-rebreather mask.
  - Assist ventilations with 100% oxygen via bag valve mask if necessary to maintain oxygen saturation > 95%.
  - Protect patient from injury & position left lateral recumbent.
- ► History preceding seizure is very important. Find out what precipitated seizure (e.g. medication non-compliance, active infection, trauma, hypoglycemia, substance abuse, third-trimester pregnancy, etc.).
  - Has diazepam rectal gel been prescribed by patient's physician? If yes, advise caregiver to administer according to patient's prescribed treatment.
  - Determine if emergency is related to implanted vagus nerve stimulator. Ascertain when vagus nerve stimulator was implanted, when last checked by physician, current settings, history of magnet use, changes in seizure intensity.
- ► If blood glucose reading less than 70 mg/dl, see Diabetic Emergencies.
- ► Request ALS intercept for ongoing or recurrent seizure activity.

Advanced Standing Orders

A

- ► IV access and administer fluids to maintain systolic blood pressure >90 mmHg.

Paramedic Standing Orders

P

- ► Consider advanced airway control as needed.
- ► Monitor vital signs, EKG and pulse oximeter.
- ► Saline lock or IV - 0.9% NaCl (normal saline) @ rate to maintain appropriate hemodynamic status.
- ► If generalized seizure activity is present, consider
  - Midazolam 1 - 2.5 mg IV/IM/IO/IN (see IN dosing chart, pg 236) may repeat every 5 min to a max of 5 mg or until seizure activity is abolished **or**
  - Diazepam 5 mg IV (then 2.5 mg IV every 5 minutes to total of 10 mg)
- ► Consider Magnesium Sulfate 4 grams IV over 5 minutes in presence of seizure in 3rd trimester of pregnancy.

Suspected Stroke Protocol

This protocol is for patients who have an acute episode of neurological deficit without any evidence of trauma. Signs consistent with acute Stroke:

- ► Sudden onset of weakness or numbness in the face, arm, or leg, especially on one side of the body
- ► Sudden onset of trouble seeing in one or both eyes
- ► Sudden onset of trouble walking, dizziness, loss of balance or coordination
- ► Sudden onset of confusion, trouble speaking or understanding
- ► Sudden onset of severe headache with no known cause
- ► Consider other causes of altered mental status, i.e. hypoxia, hypoperfusion, hypoglycemia, trauma, or overdose.

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Obtain glucose reading via glucometer.
- ► Administer oxygen to maintain SpO2 > 94%, suction as necessary, and be prepared to assist ventilation.
- ► Perform Cincinnati Pre-hospital Stroke Scale.
- ► If positive, determine time of onset of symptoms. Time of onset of stroke is critical:
  - To patient- “When was the last time you were normal?”
  - To family or bystander- “When was the last time you saw the patient normal?”
- ► Encourage transportation of a family member.
- ► Maintain normal body temperature.
- ► Protect any paralyzed or partially paralyzed extremity.
- ► Early notification of the emergency department is critical.
- ► Closest hospital may not be the best destination hospital:
  - Consider JCAHO-approved stroke center if onset of symptoms to definitive treatment can be within 3 hours (Generally within two hours of symptoms to arrival at facility).
  - Consider air medical transport from the scene in lieu of closest hospital if the patient would otherwise not have access to definitive care at a JCAHO-approved stroke center within 3 hours (Generally within two hours of arrival at facility).
- ► Transport the patient to the closest appropriate hospital emergency department if:
  - The patient is in cardiac arrest, or
  - The patient has an unmanageable airway, or
  - The patient has another medical condition that warrants transport to the closest appropriate hospital emergency department as per protocol.
- ► Obtain 12-Lead EKG during transport.
- ► Consider ALS intercept/air medical transport.

Suspected Stroke Protocol continued

Advanced Standing Orders

A

Do not delay transport for ALS procedures

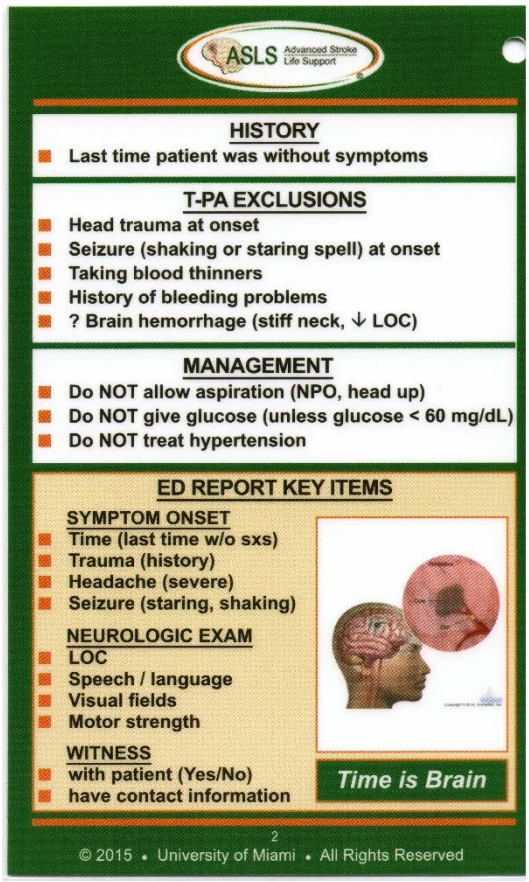
- ► IV access with saline lock. If possible 18 g in Right AC.
- ► IF Hypoglycemic, administer 12.5 G D10, or enough to restore normal mental status.

Paramedic Standing Orders

P

Do not delay transport for ALS procedures

- ► Avoid treating blood pressure elevation without online medical control authorization.
- ► Manage compromised airway.
- ► Continuously reassess.
- ► Perform Modified NIH exam during transport if trained.



Appendix: Stroke Assessment Resources

Is this a stroke?

Cincinnati Pre-Hospital Stroke Scale

This scale evaluates for facial palsy, arm weakness, and speech abnormalities. Items are scored as either normal or abnormal.

Facial Droop
The patient shows teeth or

Normal Both sides of face move
Abnormal One side of face does not move as well as the

Arm Drift
The patient closes their eyes and extends both arms straight out for 10

Normal Both arms move the same, or both arms do not move
Abnormal One arm either does not move, or one arm drifts down compared to the other.

Speech
The patient repeats “You can’t teach an old dog new tricks,” or some other simple, familiar saying.

Normal The patient says correct words with no slurring of
Abnormal The patient slurs words, says the wrong words, or is unable to

http://www.metrohealth.org/?id=473&sid=1

How severe is this stroke? C-STAT

The Cincinnati Prehospital Stroke Severity Scale's individual items and scoring.

Cincinnati Prehospital Stroke Severity Scale

2 points: Conjugate gaze deviation (≥ 1 on NIHSS item for Gaze)

1 point: Incorrectly answers at least one of two level of consciousness questions on NIHSS (age or current month) **and** does not follow at least one of two commands (close eyes, open and close hand) (≥ 1 on the NIHSS item for Level of Consciousness 1b and 1c)

1 point: Cannot hold arm (either right, left or both) up for 10 seconds before arm(s) falls to bed (≥ 2 on the NIHSS item for Motor Arm)

2 or >= Positive C-STAT

Brian S. Katz et al. Stroke. 2015;46:1508-1512

American Heart Association.

Obstetrical Emergencies

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Gather specific information:
  - Length of pregnancy, number of previous pregnancies, number of previous live births, last menstrual period, due date, pre-natal care, number of expected babies, drug use.
  - Signs of near delivery: membrane rupture ("water broke") or bloody show, contractions, urge to move bowels, urge to push, etc.
  - Signs of pre-eclampsia: hypertension, swelling of face and/or extremities.
- ► If the mother is having contractions, perform a visual inspection of the external genitalia and perineum for bulging or crowning. Have your partner be present during the exam. **IF THERE IS CROWNING, PREPARE FOR IMMEDIATE DELIVERY.**
  - Update responding ALS unit if available.
  - Inform the mother of the need for immediate delivery.
  - Ensure a private, clean delivery area and sanitary equipment.
  - Position and drape the mother.
  - Get several towels, warm if possible.
- ► Do not digitally examine or insert anything into vagina. Exceptions: to manage baby's airway in breech presentation or to treat prolapsed cord as below, you may insert a hand.
- ► Contact medical control if:
  - Active labor and delivery is imminent.
  - Post-partum hemorrhage.
  - Breech presentation.
  - Prolapsed cord.
- ► Place mother in left-lateral recumbent position if she has supine hypotension.
- ► Never delay or restrain delivery under normal circumstances.
- ► Prolapsed cord: knee-chest position or Trendelenburg position; immediately and continuously support infant head or body with your hand to permit blood flow through cord. Transport at once to closest hospital with obstetrical capabilities.

Basic Standing Orders

Delivery Procedures:

B

- ► During delivery support the infant's head with one hand while gently guiding it out of the birth canal to prevent an explosive delivery. Using your other hand with a sterile dressing, support the perineum (area between the vagina and the anus) to help prevent tearing during delivery of the head.
- ► If the amniotic sac has not broken, use your finger or a clamp to puncture the sac and pull it away from the infant's head and mouth as they appear.
- ► Attempt to prevent the infant's head from coming in contact with fecal material or other contaminants.
- ► **As soon as the head delivers** continue to support the infant's head with one hand. **Tell the mother to stop pushing**. Inspect the infant for the umbilical cord wrapped around the neck.
  - **If the umbilical cord is wrapped around the infant's neck:** Gently loosen the cord and slip it over the infant's head.
  - **If the umbilical cord is wrapped too tightly around the infant's neck or wrapped around the neck more than once, preventing the delivery of the infant, immediately** clamp the umbilical cord with two clamps and cut the cord between them.
- ► Suction the infant's oropharynx.
  - Insert a compressed bulb syringe 1 –1 ½ inches into the infant's mouth.
  - Suction the infant's oropharynx while controlling the release of the bulb syringe with your fingers.
  - Repeat suction as necessary.
- ► Suction each of the infant's nostrils.
  - Insert a compressed bulb syringe no more than ½ inch into the infant's nostrils.
  - Suction the infant's nostrils while controlling the release of the bulb with your fingers.
  - Repeat suctioning as necessary.
- ► Instruct the mother to begin pushing during contractions.
- ► **As soon as the infant has delivered,** quickly dry the infant and place the infant on a warm towel (if available) in a face-up position with the head lower than the feet. **Keep the infant at the level of the mother's vagina until the cord is cut!**

Basic Standing Orders

Delivery Procedures continued:

B

► Perform an initial assessment of the infant. Quickly assess the infant's respiratory status, pulse and general condition.

- **If the infant is breathing spontaneously and crying vigorously and has a pulse greater than 100/min:**
  - o Clamp the umbilical cord with two clamps three inches apart and cut the cord between them. The first clamp will be 8–10 inches from the baby. Place the second clamp 3 inches from the first clamp towards the mother.
  - o Cover the infant's scalp with an appropriate warm covering.
  - o Wrap the infant in a dry, warm blanket or towels ***and*** a layer of foil over the layer of blankets or towels, ***or*** use a commercial-type infant swaddler if one is provided with the OB kit. **Do not use foil alone!**
  - o Ongoing assessment. Obtain and record vital signs, as often as the situation indicates.
  - o **Keep the infant warm and free from drafts.**
- **Monitor the infant's respirations continuously. If the infant is *not* breathing spontaneously and crying vigorously:**
  - o **If the infant's respirations are absent or depressed (less than 30/minute in a newborn):**
    - i. Rub the infant's lower back **gently**.
    - ii. Snap the bottom of the infant's feet with your index finger **gently**.
  - o **If the respirations remain absent or become depressed (less than 30/minute in a newborn) despite stimulation, or if cyanosis is present:**
    - i. Clear the infant's airway by suctioning the mouth and nose **gently** with a bulb syringe.
    - ii. Begin providing positive pressure ventilations once airway is cleared. Consider oxygen with prolonged central cyanosis, not improved by PPV.

Basic Standing Orders

B

Delivery Procedures continued:

- **If respirations remain absent or depressed (less than 30/minute in a newborn) despite stimulation and oxygen:**
  - Insert the proper size oral airway **gently**.
  - Ventilate the infant with high concentration oxygen at a rate of 30 – 60 /minute with an appropriately sized pocket mask or bag-valve-mask as soon as possible. **Assure that the chest rises with each ventilation.**
- **Monitor the infant's pulse rate continuously**.
  - **If the pulse rate drops below 100 beats per minute at any time, assist ventilations at a rate of 30 – 60/minute with supplemental oxygen.**
  - **If the pulse rate drops below 60 beats per minute at any time add chest compressions to assisted ventilations following AHA/ARC/NSC guidelines.**
- Ongoing assessment of the newborn. Obtain and record the vital signs of all patients and repeat enroute as often as the situation indicates.
- **Transport immediately**, keeping the infant warm. **Do not wait for the placenta to be delivered before transporting!**
- Prepare for delivery of the placenta during transport. Delivery of the placenta ***usually*** occurs within 20 minutes of the delivery of infant. After delivery of the placenta, place the placenta in a plastic bag or other container and deliver to the receiving hospital. Massage the mother's abdomen where the fundus can be palpated.
- Ongoing assessment of the mother.
  - Reassess the mother for hypoperfusion. Obtain and record the vital signs of all patients, repeat enroute as often as the situation indicates.
  - Record all patient care information, including the mother's medical history and all treatment provided for each patient on a separate run report for each patient.

Obstetrical Emergencies – Normal Delivery Procedure continued

Advanced Standing Orders

A

- Establish at least 1 large bore saline lock. Be prepared for volume replacement with LR.

Paramedic Standing Orders

P

- Routine Patient Care.
- Follow Neonatal Resuscitation Protocol.
- Monitor the patient.

Obstetrical Emergencies – Complicated Childbirth

Basic Standing Orders

B

Breech Birth

► **Do not delay transport! Load and Go to closest appropriate hospital.**

- **If the buttocks presents first:**
  - Administer high concentration oxygen to the mother.
  - Attempt to establish an open path in the birth canal to the infant's mouth with sterile-gloved fingers. If possible, turn the infant so that the back is toward you.
  - **Transport the mother immediately** in a face-up position with her hips elevated, while maintaining an open path in the birth canal to the infant's mouth. Allow mother to push baby out. DO NOT PULL.
- **If a limb presents first:**
  - Administer high concentration oxygen to the mother.
  - Place the mother in a face-up position with her hips elevated and **transport immediately!**

Prolapsed Umbilical Cord

- Administer high concentration oxygen to the mother.
- Place the mother in a face-up position with her hips elevated, and using a sterile gloved hand, palpate the cord for pulses.
- Insert a sterile gloved hand into the vagina and gently push up on the presenting part of the fetus to keep pressure off of the cord. Continue to hold the presenting part away from the cord until you are relieved by the ED staff. **Do not insert the cord back into the uterus!**
- Wrap the exposed cord with sterile towel or dressings. The cord must be kept warm.
- **Transport immediately** while protecting the umbilical cord from pressure during transportation.

Multiple Births

- Obtain additional help as needed.
- Deliver each multiple birth according to the above protocol for **Uncomplicated Childbirth**, making sure to clamp and cut each umbilical cord between births.
- **If the anticipated second birth does not occur after 10 minutes, transport immediately!**
- A Prehospital Care Report (PCR) must be completed for each patient.

Obstetrical Emergencies – Complicated Childbirth continued

Advanced Standing Orders

A

- Establish at least one large bore saline lock. Be prepared for volume replacement.

Paramedic Standing Orders

P

- Routine Patient Care.
- Follow Neonatal Resuscitation Protocol
- Monitor the patient.

Unresponsive/Altered Mental Status (AMS) Patient - Adult

Basic Standing Orders

B

- ► Routine Patient Care.
- ► Scene and patient management per General Guidelines.
- ► Support ventilations if necessary and administer oxygen to maintain SpO2 greater than 90%.
- ► Immobilize if evidence of trauma.
- ► Determine level of consciousness (AVPU).
- ► Perform focused history and physical examination.
- ► Determine blood glucose level.
- ► If signs of narcotic overdose present
  - Administer naloxone 2 mg IN (see IN dosing chart, pg 237).
- ► Transport. Consider ALS Intercept.

Advanced Standing Orders

A

- ► Establish intravenous access.
- ► Administer naloxone 0.4 - 2 mg IV/IN/IM If no response after total of 4 mg, provide high quality airway management and transport to ED.
- ► If hypoglycemia is suspected, go to Hypoglycemia Protocol.

Paramedic Standing Orders

P

- ► Maintain airway and ventilation.
- ► Continuously monitor ECG and EtCO2.