

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Adult/Elder Abuse Or Neglect

It is the purpose of this policy to assist EMS personnel to identify, treat and report suspected cases of adult/elder abuse or neglect. It is not the role of the health care provider to make the determination whether or not abuse or neglect has occurred; therefore, be objective and non-judgmental in your evaluation, always keeping the patient's best interests in mind.

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Prehospital Care Protocol (look for dehydration, poor hygiene, unusual injuries, etc.).
2. Treat the patient medically, as indicated, and follow the appropriate treatment protocols.
3. Maintain respect and privacy for the patient.
4. If possible, assign one technician to support the patient.
5. Overview the scene with particular attention to objective evidence of abuse or neglect.
6. Contact Medical Control, if necessary.
7. Report findings promptly to local police, Family Independent Agency (FIA) and/or the emergency department. The following are FIA phone numbers for the respective counties:

Genesee County	(810) 760-2202
Lapeer	(810) 664-5968
Livingston County	(517) 546-8668
Macomb County	(586) 412-6100
N. Oakland County	(248) 975-5566
	(248) 975-5324
	(248) 669-7600
S. Oakland County	(248) 583-8803
Washtenaw County	(734) 481-9110
Wayne County	(877) 963-6006
	After 4:00pm call (313) 396-0300

8. Cooperate with police agency or DSS in collection of history or evidence while at the scene as allowed by patient's condition.
9. Include names, address and telephone numbers of witnesses in your documentation.
10. DO NOT confront caregivers with your suspicions.

NOTE: EMS personnel in Macomb County must also complete the "Elder Abuse/Neglect/Physical Well Being Report Form," as part of the Gatekeeper Project that is specific to that county.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Altered Level of Consciousness

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.

SPECIALIST/PARAMEDIC

2. Start an IV NS KVO.

PARAMEDIC/ (GENESEE-LAPEER SPECIALIST)

3. Check blood glucose level. If less than 80 mg/dl then administer Dextrose 50% (D50), 25 gm, IV.
4. If partial or transient response to Dextrose 50% (D50) repeat initial dose.

PARAMEDIC

5. Administer Naloxone (Narcan) 2 mg ET/IV/IM.
6. Repeat Dextrose (D50), as indicated.
7. Repeat Naloxone (Narcan), as indicated.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Anaphylaxis/Acute Allergic Reaction

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.
2. If insect sting, remove stinger by scraping and apply cold pack to area.
3. Elevate patient's legs.
4. Assist patient with administration of patient's own Epi-Pen/Epi-Pen Jr., in the patient's anterior thigh.
5. Refer to Epinephrine Auto Injectors protocol.

SPECIALIST/PARAMEDIC

6. Start IV NS KVO.
7. Hypotensive patients should receive a fluid bolus, as indicated by hemodynamic state, in 250 ml increments and reassess. Continue fluid bolus to a maximum of 2 liters.
8. Consider intubation if respiratory arrest is imminent.

PARAMEDIC

9. Patients with severe respiratory or hemodynamic compromise should receive Epinephrine .01 ml/kg of 1:1,000 to a max of 0.5 mg (0.5 ml) SQ. This may be performed prior to starting IV, if necessary.
10. Administer Diphenhydramine (Benadryl) 50-100 mg IM or IV depending upon severity of symptoms.

Post-Radio

PARAMEDIC

11. Administer Epinephrine 0.1 ml/kg of 1:10,000 to a maximum of 0.5 mg (5 ml) slow IV if severe respiratory distress or hypotension.
12. If no response, administer Dopamine Drip (Inotropin) 400 mg in 250 ml of NS and titrate to systolic BP above 90 mmHg.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Asthma/Wheezing

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow the General Pre-Hospital Care Protocol.
2. Assist patient with the administration of the patient's own Albuterol inhaler.

SPECIALIST/PARAMEDIC

3. Start IV NS KVO.

PARAMEDIC

4. Administer Albuterol (Proventil) 2.5 mg in 3 ml NS hand held nebulizer. Repeat as needed.
5. If a second Albuterol treatment is needed add Ipratropium (Atrovent) 0.5 mg in 3 ml NS to the second Albuterol treatment and administer prednisone 50 mg po.
6. If the patient is in severe distress, administer Epinephrine 1:1,000 0.3 mg (0.3 ml) SQ.

Post-Radio

PARAMEDIC

7. For extreme symptoms, if patient is less than 40 y/o and no cardiac history, administer Epinephrine 1:10,000 0.1 mg-0.5 mg (1 ml – 5 ml) IV.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Cerebrovascular Accident (CVA)/Stroke

NOTE: Record and report time of onset of symptoms and notify the emergency department as soon as possible of a possible stroke patient.

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care protocol.
2. Protect affected limbs from injury.
3. Allow patient to seek position of comfort.
4. Maintain appropriate body temperature.
5. Note time of onset of stroke if available.

SPECIALIST/PARAMEDIC

6. Start an IV NS KVO.
7. Follow protocols relevant to patient condition.

PARAMEDIC/ (GENESEE-LAPEER SPECIALIST)

8. Check blood glucose level. If less than 80 mg/dl then administer Dextrose 50% (D50), 25 gm, IV.
9. If partial or transient response to Dextrose 50% (D50) repeat initial dose.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Chronic Obstructive Pulmonary Disease (COPD)

Pre-Radio

MFR/ EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.

SPECIALIST/PARAMEDIC

2. Monitor respirations for signs of decompensation and be prepared to support ventilation and intubate.
3. Start an IV NS KVO.

PARAMEDIC

4. Administer Albuterol (Proventil, Ventolin) 2.5 mg in 3ml NS in nebulizer. Repeat as indicated.
5. If a second Albuterol treatment is needed add Ipratropium (Atrovent) 0.5 mg in 3 ml NS to the second Albuterol treatment and administer prednisone 50 mg po.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

CPAP PROTOCOL (Optional) Patient Selection Criteria and Protocol for Use

This optional protocol may be utilized by ALS agencies that have completed the training and are equipped with the CPAP equipment. Device settings shall be consistent with manufacturer's guidelines. Adult patients who activate the emergency medical system (EMS) with respiratory complaints will be screened for use of the CPAP noting lung sounds and temperature during differential diagnosis. For use of this protocol, patients must meet the Inclusion Criteria. *Contraindicated patients and those that do not meet the inclusion criteria will be treated according to existing protocols.*

INCLUSION CRITERIA

Respiratory distress with 2 or more of the following:

- Retractions of accessory muscles
- Pulmonary edema
- Repr. rate >20/min
- SpO₂ < 92%
- Acute/chronic CHF/COPD

CONTRAINDICATIONS

- Respiratory/cardiac arrest
- Active chest pain suggestive of ischemia or ECG changes (e.g. ST elevation/depression and/or T-wave inversion).
- B/P < 90mmHg
- Inability to speak
- Inability to maintain patent airway
- Major trauma/pneumothorax/penetrating chest trauma
- Nausea/vomiting/active GI bleed
- Patient with aspiration risk and /or history
- Altered level of consciousness

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.
2. Position patient upright with legs dangling, if possible.

PARAMEDIC

1. Determine if patient meets inclusion criteria.
2. Have patient determine Respiratory Distress level on scale of 1 (mild) to 10 (severe) distress.
3. Determine SpO₂ (room air if possible).
4. Start IV NS KVO.
5. Remove non-rebreather mask and administer CPAP using maximal FiO₂

State Approved: December 28, 2006
Implementation Date: April 1, 2007

Medical Protocol 407

Before attempting the following procedures, implement appropriate bloodborne/airborne pathogen protective

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

- For medication administration, refer to the applicable Acute CHF/Pulmonary Edema or COPD protocols.
 - Reassess patient after 5 min. and record findings including vital signs and level of respiratory distress.
6. Convey use of CPAP on patient in radio report.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Diabetic Emergencies

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.
2. Obtain pertinent medical history, including:
 - a. Time and amount of last insulin dose
 - b. Time of patient's last meal
 - c. Recent or current illness, recent heavy exercise or stress
 - d. Pregnancy

EMT/SPECIALIST/PARAMEDIC

3. Obtain blood glucose level if equipment is available.
4. Administer oral glucose agent if patient is awake and has an adequate gag reflex.

SPECIALIST/PARAMEDIC

5. Start an IV NS KVO.

PARAMEDIC/ (GENESEE-LAPEER SPECIALIST)

6. Check blood glucose level. If less than 80 mg/dl then administer Dextrose 50% (D50), 25 gm, IV, if symptomatic.
7. If partial or transient response to Dextrose 50% (D50) repeat initial dose.
8. Administer additional Dextrose 50% (D50), as indicated.

Note: If the patient is hyperglycemic do not administer glucose or insulin, but only provide support. If you are not sure, treat as hypoglycemic.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Epinephrine Auto Injectors

The following protocol is required for BLS and LALS providers, and for MCA approved MFR providers, based on need. Epinephrine Auto Injectors are used to treat life-threatening anaphylaxis. In accordance with P.A. 233 of 2003 all BLS and LALS vehicles will be required to carry two epinephrine auto injectors (one for patients over the age of 11 and one for patients age 2 to 11 years) as a part of the their standard equipment.

1. Agencies using Epinephrine Auto Injectors must:
 - A. Obtain a signed legend and pharmaceutical authorization form from the Medical Director (or their designee) for procurement of the medication (not applicable for MCAs that have an epinephrine auto injector hospital exchange policy).
 - B. Ensure medication is securely stored and locked in a compartment of the EMS agency vehicle.
 - C. Design a tracking system to ensure that expired medication is not being used.
 - D. Provide initial and ongoing training in the use of epinephrine auto injectors.
 - E. Follow the packet insert for administration procedures specific to the brand of epinephrine auto injector being used.
 - F. Every use of the Epinephrine Auto Injector shall be reviewed by the PSRO.

Pre-Radio

MFR/EMT/SPECIALIST

1. Assessment Information
 - A. Indications: Specific objective findings in the setting of a life threatening allergic/anaphylactic reaction, which may include:
 1. Respirations: respiratory distress, wheezing, stridor, retractions
 2. Swelling: facial, tongue, upper airway
 3. Vital signs: hypotension, tachycardia, thready or unobtainable pulse associated with a fall in blood pressure
 4. Skin: itching, hives, swelling, flushing, rash
 5. General: nausea, weakness, apprehension, convulsions, vomiting, diarrhea and abdominal cramps, involuntary voiding, dyspnea due to laryngeal spasm, pruritis, urticaria, or angioedema.
 6. Medications
 - B. Contraindications:
 1. Use caution in patients with heart disease, high blood pressure, and stroke.
 - a. EMT and Specialist: contact medical control.
 - b. MFR: do not administer.
2. Management
 - A. Establish and maintain airway, provide oxygenation and support ventilation as needed
 1. Upright position, if not hypotensive
 - B. Determine substance or source of exposure, remove patient from source, if known.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

3. Administration of Epinephrine Auto Injectors
 - A. Determine which Epinephrine Auto Injector is to be used.
 1. Adult Dose (0.3mg/0.3ml)
 - a. Patients who are over the age of 11 years and under 50 years old.
 - b. Patient over 32 kg.
 2. Pediatric Dose (0.15mg/0.3ml)
 - a. Patients who are age 2 to 11 years.
 - b. Patients under 32 kg.
 3. Preferred site is mid anterior thigh.
4. Be alert for reactions following administration for the drug.
Closely monitor the patient's condition.
Record all patient condition information and medication administration on the run record.

Post-Radio

For patients over the age of 50 years administer adult dose (0.3 mg / 0.3 ml).

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Non-Traumatic Hypotension

Hypotension in an adult is defined as a systolic blood pressure less than 90 mmHg or evidence of hypoperfusion.

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.
2. Place patient in supine position.

SPECIALIST/PARAMEDIC

3. Start an IV NS using the largest appropriate size IV catheter.
4. Administer a NS fluid bolus, as indicated, by hemodynamic state in 250 ml increments and reassess.
5. Start second IV using a large bore IV catheter, if time permits.

PARAMEDIC

6. Apply cardiac monitor and treat rhythm according to appropriate protocol.

Post-Radio

PARAMEDIC

7. Consider Dopamine Drip (Inotropin) 400 mg in 250 ml of NS. Titrate to maintain a systolic BP above 90 mmHg. Dopamine (Inotropin) is not indicated for hemorrhagic shock.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Obstetrical/Child Birth

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.
2. Administer high flow oxygen.
3. If hypotensive, roll mother onto left hip.
4. If baby is delivering:
 - Do not hurry or slow delivery.
 - Suction infant with bulb syringe (mouth, then nose) as soon as head is delivered. Check to see if cord is wrapped around neck; if so, attempt to unwrap the cord. If this does not work, double clamp and cut the cord immediately.
 - Double clamp the cord at least 4" from baby and cut between the clamps.
 - Dry baby, examine and keep warm, particularly the head (may place baby next to the mother's skin).
 - Assess APGAR Score at 1 and 5 minutes after birth. Regardless of score, if infant is not breathing or has no pulse and can not be stimulated (rubbing/drying with towel, tapping feet) into breathing or a pulse does not begin, see the Pediatric Respiratory Arrest or Cardiac Arrest protocol.
 - Externally massage uterus en route until placenta is delivered.
 - Do not manually remove placenta.
 - Record time of birth.
5. For multiple births repeat step 4.
6. Complications:

Notify medical control immediately for these and any other complications that may occur. Follow these guidelines for specific complications:

 - Breech
 1. Follow step 4 above. When legs and torso deliver, be sure to support them until the head delivers.
 2. If head does not deliver spontaneously, place a gloved middle and index finger along side the baby's face (palm toward face). Form a passage way between the baby's nose and outside air. Maintain this position until the head delivers or until relieved by hospital personnel. Transport ASAP.
 - Limb Presentation
 1. Place the patient in trendelenburg position/elevate hips and transport ASAP.
 2. Instruct the patient not to bear down, but pant through contractions.
 - Prolapsed Cord
 1. Place a gloved hand in the vagina and attempt to keep the baby and vagina from compressing the cord. Maintain this position until relieved by hospital personnel. Cover the cord with sterile dressing.
 2. Place the patient in trendelenburg position/elevate hips and transport ASAP.
 3. Instruct the patient not to bear down, but pant through contractions.
7. If necessary, treat mother for shock, see Traumatic Hypotension protocol.

State Approved: May 7, 2001
Implementation Date: October 1, 2001

Medical Protocol 413

Before attempting the following procedures, implement appropriate Bloodborne/airborne pathogen protective procedures.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

APGAR Score

Score baby at 1 and 5 minutes intervals after birth. A score of less than 7 suggests a need for resuscitation with suction, ventilation and ALS backup, and a need to be monitored extra closely. Remember to keep the infant warm and dry.

	0	1	2
A ppearance	Blue/Pale	Body pink, hands blue	Pink
P ulse	Absent	Below 100	Above 100
G rimace*	None	Grimace	Cough, sneeze, cry
A ctivity**	Flaccid	Some	Active motion
R espiration	Absent	Weak, slow	Good, crying

* Tested by a suction catheter (no suction) or bulb syringe tip gently placed in the nose or mouth.

** Amount of spontaneous flexion of extremities.

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Seizures

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol.
2. Protect patient from injury during a seizure.
3. Do not insert anything in the patient's mouth during a seizure.
4. Obtain pertinent medical history, including:
 - a. Known seizure disorder
 - b. Medications, what and when
 - c. Check for medical alert tags
 - d. Suspected drug or alcohol abuse
 - e. Recent trauma

SPECIALIST/PARAMEDIC

5. Start an IV NS KVO.

PARAMEDIC/ (GENESEE-LAPEER COUNTY SPECIALIST)

6. Check blood glucose level. If less than 80 mg/dl then administer Dextrose 50% (D50), 25 gm, IV.
7. If partial or transient response to Dextrose 50% (D50) repeat initial dose.

PARAMEDIC

8. If patient is actively seizing, administer 5 mg of Diazepam (Valium) slow IV.
9. If IV access is not available, 10 mg of Diazepam (Valium) ET or rectally, using a lubricated syringe without a needle.
10. If seizures persist more than 2 minutes after initial dose, repeat the Diazepam (Valium) 5 mg IV.
11. If patient is still seizing, consider administration of additional Diazepam (Valium).

Southeast Michigan Regional Protocol

Genesee, HEMS (Wayne), Lapeer, Macomb, Oakland, and Washtenaw/Livingston MCA's

Sexual Assault

Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Pre-Hospital Care Protocol. Allow patient respect and privacy. Limit IPS to life-threatening injuries.
2. A gentle survey for injuries is recommended. Explain everything to the patient in advance.
3. Do not discard anything found on or near the patient, as it may be evidence.
4. Evaluate and treat patient according to appropriate protocols.
5. Cooperate with police on collection of clothing and accurate history. Be aware of the area and patient for signs of torn clothing, blood, body fluids or other potential pieces of evidence. Additionally, document incidental contusions, lacerations and abrasions for legal purposes.
6. Be receptive to and document psychological state of the patient (crying, hysterical or inappropriate behavior), and modify exam accordingly. Document voluntary (unsolicited) comments made by the patient (these may be used as evidence in court proceedings).
7. Be supportive, non-judgmental and never force patient to an exam or history against their will.
8. Verify that authorities are notified of the incident.
9. If possible, to protect patient's privacy and minimize further stress, assign one technician to be the primary care giver and to support the patient. If possible, the technician should be the same gender as the patient.

Post-Radio

PARAMEDIC

10. Start IV NS KVO, as indicated.