Bayfield-Ashland Counties EMS	M-4
MEDICAL	ALLERGIC REACTION/ANAPHYLAXIS

Note:

- Allergic reactions span a continuum from minor to life threatening.
 - Mild: Localized or generalized urticaria, without swelling of oral or pharyngeal structures, difficulty breathing, hypotension of ALOC.
 - Moderate: Oral of pharyngeal swelling is present; mild to moderate difficulty breathing and wheezing are present.
 - Severe: Moderate to severe difficulty breathing is present; hypotension (diastolic BP less than 90) is present, and ALOC may occur.

Patient Management

Assessments and Treatment

ALL LEVELS

- 1. Ensure patent airway.
- 2. Note level of respiratory effort; auscultate for wheezing.
- 3. Assess adequacy of perfusion.
- 4. Assess for anaphylaxis:
 - a. Acute onset of an illness (minutes to several hours) with simultaneous involvement of the skin or mucosal tissue AND at least one of the following:
 - i. Respiratory compromise (dyspnea, wheeze, cough, stridor)
 - ii. Reduced BP or associated symptoms (syncope, collapse, incontinence)
 - iii. Severe gastrointestinal symptoms (e.g., severe crampy abdominal pain, repetitive vomiting) especially after exposure to non-food allergens
 - b. Acute onset of hypotension, respiratory symptoms or laryngeal involvement after exposure to a known or highly probably allergen.

EMR-O; EMT-R

- 5. If signs of anaphylaxis, administer Epi-Pen (auto injector to lateral thigh) or draw-up epinephrine:
 - a. Adult: 0.3mg IM (1:1000)
 - b. Pediatric: 0.15mg IM (1:1000)
- 6. Administer oxygen by nasal cannula or non-rebreather mask as needed to maintain 93% SpO₂.
- 7. If signs of anaphylaxis persist following the first does of epinephrine, additional IM epinephrine may be repeated every 5 to 15 minutes to a maximum of 3 doses.
- 8. Transport as soon as possible, and perform ongoing assessment as indicated.

EMT-R

- 9. If respiratory distress:
 - a. Administer one dose of Duo Neb [Albuterol 2.5mg/Atrovent 0.5 mg in 3ml Normal Saline (NS)].
 - b. Subsequent doses of Albuterol 2.5mg in 3ml NS may be repeated as needed to maximum of 5 treatments.
- 10. Monitor SpO₂ and ETCO₂ as authorized.
- 11. Contact Medical Control for additional epinephrine and albuterol administration.

AEMT

- 12. For signs of hypoperfusion, in addition to IM epinephrine:
 - a. Consider isotonic IV/IO fluid bolus 20ml/kg normal saline [AEMT-R] or lactated Ringer's [AEMT-O] rapidly (over 15 minutes).
 - b. Repeat as needed for ongoing hypoperfusion.

PARA-R

- 13. For urticaria (hives) or pruritus (severe itching of the skin), administer diphenhydramine [1mg/kg IM/IV/PO (maximum dose of 25mg)].
 - a. The IV route is preferred for the patient in severe shock.
 - b. As a supplement to diphenhydramine given for urticaria, any H2-blocking antihistamine (e.g. famotidine [Adult: 40mg PO; 20mg IV; Pediatric: 0.5mg/kg orally], cimetidine) can be given in conjunction with diphenhydramine.
- 14. Consider epinephrine infusion when cardiovascular collapse (hypotension with altered mental status, pallor, diaphoresis and/or delayed capillary refill) is present despite repeated IM doses of epinephrine in conjunction with at least 50mL/kg isotonic fluid bolus.