Anaphylaxis and Severe Allergic Reactions

Pre-Printed Orders For AGE >/= 16

EMERGENCY DEPARTMENT PHYSICIAN’S ORDERS
* These orders expire in 24 hours or sooner if indicated

**Anaphylaxis & Severe Allergic Reactions**

**Allergies:**

**Diagnosis:**
- [ ] Anaphylaxis
- [ ] Severe Allergic Reaction (check one; see Appendix in ED Binder)

**Other Pertinent Diagnoses:**

1. **Status:**
   - [ ] ED Hold
   - [ ] Ward Admission
   - [ ] ICU
   - [ ] Telemetry

2. **Diet:**
   - [ ] NPO
   - [ ] Clear liquid
   - [ ] Other

3. **Activity:**
   - [ ] Bedrest with commode
   - [ ] Bedrest with bathroom privilege
   - [ ] Other

4. **Nursing**
   - Airway: Have airway cart at bedside including cricothyroidotomy supplies.
   - Place patient in recumbent position, if tolerated.
   - Oxygen: Give 6 to 8 liters per minute via face mask, or up to 100% oxygen as needed.
   - HR,BP,RR,SaO2, continuous
   - O2 to keep SaO2 > 95%

5. **IV:**
   - **Normal saline rapid bolus:** Treat hypotension with rapid infusion of 1 L IV NS and then MD reassessment followed by:
     - [ ] Repeat Normal saline_______ml bolus over ______ minutes
     - [ ] IV
     - [ ] IV lock; flush per routine

6. **Labs:**
   - [ ]

7. **Investigations:**
   - [ ] ECG
   - [ ] CXR - portable

1. **Medications:** Give the following (check off):
   - [ ] **IM Epinephrine** *(1 mg/mL preparation or 1:1000 preparation)*:
     - Give epinephrine 0.5 mg intramuscularly, preferably in the mid-anterolateral thigh; can repeat every 5-15 minutes as needed with MD order. If symptoms are not responding to epinephrine injections, prepare IV epinephrine for infusion (see below)
   - [ ] **H2 antihistamine** : Give ranitidine 50 mg IV
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[ ] Glucocorticoid: Give methylprednisolone 125 mg IV

[ ] Bronchodilators: Give Salbutamol _____mg( 2.5 to 5 mg) in 3 mL saline via nebulizer; repeat as needed (for bronchospasm resistant to IM epinephrine)

[ ] H1 antihistamine: Give diphenhydramine 50 mg IV (for relief of urticaria and itching only)

TREATMENT OF REFRACTORY SYMPTOMS: CALL MD IMMEDIATELY

The following may be ordered by the ED Physician (check those you wish to employ):

☐ Epinephrine infusion: 1-4 micrograms per minute, titrated to effect and with constant hemodynamic monitoring (can go as high as 10ug/min if needed); for patients with inadequate response to IM epinephrine and IV saline, give epinephrine continuous infusion

☐ Vasopressors: Dopamine 5 to 20 micrograms per kilogram per minute by continuous infusion, titrated to effect and with constant hemodynamic monitoring; patients may require large amounts of IV crystalloid to maintain blood pressure; if response to epinephrine and saline is inadequate,

☐ Glucagon: Patients on beta-blockers not responding to epinephrine give glucagon 1 to 2 mg IV over 5 minutes, followed by infusion of 5 to 15 micrograms per minute

Other Regular Medications:

____________________________________________________________________________
____________________________________________________________________________

11. Discharge Criteria:

Patients being discharged from the ED are given all of the following

● An anaphylaxis emergency action plan
● An epinephrine auto-injector prescription
● Written information (attached)
● A plan for further evaluation; Follow up appointment: _________ Dr. _______________

13. Consults:

[ ] __________________________

REASON: ______________________________________________________________________

____________________________________________________________________________

Signature  Print name  Date/Time

Appendix: Definitions

Indications for Treatment
Anaphylaxis is highly likely when ANY ONE of the following criteria is fulfilled:

**Criterion 1** — Acute onset of an illness (over minutes to several hours) involving the skin, mucosal tissue, or both (eg, generalized hives, pruritus or flushing, swollen lips-tongue-uvula).

AND AT LEAST ONE OF THE FOLLOWING:

- Respiratory compromise (eg, dyspnea, wheeze-bronchospasm, stridor, reduced peak expiratory flow, hypoxemia)

- Reduced blood pressure (BP) or associated symptoms of end-organ dysfunction (eg, hypotonia [collapse] syncope, incontinence).

Note: Cutaneous symptoms are present in up to 90 percent of anaphylactic reactions. This criterion will therefore be used most frequently to make the diagnosis.

**Criterion 2** — TWO OR MORE OF THE FOLLOWING that occur rapidly after exposure TO A LIKELY ALLERGEN FOR THAT PATIENT (minutes to several hours):

- Involvement of the skin-mucosal tissue (eg, generalized hives, itch-flush, swollen lips-tongue-uvula)

- Respiratory compromise (eg, dyspnea, wheeze-bronchospasm, stridor, reduced peak expiratory flow, hypoxemia)

- Reduced BP or associated symptoms (eg, hypotonia [collapse], syncope, incontinence)

- Persistent gastrointestinal symptoms (eg, crampy abdominal pain, vomiting)

Note: Ten to 20 percent of people with anaphylaxis lack skin symptoms. This criterion incorporates symptoms in other organ systems and is applied to patients with exposure to a substance that is a likely allergen for them.

**Criterion 3** — Reduced BP after exposure TO A KNOWN ALLERGEN FOR THAT PATIENT (minutes to several hours).

- Reduced BP in adults is defined as a systolic BP of less than 90 mmHg or greater than 30 percent decrease from that person's baseline.

* Low systolic BP for children is defined as:

- Less than 70 mmHg from 1 month up to 1 year
- Less than \((70 \text{ mmHg} + [2 \times \text{ age}])\) from 1 to 10 years
- Less than 90 mmHg from 11 to 17 years

Note: This criterion is intended to detect episodes of anaphylaxis that consist of isolated cardiovascular symptoms and is applied to individuals who have been exposed to substance to which they are known to be allergic.
Name: ___________________________   Age: ___________________________

Allergy to: ___________________________

Asthma:  
☐ Yes (high risk for severe reaction)  
☐ No

Other health problems besides anaphylaxis: ___________________________

Concurrent medications, if any: ___________________________

<table>
<thead>
<tr>
<th>Symptoms of anaphylaxis include:</th>
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<tbody>
<tr>
<td>Mouth</td>
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<tr>
<td>Throat*</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>Gut</td>
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<tr>
<td>Lung*</td>
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<tr>
<td>Heart*</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Itching, swelling of lips and/or tongue</td>
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<tr>
<td>Itching, tightness/closure, hoarseness</td>
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<tr>
<td>Itching, hives, redness, swelling</td>
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<tr>
<td>Vomiting, diarrhea, cramps</td>
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<tr>
<td>Shortness of breath, cough, wheeze</td>
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<tr>
<td>Weak pulse, dizziness, passing out</td>
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</tbody>
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* Only a few symptoms may be present. Severity of symptoms can change quickly. 
* Some symptoms can be life-threatening! ACT FAST!

What to do:
1. Inject epinephrine in thigh using (check one):  
☐ EpiPen Jr (0.15 mg)  
☐ EpiPen (0.3 mg)  
☐ Twinject 0.15 mg  
☐ Twinject 0.3 mg

Other medication/dose/route: ___________________________

IMPORTANT: Asthma puffers and/or antihistamines can’t be depended on in anaphylaxis!

2. Call 911 or rescue squad (before calling contacts)!

3. Emergency contact #1: Home ______ Work ______ Cell ______
   Emergency contact #2: Home ______ Work ______ Cell ______
   Emergency contact #3: Home ______ Work ______ Cell ______

Do not hesitate to give epinephrine!

Comments: ______

Doctor’s signature/Date ___________________________   Parent’s signature (for individuals under age 18 yrs)/Date ___________________________

References
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