Any signs or symptoms of hypersensitivity reaction (HSR)/allergic reaction, notify Responding Provider\(^1\) and activate the appropriate emergency response process for your area.

**PRESENTING SYMPTOMS**

- Fever\(^2\), chills, and/or rigors
- Hives (urticaria), rash, itching, and/or facial flushing
- Hypotension\(^3\), wheezing, shortness of breath, and/or facial/lip/tongue swelling
- Other signs or symptoms of HSR/allergic reaction

**Acetaminophen**

- within 4 hours or Stem Cell Transplant patient?
  - Yes: Notify Responding Provider\(^1\) for additional instructions
  - No: Give Acetaminophen 1,000 mg PO for 1 dose

**Give Diphenhydramine**

- 50 mg IV push over 2 minutes (can be given after pre-medication of diphenhydramine)
  - Improvement within 5 minutes?
    - Yes: Give:
      - Epinephrine (1 mg/mL) 0.5 mg IM\(^4\), followed by
      - Diphenhydramine 50 mg IV push over 2 minutes (if not administered within last 30 minutes), followed by
      - Hydrocortisone\(^3\) 100 mg IV push over 1 minute
    - No:
      - Stay with patient to monitor symptoms, check SpO\(_2\) continuously, and obtain vital signs every 5 minutes
      - Start \(\mathrm{O}_2\) at 2 L/minute by nasal cannula if saturation \(\leq 92\%
      - Normal saline 150 mL/hour IV

**Give Hydrocortisone**

- 100 mg IV push over 1 minute and repeat

**Notify Responding Provider\(^1\) and/or emergency response team; re-evaluate need for IV fluids**

1. Appropriate providers may include: Primary attending physician, ordering provider, covering attending physician or advanced practice provider, nocturnal provider, etc.
2. Fever is defined as a temperature of \(> 38.3\, ^\circ\mathrm{C}\) or \(\geq 38\, ^\circ\mathrm{C}\) for 1 hour or longer
3. Some chemotherapy/biotherapy agents have a need to avoid corticosteroids. Corticosteroids should still be given in cases of severe allergic reactions.
4. Documentation:
   - Use HSR/Allergy orders to document management utilized for an individual patient
   - Document event as an Observed Adverse Drug Reaction (ADR)
5. Hypotension defined as a systolic blood pressure (SBP) \(< 90\, \text{mmHg}\) or a drop in SBP of more than 20 mmHg from baseline
6. Administer epinephrine IM into the antero-lateral mid-third portion of the thigh is preferred. The deltoid can be considered as an administration site if unable to administer in the thigh during an emergency. Administration via IM route is preferred regardless of platelet count.

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\(^2\) Fever is defined as a temperature of \(> 38.3\, ^\circ\mathrm{C}\) or \(\geq 38\, ^\circ\mathrm{C}\) for 1 hour or longer

\(^3\) Some chemotherapy/biotherapy agents have a need to avoid corticosteroids. Corticosteroids should still be given in cases of severe allergic reactions.
SUGGESTED READINGS


DEVELOPMENT CREDITS

This practice consensus algorithm is based on majority expert opinion of the Adult Hypersensitivity Reaction work group at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following experts:

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