Guidelines and Standing Orders for PEDIATRIC Infusion Hypersensitivity and Anaphylaxis Reactions

INCLUSION CRITERIA

PEDIATRIC patients receiving chemotherapy, biotherapy, or IV iron therapy.

TREATMENT PROTOCOL

Grade 1 - For Mild Symptoms: (i.e. new onset itching, flushing, rash, runny nose, fevers, or rigors)

- Consider stopping infusion and notify covering provider
- Oxygen, suction equipment, pulse oximeter, EKG monitor, and rescue medications should be readily available
- Vital signs every 15 minutes until resolution of symptoms and patient is stable
- Continuous pulse oximetry and cardio-pulmonary monitor until resolution of symptoms; Keep SPO_2 >92%
- **Normal Saline at KVO (Use a new bag and new IV tubing)**
  - 20 mL/kg bolus once administered over 1 hour if hypotensive* (see guidelines below)
- **Diphenhydramine 1 mg/kg (max 50 mg/dose) IVP once**
- **Acetaminophen 15 mg/kg (max 650 mg/dose) PO once**
- Complete online SAFE to report Adverse Drug Event

Can consider resuming infusion after symptom resolution in consultation with the ordering provider/designee.

Grade 2 - For Moderate Symptoms: (i.e. new onset shortness of breath, chest tightness, or localized urticaria)

- Stop infusion and have ANOTHER nurse notify covering provider
- Oxygen, suction equipment, pulse oximeter, EKG monitor, and rescue medications should be readily available
- Vital signs every 5 minutes until return to baseline, then every 15 minutes until resolution of symptoms
- Continuous pulse oximetry and cardio-pulmonary monitor until resolution of symptoms
- Administer oxygen at 2 liters via nasal cannula, titrate to O2 saturation ≥92%
- **Normal Saline at KVO (Use a new bag and new IV tubing)**
  - 20 mL/kg bolus once administered over 1 hour if hypotensive* (see guidelines below)
- **Diphenhydramine 1 mg/kg (max 50 mg/dose) IVP once**
- **Acetaminophen 15 mg/kg (max 650 mg/dose) PO once**
- **Famotidine 0.5 mg/kg (max 20 mg/dose) IV once**
- **Methylprednisolone 2 mg/kg (max 125 mg/dose) IV once**
- **Albuterol (0.083% Nebulizer Solution) via nebulizer once for SOB, chest tightness unrelieved by oxygen**
  - For child greater than 30 kg use 5 mg
  - For child less than 30 kg use 2.5 mg
- Complete online SAFE to report Adverse Drug Event

Can consider resuming infusion after symptom resolution in consultation with the ordering provider/designee.

Grade 3 - For Severe/Anaphylaxis Symptoms: **(i.e. new onset bronchospasm, stridor, wheezing, respiratory distress, generalized urticaria, angioedema, hypotension (see guidelines)*, or loss of consciousness)**

- Stop infusion and have ANOTHER nurse notify covering provider
- Call a **RAPID RESPONSE, CODE BLUE, or 911** as appropriate. DO NOT LEAVE PATIENT.
- Oxygen, suction equipment, pulse oximeter, EKG monitor, and rescue medications should be readily available
- **Epinephrine IM Q5-15 minutes if persistent symptoms x 3 doses**
  - For child greater than 25 kg use EpiPen (0.3 mg)
  - For child less than 25 kg use EpiPen Jr. (0.15 mg)
- Vital signs every 5 minutes until return to baseline, then every 15 minutes until resolution of symptoms
- Continuous pulse oximetry and cardio-pulmonary monitor until resolution of symptoms
- Start non-rebreather mask at 15 L O2 (100% O2) once available, titrate to patient needs
- **Normal Saline 20 ml/kg IV bolus once (Use a new bag and new IV tubing)**
- **Diphenhydramine 1 mg/kg (max 50 mg/dose) IV once**
- **Famotidine 0.5 mg/kg (max 20 mg/dose) IV once**
- **Methylprednisolone 2 mg/kg (max 125 mg/dose) IV once**
- **Albuterol (0.083% Nebulizer Solution) via nebulizer once**
  - For child greater than 30 kg use 5 mg
  - For child less than 30 kg use 2.5 mg
- Complete online SAFE to report Adverse Drug Event

***Hypotension Guidelines for Pediatrics:**

Age	Systolic Blood Pressure (mm Hg)
Term neonates (0 to 28 days)	< 60
Infants (1 to 12 months)	< 70
Children 1 to 10 years (*5th blood pressure percentile)*	< 70 + (age in years x 2)
Children > 10 years	< 90

Reference: PALS 2015

*An observed decrease in systolic blood pressure of 10 mmHg from baseline should prompt serial evaluations for additional signs of shock.