



## Nevada Infusion

# Hypersensitivity Reaction Order Set

### Adult - Hypersensitivity Order Set

#### MILD INFUSION REACTION

**Signs & Symptoms (Including but not limited to):** Mild headache, Transient flushing, Mild cough, Patchy rash or mild urticaria, Pruritus (itching), Mild nausea/vomiting, Mild diarrhea, Tickle in throat, Rhinitis, No significant vital sign changes

#### **Initial Management:**

- Slow infusion to ½ rate
- Monitor vital signs q15min, document symptoms, interventions and patient response
- Titrate per RN clinical judgement

#### **If symptoms persist OR worsen:**

- Stop infusion
- NS 500mL at TKO (max 500mL/hr)
- **Medications:**
  - Diphenhydramine 25mg IV over 2min
  - Famotidine 20mg IV over 2min
  - Acetaminophen 650mg PO

#### **If no improvement after 30min:**

- **Add:** Methylprednisolone 125mg IV or Hydrocortisone 100 mg IV over 1-2 minutes
- If symptoms persist → escalate to Moderate protocol

#### MODERATE INFUSION REACTION

**Signs & Symptoms - All mild symptoms that worsen or persist, in Addition to any of the following (including but not limited too):** Shortness of breath, Chest tightness, Fever (temperature  $\geq 38^{\circ}\text{C}$  or increase  $>1^{\circ}\text{C}$  from baseline), Back/flank pain, Rigors/chills, tachycardia (HR  $>110$  bpm or  $>20\%$  increase from baseline), Blood pressure changes ( $>20\%$  from baseline), Hypoxemia ( $\text{O}_2$  saturation  $<94\%$ ), Generalized urticaria, Significant discomfort

#### **Initial Management:**

- STOP INFUSION
- NS 500mL at 500mL/hr (increase to 1000mL/hr if SBP $<90$  or DBP $<50$ )
- Supplemental  $\text{O}_2$  via NC to maintain oxygen sat  $<92\%$  (titrate as needed to achieve oxygen saturations)

#### **Medications - Administer in sequence:**

1. Diphenhydramine 25-50mg IV over 2min
2. Famotidine 20mg IV over 2min
3. Methylprednisolone 125mg IV or Hydrocortisone 100 mg IV over 1-2min
4. Acetaminophen 650 mg PO

#### **If symptoms resolve after 30min:**

- May restart infusion at ½ previous rate (with provider approval)



## Nevada Infusion

### Hypersensitivity Reaction Order Set

#### **SEVERE INFUSION REACTION (ANAPHYLAXIS)**

**Signs & Symptoms:** Rapid onset of multiple symptoms affecting multiple body systems.

**ANY of the following (included, but not limited to):** Respiratory compromise (severe dyspnea, wheezing, stridor, hypoxemia), significant hypotension (SBP <80 mmHg or >20% drop from baseline), tachycardia or new arrhythmias, angioedema (lip/tongue/facial swelling), throat tightness or difficulty swallowing, O<sub>2</sub> saturation <90% despite supplemental oxygen, altered mental status, syncope or pre-syncope, cyanosis, unconsciousness

#### **Initial Management:**

- STOP INFUSION IMMEDIATELY
- Call EMS/911
- 1000mL NS IV (infused as quickly as IV can be infused)
- Supplemental O<sub>2</sub> to maintain oxygen saturations greater than 90%

#### **Medications - IMMEDIATE SEQUENCE:**

1. **FIRST:** Epinephrine 0.3mg IM x 1 dose
  - May repeat x 1 q5-15min PRN if no improvement
2. Diphenhydramine 50mg IV (max 75mg including pre-medications)
3. Famotidine 20mg IV
4. Methylprednisolone 125mg IV or Hydrocortisone 100 mg IV over 1-2 minutes

#### **If cardiovascular or respiratory collapse:**

- Begin CPR per BLS/ACLS protocols
- Continue until EMS arrives
- Notify ordering provider regarding patients status

#### **DOCUMENTATION REQUIREMENTS**

For all infusion reactions:

- Document precise timeline of events
- Record all vital signs and assessment findings
- Note all medications administered (dose, route, time, response)
- Document all communications with providers
- Complete an unusual occurrence form per Nevada Infusion policy
- Document patient education provided
- Include follow-up plan in discharge instruction



## Nevada Infusion

# Hypersensitivity Reaction Order Set

### **Pediatric - Hypersensitivity Order Set**

#### **MILD INFUSION REACTION**

**Signs & Symptoms (Including but not limited to):** Mild headache, transient flushing, mild cough, patchy rash or mild urticaria, pruritus (itching), mild nausea/vomiting, mild diarrhea, tickle in throat, rhinitis, no significant vital sign changes

#### **Initial Management:**

- Slow infusion to ½ rate
- Monitor vital signs q5min, document symptoms, interventions and patient response
- Titrate per RN clinical judgement

#### **If symptoms persist OR worsen:**

- Stop infusion
- **Give Medications:**

Diphenhydramine 1 mg/kg IV (maximum pediatric dose is 50 mg) IV push over 5 minutes

#### **AND**

Cetirizine once every 24 hours

>6 months to <2 years: 2.5 mg PO

2 to 5 years: 5 mg PO

>5 years: 10 mg PO

#### **If no improvement after 30min:**

- **Add:** Hydrocortisone 2 mg/kg (maximum dose 100 mg/dose)
- If symptoms persist → escalate to Moderate protocol

#### **MODERATE INFUSION REACTION**

**Signs & Symptoms - All mild symptoms that worsen or persist, in Addition to any of the following (including but not limited too):** Shortness of breath, Chest tightness, Fever (temperature  $\geq 38^{\circ}\text{C}$  or increase  $>1^{\circ}\text{C}$  from baseline), Back/flank pain, Rigors/chills, tachycardia (HR  $>110$  bpm or  $>20\%$  increase from baseline), Blood pressure changes ( $>20\%$  from baseline), Hypoxemia ( $\text{O}_2$  saturation  $<94\%$ ), Generalized urticaria, Significant discomfort

#### **Initial Management:**

- STOP INFUSION IMMEDIATELY
- Call EMS/911
- 1000mL NS IV
- $\text{O}_2$  up to 8L/min to via non-rebreather mask to maintain oxygen saturations greater than 90%

#### **Medications - IMMEDIATE SEQUENCE:**

5. **FIRST:** Epinephrine 0.3mg IM ( $>30\text{kg}$ ), 0.15mg (15 to 30kg), or 0.01 mg/kg ( $<15\text{kg}$ )  
IM x1; repeat x1 in 5 to 15 min PRN
  - May repeat q5-15min PRN if no improvement



## Nevada Infusion Hypersensitivity Reaction Order Set

6. Diphenhydramine 1 mg/kg (maximum 50 mg/dose including pre-medications ) IV push over 5 minutes
7. Famotidine 20mg IV
8. Methylprednisolone 125mg IV

### **If cardiovascular or respiratory collapse:**

- Begin CPR per BLS/ACLS protocols
- Continue until EMS arrives
- Notify ordering provider regarding patients status

### **SEVERE INFUSION REACTION (ANAPHYLAXIS)**

**Signs & Symptoms:** Rapid onset of multiple symptoms affecting multiple body systems.

**ANY of the following (included, but not limited to):** Respiratory compromise (severe dyspnea, wheezing, stridor, hypoxemia), significant hypotension (SBP <80 mmHg or >20% drop from baseline), tachycardia or new arrhythmias, angioedema (lip/tongue/facial swelling), throat tightness or difficulty swallowing, O<sub>2</sub> saturation <90% despite supplemental oxygen, altered mental status, syncope or pre-syncope, cyanosis, unconsciousness

### **Initial Management:**

- STOP INFUSION IMMEDIATELY
- Call EMS/911
- Give Normal Saline 10mL/kg (maximum 1,000mL) IV bolus
- Supplemental O<sub>2</sub> to maintain oxygen saturations greater than 90%

### **Medications - IMMEDIATE SEQUENCE:**

9. **FIRST:** Epinephrine (1 mg/ml) 0.01 mg/kg (maximum 0.5 mg/dose) IM
10. Diphenhydramine 50 mg IV push over 5 minutes (max 50 mg dose)
11. Hydrocortisone 2 mg/kg (Maximum dose 100 mg IV over 1-2 minutes)

### **If cardiovascular or respiratory collapse:**

- Begin CPR per BLS/ACLS protocols
- Continue until EMS arrives
- Notify ordering provider regarding patients status

### **DOCUMENTATION REQUIREMENTS**

For all infusion reactions:

- Document precise timeline of events
- Record all vital signs and assessment findings
- Note all medications administered (dose, route, time, response)
- Document all communications with providers
- Complete an unusual occurrence form per Nevada Infusion policy
- Document patient education provided
- Include follow-up plan in discharge instruction