CLINICAL PATHWAY: Hypersensitivity Post COVID-19 mRNA Vaccination Management Considerations

THIS PATHWAY
SERVES AS A GUIDE
AND DOES NOT
REPLACE CLINICAL
JUDGMENT

Side Effect Management for COVID-19 mRNA Vaccination

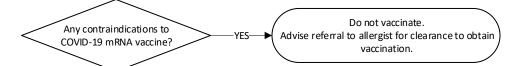
Prior COVID-19 vaccination administration, ensure no contraindications exist:

- Severe allergic reaction (e.g., anaphylaxis) after a previous dose of an mRNA COVID-19 vaccine or any of its components
- Immediate allergic reaction* of any severity to a previous dose of an mRNA COVID-19 vaccine or any of its components, including polyethylene glycol
- Immediate allergic reaction* of any severity to polysorbate (Although no longer a contraindication, it remains a precaution. Consider referral to allergy-immunology for further testing and/or clearance to obtain vaccination.)

*Immediate reactions refer to any hypersensitivity-related signs/symptoms consistent with urticaria, angioedema, respiratory distress, anaphylaxis that occur within 4 hours after administration.

If history of any immediate allergic reaction* to vaccines or injectable therapies (not related to the mRNA COVID-19 vaccine, or polysorbate), can either:

- Proceed with vaccination and have a 30 minute observational period afterwards
- Defer vaccine and refer to allergistimmunologist



Monitor for 15 minutes after giving vaccination, unless below risk factors.

NO

Administer COVID-19 mRNA vaccination

- Monitor for 30 minutes if the following risk factors are present:

 History of anaphylaxis due to any cause unrelated to mRNA COVID-19 vaccine
- History of immediate allergic reaction to any vaccine or injectable therapy (except to mRNA COVID-19 vaccine as that is contraindicated)

Vaccine reaction
during observational period?

NO

If hypersensitivity reaction: Activate Rapid Response team.

If anaphylactic reaction: follow Anaphylaxis Clinical Pathway (Appendix A)

Discharge Criteria and Instructions:

- May leave clinic if remains clinically stable.
- If any side effects occur post-vaccination, follow up with primary care doctor, and report side effects via VAMS/CDC (refer to COVID-19 FAQ sheet)
- If individual had hypersensitivity reaction post-vaccine: Advise referral to allergist and follow up with primary care doctor for care
- If employee of CT Children's experiences side effects: refer to Appendix E of Employee Exposure Algorithm for workplace implications



CLINICAL PATHWAY: Hypersensitivity Post COVID-19 mRNA Vaccination **Management Considerations** Appendix A: Anaphylaxis Clinical Pathway

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MUST document allergy and symptoms of allergy in patient's char

²Hypotension:

Low systolic blood pressure for

children is defined as: 1 month to 1 year: Less

than 70 mmHg

Inclusion Criteria: child of any age with signs and/or symptoms of anaphylaxis Exclusion Criteria: blood transfusion and other medication infusion reactions that are not anaphylaxis. symptoms attributable to other causes, allergy to epinephrine

Initial Management:

- If outside Emergency Department (ED) or PICU: consider calling Code Blue if severe respiratory distress or hypotension
- Place on continuous cardiorespiratory monitor and perform full set of vitals
- Immediately discontinue medications that may be causing anaphylaxis
- Rapid assessment and manage ABCs:
- Administer Epinephrine 0.01 mg/kg IM (max 0.5 mg)
- If hypoxic: administer oxygen
- Place patient in recumbent or supine position
- If hypotensive²: Place PIV and administer normal saline bolus 20 ml/kg IV
- If respiratory failure: consider intubation

1 to 10 years: Less than Continue to check vital signs every 15 min, or more frequent if unstable (70 mmHg + [2x age]) 11 to 17 years: Less than 90 mmHg Sta ble vital signs and/or YFS-NOanaphylaxis resolved? Vital signs unstable and/or anaphylaxis unresolved: Administer the following If outside Emergency Department (ED) or PICU: medications: consider calling Code Blue if severe respiratory distress If urticaria: diphenhydramine or hypotension Consider systemic steroids Administer up to 3 total doses of IM epinephrine q 5-Observe for 2-4 hours from last 15 min epinephrine dose Place PIV and administer rapid NS bolus 20 ml/kg IV Vital signs every 30 min If hypotension²: give up to 3 boluses Check vital signs every 5 min Consider systemic steroids If urticaria: diphenhydramine Any of the following? If whe eze: consider albuterol Hx biphasic or severe reactions, If stridor: consider racemic epinephrine ≥ 2 doses epinephrine required, progressive/persistent sxs, If respiratory failure: consider intubation reaction was to long acting medication, hx severe asthma/ current asthma flare, hypotension² or syncope upper airway obstruction, young age Does patient meet all of the below? YES (if no to one criteria, must admit to PICU) Required only <3 doses of epi? Discharge Criteria: Stable vital signs? Complete resolution all serious sxs Admit to Medical-Surgical Normal mental status? (rash may persist), at least > 4 hrs from last epinephrine, floors on Pediatric Hospital parental comfort with discharge and easy access to ED, Medicine Service (GI, epinephrine auto-injector physically available to family Nephrology or Heme-Onc (if reaction to medication administered only in hospital setting, will admit to their own service) auto-injector may not be indicated) Observe on continuous cardiorespiratory monitor Discharge meds: Consider the following Epinephrine auto-injector, Benadryl PRN medications: Admit to PICU Benadryl PRN Discharge Instructions: Systemic steroids epinephrine auto-injector training, avoid known allergens, consider referral to allergist f/u with PCP in 1-2 days

¹Diagnostic Criteria for Anaphylaxis:

(must meet ONE of the following three criteria)

- 1. Acute onset of (seconds to minutes) skin and/or mucosal involvement (e.g. generalized hives, pruritus or flushing, swollen lips/tongue/uvula), AND respiratory compromise (e.g. dyspnea, wheeze/bronchospasm, stridor, hypoxemia) OR reduced blood pressure or associated symptoms of end-organ dysfunction (e.g. hypotonia, syncope, incontinence)
- 2. TWO OR MORE OF THE FOLLOWING that occur rapidly after exposure to a LIKELY allergen for that patient (seconds to minutes):
 - A. Skin-mucosal involvement (e.g. generalized hives, pruritus or flushing, swollen lips/tongue/uvula)
 - B. Respiratory compromise (e.g. dyspnea, wheeze/bronchospasm, stridor, hypoxemia)
 - C. Reduced blood pressure or associated symptoms (e.g. hypotonia, syncope, incontinence)
 - D. Persistent gastrointestinal symptoms (e.g. crampy abdominal pain, vomiting, diarrhea)
- 3. Reduced blood pressure after exposure to a KNOWN allergen for that patient (seconds to minutes):
 - $A.\ In fants\ and\ children-Low\ systolic\ blood\ pressure\ (age-specific)\ or\ greater\ than\ 30\%\ decrease\ in\ systolic\ blood\ pressure\ from\ baseline$
 - B. Adults Systolic BP of less than 90 mmHg or greater than 30% decrease from that person's baseline

