

# Clinical Guidelines

## Medical Management of Vaccine Reactions in Adult Patients

All vaccines have the potential to cause an adverse reaction. To minimize adverse reactions, patients should be carefully screened for precautions and contraindications before administration. Even with careful screening, reactions may occur. These reactions can vary from trivial and inconvenient (eg, soreness and itching) to severe and life threatening (eg, anaphylaxis). If reactions occur, healthcare providers should be prepared with procedures for management.

Reactions	Symptoms	Management
Localized	Soreness, redness, itching, or swelling at the injection site	Apply cold compress to injection site. Consider giving analgesic or antipruritic medication.
	Slight bleeding	Apply adhesive compress over injection site.
	Continuous bleeding	Place thick layer of gauze pads over site and maintain direct and firm pressure; raise bleeding injection site above level of patient's heart.
Psychological Fright and Syncope	Fright before injection is given	Have patient sit or lie down for vaccination.
	Extreme paleness, sweating, coldness of the hands and feet, nausea, light-headedness, dizziness, weakness, or visual disturbances	Have patient lie flat or sit with head between knees for several minutes. Loosen any tight clothing and maintain open airway. Apply cool damp cloths to patient's face and neck.
	Fall, without loss of consciousness	Examine patient to determine if injury occurred before attempting to move patient. Place patient flat on back with feet elevated.
	Loss of consciousness	Check patient to determine if injury is present before attempting to move patient. Place patient flat on back with feet elevated. Call 9-1-1 if patient does not recover immediately.
Anaphylaxis	Sudden or gradual onset of generalized itching, erythema, or urticaria; angioedema; severe bronchospasm; shortness of breath; shock; abdominal cramping; or cardiovascular collapse	<ul style="list-style-type: none"> <li>• If itching and swelling are confined to injection site, observe patient closely for development of generalized symptoms.</li> <li>• If symptoms are generalized, have another person activate emergency medical system (EMS). Meanwhile, assess the airway, breathing, circulation (ABCs), and level of consciousness (LOC).</li> <li>• Administer aqueous epinephrine 1:1000 dilution IM, 0.01 mL/kg/dose to maximum single dose of 0.5 mL.</li> <li>• Administer diphenhydramine orally or IM, 1-2 mg/kg up to 100 mg as single dose.</li> <li>• Monitor patient until EMS arrives. Perform CPR if necessary and maintain airway. Keep patient in supine position unless breathing is labored (in that case elevate patient's head if blood pressure is adequate to maintain consciousness).</li> <li>• Repeat dose of epinephrine every 10-20 minutes up to 3 doses, if needed, until EMS arrives.</li> <li>• Record all vital signs, medications administered, and other relevant clinical information.</li> <li>• Notify the patient's primary care physician.</li> </ul>

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