

# Vaccine Administration: Intramuscular (IM) Injection Infants 11 months of age and younger

## Administer these vaccines by IM injection:

- Diphtheria, tetanus, and pertussis (DTaP)
- Diphtheria, tetanus, pertussis, polio, and hepatitis B (DTaP-IPV-HepB)
- Diphtheria, tetanus, pertussis, polio, and Haemophilus influenzae type b (DTaP-IPV/Hib)
- Diphtheria, tetanus, pertussis, polio, hepatitis B and Haemophilus influenzae type b (DTaP-IPV-HepB-Hib)
- Haemophilus influenzae type b
- Hepatitis B (HepB)

- Influenza vaccine, inactivated (IIV)
- Inactivated polio vaccine (IPV)\*
- Meningococcal conjugate (MenACWY)
- Pneumococcal conjugate (PCV13)

**Note:** Age, recommendations for use, and other indications vary by product. Always review manufacturers' product information as well as the current immunization schedule for children (<a href="www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html">www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html</a>) before administering vaccine.

\*May also be administered by subcutaneous injection.

## To ensure vaccines are safe and effective, it's important to prepare and administer them correctly:

- Follow aseptic technique.
- Use a new, separate needle and syringe for each injection.
- Perform hand hygiene before vaccine preparation, between patients, when changing gloves (if worn), and any time hands become soiled.<sup>†</sup>

†Gloves are not required unless the person administering the vaccine is likely to come in contact with potentially infectious body fluids or has open lesions on the hands. If worn, perform hand hygiene and change gloves between patients.

### 1. Use the correct syringe and needle.

- Administer the vaccine using either a 1-mL or 3-mL syringe.
- Use the correct gauge and needle length.<sup>‡</sup>
  - 22- to 25-gauge needle
  - 1-inch (25 mm) needle

‡A 5/8-inch (16 mm) may be used for neonates, 28 days of age and younger, if the skin is stretched tightly and the subcutaneous tissue is not bunched.

### 2. **Identify** the injection site.

- Recommended site: the vastus lateralis muscle in the anterolateral thigh
- Use anatomical landmarks to determine the injection site. The muscle is located on the anterior lateral aspect of the thigh. The middle third of the muscle is used for injections—above the lateral condyle and below the greater trochanter.

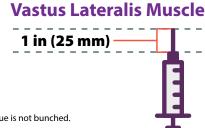
#### 3. Administer the vaccine correctly.

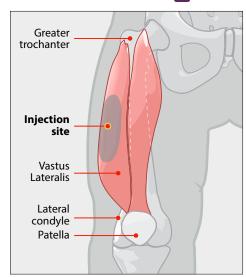
- Inject the vaccine into the middle and thickest part of the muscle. Insert the needle at a 90-degree angle and inject all the vaccine in the muscle tissue.
- Aspiration (i.e., pulling back on the plunger) is not necessary before injecting the vaccine. No large blood vessels are present at the recommended injection site, and a process that includes aspiration might be more painful.
  For more information, see <a href="https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/">https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/</a>
- If administering more than one injection in the same limb, separate the injection sites by 1 inch, if possible.

For additional information, go to CDC's clinical resources on vaccine administration

Advisory Committee on Immunization Practices General Best Practice Guidelines for Immunization:

Vaccine Administration section at <a href="https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html">www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html</a> Vaccine administration resource library at <a href="https://www.cdc.gov/vaccines/hcp/admin/resource-library.html">www.cdc.gov/vaccines/hcp/admin/resource-library.html</a>







administration.html