YOU CALL THE SHOTS

Vaccine Administration:
Intramuscular (IM) Injection
Children 3 through 6 years of age

Administer these vaccines by IM injection:

- Diphtheria, tetanus, and pertussis (DTaP)
- Diphtheria, tetanus, pertussis, and polio (DTaP-IPV)
- 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, *Haemophilus Influenzae* type b and hepatitis B (DTaP-IPV-Hib-HepB)
- *Haemophilus Influenzae* type b
- Hepatitis A (HepA)
- Hepatitis B (HepB)

- Influenza vaccine, inactivated (IIV)
- Inactivated polio vaccine (IPV)*
- Meningococcal conjugate (MenACWY)
- Pneumococcal conjugate (PCV13)
- Pneumococcal polysaccharide (PPSV23)*

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 (www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html) 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.[†]

[†]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.[‡]
  - 22- to 25-gauge needle
  - 5/8- to 1-inch (16 to 25 mm) needle

[‡]Use a 1- to 1.25-inch (25–32 mm) needle if administering vaccine in the vastus lateralis muscle in the anterolateral thigh.

5/8 in (16mm)   **1 in (25 mm)**

If the skin is stretched tightly and the subcutaneous tissues are not bunched

2. Identify the injection site.
- Preferred site: the deltoid muscle in the upper arm[§]
- Use anatomical landmarks to determine the injection site. The deltoid muscle is a large, rounded, triangular shape. Find the acromion process, which is the bony point at the end of the shoulder. The injection site will be below the bone and above the axillary fold/armpit.

[§]The vastus lateralis muscle in the anterolateral thigh can also be used.

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 sites, and a process that includes aspiration might be more painful. For more information, see www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
- If administering more than one IM injection:
  - Use the vastus lateralis muscle in the anterolateral thigh for young children. This muscle is preferred for young children because of its larger muscle mass.
  - Separate the injection sites by 1 inch if possible.

Scapula
Injection site
Acromion process
Deltoid muscle
Axillary fold/armpit
Humerus
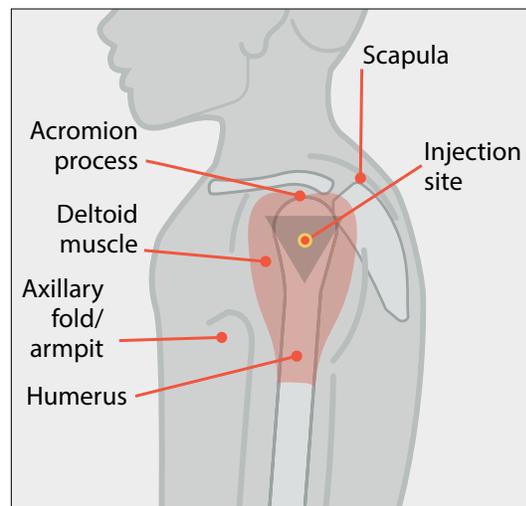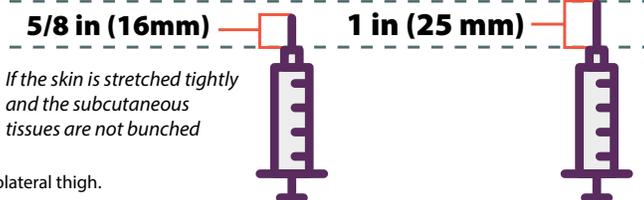
For additional information, go to CDC's clinical resources on vaccine administration
Advisory Committee on Immunization Practices General Best Practice Guidelines for Immunizations: Vaccine Administration section at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
Vaccine administration resource library at www.cdc.gov/vaccines/hcp/admin/resource-library.html