How to Administer IM and SC Vaccine Injections to Adults

Intramuscular (IM) Injections

Administer these vaccines via IM route
Tetanus, diphtheria (Td), or with pertussis (Tdap); hepatitis A; hepatitis B; human papillomavirus (HPV); trivalent inactivated influenza (TIV); pneumococcal conjugate (PCV13); and quadrivalent meningococcal conjugate (MCV4). Administer polio (IPV) and pneumococcal polysaccharide vaccine (PPSV23) either IM or SC.

Injection site
Give in the central and thickest portion of the deltoid—above the level of the armpit and below the acromion (see the diagram).

Needle size
22–25 gauge, 1–1½" needle (see note at right)

Needle insertion
• Use a needle long enough to reach deep into the muscle.
• Insert the needle at a 90° angle to the skin with a quick thrust.
• Separate two injections given in the same deltoid muscle by a minimum of 1".

Note: A ⅝" needle is sufficient in adults weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the subcutaneous tissue is not bunched and the injection is made at a 90-degree angle; a 1" needle is sufficient in adults weighing 130–152 lbs (60–70 kg); a 1–1½" needle is recommended in women weighing 152–200 lbs (70–90 kg) and men weighing 152–260 lbs (70–118 kg); a 1½" needle is recommended in women weighing more than 200 lbs (90 kg) or men weighing more than 260 lbs (more than 118 kg).

Subcutaneous (SC) Injections

Administer these vaccines via SC route
MMR, varicella, meningococcal polysaccharide (MPSV4), and zoster (shingles). Administer polio (IPV) and pneumococcal polysaccharide vaccine (PPSV23) either SC or IM.

Injection site
Give in fatty tissue over the triceps (see the diagram).

Needle size
23–25 gauge, 5/8" needle

Needle insertion
• Pinch up on the tissue to prevent injection into the muscle. Insert the needle at a 45° angle to the skin.
• Separate two injections given in the same area of fatty tissue by a minimum of 1".

Adapted by the Immunization Action Coalition, courtesy of the Minnesota Department of Health