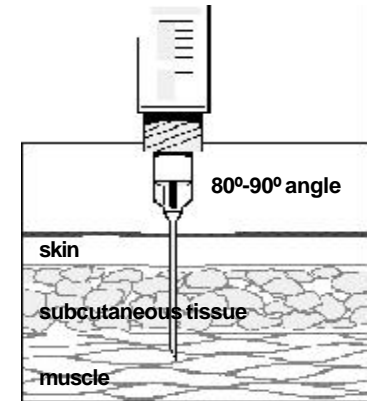


How to Administer IM (Intramuscular) Injections

Administer these vaccines via IM (intramuscular) route: DTaP, DT, Td, Hib, hepatitis A, hepatitis B, influenza, PCV7. Administer IPV & PPV23 either IM or SQ.

When you administer these vaccines, follow the age recommendations indicated in the current Minnesota immunization schedules.

Patient's age	Site (see illustrations below)	Needle size*	Needle insertion
Infants (birth to 12 months of age)	Vastus lateralis muscle in anterolateral aspect of middle or upper thigh	7/8" to 1" needle, 23-25 gauge	Use a needle long enough to reach deep into the muscle. Insert needle at an 80° to 90° angle to the skin with a quick thrust.
Toddlers (12 to 36 months of age)	Vastus lateralis muscle preferred until deltoid muscle has developed adequate mass (approximately age 36 months)	7/8" to 1" needle, 23-25 gauge	Retain pressure on skin around injection site with thumb and index finger while needle is inserted.
Toddlers (>36 months of age), children, and adults	Densest portion of deltoid muscle - above armpit and below acromion	1" to 2" needle, 23-25 gauge	There are no data to document the necessity of aspiration, however, if performed and blood appears after negative pressure, the needle should be withdrawn and a new site selected.* (p.18) Multiple injections given in the same extremity should be separated as far as possible (preferably 1" to 1½" with minimum of 1" apart).



*Red Book 2000, American Academy of Pediatrics

IM site for infants and toddlers (birth to 36 months of age)

vastus lateralis (shaded area)

IM injection site area

Insert needle at 80-90° angle into vastus lateralis muscle in anterolateral aspect of middle or upper thigh.

IM site for older toddlers, children, and adults

acromion

deltoid muscle (shaded area)

IM injection site

elbow

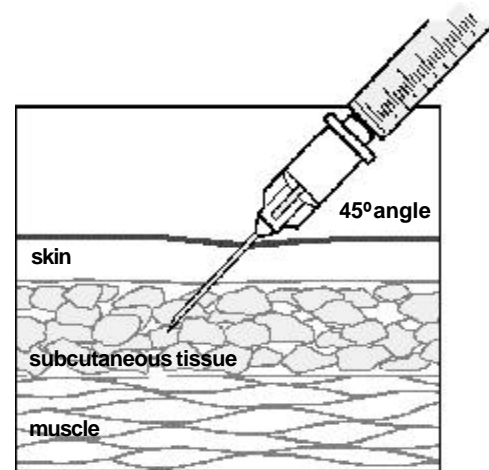
Insert needle at 80-90° angle into densest portion of deltoid muscle - above armpit and below acromion.

How to Administer SQ (Subcutaneous) Injections

Administer these vaccines via SQ (subcutaneous) route: MMR, varicella, meningococcal. Administer IPV & PPV23 either SQ or IM.

When you administer these vaccines, follow the age recommendations indicated in the current Minnesota immunization schedules.

Patient's age	Site (see illustrations below)	Needle size*	Needle insertion
Infants (birth to 12 months of age)	Fatty area of the thigh	5/8" to 3/4" needle, 23-25 gauge	Insert needle at 45° angle to the skin. Pinch up on SQ tissue to prevent injection into muscle.
Toddlers (12 to 36 months of age)	Fatty area of the thigh or outer aspect of upper arm	5/8" to 3/4" needle, 23-25 gauge	There are no data to document the necessity of aspiration, however, if performed and blood appears after negative pressure, the needle should be withdrawn and a new site selected.* (p.18)
Children and adults	Outer aspect of upper arm	5/8" to 3/4" needle, 23-25 gauge	Multiple injections given in the same extremity should be separated as far as possible (preferably 1" to 1½" with minimum of 1" apart).



*Red Book 2000, American Academy of Pediatrics

SQ site for infants and toddlers (birth to 36 months of age)

SQ injection site area

Insert needle at 45° angle into fatty area of anterolateral thigh. Make sure you pinch up on SQ tissue to prevent injection into muscle.

SQ site for toddlers, children, and adults

SQ injection site area

acromion

elbow

Insert needle at 45° angle into outer aspect of upper arm. Make sure you pinch up on SQ tissue to prevent injection into muscle.