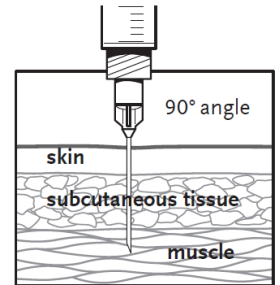


Needle Selection Reference Guide

Please use this guide as a reference for your staff to help select the right needle size and length for vaccine administration when setting up clinics and appointments.

Intramuscular Injection

Patient Age	Site	Needle Length	Max Volume
1 to < 12 mos.	Vastus lateralis	1"	1 mL
≥ 12 mos. to ≤ 2 years	Deltoid muscle (upper arm)	** 5/8" - 1"	1mL
	Alternate: Vastus lateralis	1"	2 mL
> 2 years to < 5 years	Deltoid muscle (upper arm)	** 5/8" - 1"	1 mL
	Alternate: Vastus lateralis	1"	2 mL
5 years to 18 years	Deltoid	** 5/8" - 1"	1mL
	Vastus lateralis	1"	3 mL
≥ 19 years	Deltoid	1 - 1 1/2"	2 mL
	Vastus lateralis	1 - 1 1/2"	5 mL



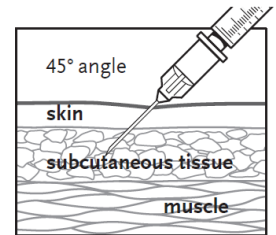
NOTES

- ◆ Use a 22 to 25 gauge needle depending on the viscosity of the biological product. A larger bore needle (e.g., 22 gauge) may be required when administering viscous products such as immune globulin preparations.
- ◆ When selecting a site it is important to consider available muscle mass.
- ◆ When selecting needle length consider individual's age, muscle mass, amount of subcutaneous tissue, and gender (adolescents and adults only).
 - **For infants, toddlers, and older children – a 5/8" needle is adequate only for the deltoid muscle and only if the skin is stretched flat between thumb and forefinger and the needle inserted at a 90° angle to the skin.
 - For adolescents and adults, a 1" – 1 1/2" needle is usually used.

Please turn over for Subcutaneous Administration information →

Subcutaneous Administration

Patient Age	Injection Site	Needle Size
< 12 months	Fatty area of anterolateral thigh is site of choice	5/8"-7/8" (25-27 gauge)
≥12 months	Lateral aspect of upper arm (upper outer triceps area) is recommended site.	5/8"-7/8" (25-27 gauge)



NOTE

- ◆ *Common subcutaneous vaccines include: MMR, VZ, MMRV, IPV, Live Attenuated Zoster, et cetera.*

Resources - Injection Sites, Needle Size and Positioning & Injection Routes

For comprehensive information access BCCDC Immunization Manual, Appendix B: Administration of Biological Products, pp. 13-19, 22-23.

To access:

- ◆ Visit www.bccdc.ca → Health Professionals → Clinical Resources → Communicable Disease Control Manual
- ◆ Review Chapter 2: Immunization → Appendix B - Administration of Biological Products

Please turn over for Intramuscular Injection information →