

Immune Globulin Preparations (HBIG, Ig, Tlg, Varlg, Rablg)

This page provides general guidance for the administration of immune globulin preparations as there is limited evidence for maximum volume limits per injection site.

Use clinical judgment to select the appropriate injection site, volume, and needle size – see [Appendix B: Administration of Biological Products, Section 14: Intramuscular, Subcutaneous, and Intradermal Injections](#).

For circumstances not captured in the below table, seek consultation.

Client Age	Needle Length	Size (Gauge)	Site	Route	Maximum Volume Per Site ^A
< 28 days	5/8"	25	Vastus lateralis	IM	1 mL
1 to < 12 months	7/8" – 1"	25	Vastus lateralis ^B	IM	1 mL
	7/8" – 1"	25	Ventrogluteal ^C	IM	1 mL
Children 12 months to 4 years (inclusive)	1" – 1 1/4"	22-25	Vastus lateralis ^B	IM	2 mL
	1" – 1 1/4"	22-25	Ventrogluteal	IM	1 mL
	5/8" – 1"	22-25	Deltoid ^D	IM	1 mL
Children 5 years to 18 years	1" – 1 1/2"	20-25	Ventrogluteal ^E	IM	3 mL
	1" – 1 1/2"	20-25	Vastus lateralis	IM	3 mL
	5/8" – 1"	22-25	Deltoid ^D	IM	1 mL
	1" – 1 1/2"	20-25	Dorsogluteal ^F	IM	3 mL
Adults 19 years and older	1" – 1 1/2"	20-22	Ventrogluteal ^E	IM	4 mL
	1" – 1 1/2"	20-22	Vastus lateralis	IM	5 mL
	5/8" – 1 1/2"	20-22	Deltoid ^D	IM	2 mL
	1" – 1 1/2"	20-22	Dorsogluteal ^F	IM	5 mL

^A Using clinical judgement, based on the individual's muscle mass, a greater volume may be used at the appropriate site. If a greater volume is required, the dose may be divided into multiple injections, using different syringes and separating the injection sites by at least 2.5 cm (1 inch). For example, if 4 mL are indicated for a 6-month-old infant and there is sufficient muscle mass, 2 injections of 1 mL may be considered in each vastus lateralis if separated by 2.5 cm (1 inch).

^B For children under 5 years of age, the vastus lateralis site is preferred over the ventrogluteal site due to muscle mass size and ease of landmarking.

^C The ventrogluteal site can be used in children 7 months of age and older.

^D The deltoid is not to be used for the administration of Rablg. Its use should be reserved for the administration of rabies vaccine.

^E For individuals 5 years of age and older, the ventrogluteal muscle is the preferred site for administration of all immune globulin preparations. Alternate sites for the administration of immune globulin preparations are the vastus lateralis and deltoid; in exceptional circumstances, the dorsogluteal site may be used.

^F Use of the dorsogluteal site is only recommended when the ventrogluteal, vastus lateralis, and deltoid (if applicable) sites have had maximum volumes of an immune globulin preparation injected and an additional volume still needs to be administered. This is due to the possibility of sciatic nerve injuries when the injection is done in the dorsogluteal site.