

# Administering Vaccines: Dose, Route, Site, and Needle Size

Vaccine	Dose	Route
Diphtheria, Tetanus, Pertussis (DTaP, DT, Tdap, Td)	0.5 mL	IM
<i>Haemophilus influenzae</i> type b (Hib)	0.5 mL	IM
Hepatitis A (HepA)	≤18 yrs: 0.5 mL ≥19 yrs: 1.0 mL	IM
Hepatitis B (HepB) <i>Persons 11–15 yrs may be given Recombivax HB (Merck) 1.0 mL adult formulation on a 2-dose schedule.</i>	<i>Engerix-B; Recombivax HB</i> ≤19 yrs: 0.5 mL ≥20 yrs: 1.0 mL <i>Hepilisav-B</i> ≥18 yrs: 0.5 mL	IM
Human papillomavirus (HPV)	0.5 mL	IM
Influenza, live attenuated (LAIV)	0.2 mL (0.1 mL in each nostril)	Intranasal spray
Influenza, inactivated (IIV); for ages 6–35 months	Fluzone: 0.25 mL FluLaval; Fluarix: 0.5 mL	IM
Influenza, inactivated (IIV), for ages 3 years & older; recombinant (RIV), for ages 18 years and older	0.5 mL	IM
Measles, Mumps, Rubella (MMR)	0.5 mL	Subcut
Meningococcal serogroups A, C, W, Y (MenACWY)	0.5 mL	IM
Meningococcal serogroup B (MenB)	0.5 mL	IM
Pneumococcal conjugate (PCV)	0.5 mL	IM
Pneumococcal polysaccharide (PPSV)	0.5 mL	IM or Subcut
Polio, inactivated (IPV)	0.5 mL	IM or Subcut
Rotavirus (RV)	Rotarix: 1.0 mL Rotateq: 2.0 mL	Oral
Varicella (Var)	0.5 mL	Subcut
Zoster (Zos)	Shingrix: 0.5* mL Zostavax: 0.65 mL	IM Subcut
<b>Combination Vaccines</b>		
DTaP-HepB-IPV (Pediarix) DTaP-IPV/Hib (Pentacel) DTaP-IPV (Kinrix; Quadracel)	0.5 mL	IM
MMRV (ProQuad)	≤12 yrs: 0.5 mL	Subcut
HepA-HepB (Twinrix)	≥18 yrs: 1.0 mL	IM

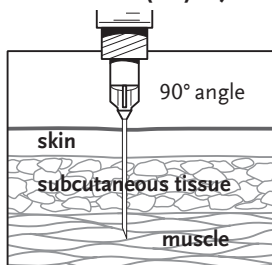
\* The vial might contain more than 0.5 mL. Do not administer more than 0.5 mL.

Injection Site and Needle Size		
<b>Subcutaneous (Subcut) injection</b> Use a 23–25 gauge needle. Choose the injection site that is appropriate to the person's age and body mass.		
AGE	NEEDLE LENGTH	INJECTION SITE
Infants (1–12 mos)	5/8"	Fatty tissue over anterolateral thigh muscle
Children 12 mos or older, adolescents, and adults	5/8"	Fatty tissue over anterolateral thigh muscle or fatty tissue over triceps
<b>Intramuscular (IM) injection</b> Use a 22–25 gauge needle. Choose the injection site and needle length that is appropriate to the person's age and body mass.		
AGE	NEEDLE LENGTH	INJECTION SITE
Newborns (1st 28 days)	5/8"	Anterolateral thigh muscle
Infants (1–12 mos)	1"	Anterolateral thigh muscle
Toddlers (1–2 years)	1–1¼"	Anterolateral thigh muscle
	5/8–1"	Deltoid muscle of arm
Children (3–10 years)	5/8–1"*	Deltoid muscle of arm
	1–1¼"	Anterolateral thigh muscle
Adolescents and teens (11–18 years)	5/8–1"*	Deltoid muscle of arm
	1–1½"	Anterolateral thigh muscle
Adults 19 years or older		
Female or male <130 lbs	5/8–1"*	Deltoid muscle of arm
Female or male 130–152 lbs	1"	Deltoid muscle of arm
Female 153–200 lbs Male 153–260 lbs	1–1½"	Deltoid muscle of arm
Female 200+ lbs Male 260+ lbs	1½"	Deltoid muscle of arm

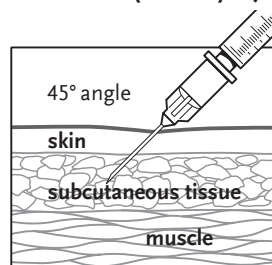
\* A 5/8" needle may be used for patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle **only** if the skin stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle.

**NOTE:** Always refer to the package insert included with each biologic for complete vaccine administration information. CDC's Advisory Committee on Immunization Practices (ACIP) recommendations for the particular vaccine should be reviewed as well. Access the ACIP recommendations at [www.immunize.org/acip](http://www.immunize.org/acip).

**Intramuscular (IM) injection**



**Subcutaneous (Subcut) injection**



**Intranasal (NAS) administration of Flumist (LAIV) vaccine**

