

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

Vaccine	Dose	Route
COVID-19 For product and dosage information for COVID-19 vaccine, see Immunize.org's "Checklist of Current Versions of U.S. COVID-19 Vaccination Guidance and Clinic Supply Tools" at <a href="http://www.immunize.org/catg.d/p3130.pdf">www.immunize.org/catg.d/p3130.pdf</a> .		IM
Dengue (DENV4CYD)	0.5 mL	Subcut
Diphtheria, Tetanus, Pertussis (DTaP, Tdap, Td)	0.5 mL	IM
Haemophilus influenzae type b (Hib)	0.5 mL	IM
Hepatitis A (HepA)	≤18 yrs: 0.5 mL ≥19 yrs: 1.0 mL	IM
Hepatitis B (HepB) People 11–15 yrs may be given Recombivax HB(Merck) 1.0 mL adult formulation on a 2-dose schedule.	Engerix-B: Recombivax HB ≤19 yrs: 0.5 mL ≥20 yrs: 1.0 mL  Heplisav-B ≥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); 6 thru 35 mos • Egg-based IIV: Afluria, FluZone, Fluarix, FluLaval • Cell-culture based (ccIIV): Flucelvax	Afluria: 0.25 mL  FluZone: 0.25 or 0.5 mL  Fluarix, Flucelvax, FluLaval: 0.5 mL	IM
Influenza, inactivated (IIV) and • Cell-culture based (ccIIV), 3+ yrs; • Recombinant (RIV, Flublok), 18+ yrs; • Adjuvanted (allV, Fluad) 65+ yrs <sup>1</sup> • High-dose (HD-IIV, FluZone High Dose) 65+ yrs <sup>1</sup>	0.5 mL	IM
Measles, Mumps, Rubella (MMR)	0.5 mL Priorix (GSK)	IM or Subcut Subcut
Meningococcal serogroups A, C, W, Y (MenACWY)	0.5 mL	IM
Meningococcal serogroup B (MenB)	0.5 mL	IM
Mpox (Jynneos)	0.5 mL	Subcut <sup>2</sup>
Pneumococcal conjugate (PCV)	0.5 mL	IM
Pneumococcal polysaccharide (PPSV23)	0.5 mL	IM or Subcut
Polio, inactivated (IPV)	0.5 mL	IM or Subcut
Respiratory Syncytial Virus (RSV) vaccine	0.5 mL	IM
RSV preventive antibody (RSV-mAb)	0.5 mL, 1 mL, or 2 mL based on weight and/or age	IM
Rotavirus (RV)	Rotarix: 1.0 mL Rotateq: 2.0 mL	Oral
Varicella (VAR)	0.5 mL	IM or Subcut
Zoster (RZV)	Shingrix: 0.5 <sup>3</sup> mL	IM
<b>Combination Vaccines</b>		
DTaP-HepB-IPV (Pediarix) DTaP-IPV/Hib (Pentacel) DTaP-IPV (Kinrix; Quadracel) DTaP-IPV-Hib-HepB (Vaxelis)	0.5 mL	IM
MenABCWY (Penbraya)	0.5 mL	IM
MMRV (ProQuad)	0.5 mL	IM or Subcut
HepA-HepB (Twinrix)	1.0 mL	IM

1 HD-IIV or allV are also options for solid organ transplant recipients 18–64 yrs on an immunosuppressive medication regimen.

2 Administration of Jynneos subcut (0.5 mL) is preferred. If an adult patient desires intradermal administration (0.1 mL), it is permitted under FDA emergency use authorization (see [www.fda.gov/media/160774/download](http://www.fda.gov/media/160774/download)).

3 The Shingrix (RZV) vial may contain more than 0.5 mL.  
Do not administer more than 0.5 mL.

## Intramuscular (IM) ► injection

Injection Site and Needle Size		
Subcutaneous (Subcut) injection		
AGE	NEEDLE LENGTH	INJECTION SITE
Infants (1–12 mos)	½"	Fatty tissue over antero-lateral thigh muscle
Intramuscular (IM) injection		
AGE	NEEDLE LENGTH	INJECTION SITE
Newborns (1st 28 days)	½"⁴	Anterolateral thigh muscle
Infants (1–12 mos)	1"	Anterolateral thigh muscle
Toddlers (1–2 yrs)	1–1¼"	Anterolateral thigh muscle <sup>6</sup>
Children (3–10 yrs)	½"–1"	Deltoid muscle of arm
Adolescents and teens (11–18 yrs)	½"–1"	Deltoid muscle of arm <sup>6</sup>
Biological sex and weight of patient 19 yrs or older	NEEDLE LENGTH	INJECTION SITE
Female or male <130 lbs	½"–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 more than 200 lbs Male more than 260 lbs	1½"	Deltoid muscle of arm
Female or male, any weight	1"–1½"	Anterolateral thigh muscle

4 If skin is stretched tightly and subcutaneous tissues are not bunched.

5 Alternate needle lengths may be used if the skin is stretched tightly and subcutaneous tissues are not bunched, as follows: a) a ½" needle in toddlers, children, and patients weighing less than 130 lbs (less than 60 kg) for IM injection in the deltoid muscle only, or b) a 1" needle for administration in the thigh muscle for adults of any weight.

6 Preferred site

