

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

| Vaccine | Dose | Route |
|--|--|------------------|
| COVID-19 For product, scheduling, and dosage information for COVID-19 vaccine primary series and booster doses for both immunocompetent and immunocompromised adults, see CDC's "COVID-19 Vaccine Interim COVID-19 Immunization Schedule for Persons 6 Months of Age and Older."* | | IM |
| Dengue (DENV4CYD) | 0.5 mL | Subcut |
| 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) 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 Hepelisav-B; PreHevbrio ≥18 yrs: 0.5 mL | IM |
| Human papillomavirus (HPV) | 0.5 mL | IM |
| Influenza, live attenuated (LAIV4) | 0.2 mL (0.1 mL in each nostril) | Intranasal spray |
| Influenza, inactivated (IIV4); 6 thru 35 mos • Egg-based IIV4: Afluria, Fluzone, Fluarix, FluLaval • Cell-culture based (ccIIV4): Flucelvax | Afluria: 0.25 mL Fluzone: 0.25 or 0.5 mL Fluarix, Flucelvax, FluLaval: 0.5 mL | IM |
| Influenza, inactivated (IIV4) and • Cell-culture based (ccIIV4), 3+ yrs; • Recombinant (RIV4, Flublok), 18+ yrs; • Adjuvanted (allIIV4, Fluad) 65+ yrs | 0.5 mL | IM |
| Influenza, high-dose (IIV4-HD) 65+ yrs | 0.7 mL | |
| 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 |
| Monkeypox (Jynneos) | 0.5 mL | Subcut† |
| 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 |
| Rotavirus (RV) | Rotarix: 1.0 mL Rotateq: 2.0 mL | Oral |
| Varicella (VAR) | 0.5 mL | Subcut |
| Zoster (Zos) | Shingrix: 0.5‡ mL | IM |
| Combination Vaccines | | |
| DTaP-HepB-IPV (Pediarix) DTaP-IPV/Hib (Pentacel) DTaP-IPV (Kinrix; Quadracel) DTaP-IPV-Hib-HepB (Vaxelis) | 0.5 mL | IM |
| MMRV (ProQuad) | 0.5 mL | Subcut |
| HepA-HepB (Twinrix) | 1.0 mL | IM |

*www.cdc.gov/vaccines/covid-19/downloads/COVID-19-immunization-schedule-ages-6months-older.pdf

†Administer monkeypox vaccine (Jynneos) 0.5 mL Subcut or, in adults, 0.1 mL intradermally. Subcut is the route indicated on the package insert. Intradermal administration to adults is permitted under FDA emergency use authorization (see www.fda.gov/media/160774/download).

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

| Injection Site and Needle Size | | |
|---|---------------|--|
| Subcutaneous (Subcut) injection 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 antero-lateral thigh muscle |
| Children 12 mos or older, adolescents, and adults | 5/8" | Fatty tissue over antero-lateral thigh muscle or fatty tissue over triceps |
| Intramuscular (IM) injection 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 yrs) | 1–1 1/4" | Anterolateral thigh muscle ³ |
| | 5/8"–1" | Deltoid muscle of arm |
| Children (3–10 yrs) | 5/8"–1" | Deltoid muscle of arm ³ |
| | 1–1 1/4" | Anterolateral thigh muscle |
| Adolescents and teens (11–18 yrs) | 5/8"–1" | Deltoid muscle of arm ³ |
| | 1–1 1/2" | Anterolateral thigh muscle |
| Adults 19 yrs 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 | 1–1 1/2" | Deltoid muscle of arm |
| Female more than 200 lbs Male more than 260 lbs | 1 1/2" | Deltoid muscle of arm |
| Female or male, any weight | 1"–1 1/2" | Anterolateral thigh muscle |

- 1 If skin is stretched tightly and subcutaneous tissues are not bunched.
- 2 Alternate needle lengths may be used if the skin is stretched tightly and subcutaneous tissues are not bunched, as follows: a) a 5/8" 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.
- 3 Preferred site

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.

