

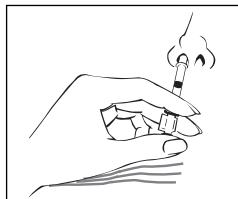
# Administering Vaccines: Dose, Route, Site, and Needle Size

Vaccine	Dose	Route	Injection Site and Needle Size																																							
<b>COVID-19</b>	Pfizer-BioNTech • age 5 to <12 yrs: 0.2 mL pediatric formulation ("orange cap") • age ≥12 yrs: 0.3 mL adult/adolescent formulation for primary and booster doses  Moderna; ≥18 yrs: 0.5 mL primary series*; 0.25 mL booster Janssen: ≥18 yrs: 0.5 mL for primary & booster doses	IM	<p><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.</p> <table border="1"> <thead> <tr> <th>AGE</th><th>NEEDLE LENGTH</th><th>INJECTION SITE</th></tr> </thead> <tbody> <tr> <td>Infants (1–12 mos)</td><td>5/8"</td><td>Fatty tissue over anterolateral thigh muscle</td></tr> <tr> <td>Children 12 mos or older, adolescents, and adults</td><td>5/8"</td><td>Fatty tissue over anterolateral thigh muscle or fatty tissue over triceps</td></tr> </tbody> </table>	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																														
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<b>Diphtheria, Tetanus, Pertussis (DTaP, DT, Tdap, Td)</b>	0.5 mL	IM																																								
<b>Haemophilus influenzae type b (Hib)</b>	0.5 mL	IM																																								
<b>Hepatitis A (HepA)</b>	≤18 yrs: 0.5 mL ≥19 yrs: 1.0 mL	IM																																								
<b>Hepatitis B (HepB)</b> <i>Persons 11–15 yrs may be given Recombivax HB (Merck) 1.0 mL adult formulation on a 2-dose schedule.</i>	Engerix-B; Recombivax HB ≤19 yrs: 0.5 mL ≥20 yrs: 1.0 mL  Heplisav-B ≥18 yrs: 0.5 mL	IM	<p><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.</p> <table border="1"> <thead> <tr> <th>AGE</th><th>NEEDLE LENGTH</th><th>INJECTION SITE</th></tr> </thead> <tbody> <tr> <td>Newborns (1st 28 days)</td><td>5/8"¹</td><td>Anterolateral thigh muscle</td></tr> <tr> <td>Infants (1–12 mos)</td><td>1"</td><td>Anterolateral thigh muscle</td></tr> <tr> <td>Toddlers (1–2 years)</td><td>1–1 1/4"</td><td>Anterolateral thigh muscle²</td></tr> <tr> <td></td><td>5/8–1 1/4"</td><td>Deltoid muscle of arm</td></tr> <tr> <td>Children (3–10 years)</td><td>5/8–1 1/4"</td><td>Deltoid muscle of arm²</td></tr> <tr> <td>Adolescents and teens (11–18 years)</td><td>5/8–1 1/4"</td><td>Deltoid muscle of arm²</td></tr> <tr> <td>Adults 19 years or older</td><td>1–1 1/2"</td><td>Anterolateral thigh muscle</td></tr> <tr> <td>Female or male &lt;130 lbs</td><td>5/8–1 1/4"</td><td>Deltoid muscle of arm</td></tr> <tr> <td>Female or male 130–152 lbs</td><td>1"</td><td>Deltoid muscle of arm</td></tr> <tr> <td>Female 153–200 lbs Male 153–260 lbs</td><td>1–1 1/2"</td><td>Deltoid muscle of arm</td></tr> <tr> <td>Female 200+ lbs Male 260+ lbs</td><td>1 1/2"</td><td>Deltoid muscle of arm</td></tr> <tr> <td>Female or male, any weight</td><td>1 1/2"</td><td>Anterolateral thigh muscle</td></tr> </tbody> </table>	AGE	NEEDLE LENGTH	INJECTION SITE	Newborns (1st 28 days)	5/8"¹	Anterolateral thigh muscle	Infants (1–12 mos)	1"	Anterolateral thigh muscle	Toddlers (1–2 years)	1–1 1/4"	Anterolateral thigh muscle²		5/8–1 1/4"	Deltoid muscle of arm	Children (3–10 years)	5/8–1 1/4"	Deltoid muscle of arm²	Adolescents and teens (11–18 years)	5/8–1 1/4"	Deltoid muscle of arm²	Adults 19 years or older	1–1 1/2"	Anterolateral thigh muscle	Female or male <130 lbs	5/8–1 1/4"	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 200+ lbs Male 260+ lbs	1 1/2"	Deltoid muscle of arm	Female or male, any weight	1 1/2"	Anterolateral thigh muscle
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<b>Influenza, live attenuated (LAIV)</b>	0.2 mL (0.1 mL in each nostril)	Intra-nasal spray																																								
<b>Influenza, inactivated (IIV); for ages 6–35 months</b>	Afluria: 0.25 mL  Fluzone: 0.25 or 0.5 mL  Fluarix, Flucelvax, FluLaval: 0.5 mL	IM																																								
<b>Influenza, inactivated (IIV), ≥3 yrs; recombinant (RIV), ≥18 yrs; high-dose (HD-IIV) ≥65 yrs</b>	0.5 mL  FluZone HD: 0.7 mL	IM																																								
<b>Measles, Mumps, Rubella (MMR)</b>	0.5 mL	Subcut																																								
<b>Meningococcal serogroups A, C, W, Y (MenACWY)</b>	0.5 mL	IM																																								
<b>Meningococcal serogroup B (MenB)</b>	0.5 mL	IM																																								
<b>Pneumococcal conjugate (PCV)</b>	0.5 mL	IM																																								
<b>Pneumococcal polysaccharide (PPSV)</b>	0.5 mL	IM or Subcut																																								
<b>Polio, inactivated (IPV)</b>	0.5 mL	IM or Subcut																																								
<b>Rotavirus (RV)</b>	Rotarix: 1.0 mL  Rotateq: 2.0 mL	Oral																																								
<b>Varicella (VAR)</b>	0.5 mL	Subcut																																								
<b>Zoster (Zos)</b>	Shingrix: 0.5† 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																																								
MMRV (ProQuad)	≤12 yrs: 0.5 mL	Subcut																																								
HepA-HepB (Twinrix)	≥18 yrs: 1.0 mL	IM																																								

\* If immunocompromised, Moderna 0.5 mL for 3-dose primary series, then 0.25 mL for booster dose.

† The Shingrix vial might contain more than 0.5 mL. Do not administer more than 0.5 mL.

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

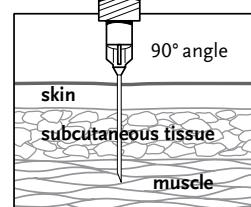


¹ A 5/8" needle may be used in newborns, preterm infants, and patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle to the skin.

² 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](http://www.immunize.org/acip).

## Intramuscular (IM) injection



## Subcutaneous (Subcut) injection

