

# Guide to Contraindications and Precautions to Commonly Used Vaccines<sup>1,\*</sup>

Vaccine	Contraindications <sup>1</sup>	Precautions <sup>1</sup>
<b>Hepatitis B (HepB)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>Hypersensitivity to yeast</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>Infant weighing less than 2000 grams (4 lbs, 6.4 oz)<sup>2</sup></li> </ul>
<b>Rotavirus (RV5 [RotaTeq], RV1 [Rotarix])</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>Severe combined immunodeficiency (SCID)</li> <li>History of intussusception</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>Altered immunocompetence other than SCID</li> <li>Chronic gastrointestinal disease<sup>3</sup></li> <li>Spina bifida or bladder exstrophy<sup>3</sup></li> </ul>
<b>Diphtheria, tetanus, pertussis (DTaP)</b> <b>Tetanus, diphtheria, pertussis (Tdap)</b> <b>Tetanus, diphtheria (DT, Td)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>For pertussis-containing vaccines: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of a previous dose of DTP or DTaP (for DTaP); or of previous dose of DTP, DTaP, or Tdap (for Tdap)</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus toxoid-containing vaccine</li> <li>History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria- or tetanus toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine</li> <li>For DTaP and Tdap only: Progressive or unstable neurologic disorder (including infantile spasms for DTaP), uncontrolled seizures, or progressive encephalopathy; defer until a treatment regimen has been established and the condition has stabilized</li> </ul>
<b>Haemophilus influenzae type b (Hib)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>Age younger than 6 weeks</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> </ul>
<b>Inactivated poliovirus vaccine (IPV)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>Pregnancy</li> </ul>
<b>Hepatitis A (HepA)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> </ul>
<b>Measles, mumps, rubella (MMR)<sup>4</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>Severe immunodeficiency (e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy<sup>5</sup>), or persons with human immunodeficiency virus [HIV] infection who are severely immunocompromised<sup>6</sup></li> <li>Family history of congenital or hereditary immunodeficiency in first-degree relatives (e.g., parents and siblings), unless the immune competence of the potential vaccine recipient has been substantiated clinically or verified by a laboratory test</li> <li>Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)<sup>7</sup></li> <li>History of thrombocytopenia or thrombocytopenic purpura</li> <li>Need for tuberculin skin testing<sup>8</sup> or interferon gamma release assay (IGRA) testing</li> <li>For MMRV only: Family or personal history of seizures</li> </ul>
<b>Varicella (Var)<sup>4</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>Severe immunodeficiency (e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy<sup>5</sup>), or persons with HIV infection who are severely immunocompromised<sup>6</sup></li> <li>Family history of congenital or hereditary immunodeficiency in first-degree relatives (e.g., parents and siblings), unless the immune competence of the potential vaccine recipient has been substantiated clinically or verified by a laboratory test</li> <li>Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)<sup>7</sup></li> <li>Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination.</li> <li>Use of aspirin or aspirin-containing products</li> <li>For MMRV only: Family or personal history of seizures</li> </ul>
<b>Pneumococcal (PCV13 or PPSV23)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component (including, for PCV13, to any vaccine containing diphtheria toxoid)</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> </ul>
<b>Human papillomavirus (HPV)<sup>9</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> </ul>

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Vaccine	Contraindications <sup>1</sup>	Precautions <sup>1</sup>
<b>Influenza, inactivated injectable (IIV)<sup>10</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (except egg) or to a previous dose of influenza vaccine<sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>History of GBS within 6 weeks of previous influenza vaccination</li> <li>Egg allergy other than hives (e.g., angioedema, respiratory distress, lightheadedness, or recurrent emesis); or required epinephrine or another emergency medical intervention (IIV may be administered in an inpatient or outpatient medical setting, under the supervision of a healthcare provider who is able to recognize and manage severe allergic conditions)<sup>10</sup></li> </ul>
<b>Influenza, recombinant (RIV)<sup>10</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (except egg) or to a previous dose of influenza vaccine<sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>History of GBS within 6 weeks of previous influenza vaccination</li> </ul>
<b>Influenza, live attenuated (LAIV)<sup>4,5,10,11</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (except egg) or to a previous dose of influenza vaccine</li> <li>Concomitant use of aspirin or salicylate-containing therapy in children or adolescents</li> <li>Children age 2 through 4 years who have a diagnosis of asthma or had wheezing with the past 12 months, per healthcare provider statement</li> <li>Children and adults who are immunocompromised due to any cause (including immunosuppression caused by medications or by HIV infection)</li> <li>Close contacts and caregivers of severely immunosuppressed persons who required a protected environment)</li> <li>Pregnancy</li> <li>Receipt of influenza antivirals (amantadine, rimantadine, zanamivir, oseltamivir or peramivir) within the previous 48 hours; avoid use of these antiviral drugs for 14 days after vaccination</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>GBS within 6 weeks of previous influenza vaccination</li> <li>Asthma in persons age 5 years and older</li> <li>Other chronic medical conditions (e.g., other chronic lung diseases, chronic cardiovascular disease [excluding isolated hypertension], diabetes, chronic renal or hepatic disease, hematologic disease, neurologic disease, and metabolic disorders)</li> </ul>
<b>Meningococcal (MenACWY; MenB)</b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> </ul>
<b>Recombinant zoster vaccine (RZV)</b> <b>Zoster vaccine live (ZVL)<sup>4</sup></b>	<ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</li> <li>For ZVL only: Severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, or long-term immunosuppression therapy<sup>7</sup>), or persons with HIV infection who are severely immunocompromised</li> <li>For ZVL only: Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>Moderate or severe acute illness with or without fever</li> <li>For ZVL only: Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination</li> <li>For RZV only: Pregnancy and lactation</li> </ul>

**FOOTNOTES**

- The Advisory Committee on Immunization Practices (ACIP) recommendations and package inserts for vaccines provide information on contraindications and precautions related to vaccines. Contraindications are conditions that increase chances of a serious adverse reaction in vaccine recipients and the vaccine should not be administered when a contraindication is present. Precautions should be reviewed for potential risks and benefits for vaccine recipient. For a person with a severe allergy to latex (e.g., anaphylaxis), vaccines supplied in vials or syringes that contain natural rubber latex should not be administered unless the benefit of vaccination clearly outweighs the risk for a potential allergic reaction. For latex allergies other than anaphylaxis, vaccines supplied in vials or syringes that contain dry, natural rubber or natural rubber latex may be administered. Whether and when to administer DTaP to children with proven or suspected underlying neurologic disorders should be decided on a case-by-case basis.
- Hepatitis B vaccination should be deferred for preterm infants and infants weighing less than 2000 g if the mother is documented to be hepatitis B surface antigen (HBsAg)-negative at the time of the infant's birth. Vaccination can commence at chronological age 1 month or at hospital discharge. For infants born to women who are HBsAg-positive, hepatitis B immunoglobulin and hepatitis B vaccine should be administered within 12 hours of birth, regardless of weight.
- For details, see CDC. "Prevention of Rotavirus Gastroenteritis among Infants and Children: Recommendations of the Advisory Committee on Immunization Practices. (ACIP)" *MMWR* 2009; 58(No. RR-2), available at [www.cdc.gov/mmwr/pdf/rr/rr5802.pdf](http://www.cdc.gov/mmwr/pdf/rr/rr5802.pdf).
- Age-appropriate parenteral vaccines (LAIV, MMR, Var, or ZVL) can be administered on the same day. If not administered on the same day, these live vaccines should be separated by at least 28 days.
- Immunosuppressive steroid dose is considered to be 2 or more weeks of daily receipt of 20 mg prednisone or equivalent. Vaccination should be deferred for at least 1 month after discontinuation of such therapy. Providers should consult ACIP recommendations for complete information on the use of specific live vaccines among persons on immune-suppressing medications or with immune suppression because of other reasons.
- HIV-infected children 5 years of age or younger should receive measles vaccine if CD4+ T-lymphocyte percentages are greater than or equal to 15% for greater than or equal to 6 months.

- HIV-infected children older than 5 years must have CD4+ percentages greater than or equal to 15 and CD4+ T-lymphocyte counts greater than or equal to 200 lymphocytes/cubic mm for 6 months or longer. In cases where only counts or only percentages are available for children older than 5 years, use the data that are available. In cases where percentages are not available for children 5 years of younger, use counts based on the age-specific counts at the time the counts were measured (see [www.cdc.gov/mmwr/pdf/rr/rr6204.pdf](http://www.cdc.gov/mmwr/pdf/rr/rr6204.pdf), page 23, for details). HIV-infected children younger than 8 years may receive varicella vaccine if CD4+ T-lymphocyte percentages are 15% or greater. HIV-infected children 8 years or older may receive varicella vaccine if CD4+ T-lymphocyte count is greater than 200 cells/cubic mm.
- Vaccine should be deferred for the appropriate interval if replacement immune globulin products are being administered (see "Table 3-5. Recommended Intervals Between Administration of Antibody-Containing Products and Measles- or Varicella-Containing Vaccine, by Product and Indication for Vaccination" found in "Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP)," available at [www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html).)
- Measles vaccination might suppress tuberculin reactivity temporarily. Measles-containing vaccine may be administered on the same day as tuberculin skin testing or interferon gamma release assay (IGRA), or should be postponed for at least 4 weeks after the vaccination.
- HPV vaccine is not recommended for use in pregnant women. If a woman is found to be pregnant after initiating the vaccination series, the remainder of the series should be delayed until completion of pregnancy. Pregnancy testing is not needed before vaccination.
- For additional information on use of influenza vaccines among persons with egg allergy, see CDC. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP) – United States, . . ." Access links to influenza vaccine recommendations at [www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html](http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html).
- LAIV is not recommended for people with functional or anatomic asplenia, complement component deficiency, cochlear implant, or CSF leak.

\* Adapted from "Table 4-1. Contraindications and Precautions to Commonly Used Vaccines" found in: CDC. "Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP)" available at [www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html).