

# Contraindications<sup>1</sup> and Precautions<sup>2</sup> to Immunizations

VACCINE	TRUE CONTRAINDICATIONS/PRECAUTIONS <sup>2</sup>	UNTRUE (Vaccines may be administered)
<b>ALL VACCINES</b> DTaP, DT, Td, IPV, MMR, Hib, Hep A, Hep B, Var, PCV, PPV, Influenza	<ul style="list-style-type: none"> <li>→ Serious allergic reaction (e.g., anaphylaxis) after a previous vaccine dose</li> <li>→ Serious allergic reaction (e.g., anaphylaxis) to a vaccine component</li> </ul> <p><b>Precautions</b> → Moderate or severe acute illness with or without fever</p>	<ul style="list-style-type: none"> <li>→ Mild acute illness with or without fever</li> <li>→ Mild to moderate local reaction (i.e., swelling, redness, soreness); low-grade or moderate fever after previous dose</li> <li>→ Lack of previous physical examination in well-appearing person</li> <li>→ Current antimicrobial therapy</li> <li>→ Convalescent phase of illness</li> <li>→ Premature birth (hepatitis B vaccine is an exception in certain circumstances)<sup>3</sup></li> <li>→ Recent exposure to an infectious disease</li> <li>→ History of penicillin allergy, other non-vaccine allergies, relative with allergies, receiving allergen extract immunotherapy</li> </ul>
<b>DTaP</b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction after a previous dose or to a vaccine component</li> <li>→ Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) within 7 days of administration of previous dose of DTP or DTaP</li> <li>→ Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized</li> </ul> <p><b>Precautions</b> → Seizure ≤3 days of receiving a previous dose of DTP/DTaP<sup>4</sup></p> <ul style="list-style-type: none"> <li>→ Fever of &gt;40.5° C ≤48 hours after vaccination with a previous dose of DTP or DTaP</li> <li>→ Collapse or shock-like state (i.e., hypotonic hyporesponsive episode) ≤48 hours after receiving a previous dose of DTP or DTaP</li> <li>→ Persistent, inconsolable crying lasting ≥3 hours ≤48 hours after receiving a previous dose of DTP or DTaP</li> <li>→ Moderate or severe acute illness with or without fever</li> </ul>	<ul style="list-style-type: none"> <li>→ Temperature of &lt;40.5° C, fussiness or mild drowsiness after a previous dose of diphtheria toxoid-tetanus toxoid-pertussis vaccine DTP or DTaP</li> <li>→ Family history of seizures<sup>4</sup></li> <li>→ Family history of sudden infant death syndrome</li> <li>→ Family history of an adverse event after DTP or DTaP administration</li> <li>→ Stable neurologic conditions (e.g., cerebral palsy, well controlled convulsions, developmental delay)</li> </ul>
<b>DT, Td</b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction after a previous dose or to a vaccine component</li> </ul> <p><b>Precautions</b> → Guillain-Barré syndrome ≤6 weeks after previous dose of tetanus toxoid-containing vaccine</p> <ul style="list-style-type: none"> <li>→ Moderate or severe acute illness with or without a fever</li> </ul>	
<b>IPV</b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction after a previous dose or to a vaccine component</li> </ul> <p><b>Precautions</b> → Pregnancy</p> <ul style="list-style-type: none"> <li>→ Moderate or severe acute illness with or without fever</li> </ul>	
<b>MMR<sup>5</sup></b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> <li>→ Pregnancy</li> <li>→ Known severe immunodeficiency (e.g., hematologic and solid tumors; congenital immunodeficiency; long-term immunosuppressive therapy or severely symptomatic human immunodeficiency virus [HIV] infection)<sup>6</sup></li> </ul> <p><b>Precautions</b> → Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)<sup>8</sup></p> <ul style="list-style-type: none"> <li>→ History of thrombocytopenia or thrombocytopenic purpura</li> <li>→ Moderate or severe acute illness with or without fever</li> </ul>	<ul style="list-style-type: none"> <li>→ Positive tuberculin skin test</li> <li>→ Simultaneous TB skin testing<sup>7</sup></li> <li>→ Breast-feeding</li> <li>→ Pregnancy of recipient's mother or other close or household contact</li> <li>→ Recipient is child-bearing-age female</li> <li>→ Immunodeficient family member or household contact</li> <li>→ Asymptomatic or mildly symptomatic HIV infection</li> <li>→ Allergy to eggs</li> </ul>
<b>VARICELLA<sup>6</sup></b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> <li>→ Substantial suppression of cellular immunity</li> <li>→ Pregnancy</li> </ul> <p><b>Precautions</b> → Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)<sup>8</sup></p> <ul style="list-style-type: none"> <li>→ Moderate or severe acute illness with or without fever</li> </ul>	<ul style="list-style-type: none"> <li>→ Pregnancy of recipient's mother or other close or household contact</li> <li>→ Immunodeficient family member or household contact<sup>9</sup></li> <li>→ Asymptomatic or mildly symptomatic HIV infection</li> <li>→ Humoral immunodeficiency (e.g., agammaglobulinemia)</li> </ul>
<b>HEP A</b> (Hepatitis A)	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> </ul> <p><b>Precautions</b> → Pregnancy</p> <ul style="list-style-type: none"> <li>→ Moderate or severe acute illness with or without fever</li> </ul>	
<b>HEP B</b> (Hepatitis B)	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> </ul> <p><b>Precautions</b> → Infant weighing &lt;2,000 grams</p> <ul style="list-style-type: none"> <li>→ Moderate or severe acute illness with or without fever</li> </ul>	<ul style="list-style-type: none"> <li>→ Pregnancy</li> <li>→ Autoimmune disease (e.g., systemic lupus erythematosus or rheumatoid arthritis)</li> <li>→ Premature birth (hepatitis B vaccine is an exception in certain circumstances)<sup>3</sup></li> </ul>
<b>Hib</b> (Haemophilus influenzae type b)	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> <li>→ Age &lt;6 weeks</li> </ul> <p><b>Precaution</b> → Moderate or severe acute illness with or without fever</p>	
<b>PCV</b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> </ul> <p><b>Precaution</b> → Moderate or severe acute illness with or without fever</p>	
<b>PPV</b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component</li> </ul> <p><b>Precaution</b> → Moderate or severe acute illness with or without fever</p>	
<b>INFLUENZA</b>	<ul style="list-style-type: none"> <li>→ Severe allergic reaction to previous dose or to a vaccine component, including egg protein</li> </ul> <p><b>Precaution</b> → Moderate or severe acute illness with or without fever</p>	<ul style="list-style-type: none"> <li>→ Non-severe (e.g., contact) allergy to latex or thimerosal</li> <li>→ Concurrent administration of coumadin or aminophylline</li> </ul>

**1. Contraindications** - A contraindication is a condition in a recipient that increases the risk for a serious adverse reaction. A vaccine will not be administered when a contraindication is present. Consult the MMWR article "General Recommendations on Immunizations" for a full definition including examples.

**2. Precautions** - A precaution is a condition in a recipient that might increase the risk for a serious adverse reaction or that might compromise the ability of the vaccine to produce immunity. Injury could result or a person might experience a more severe reaction to the vaccine than would have otherwise been expected; however, the risk for this happening is less than expected with a contraindication. Under normal circumstances, vaccinations should be deferred when a precaution is present. However, a vaccination might be indicated in the presence of a precaution because the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Consult the MMWR article "General Recommendations on Immunizations" for a full definition including examples.

**3.** Hepatitis B vaccination should be deferred for infants weighing <2,000 grams if the mother is documented to be hepatitis B surface antigen (HbsAg)-negative at the time of infant's birth. Vaccination can commence at chronological age 1 month. For infants born to HbsAg-positive women, hepatitis B immunoglobulin and hepatitis B vaccine should be administered at or soon after birth regardless of weight. See MMWR article "General Recommendations on Immunizations" text for details.

**4.** Acetaminophen or other appropriate antipyretic can be administered to children with a personal or family history of seizures at the time of DTaP vaccination and every 4-6 hours for 24 hours thereafter to reduce the possibility of post-vaccination fever (Source: American Academy of Pediatrics. Active immunization. In Pickering LK, ed. 2000 Red Book rep of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL; American Academy of Pediatrics, 2000).

**5.** MMR and varicella vaccines can be administered on the same day. If not administered on the same day, these vaccines should be separated by ≥28 days.

**6.** Substantially immunosuppressive steroid dose is considered to be >2 weeks of daily receipt of 20 mg or 2 mg/kg body weight of prednisone or equivalent.

**7.** Measles vaccination can suppress tuberculin reactivity temporarily. Measles-containing vaccine can be administered on the same day as tuberculin skin testing. If testing cannot be performed until after the day of MMR vaccination, the test should be postponed for >4 weeks after the vaccination. If an urgent need exists to skin test, do so with the understanding that reactivity might be reduced by the vaccine.

**8.** See text for details. "Guide to Contraindications and Precautions to Commonly Used [Pediatric] Vaccines," MMWR 2002; 51(RR-2).

**9.** If a vaccinee experiences a presumed vaccine-related rash 7-25 days after vaccination, avoid direct contact with immunocompromised persons for the duration of the rash.

