Contraindications and Precautions to Vaccines for Children and Adults

TEXAS Health and Human Services | Texas Department of State Health Services

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VACCINE	CITATION	TRUE CONTRAINDICATIONS / PRECAUTIONS[a]	UNTRUE (Vaccines may be administered)
General for all routine vaccines, including DTaP, Tdap, Td, IPV, MMR, Hib, HepA, HepB, varicella, rotavirus, PCV13, PPSV23, IIV, RIV, LAIV, MenACWY, MPSV4, HPV-Gardasil-9, Herpes Zoster, and MenB		→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precaution** → Moderate or severe acute illness with or without fever	→ Mild acute illness with or without fever → Current antimicrobial therapy[j] → Mild-to-moderate local reaction (i.e., swelling, redness, soreness); low-grade or moderate fever after previous dose → Lack of previous physical examination in well-appearing person → Preterm birth (hepatitis B vaccine is an exception in certain circumstances)[k] → Recent exposure to an infectious disease → History of penicillin allergy, other non-vaccine allergies, relatives with allergies, or receiving allergen extract immunotherapy → History of Guillain-Barré Syndrome (GBS)[l] → Convalescent phase of illness
Diphtheria, Tetanus (DT) Tetanus, diphtheria (Td)	*(2)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precautions** → GBS <6 weeks after previous dose of tetanus-toxoid-containing vaccine → Moderate or severe acute illness with or without fever → History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine	
Diphtheria, Tetanus, Pertussis (DTaP)	*(4)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP or DTaP **Precautions** → Moderate or severe acute illness with or without fever → Guillain-Barré syndrome (GBS) <6 weeks after a previous dose of tetanus-toxoid-containing vaccine → History of arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid containing or tetanus-toxoid-containing vaccines; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid containing vaccine → Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, or progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized	→ Fever within 48 hours after vaccination with a previous dose of DTP or DTaP → Family history of seizures → Family history of sudden infant death syndrome → Family history of an adverse event after DTP or DTaP administration → Stable neurologic conditions (e.g., cerebral palsy, well-controlled seizures, or developmental delay) → Collapse or shock-like state (i.e., hypotonic hyporesponsive episode) within 48 hours after receiving a previous dose of DTP/DTaP → Seizure ≤3 days after receiving a previous dose of DTP/DTaP → Persistent, inconsolable crying lasting ≥3 within 48 hours after receiving a previous dose of DTP/DTaP
***Haemophilus influenzae* type b (Hib)**	*(7)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Aged <6 weeks **Precaution** → Moderate or severe acute illness with or without fever	
Hepatitis A (HepA)	*(5)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precautions** → Moderate or severe acute illness with or without fever	
Hepatitis B (HepB)	*(6)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Hypersensitivity to yeast **Precautions** → Moderate or severe acute illness with or without fever → Infant weighing less than 2,000 grams (4 lbs., 6.4 oz.)[2]	→ Pregnancy → Autoimmune disease (e.g., systemic lupus erythematosis or rheumatoid arthritis)
Human papillomavirus (HPV)	*(8)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precautions** → Moderate or severe acute illness with or without fever → Pregnancy	→ Immunosuppression → Known HPV infection → Previous equivocal or abnormal Papanicolaou test → Breastfeeding → History of genital warts
Inactivated Poliovirus (IPV)	(10)	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Precautions → Moderate or severe acute illness with or without fever → Pregnancy	→ Previous receipt of ≥1 dose of oral polio vaccine
Influenza, inactivated injectable (IIV)	*(9)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including egg protein **Precaution** → Moderate or severe acute illness with or without fever → History of GBS <6 weeks of previous dose of influenza vaccine → Egg allergy other than hives, e.g., angioedema, respiratory distress, lightheadedness, recurrent emesis; or required epinephrine or another emergency medical intervention (IIV maybe administered in an inpatient or outpatient medical setting and under the supervision of a health care provider who is able to recognize and manage severe allergic conditions).	→ Non-severe (e.g., contact) allergy to latex, thimerosal, or egg → Concurrent administration of Coumadin (generic: Warfarin) or aminophylline
Influenza, live-attenuated vaccine (LAIV)[b]	*(9)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including egg protein → Concomitant use of aspirin or aspirin-containing medication in children and adolescents → Pregnancy → LAIV should not be administered to persons who have taken influenza antiviral medications within the previous 48 hours **Precaution** → Moderate or severe acute illness with or without fever → Asthma in persons aged 5 years or older → History of GBS <6 weeks after a previous dose of influenza vaccine[c] → Medical conditions which might predispose to higher risk of complications attributable to influenza	→ Health-care providers that see patients with chronic diseases or altered immunocompetence (an exception is providers for severely immunocompromised patients requiring care in a protected environment) → Breastfeeding → Contacts of persons with chronic disease or altered immunocompetence (an exception is contacts of severely immunocompromised patients requiring care in a protected environment
Meningococcal, quadrivalent meningococcal conjugate (MenACWY)	*(11)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precaution** → Moderate or severe acute illness with or without fever	
Meningococcal, serogroup meningococcal B (MenB)	*(12, 13)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precaution** → Moderate or severe acute illness with or without fever	
Measles, mumps, rubella (MMR)[d],[e]	*(1)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, or long-term immunosuppressive therapy[f] or patients with HIV infection who are severely immunocompromised) → Family history of altered immunocompetence[g] → Pregnancy **Precautions** → Moderate or severe acute illness with or without fever → Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)[7] → Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing[h] → History of thrombocytopenia or thrombocytopenic purpura	→ Positive tuberculin skin test → Simultaneous tuberculin skin or interferon-gamma release assay (IGRA) testing[m] → Pregnancy of recipient's mother or other close or household contact → Recipient is female of child-bearing age → Immunodeficient family member or household contact → Asymptomatic or mildly symptomatic HIV infection → Allergy to eggs → Breastfeeding
Pneumococcal conjugate vaccine (PCV13)	*(14)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose PCV13 or any diphtheria-toxoid-containing vaccine or to a component of a vaccine (PCV13 or any diphtheria-toxoid-containing vaccine) **Precaution** → Moderate or severe acute illness with or without fever	
Pneumococcal polysaccharide (PPSV23)	*(15)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component **Precaution** → Moderate or severe acute illness with or without fever	→ History of invasive pneumococcal disease or pneumonia
Rotavirus (RV5 [RotaTeq], RV1 [Rotarix])	*(3)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Severe combined immunodeficiency (SCID) → History of intussusception **Precautions** → Moderate or severe acute illness with or without fever → Altered immunocompetence other than SCID → Chronic gastrointestinal disease[i] → Spina bifida or bladder exstrophy[i]	→ Prematurity → Immunosuppressed household contacts → Pregnant household contacts
Tetanus, diphtheria, pertussis (Tdap)	*(16)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP, DTaP, or Tdap **Precautions** → Moderate or severe acute illness with or without fever → GBS <6 weeks after a previous dose of tetanus-toxoid-containing vaccine → Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized → History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine	→ History of fever ≥105°F (≥40.5°C) for <48 hours after vaccination with a previous dose of DTP or DTaP → History of collapse or shock-like state (i.e., hypotonic hyporesponsive episode) within 48 hours after receiving a previous dose of DTP/DTaP → History of seizure <3 days after receiving a previous dose of DTP/DTaP → History of persistent, inconsolable crying lasting >3 hours within 48 hours after receiving a previous dose of DTP/DTaP → History of extensive limb swelling after DTP/DTaP/Td that is not an Arthus-type reaction → History of stable neurologic disorder → History of brachial neuritis → Breastfeeding → Latex allergy that is not anaphylactic → Immunosuppression
Varicella (Var)[d], [e]	*(17)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, primary or acquired immunodeficiency, or long-term immunosuppressive therapy[f] or patients with HIV infection who are severely immunocompromised)[c] → Family history of altered immunocompetence[g] → Pregnancy **Precautions** → Moderate or severe acute illness with or without fever → Use of aspirin or aspirin-containing products[j] → Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)[7] → Receipt of specific antivirals (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)	→ Pregnancy of recipient's mother or other close or household contact → Immunodeficient family member or household contact[n] → Asymptomatic or mildly symptomatic HIV infection → Humoral immunodeficiency (e.g., agammaglobulinemia)
Zoster (Zos)	*(18)*	→ Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component → Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy[f] or patients with HIV infection who are severely immunocompromised)[c] → Pregnancy **Precautions** → Moderate or severe acute illness with or without fever → Receipt of specific antivirals (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)	→ Therapy with low-dose methotrexate (≤.04 mg/kg/week), azathioprine ≤3.0 mg/kg/day), or 6-mercaptopurine (≤1.5 mg/kg/day) for treatment of rheumatoid arthritis, psoriasis, polymyositis, sarcoidosis, inflammatory bowel disease, or other conditions → Health-care providers of patients with chronic diseases or altered immunocompetence → Contacts of patients with chronic diseases or altered immunocompetence → Unknown or uncertain history of varicella in a U.S.-born person

FOOTNOTES:

(a) Events or conditions listed as precautions should be reviewed carefully. Benefits of and risks for administering a specific vaccine to a person under these circumstances should be considered. If the risk from the vaccine is believed to outweigh the benefit, the vaccine should not be administered. If the benefit of vaccination is believed to outweigh the risk, the vaccine should 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.

(b) In addition, ACIP recommends LAIV not be used for pregnant women, immunosuppressed persons, persons with egg allergy, and children aged 2-4 years who have asthma or who have had a wheezing episode noted in the medical record within the past 12 months, or for whom parents report that a health care provider stated that they had wheezing or asthma within the last 12 months. LAIV should not be administered to persons who have taken influenza antiviral medications within the previous 48 hours. Persons who care for severely immunosuppressed persons who require a protective environment should not receive LAIV, or should avoid contact with such persons for 7 days after receipt.

(c) Source: (52).

(d) HIV-infected children may receive varicella vaccine if CD4+ T-lymphocyte count is ≥15% and should receive MMR vaccine if they are aged ≥12 months and do not have evidence of current severe immunosuppression (i.e., individuals aged ≤5 years must have CD4+T lymphocyte [CD4] percentages ≥15% for ≥6 months; and individuals aged >5 years must have CD4+percentages ≥15% and CD4+≥200 lymphocytes/mm3 for ≥6 months) or other current evidence of measles, rubella, and mumps immunity. In cases when only CD4+cell counts or only CD4+percentages are available for those older than age 5 years, the assessment of severe immunosuppression can be based on the CD4+values (count or percentage) that are available. In cases when CD4+percentages are not available for those aged ≤5 years, the assessment of severe immunosuppression can be based on age-specific CD4+counts at the time CD4+counts were measured; i.e., absence of severe immunosuppression is defined as ≥6 months above age-specific CD4+count criteria: CD4+count >750 lymphocytes/mm3 while aged ≤12 months and CD4+count ≥500 lymphocytes/mm3 while aged 1 through 5 years. Sources: (1,50).

(e) MMR and varicella-containing vaccines can be administered on the same day. If not administered on the same day, these vaccines should be separated by at least 28 days.

(f) A 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.

(g) 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.

(h) If active tuberculosis is suspected, MMR should be delayed. Measles vaccination might suppress tuberculin reactivity temporarily. Measles-containing vaccine can be administered on the same day as tuberculin skin or IGRA 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 or IGRA, do so with the understanding that reactivity might be reduced by the vaccine.

(i) For details, see (20).

(j) Antibacterial drugs might interfere with Ty21a oral typhoid vaccine, and certain antiviral drugs might interfere with varicella-containing vaccines and LAIV4.

(k) Hepatitis B vaccination should be deferred for infants weighing <2,000 g if the mother is documented to be HBsAg negative. Vaccination should commence at chronological age 1 month or at hospital discharge. For infants born to HBsAg-positive women, hepatitis B immune globulin and hepatitis B vaccine should be administered within 12 hours after birth, regardless of weight.

(l) An exception is Guillain-Barré syndrome within 6 weeks of a dose of influenza vaccine or tetanus-toxoid–containing vaccine, which are precautions for influenza vaccines and tetanus-toxoid containing vaccines, respectively.

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

(n) If a vaccinee experiences a presumed vaccine-related rash 7-25 days after vaccination, the person should avoid direct contact with immunocompromised persons for the duration of the rash.

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