

# Contraindications for Childhood\* Immunization

⊗ Do not administer the vaccine indicated directly above the symbol when the symptom or condition to the left is present

Symptom or Condition	HA	HB	DTP/DTaP	Hib	OPV	IPV	MMR	Var	PCV
<b>Allergies</b>									
to 2-phenoxyethanol	⊗ Note 1								
to alum	⊗								
to baker's yeast (anaphylactic)		⊗							
to duck meat or duck feathers									
to eggs (anaphylactic)									
to gelatin (anaphylactic)							Note 2	Note 2	
to neomycin (anaphylactic)						⊗	⊗	⊗	
to penicillin									
to streptomycin (anaphylactic)						⊗			
nonspecific or nonanaphylactic									
in relatives									
Antimicrobial therapy (current)									
<b>Breastfeeding</b>									
<b>Convalescing from illness</b>									
<b>Convulsions (fits, seizures)</b>									
family history (including epilepsy) See Note 3									
within 3 days of previous dose of DTP or DTaP			Note 4						
<b>Diarrhea</b>									
mild (with or without low-grade fever)									
moderate to severe (with or without fever)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Exposure (recent) to infectious (contagious) disease									
<b>Fever</b>									
low-grade fever with or without mild illness									
fever with moderate-to-severe illness									See Note 5
<b>HIV infection</b>									
in household contact					⊗				
in recipient (asymptomatic)					⊗		Note 6	Note 7	
in recipient (symptomatic)					⊗		Note 8	⊗	
<b>IG administration</b> (intramuscular or intravenous), recent or simultaneous (see suggested intervals in table 1)							Note 9	Note 10	
<b>Illness</b>									
mild acute (with or without low-grade fever)									
moderate-to-severe acute (with or without fever)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
chronic									See Note 11
<b>Immunodeficiency †</b>									
family history					Note 12			Note 12	
in household contact					⊗				
in recipient (hematologic and solid tumors, congenital immunodeficiency, long-term immunosuppressive therapy, including steroids)					⊗		⊗	⊗	Note 13

Symptom or Condition	HA	HB	DTP/DTaP	Hib	OPV	IPV	MMR	Var	PCV
<b>Neurologic disorders, underlying</b> (including seizures disorders, cerebral palsy, and developmental delay)									
			Note 14						
<b>Otitis media</b>									
mild (with or without low-grade fever)									
moderate (with or without fever)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
resolving									
<b>Pregnant mother or household contact of recipient</b>									
<b>Prematurity</b> See Note 15									
<b>Reactions to a previous dose of any vaccine</b>									
anaphylactic (life-threatening) See Note 16	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
local (mild to moderate soreness, redness, swelling)									
fever of < 40.5°C (105°F) within 48 hours after a dose			Note 17						
fever of ≥ 40.5°C (105°F) within 48 hours after a dose			Notes 17&18						
<b>Reactions to previous dose of DTP/DTaP</b>									
collapse or shocklike state within 48 hours of dose			Note 17						
persistent, inconsolable crying lasting for 3 or more hours, occurring within 48 hours of dose			Note 17						
encephalopathy ‡ within 7 days after dose			⊗						
family history of any adverse event after dose			Note 17						
Guillain-Barré syndrome (GBS) within 6 weeks after a dose			Note 19						
seizures within 3 days after a dose			Notes 17&18						
<b>Simultaneous administration of vaccines</b> See Note 20									
<b>Sudden infant death syndrome (SIDS), family history</b>									
								Note 21	
<b>Thrombocytopenia</b>									
								Note 21	
<b>Thrombocytopenic purpura (history)</b>									
								Note 22	
<b>Tuberculin skin testing, performed simultaneously with vaccination</b>									
								Note 23	
<b>Tuberculosis (TB) or positive PPD</b>									
								Note 24	
<b>Unvaccinated household contact §</b>									
<b>Vomiting</b>									
mild (with or without low-grade fever)									
moderate to severe (with or without fever) See Note 25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗

‡ An acute, severe central nervous system disorder, generally consisting of major alterations in consciousness, unresponsiveness, or generalized or focal seizures that persist more than a few hours, with failure to recover within 24 hours.

§ Parent or household contact who has not been vaccinated with a vaccine the child is receiving.

Source: US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, Guide to Contraindications to Childhood Vaccinations, 2000.

Last revised, October 2000.



\* For children up to the age of school entry.

† This chart includes all childhood vaccinations routinely recommended by the ACIP as of June 2000 as well as Hepatitis A which is routinely recommended in some states. Influenza and pneumococcal polysaccharide vaccine is recommended for children > 2 years of age in special cases (children with chronic illness, functional or anatomic asplenia, or who are living in special environments or social settings). Please refer to the ACIP recommendations for detailed information.

‡ See "HIV infection"; recommendations differ slightly for that condition.

**Note 1:** In the case of HARVIX®.

**Note 2:** Children with a history of anaphylactic reaction to gelatin or gelatin-containing products should be vaccinated only with extreme caution. Skin testing for sensitivity can be considered.

**Note 3:** Consider giving acetaminophen before DTP or DTaP and every 4 hours thereafter for 24 hours to children who have a personal or a family history of convulsions. (If underlying neurologic disorder is involved, also see "Neurologic disorders.")

**Note 4:** Not a contraindication, but a precaution. Consider carefully the benefits and risks of this vaccine under these circumstances. If the risks are believed to outweigh the benefits, withhold the vaccination; if the benefits are believed to outweigh the risks (for example, during an outbreak or foreign travel), give the vaccine (If convulsions are accompanied by encephalopathy, also see "Reactions to a previous dose of DTP/DTaP" If an underlying neurologic disorder is involved, also see "Neurologic disorders.")

**Note 5:** Children with moderate or severe febrile illnesses can be vaccinated as soon as they are recovering and no longer acutely ill.

**Note 6:** MMR vaccination is recommended for all asymptomatic HIV-infected persons who do not have evidence of severe immunosuppression\* for whom measles vaccination would otherwise be indicated. (\*MMWR, May 22, 1998, Vol. 47, No. RR-8, Pg. 21)

**Note 7:** ACIP recommends that, after weighing potential risks and benefits, varicella vaccine should be considered for asymptomatic or mildly symptomatic HIV-infected children in CDC class N1 or A1 with age specific CD4 + T-lymphocyte percentages  $\geq 25\%$ . Eligible children should receive two doses of varicella vaccine with a 3-month interval between doses. (\*MMWR, May 28, 1999, Vol. 48, No. RR-6, Pg. 3 plus footnote)

**Note 8:** MMR vaccination should be considered for all symptomatic HIV-infected persons who do not have evidence of severe immunosuppression\* or measles immunity. (\*MMWR, May 22, 1998, Vol. 47, No. RR-8, Pg. 21)

**Note 9:** Do not give Immune globulin products and MMR simultaneously. If unavoidable, give at different sites and revaccinate or test for seroconversion in 3 months. If MMR is given first, do not give IG for 2 weeks. If IG is given first, the interval between IG and measles vaccination depends on the product, the dose, and the indication. (See table 1).

**Note 10:** Do not give varicella vaccine for at least 5 months after administration of blood (except washed red blood cells) or after plasma transfusions, IG, or VZIG. Do not give IG or VZIG for 3 weeks after vaccination unless the benefits exceed those of the vaccination. In such instances, either revaccinate 5 months later or test for immunity 6 months later and revaccinate if seronegative.

**Note 11:** The great majority of children with chronic illnesses should be appropriately vaccinated because of an increased risk of vaccine preventable diseases associated with some chronic diseases. Vaccination for children with HIV or certain other immunosuppressive conditions should be made on an individual basis.

**Note 12:** Do not give OPV or varicella vaccine to a member of a household with a family history of immunodeficiency until the immune status of the recipient and other persons in the family is documented.

**Table 1. Suggested Intervals**

	Months before Measles Vaccination
TIG for tetanus prophylaxis	3
IG for hepatitis A contact prophylaxis or foreign travel	3
HBIG for hepatitis B prophylaxis	3
HRIG for rabies prophylaxis	4
VZIG for varicella prophylaxis	5
IG for measles prophylaxis (normal contact)	5
IG for measles prophylaxis (immunosuppressed contact)	6
Blood transfusion (red blood cells [RBCs], washed)	0
Blood transfusion (RBCs, adenine-saline added)	3
Blood transfusion (packed RBCs [Hct 65%])	6
Blood transfusion (whole blood [Hct 35%-50%])	6
Blood transfusion (plasma/platelet products)	7
Cytomegalovirus prophylaxis (CMV IGIV)	6
Replacement therapy for humoral Immune deficiencies (given as IGIV)	8
Respiratory syncytial virus prophylaxis (RSV IGIV)	9
Treatment of immune thrombocytopenic Purpura (400mg/kg IV)	8
Treatment of immune thrombocytopenic Purpura (100mg/kg IV)	10
Kawasaki disease	11

For guidelines, see *J Pediatr* 1993, 122:204-11. Also see *MMR Recommendations: Advisory Committee on Immunization Practices*, May 22, 1998.

**Note 13:** A protocol exists for use of varicella vaccine in patients with acute lymphoblastic leukemia (ALL). See *Varicella Prevention: Recommendations of the Advisory Committee on Immunization Practices*, May 28, 1999.

**Note 14:** Whether and when to administer DTP or DTaP to children with proven or suspected underlying neurologic disorders should be decided individually. Generally, infants and children with stable neurologic conditions, including well-controlled seizures, may be vaccinated.

**Note 15:** The appropriate age for initiating vaccinations in the prematurely born infant is the usual chronological age (same dosage and indications as for normal, full-term infants). If an infant weighs less than 2kg at birth, and the mother is HBsAg-negative, the first dose of hepatitis B vaccine may be given at chronological age 1 month. Premature infants discharged from the hospital before chronological age 1 month can receive hepatitis B vaccine at discharge if they are medically stable and have gained weight consistently. If the mother is HBsAg-positive or if her antigen status is unknown, give the first dose, plus HBIG, within 12 hours of birth, regardless of birth weight or gestational age. But when these infants weigh less than 2kg, do not count this dose as part of the 3-dose primary series.

**Note 16:** Contraindicates vaccination only with vaccine to which reaction occurred. If tetanus toxoid is contraindicated for a child who has not completed a primary series of tetanus toxoid immunization and that a child has a wound that is neither clean nor minor, give only passive vaccination, using tetanus immune globulin (TIG). Also see Allergies.

**Note 17:** Not a contraindication, but consider carefully the benefits and risks of this vaccine under these circumstances. If the risks are believed to outweigh the benefits, withhold the vaccination; if the benefits are believed to outweigh the risks (for example, during an outbreak or foreign travel), give the vaccine.

**Note 18:** Consider giving acetaminophen before DTP or DTaP and every 4 hours thereafter for 24 hours to children who have a personal or a family history of convulsions.

**Note 19:** The decision to give additional doses of DTP/DTaP should be based on consideration of the benefit of further vaccination versus the risk of recurrence of GBS. For example, completion of the primary series in children is justified. However, it is prudent to avoid influenza vaccination of person who are not at high risk for severe influenza complication and who are known to have developed GBS within 6 weeks of a previous influenza vaccination.

**Note 20:** There is a theoretical risk that the administration of multiple live virus vaccines (OPV MMR, and varicella) within 28 days or 4 weeks of one another if not given on the same day will result in a suboptimal immune response. There are no data to substantiate this with current vaccines.

**Note 21:** Consider the benefits of immunity to measles, mumps, and rubella versus the risk of recurrence or exacerbation of thrombocytopenia after vaccination or risk from natural infections of measles or rubella. In most instances, the benefits of vaccination will be much greater than the potential risks and will justify giving MMR, particularly in view of the even greater risk of thrombocytopenia following measles or rubella disease. However, If a prior episode of thrombocytopenia occurred near the time of vaccination, it might be prudent to avoid a subsequent dose.

**Note 22:** Measles vaccination may temporarily suppress tuberculin reactivity. MMR vaccine may be given after, or on the same day as, TB testing. If MMR has been given recently, postpone the TB test until 4-6 weeks after administration of MMR. If giving MMR simultaneously with tuberculin skin test, use the Mantoux test, not multiple puncture tests, because the latter, if results are positive, require confirmation (and confirmation would then have to be postponed 4-6 weeks). While no data are available on the effect of varicella vaccination on tuberculin reactivity, it is prudent to apply the same precautions when using varicella vaccine.

**Note 23:** A theoretical basis exists for concern that measles vaccine might exacerbate tuberculosis. Consequently, before administering MMR to persons with untreated active tuberculosis, initiating antituberculosis therapy is advisable.

**Note 24:** If the parent or other adult household contact of a child receiving IPV has never received polio vaccine, this person should consider being vaccinated with IPV before or at the same time as the child. Vaccination of the child should not be delayed.

**Note 25:** *Vomiting and OPV.* Infants sometimes do not swallow OPV. If, in the judgment of the vaccinator, a substantial amount of the vaccine is spit out or vomited within 5-10 minutes after administration, another dose can be given at the same visit. If this repeat dose is not retained, neither dose should be counted, and the vaccine should be readministered at the next visit.

