

Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Spread by	Symptoms	Complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia
Diphtheria	DTaP* vaccine protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of heart muscle, heart failure, coma, paralysis, death
Hib (Haemophilus influenzae type b)	Hib vaccine protects against Haemophilus influenzae type b.	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection around the brain and spinal cord), intellectual disability, epiglottitis (life-threatening infection that can block windpipe and cause serious breathing problems), pneumonia, death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms; fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic, and blood disorders
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms; fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Influenza (flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia
Measles	MMR** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pinkeye	Encephalitis (brain swelling), pneumonia, death
Meningococcal disease	Vaccines help protect against all three serogroups (B, C, and Y) of meningococcal disease.	Direct contact, saliva	Fever, headache, stiff neck, nausea, vomiting, confusion	Long-term disabilities, such as loss of limb(s), deafness, nervous system problems, or brain damage
Mumps	MMR** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection around brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness

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Pertussis	DTaP* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia, death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms; sore throat, fever, nausea, headache	Paralysis, death
Pneumococcal disease	PCV vaccine protects against pneumococcus.	Air, direct contact	May be no symptoms; pneumonia	Bacteremia (blood infection), meningitis (infection around brain and spinal cord), death
Rotavirus	RV vaccine protects against rotavirus. Max age for vaccine is 8 months.	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration
Rubella	MMR** vaccine protects against rubella.	Air, direct contact	Sometimes a rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Shingles	Recombinant zoster vaccine (RZV, Shingrix)	Direct contact	A painful rash on one side of the face or body, fever, headache, chills, upset stomach, and eye problems	A condition called postherpetic neuralgia (PHN), eye complications including vision loss, skin infections, and some other rare conditions
Tetanus	DTaP* vaccine protects against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death