



## Vaccine-Preventable Diseases and the Vaccines That Prevent Them

Disease	Vaccine	Disease Spread By	Disease Symptoms	Disease Complications
Chickenpox	Varicella vaccine	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs)
Diphtheria	DTaP vaccine	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
<i>Haemophilus influenzae</i> (Hib)	Hib vaccine protects against <i>Haemophilus influenzae</i> Type b	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection of the covering around the brain and spinal cord), intellectual disability, epiglottitis (life-threatening infection that can block the windpipe and lead to serious breathing problems), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine	Direct contact, contaminated food or water	May be no symptoms. Possible symptoms include 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	Contact with blood or body fluids	May be no symptoms. Possible symptoms include fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Human Papillomavirus	HPV vaccine	Sexual contact	Itching, warts on genital areas	Cervical cancer, penile cancer
Influenza (Flu)	Flu vaccine	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs)
Measles	MMR vaccine	Air, direct contact	Rash, fever, cough, runny nose, pinkeye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Meningococcal Disease	MCV4 vaccine	Air, direct contact such as kissing	Nausea, vomiting, sensitivity to light, confusion, sleepiness	Hearing loss, brain damage, seizures, strokes, amputations, nervous system problems
Mumps	MMR vaccine	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Encephalitis, deafness, infertility
Pertussis (Whooping Cough)	DTaP vaccine	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Pneumococcal Infections	PCV vaccine	Air, direct contact	May be no symptoms. Possible symptoms include pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death



<b>Polio</b>	IPV vaccine	Air, direct contact	May be no symptoms. Possible symptoms include sore throat, fever, nausea, headache	Paralysis, death
<b>Rotavirus</b>	RV vaccine	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration
<b>Rubella</b>	MMR vaccine	Air, direct contact	Children infected with rubella virus sometimes have a rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
<b>Serogroup B Meningococcal Disease</b>	MenB vaccine	Air, direct contact	Meningitis, blood infections	Hearing loss, brain damage, amputations, nervous system problems, severe scars from skin grafts
<b>Tetanus</b>	DTaP vaccine	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

### Important Points About Immunizations

Talk to your child's doctor about any questions you have about vaccines. Other important points about immunizations include:

- To protect your new baby and yourself against whooping cough, get a Tdap vaccine in the third trimester of each pregnancy.
- MMR combines protection against measles, mumps and rubella.
- DTaP combines protection against diphtheria, tetanus and pertussis