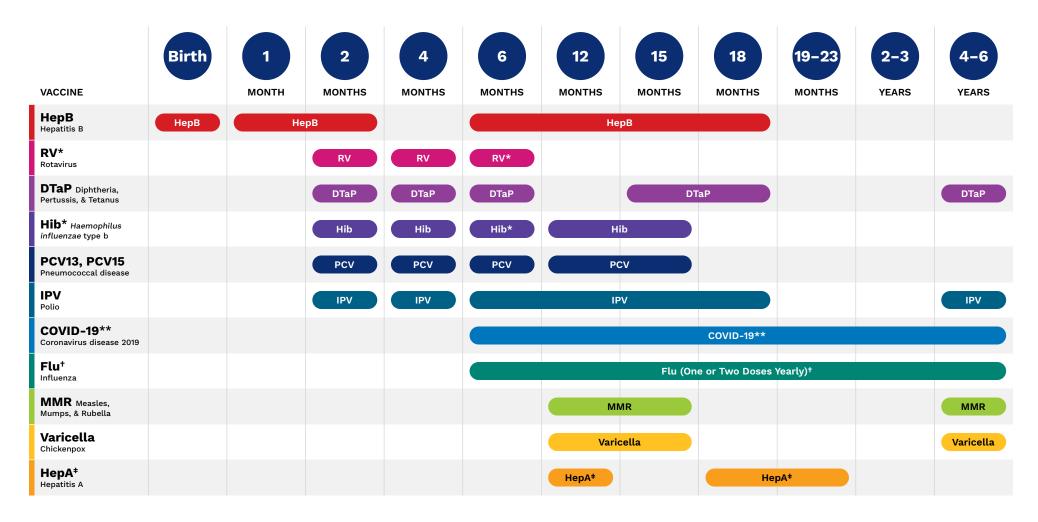
# 2023 Recommended Immunizations for Children from Birth Through 6 Years Old



#### **FOOTNOTES**





Administering a third dose at age 6 months depends on the brand of Hib or rotavirus vaccine used for previous dose.

COVID-19\*\* Number of doses recommended depends on your child's age and type of COVID-19 vaccine used.

Two doses given at least 4 weeks apart are recommended for children age 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.

HepA\* Two doses of Hep A vaccine are needed for lasting protection. The 2 doses should be given between age 12 and 23 months. Both doses should be separated by at least 6 months. Children 2 years and older who have not received 2 doses of Hep A should complete the series.

#### ADDITIONAL INFORMATION

1. If your child misses a shot recommended for their age, talk to your child's doctor as soon as possible to see when the missed shot can be given.

2. If your child has any medical conditions that put them at risk for infection (e.g., sickle cell, HIV infection, cochlear implants) or is traveling outside the United States, talk to your child's doctor about additional vaccines that they may need.

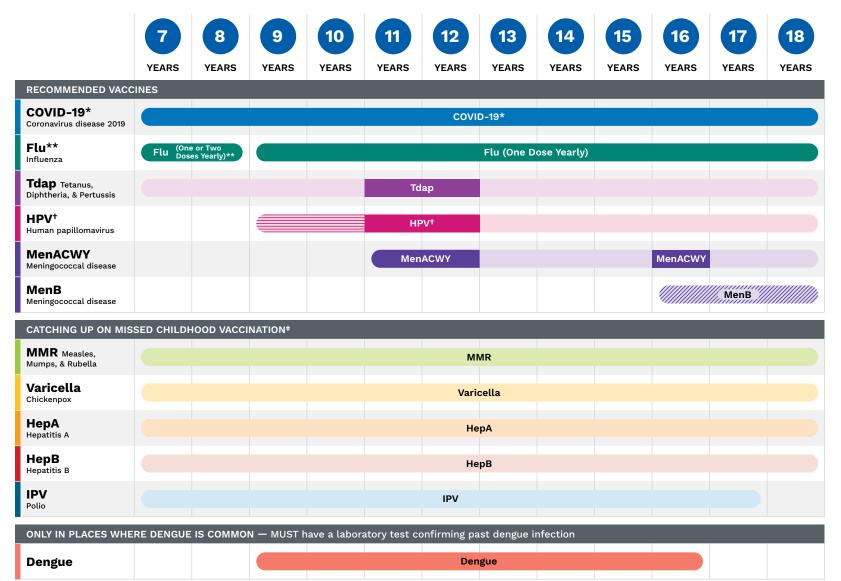
Talk with your child's doctor if you have questions about any shot recommended for your child.





Or visit: cdc.gov/vaccines/parents

# 2023 Recommended Immunizations for Children 7-18 Years Old



#### KEY



Indicates when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.



Indicates the vaccine series can begin at this age.



Indicates the vaccine **should** be given if a child is catching up on missed vaccines. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses.



Indicates children not at increased risk **may** get the vaccine if they wish after speaking to a provider.

### ADDITIONAL INFORMATION

- 1. If your child misses a shot recommended for their age, talk to your child's doctor as soon as possible to see when the missed shot can be given.
- 2. If your child has any medical conditions that put them at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that they may need.

Talk with your child's doctor if you have questions about any shot recommended for your child.

## **FOOTNOTES**

COVID-19\* Number of doses recommended depends on your child's age and type of COVID-19 vaccine used.

Two doses given at least 4 weeks apart are recommended for children age 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.

HPV† Ages 11 through 12 years old should get a 2-shot series separated by 6 to 12 months. The series can begin at 9 years old. A 3-shot series is recommended for those with weakened immune systems and those who start the series after their 15th birthday.

\*Originally recommended age ranges for missed childhood vaccinations: 2-dose series of **MMR** at 12-15 months and 4-6 years; 2-dose series of **Varicella** at 12-15 months and 4-6 years; 2-dose series of **HepA** (minimum interval: 6 months) at age 12-23 months; 3-dose series of **HepB** at birth, 1-2 months, and 6-18 months; and 4-dose series of **Polio** at 2 months, 4 months, 6-18 months, and 4-6 years.





FOR MORE INFORMATION

# **Diseases and the Vaccines that Prevent Them**

| DISEASE                                   | VACCINE   | DISEASE SPREAD BY                                | DISEASE SYMPTOMS  | DISEASE COMPLICATIONS   |
|---|---|--|---|---|
| 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, death   |
| Rotavirus                                 | RV vaccine protects against rotavirus.  | Through the mouth                                | Diarrhea, fever, vomiting   | Severe diarrhea, dehydration, death   |
| Diphtheria                                | DTaP* vaccine protects against diphtheria.  | Air, direct contact                              | Sore throat, mild fever, weakness, swollen glands in neck   | Swelling of the heart muscle, heart failure, coma, paralysis, death   |
| Pertussis<br>(whooping cough)             | DTaP* vaccine protects against pertussis (whooping cough).                            | Air, direct contact                              | Severe cough, runny nose, apnea (a pause in breathing in infants)   | Pneumonia (infection in the lungs), death   |
| 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   |
| Haemophilus<br>influenzae<br>type b (Hib) | Hib vaccine protects against Haemophilus influenzae 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 |
| Pneumococcal<br>disease<br>(PCV13, PCV15) | PCV vaccine protects against pneumococcal disease.                                    | Air, direct contact                              | May be no symptoms, pneumonia (infection in the lungs)  | Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death  |
| Polio                                     | IPV vaccine protects against polio.   | Air, direct contact, through the mouth           | May be no symptoms, sore throat, fever, nausea, headache  | Paralysis, death  |
| Coronavirus<br>disease 2019<br>(COVID-19) | covid-19 vaccine protects against severe complications from coronavirus disease 2019. | Air, direct contact                              | May be no symptoms, fever, muscle aches, sore throat, cough, runny nose, diarrhea, vomiting, new loss of taste or smell         | Pneumonia (infection in the lungs), respiratory failure, blood clots, bleeding disorder, injury to liver, heart or kidney, multisystem inflammatory syndrome, post-COVID syndrome, death  |
| Influenza (Flu)                           | Flu vaccine protects against influenza.   | Air, direct contact                              | Fever, muscle pain, sore throat, cough, extreme fatigue   | Pneumonia (infection in the lungs), bronchitis, sinus infections, ear infections, death   |
| Measles                                   | MMR** vaccine protects against measles.   | Air, direct contact                              | Rash, fever, cough, runny nose, pink eye  | Encephalitis (brain swelling), pneumonia (infection in the lungs), death  |
| Mumps                                     | MMR** vaccine protects against mumps.   | Air, direct contact                              | Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain  | Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness, death   |
| Rubella                                   | MMR** vaccine protects against rubella.   | Air, direct contact                              | Sometimes rash, fever, swollen lymph nodes  | Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects   |
| Chickenpox                                | Varicella vaccine protects against chickenpox.  | Air, direct contact                              | Rash, tiredness, headache, fever  | Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs), death   |
| Hepatitis A                               | HepA vaccine protects against hepatitis A.  | Direct contact,<br>contaminated food<br>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, death   |

## **Diseases and the Vaccines that Prevent Them**

| DISEASE                                   | VACCINE   | DISEASE SPREAD BY                                | DISEASE SYMPTOMS   | DISEASE COMPLICATIONS  |
|---|---|--|--|--|
| Coronavirus<br>disease 2019<br>(COVID 19) | covid-19 vaccine protects against severe complications from coronavirus disease 2019. | Air, direct contact                              | May be no symptoms, fever, muscle aches, sore throat, cough, runny nose, diarrhea, vomiting, new loss of taste or smell                                  | Pneumonia (infection in the lungs), respiratory failure, blood clots, bleeding disorder, injury to liver, heart or kidney, multisystem inflammatory syndrome, post-COVID syndrome, death |
| Influenza (Flu)                           | Flu vaccine protects against influenza.   | Air, direct contact                              | Fever, muscle pain, sore throat, cough, extreme fatigue  | Pneumonia (infection in the lungs), bronchitis, sinus infections, ear infections, death  |
| Tetanus                                   | Tdap* and Td** vaccines protect against tetanus.                                      | Exposure through cuts in skin                    | Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever   | Broken bones, breathing difficulty, death  |
| Diphtheria                                | Tdap* and Td** vaccines protects against diphtheria.                                  | Air, direct contact                              | Sore throat, mild fever, weakness, swollen glands in neck  | Swelling of the heart muscle, heart failure, coma, paralysis, death  |
| Pertussis<br>(whooping cough)             | Tdap* vaccine protects against pertussis (whooping cough).                            | Air, direct contact                              | Severe cough, runny nose, apnea (a pause in breathing in infants)  | Pneumonia (infection in the lungs), death  |
| Human<br>papillomavirus                   | HPV vaccine protects against human papillomavirus.                                    | Direct skin contact                              | May be no symptoms, genital warts  | Cervical, vaginal, vulvar, penile, anal, oropharyngeal cancers   |
| Meningococcal<br>disease                  | MenACWY MenB vaccines protect against meningococcal disease.                          | Air, direct contact                              | Sudden onset of fever, headache, and stiff neck, dark purple rash  | Loss of limb, deafness, nervous system disorders, developmental disabilities, seizure disorder, stroke, death  |
| Measles                                   | MMR <sup>†</sup> vaccine protects against measles.                                    | Air, direct contact                              | Rash, fever, cough, runny nose, pink eye   | Encephalitis (brain swelling), pneumonia (infection in the lungs), death   |
| Mumps                                     | MMR <sup>†</sup> vaccine protects against mumps.                                      | Air, direct contact                              | Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain   | Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness, death                            |
| Rubella                                   | MMR <sup>†</sup> vaccine protects against rubella.                                    | Air, direct contact                              | Sometimes rash, fever, swollen lymph nodes   | Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects  |
| Chickenpox                                | Varicella vaccine protects against chickenpox.  | Air, direct contact                              | Rash, tiredness, headache, fever   | Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs), death  |
| Hepatitis A                               | HepA vaccine protects against hepatitis A.  | Direct contact,<br>contaminated food<br>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, death  |
| 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, death  |
| Polio                                     | IPV vaccine protects against polio.   | Air, direct contact, through the mouth           | May be no symptoms, sore throat, fever, nausea, headache   | Paralysis, death   |
| Dengue                                    | Dengue <sup>‡</sup> vaccine protects against dengue.                                  | Bite from infected<br>mosquito                   | May be no symptoms, fever, headache,<br>pain behind the eyes, rash, joint pain,<br>body ache, nausea, loss of appetite, feeling<br>tired, abdominal pain | Severe bleeding, seizures, shock, damage to the liver, heart, and lungs, death   |