

# To Your Health

*Information You Can Use*

## The Importance of Vaccination

Americans recently became concerned about the spread of measles, a highly contagious illness that is easily prevented through routine childhood vaccination. As recently as ten years ago, measles was almost non-existent in the United States, but that has changed. According to the Centers for Disease Control and Prevention (CDC), 146 people in seven states, many of whom had recently visited Disneyland in California, have contracted measles since December 2014. These individuals were vulnerable to measles because nearly all of them had not been fully vaccinated against the virus.

Vaccination is not just good for preventing illness in a specific individual. When the vast majority of a population is vaccinated against a particular pathogen, it creates “herd immunity,” which may protect everyone in the community. Because so many people are immune to it, the disease cannot develop into an outbreak. If there’s no outbreak, then those who are unable to be vaccinated, such as infants and people with compromised immune systems, are less likely to be exposed to the illness.



### What Vaccinations Are Needed?

The CDC recommends a host of vaccinations for children, adolescents and adults, including (but not limited to):

- ☑ **Hepatitis B.** The first dose should be administered at birth, with two additional doses administered before the child is 19 months old.
- ☑ **Rotavirus.** This is administered in two doses when the baby is a few months old.
- ☑ **Tetanus, diphtheria and whooping cough (DTaP).** This combined vaccine is administered in five doses during infancy and early childhood. Vaccinate again around age 11 to 12 (Tdap). Adults should receive a tetanus and diphtheria booster shot (Td) every 10 years.
- ☑ **Polio.** This is administered in five doses during infancy and early childhood.
- ☑ **Mumps, measles and rubella (MMR).** Generally, this combined vaccine is first administered at 12 months, and then again when the child is aged four to six.
- ☑ **Chicken pox.** As with the MMR, the first dose is administered at 12 months and the second dose at age four to six years.
- ☑ **Meningitis.** The first dose should be administered when the child is around age 11 to 12, with a booster shot after age 16. This booster is especially important for college students living in residence halls, as they are at greatest risk for meningitis.
- ☑ **Shingles.** Adults aged 60 and older should receive this one-time vaccine.
- ☑ **Seasonal influenza.** In general, an annual flu shot is recommended for everyone aged six months and older.

### Fact and Fiction

Vaccination rates have dropped in recent years, due to a variety of misconceptions:

- ✗ **“Vaccines have serious side effects. The MMR shot causes autism.”** It is true that any medical procedure, no matter how minor, may cause some side effects. Vaccines are generally very safe, although it’s not unusual to run a mild fever, or to have a sore arm, after receiving certain shots.  
Several studies have shown no link between vaccinations and autism. In fact, Autism Speaks, a leading autism advocacy organization, recommends full vaccination for all children.
- ✗ **“These diseases have already been eliminated!”** This is dangerously untrue. As the recent U.S. measles outbreak has shown, that disease has not gone away. In parts of the Middle East, where vaccine campaigns have stopped due to war and internal conflict, children have contracted polio.  
Vaccine-preventable illness is less likely to spread when most people have been vaccinated, and are therefore mostly immune to the disease. Those who are unable to be vaccinated can take advantage of this “herd immunity” to avoid illness themselves.
- ✗ **“I was already vaccinated as a kid. I don’t need a booster shot now.”** Immunity from a childhood vaccination can wear off over time, leaving you unprotected as an adult. If you are concerned, ask your doctor for a titer test, which will check your blood for antibodies. If you have few or no antibodies for a vaccine-preventable disease, a booster shot may be recommended.

## Preparing for Immunization

Many people are afraid of needles, often beginning in childhood. In some cases, they may have had a frightening experience during a routine vaccination. Consider these tips when preparing your children (or yourself!) for an immunization.

- ☑ **Stay calm and controlled.** Children are keenly aware of their caregivers' emotions. If you appear nervous about seeing the doctor or getting a shot, they may become anxious and afraid.

Very young children should be told about the vaccine shortly before the appointment. School-age children could be told a few days ahead of the visit, although it depends on the child. During the appointment, speak calmly and reassuringly, in a normal tone of voice.

Practice deep breathing to stay relaxed. Small children could pretend to blow out candles on a birthday cake. They could also blow bubbles, which helps to distract them, too.



- ☑ **Be honest.** If your child asks if the shot will hurt, be honest, but choose your words carefully. Advise that it will feel like a pinch or a squeeze, rather than saying it will sting or be painful. Advise that it may hurt a little, but the discomfort will quickly fade.



You could also use this experience to explain to your child that it's important to take care of your health. For example, you could say, "It's smart to take care of yourself, and to visit the doctor. The shot will take just a moment, and it will keep you from getting sick."

- ☑ **Find something else to do.** If you or your child are nervous about getting a shot, find a distraction. For a baby or toddler, that could be a toy that lights up or makes noise. School-age children could be engaged in conversation about something they like, such as a favorite game or TV show. Books, magazines and electronic devices can also be used to focus attention elsewhere.

In addition, role-playing may help. Your child could bring a stuffed animal to the appointment, with the toy getting a "shot" before the child.

Not only will the distraction keep your mind off the needle, it will also give you something to do if you have a long wait in the doctor's office!

- ☑ **Have a treat.** Give your child (or yourself) something pleasant to anticipate after the vaccination is over. This could include going for ice cream or to a movie, or eating lunch at a favorite restaurant. Knowing there's something fun coming up also serves as a distraction.
- ☑ **After the shot.** Occasionally, a vaccination may cause some lingering discomfort or a low-grade fever. To reduce pain and fever, your child could take acetaminophen or ibuprofen. (Aspirin and products containing aspirin should never be given to children under age 19, because of the risk for developing Reye's Syndrome, a potentially deadly illness.)



If the vaccination area is red or sore, apply a cool, wet washcloth, and provide pain relief as needed. If fever or pain continue or increase after 24 hours, however, call your child's pediatrician.

Rarely, worse side effects may occur, such as an allergic reaction. If the child is pale or limp, or shaking and jerking, seek medical attention immediately.