

**L**ots of people think "shots" or immunizations are just for kids. They're not! As an adult, you need to be protected against measles, mumps, rubella, tetanus, diphtheria, pneumococcal disease, influenza, and varicella. You may also need protection against hepatitis A and B. Your best protection against these diseases? Immunization.

Many people think diseases like diphtheria, mumps, and measles have been wiped out. This is not the case. During 1995, at least 39 percent of all reported measles cases in the United States occurred in persons 20 years of age or older.

If you were never immunized or never had these vaccine-preventable diseases, you are at risk. If you were immunized as a child, you may need updating because some immunizations lose their effectiveness over time. To find out what shots you may need or where to get immunizations, contact your doctor or local health department.

Remember...immunizations are not just kids' stuff!

## Measles

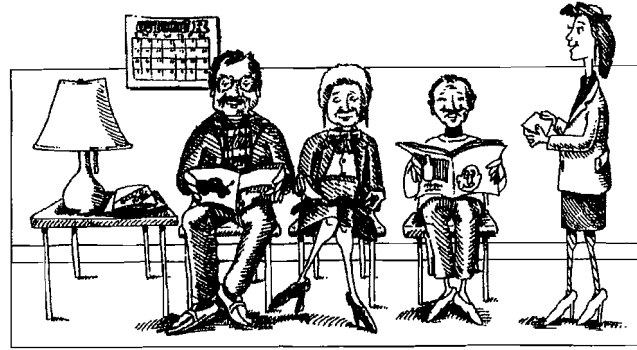
Though the number of cases of measles is at a record low, adults account for about one-third of cases. Measles is caused by a virus that is spread through the air or through direct contact with an infected person. Symptoms of measles usually include a high fever, rash, runny nose, red eyes, and cough.

Measles can lead to serious complications such as pneumonia and encephalitis (inflammation of the brain). A pregnant woman who contracts measles is at increased risk for miscarriage or premature labor.

The measles vaccine is routinely administered as part of the combination measles, mumps, and rubella (MMR) shot. Two doses generally provide lifelong protection.

## Mumps

Mumps is caused by a virus that is spread by direct contact with an infected person or through the air. The use of MMR vaccine accounts for the dramatic decline in the incidence of mumps in the U.S. However, one in five adults is estimated to be susceptible to mumps (meaning they have neither had mumps nor been vaccinated against it). Adults who develop disease are more likely to have serious complications than



are children. Mumps vaccine is recommended for children, teens, and susceptible adults and is routinely given as part of the MMR shot.

## Rubella

Rubella virus is spread by contact with an infected person or with articles they have used. Up to 50% of persons infected with rubella may not have symptoms. Pregnant women who get rubella, especially during the first three months of pregnancy, may miscarry or their babies may be born with birth defects or even die.

Many immigrants to the U.S. were never vaccinated. If you are unsure if you are immune to rubella, consult your health care provider. Rubella vaccine is routinely given as part of the MMR shot.

## Tetanus and diphtheria

Tetanus, also known as lockjaw, is caused by bacteria that enter the body through a break in the skin (often a puncture wound or other injury). Tetanus causes painful muscle contractions, especially in the jaw. In recent years, fewer than 50 cases of tetanus have occurred annually in the U.S. Adults over 60 years of age are at highest risk for tetanus and complications of tetanus, including death.

Diphtheria bacteria are spread from one person to another in the droplets released when an infected person coughs or sneezes. Symptoms of diphtheria include sore throat, fever, and swollen neck glands. As the disease progresses, a membrane forms in the throat that obstructs breathing and may cause death.

While the disease is rare in the U.S., it still occurs in other parts of the world.

Adults should have completed a primary series of three shots that protect against tetanus and diphtheria. They then need a tetanus-and-diphtheria (Td) combination shot every 10 years thereafter.

## Polio

The risk of getting polio is very small in the U.S. today because of the widespread use of polio vaccines. Adult immunization is usually not recommended unless you are traveling to a part of the world where polio still occurs. Polio virus is usually spread by the fecal-oral route.

## Influenza

A very contagious disease that affects at least 10% of the population annually, influenza kills an average of 36,000 people in the U.S. each year. More than 90% of those who die are over 65 years of age. The symptoms of influenza include fever, chills, headache, sore throat, dry cough, runny nose, and body aches. Influenza is spread by direct contact with an infected person or through contact with the airborne virus.

Influenza vaccine is strongly recommended every fall for all people age 50 and over, for people 6 months of age and older who have chronic diseases, and for their close contacts. In addition, anyone who wants to reduce the risk of becoming ill with influenza can be vaccinated. Vaccination against influenza can be given at any time during the autumn or winter but is best when it is given in October to November, before the influenza season begins.

## Pneumococcal disease

Pneumococcal disease is caused by bacteria that can lead to life-threatening infections, such as pneumonia, bacteremia, and meningitis. It is spread when someone comes in contact with the airborne droplets of an infected person. Influenza and pneumonia together account for nearly 66,000 deaths each year in the U.S. Up to 20,000 of these are estimated to be due to pneumococcal disease. A single dose of adult pneumococcal vaccination is recommended for all people age 65 and over, as well as for people of any age with certain chronic illnesses.

## Chickenpox

Chickenpox, also known as varicella, is a highly contagious disease. Caused by a virus, varicella infection can occur after direct contact with an infected person or with airborne droplets from an infected person. Prior to the availability of a vaccine in 1995, approximately 100 people died from chickenpox complications each year in the U.S. The number of cases has since declined by nearly 70%. Adults who get chickenpox often get a more severe case than children and have more complications. For example, adults are 25 times more likely than children to die from the disease or its complications. Adults who have not had chickenpox should consult their physicians regarding vaccination.

## Hepatitis B

Hepatitis B is a serious liver disease caused by the hepatitis B virus (HBV). It is spread by contact with blood or other body fluids of an infected person. Though some infected persons have no symptoms, about one out of three will be very ill, with nausea, yellow-tinged skin and eyes, headache, and abdominal pain. Some people develop chronic HBV infection, which can lead to liver failure or liver cancer. About 5,000 people in the U.S. die each year from HBV-related illness.

Hepatitis B vaccine is recommended for all infants, children, and teens. It is also recommended for adults at increased risk for infection, including health care workers likely to have blood exposure, certain travelers, dialysis patients, men who have sex with men, people who have more than one sex partner in six months, people who inject illegal drugs, and household members and sexual contacts of persons with chronic HBV infection.

## Hepatitis A

Hepatitis A is a viral infection of the liver that can cause fever, yellowing of the skin and the whites of the eyes, loss of appetite, nausea, and abdominal pain. It is usually spread by the fecal-oral route after close personal contact with an infected person (e.g., a household member or sexual partner). You can also become infected by eating contaminated food or drinking contaminated water. CDC estimates that about 90,000 new cases occur each year in the U.S.

Hepatitis A vaccine is recommended for some international travelers (including those traveling to Mexico), persons in communities with a history of high hepatitis A rates and periodic outbreaks, men who have sex with men, street drug users, recipients of certain blood products, and individuals with chronic liver disease.

## Meningococcal disease

Meningococcal disease is caused by bacteria that infect the blood or membranes surrounding the brain and spinal cord. It can lead to brain damage, hearing loss, loss of limbs, and death. The bacteria are spread through airborne respiratory droplets or direct contact. Certain adults should be vaccinated, including those who are planning to travel to an area of the world where the disease is common or who have certain health conditions (e.g., a damaged or absent spleen). College freshmen, particularly those who live in dormitories, have a slightly increased risk of the disease and should consider vaccination.

## Everyone needs vaccinations!

If you need more information, can't afford shots, or don't know where to get them, contact your local or state health department, or call the National Immunization Hotline at (800) 232-2522. You can also get more information on the Web at

[www.immunize.org](http://www.immunize.org)  
[www.vaccineinformation.org](http://www.vaccineinformation.org)  
[www.cdc.gov/nip](http://www.cdc.gov/nip)  
[www.cdc.gov/hepatitis](http://www.cdc.gov/hepatitis)

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# Immunization...

## Not Just Kids' Stuff

