

Your Guide to



ADULT VACCINATION

What You Need to Know About
Protecting Your Health

Although you might have been vaccinated when you were younger, the viruses and bacteria you were immunized against can change, lowering your resistance. Also, the protection from some vaccines can wear off over time. You may also have an increased risk for vaccine-preventable diseases because of your age, health condition, job, travel, or hobbies.

In general, adults should receive:

- An annual flu shot for all ages, including pregnant women
- The Tdap (tetanus, diphtheria, and pertussis) vaccine, and a booster every 10 years
- Two doses of the chickenpox vaccine
- One or two doses of the MMR (measles, mumps, and rubella) vaccine
- Three doses of the HPV (human papillomavirus) vaccine for men and women ages 19 to 26
- The zoster (shingles) vaccine for those 50 and older.

Some people may benefit from vaccines for pneumonia, meningococcal disease, and hepatitis A and B. Talk with your healthcare provider to determine which vaccines are right for you.

When most of us think of vaccinations, we think of the shots we received as children. But it's important for adults to be vaccinated, too, to avoid getting and spreading diseases.

HOW VACCINES

WORK

Vaccines help your body create immunity, or resistance, to certain diseases by imitating an infection. This infection does not cause illness, but triggers your immune system to create antibodies and lymphocytes to fight it.

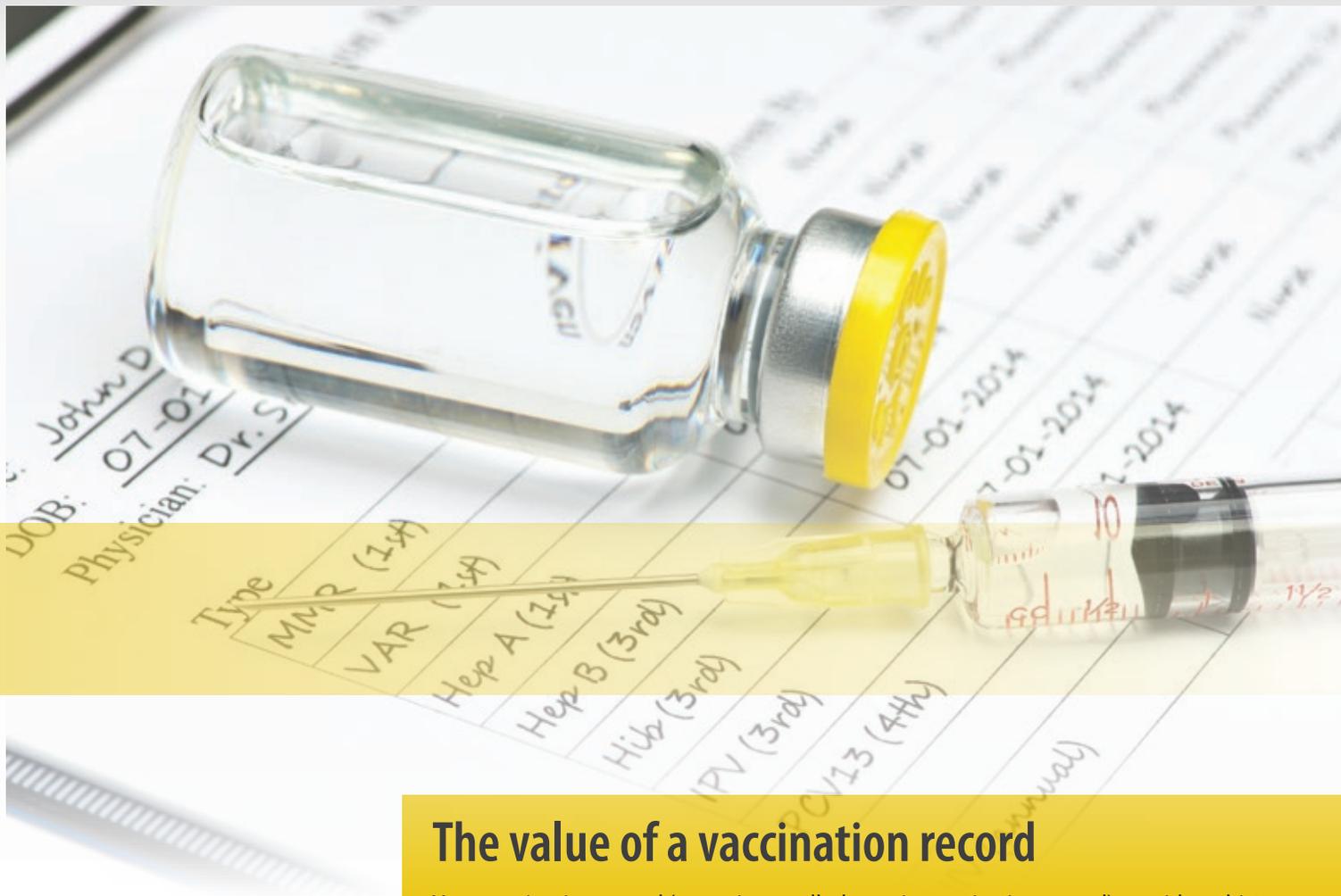
Sometimes you might have minor symptoms, such as a fever, after getting a vaccine. These mild symptoms are normal, and should be expected as your body builds up immunity.

When scientists design a vaccine, they use information about the germs (viruses or bacteria) the vaccine will prevent, such as how it infects cells and how your immune systems responds to it. They also consider in what parts of the world it will be used, because the strain of the virus and conditions such as temperature and risk of exposure are also important.

There are several different kinds of vaccines. Some types require more than one dose to be most effective. With these vaccines, the first dose doesn't provide as much immunity as possible. To build a more complete immunity, more than one dose is needed.

With some vaccines, immunity can wear off over time. When that happens, a "booster" dose is needed to build immunity levels back up.

The flu vaccine is an example of a shot that is needed annually. The virus that causes the flu may be different from year to year, and the flu vaccine is designed each year to prevent the specific strain that experts predict will be circulating.



The value of a vaccination record

Your vaccination record (sometimes called your immunization record) provides a history of all the vaccines you received as a child and adult. This record may be required for certain jobs, travel abroad, or school registration.

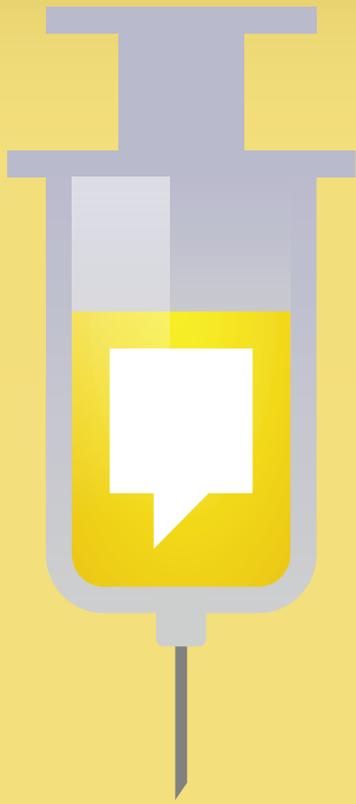
Unfortunately, there is no national organization that maintains vaccination records. The records that exist are the ones you or your parents were given when the vaccines were administered and the ones in the medical record of the doctor or clinic where the vaccines were given.

Talk with your healthcare provider about the best options to make sure you are up-to-date on vaccines.

If you need official copies of vaccination records, or if you need to update your personal records, there are several places you can look:

- Ask parents or other caregivers if they have records of your childhood immunizations.
- Try looking through baby books or other saved documents from your childhood.
- Check with your high school and/or college health services for dates of any immunizations. Keep in mind that generally records are kept only for 1-2 years after students leave the system.
- Check with previous employers (including the military) that may have required immunizations.
- Check with your doctor or public health clinic. Keep in mind that vaccination records are maintained at doctor's office for a limited number of years.
- Contact your state's health department. Some states have registries (Immunization Information Systems) that include adult vaccines.

Source: Centers for Disease Control and Prevention



RECOMM

Vaccines & Vaccine-Preventable Diseases

There are certain vaccines that every adult needs. Others are based on your age, occupation, and health. Still others depend on where in the world you may travel. Some may not be right for you because you may have allergies to vaccine ingredients. Talk to your healthcare provider to determine which vaccines are right for you.

The CDC recommends that all adults receive the following vaccines:

- **Seasonal flu (influenza):** All adults need a flu vaccine every year. Flu vaccine is especially important for people with chronic health conditions, pregnant women, and older adults.
- **Td or Tdap:** Every adult should get the Tdap vaccine once if they did not receive it as an adolescent to protect against pertussis (whooping cough), and then a Td (tetanus, diphtheria) booster shot every 10 years. In addition, women should get the Tdap vaccine each time they are pregnant, preferably at 27 through 36 weeks.

In 2012, 43% of blacks and 42.9% of Hispanic/Latinos received the influenza vaccine, compared to 53.7% of whites.

Source: Centers for Disease Control and Prevention



Percentage of women aged 19 to 26 who ever received at least one dose of the HPV vaccine, 2010:

- 15.1% Hispanic
- 20.4% Black
- 22.4% White

Source: U.S. Department of Health and Human Services, Office of Minority Health

ENDED

For ages 19-26 years:

In addition to seasonal flu vaccine and Td or Tdap vaccine, you should also get:

- HPV vaccine, which protects against the human papillomaviruses that cause most cervical cancers, anal cancer, and genital warts. It is recommended for:
 - women up to age 26 years
 - men up to age 21 years
 - men ages 22-26 who have sex with men

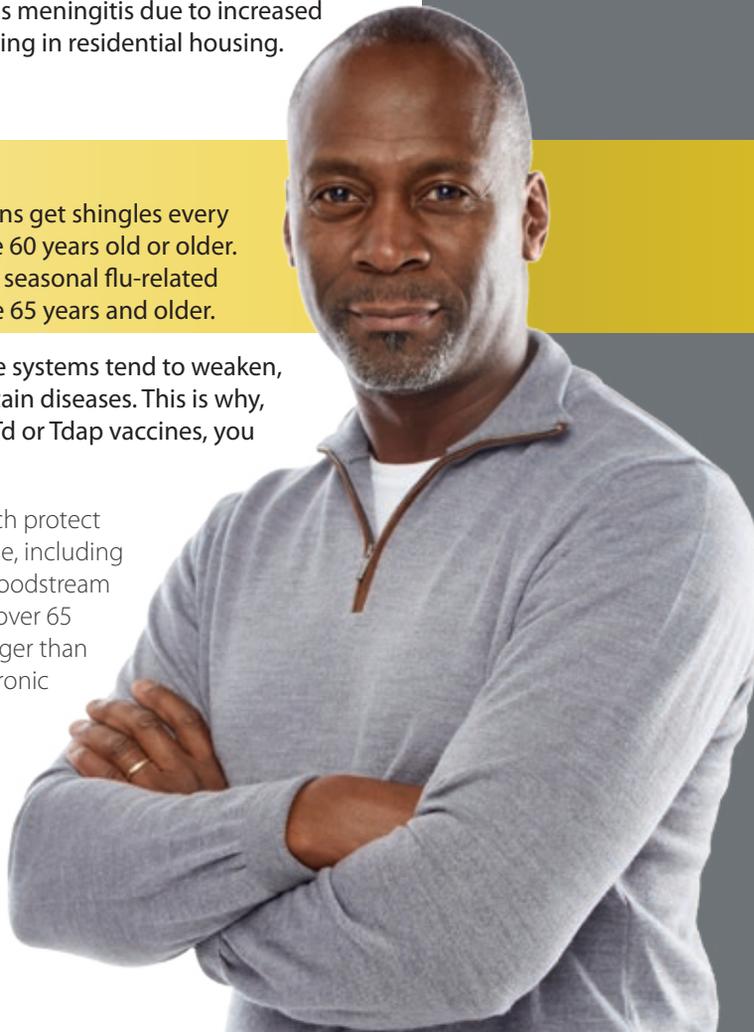
Some vaccines may be recommended for adults because of particular job or school-related requirements, health conditions, lifestyle, or other factors. For example, some states require students entering colleges and universities to be vaccinated against certain diseases, such as meningitis due to increased risk among college students living in residential housing.

For 60 years or older:

An estimated 1 million Americans get shingles every year, and about half of them are 60 years old or older. Additionally, over 60 percent of seasonal flu-related hospitalizations occur in people 65 years and older.

As we get older, our immune systems tend to weaken, putting us at higher risk for certain diseases. This is why, in addition to seasonal flu and Td or Tdap vaccines, you should also get:

- Pneumococcal vaccines, which protect against pneumococcal disease, including infections in the lungs and bloodstream (recommended for all adults over 65 years old, and for adults younger than 65 years who have certain chronic health conditions)
- Zoster vaccine, which protects against shingles (recommended for adults 60 years or older)



What is the immune system?

The immune system works to keep germs out of the body and destroy any that get in. The immune system is made up of a complex network of cells and organs that protect the body from infection.

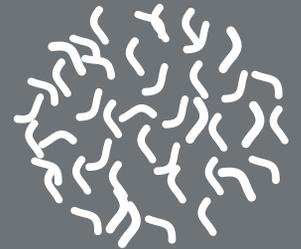
Lymph nodes are part of the immune system. They release **lymphocytes**, a certain type of white blood cell that fights infection. The blood vessels and lymph vessels carry the lymphocytes to and from different areas in the body.

Lymphocytes are a type of infection-fighting white blood cell. They are vital to an effective immune system.

Lymph node



Lymphocyte





In 2010, 63.5% of whites aged 65 and older had ever received the pneumonia vaccine, while only 46.2% of blacks and 39% of Hispanics had ever received the vaccine.

Source: U.S. Department of Health and Human Services, Office of Minority Health



Vaccines and Pregnancy

Being up-to-date on routine adult vaccines will help protect you and your child if you're planning on becoming pregnant. A mother's immunity is passed along to her baby during pregnancy and helps protect him or her during the first few months of life.

While pregnant, it's important to have the seasonal flu vaccine. Having the flu while pregnant can lead to complications, and even hospitalization. Getting the Tdap vaccine is also recommended, ideally between 27 and 36 weeks of pregnancy.

You can also receive routine vaccines right after giving birth, even if you're breastfeeding.

For more information about vaccines and pregnancy, visit www.cdc.gov/vaccines/adults/rec-vac/pregnant.html.

There are many diseases that can be prevented with vaccine. The CDC lists the following as vaccine-preventable diseases:

- Anthrax
- Cervical Cancer
- Diphtheria
- Hepatitis A
- Hepatitis B
- Haemophilus influenzae type b (Hib)
- Human Papillomavirus (HPV)
- H1N1 Flu (Swine Flu)
- Influenza (Seasonal Flu)
- Japanese Encephalitis (JE)
- Lyme Disease
- Measles
- Meningococcal
- Monkeypox
- Mumps
- Pertussis (Whooping Cough)
- Pneumococcal
- Poliomyelitis (Polio)
- Rabies
- Rotavirus
- Rubella (German Measles)
- Shingles (Herpes Zoster)
- Smallpox
- Tetanus (Lockjaw)
- Tuberculosis
- Typhoid Fever
- Varicella (Chickenpox)
- Yellow Fever

HEALTH

Conditions & Vaccines

Certain health conditions put you more at risk for some diseases. If you have any of the following conditions, ask your healthcare provider which vaccinations you should have to protect your health.

Following are some health conditions and CDC recommendations for vaccinations.

Asplenia

If you do not have a spleen or your spleen does not work well, talk with your healthcare provider about the following vaccines:

- Influenza
- Tdap
- Hib
- Pneumococcal
- Meningococcal
- Zoster (if you are 60 years and older)
- HPV vaccine (if you are a man up to age 21 or woman up to age 26)
- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

Diabetes (Types 1 and 2)

- Influenza
- Tdap
- Pneumococcal polysaccharide
- Hepatitis B
- Zoster (if you are 60 years and older)
- HPV (if you are a man or woman up to age 26)
- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

HIV Infection

If you have HIV infection and your CD4 count is 200 or greater, talk with your healthcare provider about:

- Influenza
- Tdap
- Pneumococcal
- Hepatitis B
- HPV (if you are a man or woman up to age 26 years)

- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella vaccine (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

If you have HIV infection and your CD4 count is less than 200, talk with your healthcare provider about:

- Influenza
- Tdap
- Pneumococcal
- Hepatitis B
- HPV (if you are a man or woman up to age 26 years)

Liver Disease

- Influenza
- Tdap
- Pneumococcal polysaccharide
- Hepatitis B
- Hepatitis A
- Zoster (if you are 60 years and older)
- HPV (if you are a woman up to age 26 or a man up to age 21)
- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

Lung Disease (Including Asthma)

- Influenza
- Tdap
- Pneumococcal polysaccharide
- Zoster (if you are 60 years and older)
- HPV (if you are a woman up to age 26 or a man up to age 21)
- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

Renal (Kidney) Disease

- Influenza
- Tdap
- Pneumococcal polysaccharide
- Hepatitis B
- Zoster (if you are 60 years and older)
- HPV (if you are a woman up to age 26 or a man up to age 21)
- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

Weakened Immune System

If you have cancer or other conditions that compromise your immune system, talk with your healthcare provider about:

- Influenza
- Tdap
- Pneumococcal
- HPV (if you are a man or woman up to age 26 years)

Heart Disease, Stroke and Other Cardiovascular Diseases

- Influenza
- Tdap
- Pneumococcal polysaccharide
- Zoster (if you are 60 years and older)
- HPV (if you are a woman up to age 26 or a man up to age 21)
- MMR (if you were born in 1957 or after and have not gotten this vaccine or have immunity to these diseases)
- Varicella (if you were born in 1980 or after and have not gotten two doses of this vaccine or have immunity to this disease)

Where to Get Vaccines

Getting all of the vaccines you need is an important step in keeping yourself and those around you healthy. If you have a healthcare provider, talk to him or her about which vaccinations you should have.

If you do not have a healthcare provider, vaccines are also available at pharmacies, community health clinics, and health departments. They are also sometimes available at workplaces, and community locations such as schools and religious centers. Your state health department can also provide information about where vaccines are available.

You can also visit the CDC's Vaccine Finder at <http://flushot.healthmap.org>.

Getting all of the vaccines you need is an important step in keeping yourself and those around you healthy.

Learn More/Resources

To learn more about adult vaccines, visit the following:

- CDC Adult Vaccination Home Page
www.cdc.gov/vaccines/adults/index.html
- MedlinePlus
www.nlm.nih.gov/medlineplus/immunization.html
- National Foundation for Infectious Diseases
www.adultvaccination.org
- National Institute of Allergy and Infectious Diseases
<http://www.niaid.nih.gov/topics/vaccines/Pages/Default.aspx>

- **For additional information on important health issues, please visit the Association of Black Cardiologists' website, www.abccardio.org.**



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