



VACCINATIONS AND HIV

WHAT ARE VACCINATIONS?

Vaccinations, or immunizations, are injections that build up your body's defenses against certain infections. For example, many people get flu shots each fall. It can take a few weeks for your immune system to respond after a vaccination.

"Live" vaccines use a weakened form of the germ. They can give you a mild case of disease, but then your immune system kicks in to protect you against a severe case. Other "inactivated" vaccines don't use a living germ. With them, you don't get the disease, but your body can still build up its defenses.

Vaccines can have some side effects. With live vaccines, you might get a mild case of the disease. Even with inactivated vaccines, your immune system will respond. You could have pain, redness, and swelling where you got the shot. You might also feel weakness, fatigue, or nausea for a day or so.

WHAT'S DIFFERENT FOR PEOPLE WITH HIV?

If HIV has damaged the immune system, it might not respond as well to a vaccine, or for the same length of time. Also, vaccines might cause more side effects in people with HIV. They might even cause the disease they are designed to prevent.

There has not been much research on vaccines and people with HIV, especially since people started using combinations of anti-HIV drugs. However, there are a few key guidelines for people with HIV:

- Vaccinations can increase the viral load (see fact sheet 413) for a little while. However, getting sick with the flu, hepatitis, or other preventable diseases would be much worse. **Do not measure your viral load within 4 weeks of any vaccination.**
- Flu shots have been studied more than any other vaccination for people with HIV. They are considered to be safe and effective.
- If your T-cell count (see fact sheet 412) is very low, vaccines might not work. If

possible, strengthen your immune system by taking strong anti-HIV medications before vaccination.

- **HIV-positive people should not receive most live vaccines (see below) including smallpox vaccine. Do not get vaccinated for smallpox unless your doctor agrees that it is safe for you. Avoid contact with anyone who got a smallpox vaccination in the past 2 or 3 weeks.** However, the "MMR" vaccine against measles, mumps and rubella is considered safe if your T-cell count is over 200.

WHICH VACCINATIONS ARE RECOMMENDED?

1. Pneumonia: Having HIV greatly increases your risk of developing pneumococcal pneumonia. The vaccine takes 2 or 3 weeks to become effective. The protection lasts for about 5 years in people with HIV.

2. Hepatitis (See fact sheet 505): Hepatitis can be caused by several different viruses. Vaccines exist for hepatitis A and B. **Hepatitis A** is usually not serious but it can be for someone with a weakened liver. This includes people who are infected with hepatitis B or C. Getting two hepatitis A vaccine shots can protect you for about 20 years.

Hepatitis B can cause serious disease. If you were exposed to hepatitis B, you should have antibodies. If you don't, you should get vaccinated. A series of three hepatitis B shots should protect you for about 10 years. People who have a higher risk of hepatitis A or B include men who have sex with men and people who use street drugs or who inject drugs.

3. Influenza (Flu): A flu vaccine is offered each year, based on the most active type of flu. Flu shots are recommended for all people with HIV. For best protection, you should get the shot by mid-November, before flu season. A case of the flu can sometimes develop into pneumonia. Some flu vaccines can cause an allergic reaction in people who are allergic to eggs.

4. Tetanus and Diphtheria: Tetanus is a serious disease caused by common bacteria. Tetanus infection can occur in any cut in the skin. It cannot be passed from person to person. Injecting drug users have a higher risk of a tetanus infection. **Diphtheria** is another bacterial disease. It can be passed from person to person and is common in homeless people. Diphtheria vaccine is always combined with tetanus vaccine.

Tetanus and diphtheria vaccines are usually given to children as a series of three shots. A single booster shot can be given every ten years. People with HIV should not receive the shots more than once every 10 years, or else they might have a painful local reaction. The shots can cause a lump that can last for a few weeks.

5. Measles, Mumps and Rubella: These are three diseases caused by viruses. They are very contagious and can be spread by coughing or sneezing. Children are normally vaccinated against these diseases with an "MMR" shot. The vaccine usually gives life-long protection against these diseases. If you were born after 1957 and did not get these vaccines as a child, you should get an MMR vaccination. However, since this is a live vaccine, it is not recommended for people with a CD4 cell count below 200.

HIV-POSITIVE TRAVELLERS

Every traveler with HIV should be sure they are vaccinated against hepatitis A and B.

Countries have different vaccination requirements for entry. In general, **inactivated** vaccines should not be a problem for travelers with HIV. However, they should **avoid live vaccines**, including typhoid, yellow fever, and vaccinia. If polio vaccine is required, it should be the inactivated version, **not** the live oral version.

Instead of getting a live vaccine, people with HIV should get a doctor's letter explaining that they have a medical reason not to be vaccinated. This is accepted by most countries.

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