Vaccinations and HIV

WHAT ARE VACCINATIONS?

Vaccinations, or immunizations, are treatments that build up your body's defenses against certain infections. It can take a few weeks for your immune system to respond after a vaccination. Vaccines are usually very safe.

Live vaccines use a weakened form of the germ. Inactivated vaccines don't use a living germ.

Vaccines can have side effects. With live vaccines you might get a mild case of the disease. With inactivated vaccines you could have pain, redness, and swelling where you got the shot. You might also briefly feel weakness, fatigue, or nausea.

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. If you will soon start antiretroviral therapy (ART) you may respond better if you wait until your CD4 cell count increases.

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

- Vaccinations can increase your viral load for a little while. On the other hand, getting sick with 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 safe and effective. However, people with HIV should not use FluMist nasal spray flu vaccine because it contains live virus.
- If your CD4 cell count is very low, vaccines might not work. If possible, strengthen your immune system by taking strong ARVs before vaccination.
- People with HIV should not receive most live vaccines (see below) including chickenpox (varicella) or smallpox vaccine. Do not get these vaccines unless your healthcare provider agrees that it is safe for you. Avoid close contact with anyone who got a live vaccination in the past 2-3 weeks. However, the measles, mumps, and rubella (MMR) vaccine is considered safe if your CD4 cell count is over 200 cells/mm^3.
- Yellow fever (YF) vaccine is a live vaccine so it is not recommended for people with HIV who have CD4 counts below 200 cells/mm^3. The vaccine may be given to asymptomatic people traveling to areas with YF with CD4 counts more than 200 cells/mm^3 with close monitoring for side effects.

WHAT VACCINATIONS ARE RECOMMENDED?

Vaccines are especially critical for people with chronic health conditions such as HIV infection.

Vaccine	Do you need it?
Influenza	You need a dose every fall (or winter) for your protection and for the protection of others around you.
Tetanus, Diptheria, Pertussis (TDaP)	If you have not received a dose of TDaP during your lifetime, you need to get a TDaP shot. All pregnant people need to get a dose during each pregnancy. After your first shot, you need a TDaP or TD booster dose every 10 years. Consult your healthcare provider if you haven't had at least 3 TD containing shots sometime in your life or if you have a deep or dirty wound.*
Pneumococcal (Prevnar 13, Pneumovax 23)	You need to get vaccinated with both types of pneumococcal vaccine – Prevnar once in a lifetime and Pneumovax (you may need more than 1 dose, depending on your age and health conditions). If you haven't received these shots, talk with your healthcare provider about when to get them.* If you are age 65 or older and already had Pneumovax when you were younger than 65, you will need another dose, given at least 5 years after your previous dose of Pneumovax.
Meningococcal ACWY (MenACWY)	MenACWY vaccine is recommended for all people with HIV age 2 years and older. The first 2 doses are given 8 weeks apart, followed by booster doses every 5 years.
Meningococcal B (MenB)	You may need MenB if you have one of several health conditions, for example if you do not have a functioning spleen, and boosters if your risk is ongoing. You may also consider getting the MenB vaccine if you are 23 years or younger (even if you don't have a high-risk medical condition) after a discussion with your healthcare provider.*
Hepatitis A Virus (HAV)	Because you have HIV, you are at higher risk for HAV. The vaccine is usually given in 2 doses, 6–18 months apart.

Hepatitis B Virus (HBV)	Because you have HIV, you might be at higher risk for HBV. If you haven't had a series of HBV vaccinations, you need to get either a 2- or 3-dose series, depending on the brand. If you started a series earlier but didn't complete it, you can simply continue from where you left off. Ask your healthcare provider if you need screening blood tests for HBV.*
Human Papilloma Virus (HPV)	You should be vaccinated against HPV if you are 26 years or younger. Adults 27-45 years may also be vaccinated against HPV after a discussion with their healthcare provider.* The vaccine is usually given in 2 or 3 doses (depending on the age at which the first dose is given) over a 6-month period.
Measles, Mumps, Rubella (MMR)	You need at least 1 dose of MMR vaccine if you were born in 1957 or later and have no HIV symptoms or only mild symptoms.* If you have moderate or severe symptoms from HIV, you should not receive MMR. If you are exposed to measles, call your healthcare provider right away. If you get measles, you are at risk of developing severe complications because of your HIV infection.
Herpes Zoster (Shingles)	Shingrix is an FDA-approved vaccine that prevents shingles in adults 50 and older, and in adults 18 and older who are immunocompromised. The CDC recommends that adults get two doses of Shingrix, with the second dose given 2–6 months after the first. For immunocompromised adults, the CDC says a shorter interval of 1–2 months can be followed if needed.
Varicella (chickenpox)	If you have no HIV symptoms or only mild symptoms, and have never had chickenpox, never were vaccinated, or were vaccinated but only received 1 dose, talk to your healthcare provider to find out if you need this vaccine.
COVID-19	Everyone 12 years of age and older is now eligible to get a COVID-19 vaccination. **Get a COVID-19 vaccine as soon as you can.** Widespread vaccination is a critical tool to help stop the pandemic. People with HIV and those with weakened immune systems due to other illnesses or medication might be at increased risk for severe COVID-19. They may receive a COVID-19 vaccine. However, they should be aware of the limited safety data: • ◦ Information about the safety of COVID-19 vaccines for people who have weakened immune systems is not yet available. ◦ People with HIV were included in clinical trials, though safety data specific to this group are not yet available. People with weakened immune systems should also be aware of the potential for reduced immune responses to the vaccine, as well as the need to continue following current guidance to protect themselves against COVID-19.
mpox	Two doses provide the best protection. Get dose 1, wait 4 weeks, and then get dose 2. If you can't get your second dose on time, you should get it as soon as possible to complete the series. You will have maximum protection two weeks after your second dose. Read more about the vaccine, how it's given, side effects, and where to get it at Mpox Vaccine Recommendations.

TRAVELERS WITH HIV

Travelers with HIV should consider vaccination against HAV and HBV.

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 YF (see above) and smallpox. If polio or typhoid vaccines are required, they should be the inactivated versions, **not** the live versions.

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

Visit the Centers for Disease Control and Prevention's (CDC) website for travel information or consult a travel clinic.

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