

Vaccinations Before and After Heart Transplant

Before you receive your heart transplant, you will need to boost your immune system's ability to fight off infection. Vaccinations are important. They can help to protect your body from infection. Your heart team and infectious disease specialist will let you know which vaccines are right for you.

If there are any questions or concerns, call the heart transplant team at 312.695.4965.

Why you need your vaccines

You need to make sure your vaccines are up-to-date **before** your transplant. They can help protect you from infection before, during and after your transplant.

- **Patients with heart failure and heart transplant recipients are at high risk for getting severe influenza (flu) and pneumonia.** These vaccines can help prevent infection before and after your transplant.
- **In rare cases, blood transfusions or transplanted organs can pass on viruses like hepatitis B to you.** The hepatitis B vaccine protects patients from getting hepatitis B during the transplant process.
- **After your heart transplant, you will take anti-rejection medications that suppress your immune system.** This medication prevents your immune system from rejecting your new heart. Since the immune system fights infection, taking anti-rejection medications also increase your risk for infections. They can also prevent your body from having good responses to vaccines. For this reason, you should be up-to-date on your vaccines before transplant surgery.

Vaccines you need

You should be up-to-date on your vaccinations before your transplant. You will need the following vaccines:

- Diphtheria
- Pertussis
- Hepatitis A and B
- Covid-19 vaccines and boosters
- Meningitis
- Shingles (recombinant zoster vaccine, Shingrix®)
- Measles, mumps, rubella (MMR)*
- Tetanus
- Pneumonia
- Annual flu vaccines
- Human papillomavirus (HPV) (if you are younger than 45 years old)

*You will need to be up to date with the MMR vaccine. Since it is a live virus, you should have this vaccine more than 4 weeks before your transplant.

Your physician will order blood tests for you. They will do this after your heart transplant and during your infectious disease office visits. The blood tests will determine your immunity. If your immunity is low, your care team may let you know that you need extra vaccine doses. The infectious disease specialist who works with your heart team may also suggest more vaccinations.

Vaccines you should not get

Transplant patients should not get live virus vaccines. A live virus vaccine may cause an infection in patients with weakened immune systems. **You should not get the following vaccines:**

- Smallpox
- Bacillus Calmette-Guerin (BCG) (tuberculosis)
- Oral polio
- Oral typhoid
- Yellow fever
- Japanese B encephalitis
- Nasal live attenuated influenza (the nasal spray flu vaccine)
- Chickenpox (Varivax®)
- Shingles (live zoster vaccine, Zostavax®)

It is important that you do not receive a live virus vaccine within 1 month before your transplant.

Vaccination for close contacts

We strongly recommend that anyone in close contact with you stay current on their vaccinations. This will help protect you from exposure to infectious diseases. If someone close to you get a vaccine with a live virus (like varicella or smallpox), **please contact the heart team at 312.695.4965 (TTY: 711) immediately.** Your care team will let you know what precautions you need to follow

Vaccination for travel

Your risk for infection while you travel varies. It will depend on where you go and for how long. A physician or advanced practice provider who has special training in travel medication and immunizations can tell you what precautions and vaccinations you may need.

If you plan to travel, please contact the heart team at **312.695.4965.** They can give you a referral to an infectious disease and/or travel medicine expert. Remember, vaccines need several weeks to take effect. Make sure you allow enough time before your trip when you make an appointment.

To learn more

Your infectious disease specialist can give you more information about vaccinations during an office visit. You may also find more information about adult vaccinations at **[cdc.gov/vaccines/schedules/easy-to-read/adult.html](https://www.cdc.gov/vaccines/schedules/easy-to-read/adult.html).**