

IMMUNIZATIONS

WHAT YOUR NEPHROLOGIST WANTS YOU TO KNOW ABOUT DIALYSIS AND VACCINATIONS

Kidney disease is one of several conditions that can put a person at higher risk for infection. This means that those with kidney failure may need to receive more shots, or higher doses, of vaccines to assure protection.

Types of immunizations and vaccines recommended for people on dialysis and those with chronic kidney disease who have not yet started dialysis:

- **Hepatitis B vaccine**
- **Flu shot to protect against influenza**
- **The pneumococcal vaccine called PPV23**

Special dialysis populations

Anyone who has received a transplant of bone marrow, kidney, or liver are at risk for a virus called Rotovirus. This can lead to very serious illness, so this group should receive the Rotovirus vaccine.

Schedule and protocols

Hepatitis B

People on dialysis should be given either higher doses or given more doses of the Hepatitis B vaccine. A special formula of vaccine has been developed for such persons, it is called Recombivax HB. All shots should be given in the muscle of the upper arm called the deltoid.

Group	Recombivax HB (40 µg/mL)			Energix B		
	Dose	Volume	Schedule	Dose	Volume	Schedule
>20 years Pre-dialysis	10 µg	1 mL	3 doses 0,1,& 6 months	20 µg	1 mL	3 doses 0,1,6 months
>20 years On dialysis	40 µg	1 mL	3 doses 0,1,& 6 months	40 µg	2 mL (2 doses)	4 doses 0,1,2, & 6 months
<20 years High risk	5 µg	0.5 mL	3 doses 0,1,& 6 months	10 µg	0.5 mL	3 doses 0,1,6 months



The only way to make sure that the vaccine has worked is to do a blood test 1-2 months after the last dose. This test looks to see if the body has produced infection fighting antibodies. The antibody level (anti-HB) should be above 10 mIU/mL. If the test shows that the level is below 10, the vaccine series should be repeated. The anti-HB level should also be checked every year and if it ever drops below 10 a “booster” dose of the vaccine should be given.

Influenza

Adults and children on dialysis should receive a flu shot every year. It is important to know that only the inactivated influenza vaccine (TIV) should be used, not the other type, called live attenuated influenza vaccine (LAIV). Flu shots are usually given in September and October since flu season runs from November to March every year. However, if you don't get the shot in the early

fall, it is still better to get the shot in January than not at all.

A new type of flu called Novel H1N1 has been in the news a lot lately. In June, the World Health Organization (WHO) signaled that a pandemic was underway, meaning that this new flu had spread over large portions of the world in many countries. An H1N1 vaccine has been developed and is available in many locations. Dialysis patients qualify as a priority group to receive this vaccine. Please contact your local department of health to find out where you can go to get this shot.

Pneumococcal Infection

The pneumococcal vaccine, called PPV23, is recommended for all adults on dialysis and for those with chronic kidney disease who have not yet started dialysis. Repeat doses may be given every 5 years until the age of 65.

Precautions

A person should not receive a vaccine if they have a history of serious allergic reaction to a previous dose of vaccine, but true allergic reactions are rare. Persons with moderate or severe acute illness should not be vaccinated until their condition improves. You should not receive a flu shot if you have had a severe allergic reaction to egg protein or gelatin, or the antibiotics penicillin, streptomycin or neomycin. If you have questions, talk to your doctor.

Preventing illness and hospitalizations

Since people on dialysis are at higher risk for infection it makes sense that getting the proper vaccinations can help prevent illness. Studies have proven that getting all the proper immunizations can prevent illness and decrease the need for hospital stays.