Exposure to People After They Had a Vaccine

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Dear OncoLink "Ask The Experts,"

How long should a neutropenic person stay away from someone who has received a vaccine, flu shot, or infants who received their regular vaccinations? I see that it says to "avoid" recently vaccinated persons, but no indication for [how] long. Thanks.

The issue with vaccines is actually with those that are "live attenuated vaccines". These types of vaccines are created using the actual germ or bacteria, and therefore could possibly infect someone. However, it is rare for this to occur, because the germ gets weaker as the vaccine is produced in the laboratory. Because of this, it causes mild or no illness in the person receiving the vaccine. However, if the person receiving the vaccine is exposed to someone who is immunocompromised, the immunocompromised individual could get the illness.

The Infectious Disease Society of America (ISDA) published recommendations for vaccinating people who are immunocompromised - and the people who live with them. Not all live vaccines are created equal - and the recommendations reflect this. As a person receiving cancer therapy (chemo, bio, radiation), stem cell or bone marrow transplant, you should not receive any live vaccines without first consulting with your oncology providers. That part is simple.

For people who live with a person receiving cancer therapy, it gets more complicated. The guidelines state that healthy people who live with an immunocompromised person can receive the following live vaccines:

- MMR (measles, mumps and rubella)
- Varicella & Zoster (chickenpox and shingles)
- Rotavirus
- Yellow Fever
- Typhoid
- They should NOT receive the oral polio vaccine.

As for flu vaccines, only the nasal formula (FluMist) is a live vaccine - the injection/shot formula is not. The guidelines state that "if the immunocompromised patient is 6 months or older, household members may receive the inactivated flu vaccine (the shot), or – if they are healthy, not pregnant and 2-49 years old – they can receive the nasal vaccine (live vaccine). However, they add that exceptions include those who live with a patient who has had a stem cell transplant in the last 2 months, has graft versus host disease, or severe combined immunodeficiency. Live flu vaccine should not be given to the household members of these patients, and if it is, they should avoid contact with the immunocompromised person for 7 days.

A few additional things included in the guidelines: highly immunocompromised patients (those receiving cancer therapy or transplant) should not handle the diapers of infants who received rotavirus vaccine for 4 weeks after the vaccination. In addition, they should avoid contact with people who develop skin lesions after receiving varicella or zoster vaccines until the lesions resolve.

That’s a lot to consider, so it is always best to be sure the people in your household inform their providers that they live with someone undergoing cancer treatment, and when you consider receiving a vaccine, you discuss it with your oncology providers first.
For more information on the flu vaccine, read our blog about Flu vaccines for people with cancer.

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vaccine, vaccination, live virus, flu

No