Smallpox Vaccine and Monkeypox

HOW EFFECTIVE IS THE SMALLPOX VACCINE IN PREVENTING MONKEYPOX?

Past data from Africa suggests that the smallpox vaccine is at least 85% effective in preventing monkeypox.

WHY HAVE SMALLPOX VACCINATION RECOMMENDATIONS CHANGED?

When there is no “pox” outbreak, the smallpox vaccine is only available to certain people. This includes health-care workers and members of first response teams. It is not available to the general public.

But, when there is an outbreak, decisions about who should get the vaccine change. This is because the disease poses an immediate risk to people. Given the outbreak of monkeypox now, the risk from the disease for people who are exposed (or could be exposed) to the monkeypox virus is believed to be greater than the risk posed by the smallpox vaccine. For that reason, the Centers for Disease Control and Prevention (CDC) advises that certain people get the smallpox vaccine to prevent monkeypox.

WHO SHOULD GET THE SMALLPOX VACCINE TO PREVENT MONKEYPOX?

CDC is advising that people investigating monkeypox outbreaks and involved in caring for infected people or animals should get a smallpox vaccine to protect against monkeypox. People who have had close or intimate contact with individuals or animals that have monkeypox also should get the vaccine. These people can get the vaccine up to 14 days after they have been exposed to monkeypox.

ARE THERE SOME PEOPLE WHO SHOULD NOT GET SMALLPOX VACCINE EVEN IF THEY HAVE BEEN EXPOSED TO MONKEYPOX?

Yes. People with weakened immune systems due to treatments or certain health conditions (e.g. cancer treatment, organ transplant, HIV, and Primary Immune Deficiency disorders) should NOT get the smallpox vaccine, even if they have been exposed to monkeypox. People who have had life-threatening allergies to latex or to smallpox vaccine or any of its components (polymyxin B, streptomycin, chlortetracycline, neomycin) should also NOT get the smallpox vaccine, even if they have been exposed to monkeypox. For these people, the risk from the smallpox vaccine may be more than the risk posed by monkeypox disease. People who are not sure about their immune status or if they are allergic to the vaccine, should ask a health-care provider whether it is OK to get the vaccine.

The other health conditions that normally mean people should not get the smallpox vaccine (age, pregnancy, skin conditions, etc.) no longer apply in the context of monkeypox exposure. Visit the CDC monkeypox website for more information on the smallpox vaccine.

IS IT TOO LATE TO GET THE VACCINE AFTER YOU'VE BEEN EXPOSED TO THE MONKEYPOX VIRUS?

No, it is not too late. But, the quicker an exposed person gets the vaccine, the better. CDC recommends that the vaccine be given within 4 days from the date of exposure in order to prevent *onset* (start) of the disease. If given between 4 to 14 days after the date of exposure, vaccination may reduce the symptoms of the disease. But it may not prevent the disease.

WHO DECIDED TO OFFER SMALLPOX VACCINATION TO PEOPLE EXPOSED TO MONKEYPOX?

CDC recommendations on smallpox vaccination for people exposed to monkeypox were developed in consultation with members of the Advisory Committee on Immunization Practices (ACIP) and other experts. They will continue to be reviewed and updated by both of these groups.

WHAT ARE THE RISKS OF SMALLPOX VACCINE COMPARED TO THE RISKS OF MONKEYPOX DISEASE?

For most persons who have been exposed to monkeypox, the risks from monkeypox disease are greater than the

risks from the smallpox vaccine. Monkeypox is a serious disease. It causes:

- Fever.
- Headache.
- Muscle aches.
- Backache.
- Swollen lymph nodes.
- General feeling of discomfort.
- Exhaustion.
- Severe rash.

Studies of monkeypox have been done in West Africa, where people live in remote areas and are medically underserved. Results showed that the disease killed 1% to 10% of people infected. In contrast, most people who get the smallpox vaccine have had only minor reactions. They include mild fever, tiredness, swollen glands, and redness and itching at the place where the vaccine is given. But the smallpox vaccine does has serious risks, too. It is estimated that between 1 and 2 people out of every 1 million people vaccinated will die as a result of life-threatening reactions to the vaccine.

I HAVE HAD THE SMALLPOX VACCINE, SHOULD I GET IT AGAIN?

If you have been exposed to the monkeypox virus and have not received the smallpox vaccine within the last 3 years, you should get the smallpox vaccine. The sooner you get the vaccine, the better it will be in protecting you against the monkeypox virus.

FOR FURTHER INFORMATION

On the internet:
www.cdc.gov/ncidod/monkeypox/

Most information courtesy of the CDC.

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