

Monkeypox Vaccine

Public Health – Factsheet

Immunization is one of the most important accomplishments in public health. Over the past 50 years, immunization has led to the elimination, containment and control of diseases that were once very common in Canada.¹ Vaccines help our immune system recognize and fight bacteria and viruses that cause diseases.

What is monkeypox?

Monkeypox is a viral illness most commonly found in parts of Central and West Africa. Monkeypox virus is related to the smallpox virus, but typically causes less serious disease. The virus is usually spread to humans by touching or being bitten by an infected animal such as rodents or non-human primates. Outside of Africa, cases have usually been linked to international travel or imported animals from these regions.

In May 2022, human cases of monkeypox were identified in several countries where it is not typically found, including Canada. Investigations are ongoing, but many of the global cases identified to date have reported close or intimate contact with other cases. Although this virus is not typically considered a sexually transmitted infection, close intimate contact during sex with someone who has monkeypox is a risk factor for infection.

What are the symptoms?

Symptoms are typically flu-like, and can include fever, headache, muscle aches, backache, chills, exhaustion and swollen lymph nodes. Several days after these symptoms appear, a rash may appear anywhere on the body, but is typically found on the face, palms of the hands and soles of the feet. The rash may also start on the area of contact (e.g. genital area) without further spread on the body.

How does it spread?

In countries where monkeypox is commonly found, the virus is believed to mainly spread to humans through direct contact with an infected animal (i.e. via a bite or scratch, or through bush meat preparation). Monkeypox does not generally spread easily between people. Human-to-human transmission can occur with:

- prolonged face to face contact via respiratory droplets
- direct contact with monkeypox lesions or bodily fluids
- indirect contact with contaminated surfaces and materials, such as bedding and clothes

A person is infectious for five days prior to the onset of the rash and until all the skin lesions have resolved.

Monkeypox is usually a mild illness and most people recover on their own within two to four weeks.

What is the monkeypox vaccine?

Imvamune[®] is the name of the vaccine used to protect against the monkeypox virus. Although Imvamune[®] is called the smallpox or monkeypox vaccine, it does not contain the smallpox or monkeypox viruses. It contains a weakened form of the vaccinia virus. Because this virus is closely related to the smallpox and monkeypox virus, the vaccine can protect against both infections.

Health Canada has approved the Imvamune[®] vaccine for use in adults aged 18 years and older who are assessed as being at high-risk for exposure to monkeypox.

The monkeypox vaccine can be used in two different ways to try to prevent infection:

- before getting exposed to the virus in someone at high risk of exposure (Pre-Exposure Prophylaxis – PrEP); or
- after being exposed to the virus, but before infection occurs (Post-Exposure Prophylaxis – PEP).

Infection could still occur even after vaccination, but if infection does occur, the infection is likely to be less severe compared to an unvaccinated person.

For more information about eligibility criteria, please visit <https://www.gov.mb.ca/health/publichealth/diseases/monkeypox.html>.

How is the vaccine administered?

Imvamune[®] is administered by a needle in the upper arm. It is usually given as a series of two needles (i.e., two doses), given 28 days apart. Some people may only need one dose of the monkeypox vaccine (e.g. people who have previously had a smallpox vaccine, or people without ongoing risk of exposure to monkeypox). Your health care provider will determine if you need one or two doses of the vaccine.

Who should get the monkeypox vaccine?

In Manitoba, the populations at greater risk of being exposed to monkeypox are eligible to receive pre-exposure prophylaxis. Public health officials will also follow-up with individuals who may have been exposed to the monkeypox virus and may recommend that they receive the monkeypox vaccine.

¹ The Public Health Agency of Canada

Monkeypox Vaccine

Vaccination used for pre- or post-exposure to the monkeypox virus may help prevent the disease or make it less severe. For post-exposure prophylaxis, the sooner the vaccine is given after exposure, the more effective it is at protecting against the virus. It can be given up to 14 days after exposure.

Who should NOT get the monkeypox vaccine?

You should not get the vaccine if you have had a major reaction to a previous dose of the monkeypox vaccine, including a severe allergic reaction or myopericarditis (inflammation of the heart muscle and lining of the heart). If you are allergic to any of the contents of the vaccine, please speak with your health care provider.

For information about any of the vaccine ingredients, please review the vaccine manufacturer's product monograph at https://pdf.hres.ca/dpd_pm/00063755.PDF or speak with your health care provider.

Someone with a high fever should not be immunized. In discussion with your health care provider, the vaccine can still be given if the illness is mild, like a common cold.

Your health care provider will advise you on when it's the best time to get the monkeypox vaccine. Generally, the monkeypox vaccine should not be given at the same time as other (live or inactivated) vaccines, and you should wait two to four weeks before receiving or getting another vaccine.

Information for specific populations

Speak with your health care provider about the risks and benefits of vaccination, if you:

- are younger than 18 years of age
- are pregnant, planning to become pregnant or breastfeeding
- have a weakened immune system caused by disease or medical treatment (e.g., cancer)

There is limited information on the use of Imvamune® among these individuals. Except for those who are breastfeeding, these individuals also have a higher risk of severe illness if infected with monkeypox. Your health care provider knows your health history best and can provide you with information to help guide your decision to get the monkeypox vaccine or not.

Possible side effects of the monkeypox vaccine

The following side effects are very common, are generally mild or moderate, and go away about a week after vaccination:

- pain, redness and swelling at the injection site
- feeling tired
- headache
- nausea
- muscle pain

Individuals with atopic dermatitis or eczema are more likely to experience these very common side effects after vaccination. Vaccination may also make the symptoms of atopic dermatitis temporarily worse. Talk to your health care provider about the individual risks and benefits of vaccination if you have atopic dermatitis.

For a full list of possible side effects, review the vaccine manufacturer's product monograph at: https://pdf.hres.ca/dpd_pm/00063755.PDF or speak with your health care provider.

Although no confirmed cases of myopericarditis have been associated with Imvamune®, previous smallpox vaccines have been associated with myopericarditis. The signs and symptoms can include shortness of breath, chest pain, or the feeling of a rapid or abnormal heart rhythm. **If you experience any of these symptoms, go to the nearest emergency department or health centre.**

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is a rare possibility of a severe allergic reaction. This can include hives, difficulty in breathing or swelling of the throat, tongue or lips. **Call 911 or go to the nearest emergency department for immediate attention should any reaction occur after leaving the clinic.**

Report any serious or unexpected adverse reactions to a health care provider, or call Health Links – Info Santé at 204-788-8200 or 1-888-315-9257 (toll free in Manitoba)

Your record of protection

Make sure your immunization provider updates your immunization record card or that of your child(ren), after you receive an immunization. Keep the card in a safe place! All immunizations administered are recorded on an individual's immunization record in Manitoba's immunization registry. This registry:

- allows the health care provider to find out which immunizations you or your child(ren) have had or need to have
- may be used to produce immunization records, or notify you or your health care provider if a particular immunization has been missed

Monkeypox Vaccine

- allows Manitoba Health and public health officials to monitor how well vaccines work in preventing disease

The Personal Health Information Act protects your information and/or that of your child(ren). You can have your personal health information and/or that of your child(ren) hidden from view from health care providers. For additional information, please contact your local public health office or speak with a health care provider.

If you need information on the immunizations that you or your child(ren) have received, contact your health care provider. Contact your local public health office for a copy of your or your child(ren)'s immunization records.

For a listing of public health offices please visit:
www.manitoba.ca/health/publichealth/offices.html.

For more information

For more information about monkeypox or the monkeypox vaccine, talk to your health care provider.

You can also contact Health Links – Info Santé in Winnipeg at 204-788-8200 or 1-888-315-9257 (toll free in Manitoba). Or visit:

Manitoba Government:

www.manitoba.ca/health/publichealth/diseases/monkeypox.html

The Public Health Agency of Canada:

www.canada.ca/en/public-health/services/diseases/monkeypox.html

Centers for Disease Control and Prevention:

www.cdc.gov/poxvirus/monkeypox/index.html

The World Health Organization:

www.who.int/news-room/fact-sheets/detail/monkeypox