

IMVAMUNE® Smallpox and Mpox Vaccine

Vaccines have saved more lives than any other medical intervention. Vaccines help your immune system to recognize and fight bacteria and viruses that cause diseases.

What is mpox?

- Mpox is a rare viral illness that causes fever, headache, swollen lymph nodes and lethargy, followed by the development of a rash over a person's body.
- Mpox is spread through direct contact with mpox lesions or fluids from lesions of infected animals or people, through respiratory droplets from an infected person, from a pregnant woman to her baby, or indirect contact with items (e.g. bedding, towels).
- Mpox virus is not considered a sexually transmitted infection (STI) but can spread through close contact during sexual activity.
- The virus may be spread to others even if the exposed person is not showing any symptoms.

What are the symptoms of mpox?

- The time between becoming infected and developing symptoms is 6 to 13 days (range is 5 to 21 days).
- Symptoms last from 2 to 4 weeks, and the disease usually resolves on its own without treatment.
- Initial symptoms may include fever, chills, muscle soreness, fatigue, headache, backache, swollen lymph nodes, sore throat, cough, vomiting or diarrhea.
- Sores may develop on or by the mouth or eyes.
- Within a few days after these symptoms, a rash characterized by a flat, red area on the skin that is covered with small bumps starts on the face, legs or arms, and can spread to other parts of the body including the palms of the hands, soles of the feet and genitals.
- Within 1 to 2 weeks, the rash becomes raised blisters that crust and scab over in 2 to 3 weeks and can be extremely itchy. Lesions are considered infectious until the scabs fall off and new skin can be seen.
- Complications from mpox may include inflammation of the brain, blood poisoning, bacterial skin infections from scratching, dehydration, eye inflammation including the cornea, pneumonia and death.

How can mpox be prevented?

- Imvamune® protects against infection from the virus that causes mpox. The vaccine can prevent illness or make the illness less severe in those exposed to the virus.
- Avoid any close face-to-face contact with a person with mpox.

- Avoid touching the sores and lesions of a person with mpox.
- Avoid sharing or touching the bed linens, towels, and clothing of a mpox case.
- Avoid sharing items such as toothbrushes, razors and hairbrushes/combs with a person with mpox.
- Practice good hygiene (e.g. handwashing).

Who can get this vaccine for free?

- Those who are identified as a close contact to a probable or confirmed case of mpox, ideally within 4 days and up to 14 days from last exposure.
- Personnel who work in research laboratory settings and who are at high risk of occupational exposure to replicating orthopoxviruses.
- Men who have sex with men (MSM) who meet one or more of the following criteria:
 - » Have more than one partner.
 - » Are in a relationship where at least one of the partners has other sexual partners.
 - » Have had a confirmed sexually transmitted infection in the last year.
 - » Have engaged in sexual contact in sex-on-premises venues.
- Sexual partners of individuals who meet criteria above.
- Individuals who identify as sex workers regardless of gender, sex assigned at birth, or sexual orientation.
- Staff or volunteers in sex-on-premises venues where workers may have contact with objects potentially contaminated with mpox.
- Travellers who engage in risky sexual behaviours regardless of gender, sex assigned at birth, or sexual orientation.
- Individuals who anticipate experiencing any of the above scenarios.
- Travellers who are high-risk individuals as above.
- **Travelers to an area with ongoing community transmission of mpox virus clade I** (as per Public Health Agency of Canada's travel health notice, [Mpox: Advice for travellers](#)) who anticipate prolonged close contact or sexual contact with people that area.

- **Travellers who are Canadian healthcare professionals** in advance of deployment to support the mpox clade I outbreak in countries where there is a Government of Canada [level 2 travel health notice for mpox](#).
- Immunization may be considered on an individual basis [for non-international travelling] healthcare workers based on a high risk of frequent exposure.
- Imvamune® may be offered to people who are immunocompromised, pregnant or breastfeeding, or under 18 years if they are considered high-risk or following a known exposure to the virus.

Who should not get this vaccine?

- Those with a history of mpox infection do not need to be vaccinated.
- Persons who have a serious illness, with or without a fever, should delay immunization.
- Persons who have had a life-threatening reaction to a previous dose of a smallpox vaccine, or any components of the vaccine.
- Egg-allergic individuals may be immunized except if there is a known previous anaphylactic reaction to egg. Egg-allergic vaccine recipients should be kept under observation for 30 minutes following the administration of this vaccine.
- Talk to your healthcare provider if you:
 - » Have a weakened immune system.
 - » Have atopic dermatitis.
 - » Are pregnant or breastfeeding.

How is this vaccine given?

- The vaccine is given as an injection in the upper arm (subcutaneously) or under the skin of the arm (intradermally).

What are common reactions to this vaccine?

- **Vaccines are very safe. It is much safer to get this vaccine than to get mpox.**
- The vaccine is made using weakened live vaccinia virus and cannot cause smallpox, mpox, or any other disease.
- Temporary pain, redness, swelling, warmth, hardness and itching at the injection site. Injection site reaction may be more common and last longer when the vaccine is administered under the skin (intradermally).
- Fatigue, headache, muscle and joint aches, headache, nausea, decreased appetite, fever or pain in the arm.
- These reactions may last for a few days.
- Persons who have atopic dermatitis may have more intense reactions or have a flare up after getting this vaccine.
- If you have signs and symptoms of a cardiac disorder (e.g. chest pain or discomfort, difficulty breathing or palpitations), seek medical attention immediately.

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips. **If this happens after you leave the clinic, call 911 or the local emergency number.** This reaction can be treated and occurs in less than one in one million people who get the vaccine.

Use **Acetaminophen** (Tylenol®, Tempra®) or **Ibuprofen** (Advil®, Motrin®) to treat fevers and pain in children and adults. **Never give ASA (Aspirin®)** to anyone younger than 18 years old because of the serious risk of Reye’s syndrome.

For more information, contact your local public health office, your physician, nurse practitioner, HealthLine online or by calling 811.

Who should you report reactions to?

- Report any adverse or unexpected reactions to your local public health nurse, your doctor, or nurse practitioner as soon as possible.

Talk to a public health nurse:

- If you have questions or concerns about your reaction to an immunization.
- If you had to go to a doctor, a hospital or to a health centre with a symptom that might be related to immunization.

What does this vaccine contain?

IMVAMUNE® is an attenuated live non-replicating viral vaccine that contains Tris buffer (Tris-hydroxymethyl-amino methane, sodium chloride, water for injection and hydrochloric acid), Trometamol (Tris-hydroxymethyl-amino methane), sodium chloride, water for injection. The vaccine contains trace amounts of host cell DNA and protein, benzonase, gentamicin and ciprofloxacin. Contains no preservatives or adjuvants.

Provincial immunization fact sheets are available at saskatchewan.ca/immunize.

References: Product monograph (IMVAMUNE® 2023).

