

Mpox vaccines in solid organ transplant recipients

November 4, 2024

Introduction

The World Health Organization (WHO) announced in Aug 2024 that the increase in mpox in the Democratic Republic of Congo and a growing number of African countries is now a public health emergency of international concern. Mpox cases in British Columbia reflect similar trends across Canada, which have seen a decrease since 2022, but a slight rise in 2024 compared to 2023.

What is mpox?

Mpox is a disease caused by the Monkeypox virus. Some people get initial flu-like symptoms, but everyone gets a rash (sores/blisters) that lasts 2 to 4 weeks. These sores can be everywhere or only on some parts of the body.

How is it spread?

Mpox is commonly spread by direct contact with sores or sharing objects (such as towels or bedding) that are contaminated with fluid from the sores. It can also spread from prolonged close face-to-face contact, such as kissing. Currently, most cases are spread through close intimate contact such as sex.

Who should get vaccinated?

Immunocompromised individuals are at a higher risk of severe disease with mpox and should be offered immunization based on the high-risk criteria below:

Vaccination before exposure

Two-Spirit and transgender people and cisgender males who self-identify as belonging to the gay, bisexual and other men who have sex with men community; and at least one of the following:

- Has sex with more than one partner
- Has sex with a partner who has more than one partner
- Has casual sex (e.g., cruising)
- Engages in sex work as a worker or client

Vaccination after exposure

- Individuals who have had high-risk exposure to the virus, and
 - do not have symptoms of mpox **AND**
 - with the approval of Public Health
- Ideally this is offered within 4 days of exposure but can be given up to 14 days after exposure

What is the mpox vaccine?

IMVAMUNE® is authorized for use in Canada for immunization against mpox in adults 18 years of age and older. It is a live vaccine but has been modified so it cannot replicate in humans and is therefore safe in transplant recipients.

Immunocompromised individuals who meet criteria are offered 2 doses at least 28 days apart, regardless of previous smallpox vaccine history.

References:

- <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-21-smallpox-vaccine.html>
- <http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/Part4/Monkeypox-Vaccine-Client-Information.pdf>
- <https://immunizebc.ca/vaccines/mpox>
- <https://www.who.int/news/item/14-08-2024-who-director-general-declares-mpox-outbreak-a-public-health-emergency-of-international-concern>