



Protecting you from mpox

Information on the mpox vaccination

What is the mpox (MVA) vaccination?

You are being offered a smallpox vaccination to help protect you against mpox.

The vaccine is manufactured in Europe by Bavarian Nordic.¹ When you are given the vaccine, your immune system (the body's natural defence system) produces antibodies against the mpox virus. The vaccine contains a virus which has been modified so that it cannot grow in the human body. This Modified Vaccinia Ankara (MVA) vaccine was developed as a much safer form of the smallpox vaccine used widely in the UK and abroad into the 1970s. The MVA vaccine does not contain smallpox or mpox virus and cannot spread or cause smallpox or mpox.

[1] The vaccine is called Imvanex in the UK and Europe, Jynneos in the US and Imvamune in Canada. These all contain the same MVA vaccine and are made by the same company.

What is MVA used for?

As mpox is caused by a virus similar to smallpox, vaccines against smallpox are expected to prevent or reduce the severity of the mpox infection.

Imvanex vaccine has been authorised by the UK's Medicines and Healthcare products Regulatory Agency (MHRA) to protect against smallpox.

The Public Health Agency (PHA) and the Joint Committee on Vaccination and Immunisation (JCVI) recommends the use of MVA vaccine as part of the response to cases of mpox.

What is mpox?

Mpox is a serious infectious disease that can present itself in the form of painful skin lesions. These can appear on any part of the body. It is a rare infection most commonly found in central and east Africa. Due to increasing global travel, however, there is a risk of cases locally.

Mpox is usually mild and can get better within a few weeks without treatment. But if your symptoms are more severe and you become unwell, you will need treatment in hospital.



Who is MVA recommended for?

The PHA currently recommends it is offered to:

- ✓ **Healthcare workers who are caring for or are due to start caring for a patient with confirmed mpox**
(2 doses are normally required)
- ✓ **Gay, bisexual and other men who have sex with men.** Your clinician will advise vaccination for you if you have multiple partners, participate in group sex or attend 'sex on premises' venues (one dose now - a second dose may be advised later at your sexual health clinic)
- ✓ **People who have already had close contact with a patient with confirmed mpox.** Vaccination with a single dose of vaccine should be offered as soon as possible (ideally within 4 days but sometimes up to 14 days)
- ✓ **People who are members of a group or attend a setting where there is a case or cluster, or where some of the members have had close contact with a case**

Does the vaccine work?

Two doses of vaccine have been shown to give a high level of protection against mpox. Protection is also very good after the first dose, but a second dose is sometimes advised for long-term protection.

The vaccine may not completely prevent infection but even if you catch mpox, the symptoms should not be as bad. The first dose prepares your immune system so it can respond much more quickly if you come into contact with mpox.

The vaccine also takes time to work. It might start to work after a few days and should reach the highest protection by about 4 weeks.

The second dose can be given after 28 days but can be given much later, even after a few months. A longer time between the first and second doses should improve your long term protection.

Even after 2 doses you should continue to be aware of the risks and symptoms of mpox. If you develop symptoms, stay at home and call your sexual health clinic.

Does the vaccine cause any side effects?

The vaccine has a very good safety profile. Like all vaccines it can cause side effects, but most of these are mild and short-lived and not everyone gets them. Unlike the old smallpox vaccine, vaccination does not leave a scar.

Side effects may be more common in people who have previously received a dose of live smallpox vaccine. These people only need a single dose of MVA to boost their existing protection.

Common side effects include pain and itching at the injection site and headache, muscle ache, sickness and tiredness. About 1 in 10 people will have chills and fever, but these should not last more than a few days.

If you experience any of the side effects listed above, you should rest and you can take the correct dose of paracetamol to help relieve the symptoms.

If you already have atopic dermatitis (a form of eczema), you may experience more intense local skin reactions (such as redness, swelling and itching) and other general symptoms (such as headache, muscle pain, feeling sick or tired), as well as a flare-up or worsening of your skin condition.

Is there anyone who cannot receive MVA vaccine?

The only people who cannot receive the vaccine are those who suffered a sudden life-threatening allergic reaction to a previous dose of the vaccine, or any ingredient of vaccine before. The vaccine contains trace amounts of chicken protein, benzonase and gentamicin and ciprofloxacin (antibiotics).

Who may be better to delay vaccination?

If you are ill with a high temperature you may need to be assessed to determine if you are displaying early signs of mpox. If your illness is not related to mpox, you may still be offered the vaccine. The presence of a minor infection, such as a cold, should not require postponement of the vaccination, but talk to your doctor or nurse first.

Who else needs to take special care?

You should tell the doctor or nurse if you have received smallpox vaccination in the past or if you have atopic dermatitis, as the risk of side effects from the MVA vaccine may be higher.

If you are HIV positive or have any other condition or treatment leading to a weakened immune system, the vaccine may not protect you as well. Let your doctor or nurse know.

What if I am pregnant?

If you are pregnant, or think you may be pregnant or are planning to have a baby, talk to your doctor. The virus in the vaccine does not grow and multiply in the human body and so cannot spread to an unborn child.

Mpox may be more severe in pregnancy and you also need to consider the risk of passing infection to your baby. The doctor should help you to understand the benefits and how this balances against any theoretical risk from the vaccine.

I am breastfeeding, should I still have the vaccine?

It is not known whether the vaccine is excreted in human milk, but this is unlikely as the vaccine virus does not replicate effectively in humans. If you are breastfeeding and have a significant exposure to mpox, you should therefore be offered vaccination, after discussion with your doctor about the risks of mpox to both yourself and your baby.

What about the other medicines I am taking?

Tell your doctor or nurse if you are taking or have recently taken any other medicines or if you have recently received any other vaccine. In most cases, you should be fine to have the vaccine.

The vaccine can be safely given to people who are living with HIV infection, those who are taking PreP and at the same time as other important vaccines including those against HPV and hepatitis.

How is MVA given?

There are two methods used to give the MVA injection, preferably into the upper arm. One method injects below the skin or into the muscle (similar to most other vaccines), the other one injects into the skin, like the BCG vaccine against TB. Both methods are highly effective.

Driving and using machines: There is no reason to believe that the vaccine would affect your ability to drive or use machines. Fainting after vaccination is quite common, so you should wait for 15 minutes after the jab before you drive.

Mpox vaccination record

Record your mpox vaccination date(s) below to ensure that you don't miss out on protection.

If you are advised to have two doses of vaccine, make sure you get both to be protected.

Mpox (MVA-BN) Vaccine dose	Date
Dose 1	
Dose 2 At least 28 days after the first dose	

What do I do now?

Ask your clinic nurse or doctor for more details. The vaccine is available in sexual health clinics.

For more information about mpox and where to find a vaccination site visit: sexualhealthni.info/stis/visiting-a-sexual-health-clinic



Serious side effects

Some other conditions have been more rarely reported in people who received the vaccine. In the spirit of openness, the vaccine product insert mentions all these conditions – even those reported from single cases – but this does not mean that the vaccine was responsible. If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

By reporting side effects you can help provide more information on the safety of this vaccine.



Please report any suspected side effects directly via the Yellow Card Scheme at website:

www.mhra.gov.uk/yellowcard

by downloading the Yellow Card app or by calling the Yellow Card scheme on 0800 731 6789 9am – 5pm



If you have the following symptoms shortly after vaccination, ring 999 (or ask someone to do this for you):

difficult or noisy breathing, wheezing, swollen tongue



prolonged fainting, confusion or unconsciousness



These symptoms may be a sign of a rare but serious allergic reaction and typically happen within 15 minutes of vaccination. Simple faints are much more common after vaccination. If you do faint, stay flat on your back with your legs raised. If this doesn't make you feel better, then call for help.

For other symptoms, contact your GP or out of hours service.

You will get more information on this medicine from the package insert that the doctor or nurse should give you.

The Imvanex insert is available on the European Medicines Agency web site:

www.ema.europa/en/medicines/human/EPAR/Imvanex

The Jynneos insert is available on the Food and Drug

Administration website: www.fda.gov/media/131078/download



Public Health Agency
12-22 Linenhall Street, Belfast BT2 8BS.
Tel: 0300 555 0114 (local rate).
www.publichealth.hscni.net

Find us on:

