1. What is the JYNNEOS mpox vaccine?

JYNNEOS is a 2-dose vaccine that is approved by the Food and Drug Administration (FDA) for the prevention of mpox and smallpox disease in people aged 18 years and over. It also has FDA emergency use authorization (EUA) for people under age 18 years.

- If the JYNNEOS vaccine is given *before* a person is exposed to mpox, it helps to protect them from getting mpox disease.
- If it is given soon *after* they are exposed to mpox (ideally within 4 days), it may help to prevent the disease or make it less severe.

Note: If a person already has symptoms of mpox, it is too late for them to get the vaccine. They should see a doctor for testing and advice about treatment.

The JYNNEOS vaccine is made using a modified vaccinia virus. This is a virus that is related to the mpox and smallpox viruses. The vaccinia virus is weakened so that it cannot cause vaccinia, smallpox, or mpox in the person getting vaccinated or the people around them.

A vaccine called ACAM2000 is approved by the FDA to prevent smallpox but can also be used to prevent mpox. As ACAM2000 is not being used to prevent mpox in the US at this time, this FAQ only refers to the JYNNEOS vaccine.

2. How is the vaccine given?

The JYNNEOS vaccine is given by injection. There are two different methods that are used:

- **Subcutaneous injection**. This means that the vaccine is given in the fatty tissue beneath the skin, most commonly in the upper arm. People who are younger than age 18 years and people of any age who have had keloid scars should only receive the vaccine subcutaneously. A keloid scar is a thick, raised scar that can form after skin damage, such as a cut, piercing, or surgery.
- **Intradermal injection**. This means that the vaccine is given between the layers of skin. This method can be used for most people aged 18 years and older. People getting the vaccine this way may choose one of 3 places to get this injection: on the forearm (inside of the arm between the wrist and the elbow); on the upper back below the shoulder blade; and on the deltoid (shoulder muscle). You can see pictures of people getting the vaccines on the <u>forearm</u>, <u>upper back</u>, or <u>shoulder</u>.

Both types of injections have been found to be safe and effective in preventing mpox. Be sure to tell the vaccine provider your preference.

3. How many doses do I need?

The JYNNEOS vaccine is given as two doses at least 28 days apart. A person will start to build protection in the days and weeks after their first dose but will not have their maximum protection until at least 14 days after the second dose. This is when you are considered fully vaccinated. Currently, there is no booster recommended for mpox.

Because the vaccine is not fully protective against mpox, it is still important to continue to take other steps to reduce your risk even after you are fully vaccinated.



4. I received both doses of JYNNEOS vaccine. Should I receive a booster?

There have been more than 30,000 mpox cases reported during 2022-23 outbreak in the United States, including over 10,000 cases diagnosed among persons living with HIV. Although there have been reports of cases in fully vaccinated people, there have not been confirmed reports of severe mpox illness after full vaccination. There is currently no convincing data to indicate patients with moderate-severe immunocompromise would benefit from an additional dose of JYNNEOS. We will continue to follow the data closely, but at this time, the CDC does **not** recommend a third JYNNEOS dose for anyone, including persons with advanced HIV or other severe immunocompromise.

5. How well does the vaccine work?

JYNNEOS is effective at reducing the risk of mpox disease, with 2 doses providing the best protection, regardless of how the vaccine was administered. Published data suggests that vaccine effectiveness against mpox disease ranges from 36-75% for 1 dose, and 66-89% after 2 doses. Additionally, one study showed that vaccinated individuals tend to have less severe symptoms such as fever, headache, and chills, and are less likely to require hospitalization.

Vaccination may prevent someone who has been exposed to mpox from getting the disease if it is given within 4 days of the exposure. If the person is vaccinated between 4 and 14 days after the exposure, the vaccine is less likely to prevent infection, but if the person does get mpox, their symptoms may be milder.

The vaccine is not known to work if it is given once a person already has symptoms of mpox.

Because the vaccine is not 100% effective, it is important to continue to take other steps to reduce your risk even after you are fully vaccinated.

6. Who should get vaccinated?

Public Health recommends vaccination for people who have been exposed to mpox, and for people who may be at risk for, or seek additional protection from mpox. Anyone who requests vaccination can receive it without having to disclose information on personal risk.

The following groups remain at elevated risk and are encouraged to get vaccinated:

- Any man or transgender person who has sex with men or other transgender people
- People of any gender or sexual orientation who engage in commercial and/or transactional sex (e.g., sex in exchange for money, shelter, food, or other goods or needs) or have sex in association with a large public event
- People living with HIV, especially persons with uncontrolled or advanced HIV disease
- People who had skin-to-skin or intimate contact with someone with suspected or confirmed mpox, including those who have not yet been confirmed by Public Health
- Sexual partners of people in any of the above groups
- People who anticipate being in any of the above groups
- People with certain jobs including:
 - People who work with orthopoxviruses or tests for orthopoxviruses in research or clinical laboratories



 Health care workers who care for people with confirmed or suspected mpox. This includes clinicians and environmental services personnel. See FAQ below I'm a healthcare worker. Should I get vaccinated?

For the latest information on who should get vaccinated, see ph.lacounty.gov/mpox/vaccine.htm.

7. What are the side effects of JYNNEOS?

Side effects at the site of injection are common with both subcutaneous and intradermal JYNNEOS vaccination. These include redness, swelling, soreness, firmness, and/or itching. These symptoms are more common with intradermal injections. For some people, the itching and swelling can last days to several weeks. Other side effects can include muscle pain, headaches, nausea, chills, or feeling tired. There is a small chance of fever.

As with any medicine, there is a very small chance of a vaccine causing a severe allergic reaction. If you have signs of a severe allergic reaction (such as hives, swelling of the face or throat, difficulty breathing, a fast heartbeat, or dizziness), call **911 immediately** or go to the nearest hospital. For other concerns, contact a healthcare provider.

8. Can I get the vaccine at the same time as other vaccines?

Yes. The JYNNEOS vaccine may be given before, after, or at the same time as other vaccines. This includes flu, COVID-19, meningococcal, and HPV vaccines.

If you are a 12–39 year old male, you might consider waiting 4 weeks after you get a JYNNEOS vaccine before getting a COVID-19 vaccine. This is because there may be a small increase in the risk of myocarditis (inflammation of the heart muscle) if you get the vaccines close together. But, if you are at high risk for getting mpox or had a recent exposure, you should get your JYNNEOS vaccine even if you recently got a dose of COVID-19 vaccine.

9. I'm a healthcare worker. Should I get vaccinated?

The risk of mpox transmission is very low for healthcare workers (HCW) if they follow appropriate infection control practices. This includes wearing personal protective equipment (PPE) and using safe specimen collection methods. HCWs should consider being vaccinated if they have been exposed to mpox, believe they may be at risk for exposure, are likely in contact with laboratory specimen from patients with mpox, or seek additional protection from mpox infection.

Postexposure prophylaxis (PEP) may be recommended for healthcare workers after certain occupational exposures. See CDC <u>high and intermediate risk exposure chart</u>.

10. If I have symptoms of mpox, should I get vaccinated?

No. If you have <u>symptoms of mpox</u> you should not get a mpox vaccine. Talk to a doctor about your symptoms as soon as possible. If you do not have a doctor or health insurance, you can visit a Public Health <u>sexual health clinic</u>. For more information, call the Public Health Call Center at 1-833-540-0473 (7 days a week 8:00am – 8:30pm).



11. I already had mpox, should I get vaccinated?

No. Based on currently available information, if you have had mpox in this outbreak, you are protected from getting it again at this time. You have "natural immunity". Vaccination is not recommended at this time. However, if you are immunocompromised, you should speak to your physician about whether you should get vaccinated.

12. If I get mpox after getting the first dose of vaccine, should I get the second dose?

No. If you have had mpox in this outbreak, based on currently available information, you are protected from getting it again at this time. This means you don't need to get a second dose. If you are immunocompromised (you have a weak immune system), talk to your doctor about whether you should get a second dose.

13. If I had a smallpox vaccine years ago, should I still get a mpox vaccine?

Yes. People who were vaccinated for smallpox before this outbreak should still get the mpox vaccine. This is because protection from the smallpox vaccine may lessen over time.

14. Can I get the vaccine if I have a weakened immune system and/or HIV?

Yes. It is important to get vaccinated as people with weak immune systems, such as people with advanced or uncontrolled HIV, are at higher risk of becoming seriously ill if they get mpox. JYNNEOS has been studied in people with HIV, and no severe adverse reactions were seen.

It is important to note that if you have a weakened immune system, you may be less likely to build a strong immune response after vaccination. This means that it is especially important to take other steps to keep from getting mpox. See additional recommendations for prevention here.

15. Can I get the vaccine if I have eczema?

Yes, JYNNEOS has been studied in people with atopic dermatitis (eczema), and no severe adverse reactions were seen. People with these conditions may have more severe disease if they do develop mpox.

16. Should I get the vaccine if I am pregnant or might be pregnant?

If you are pregnant and have been exposed to mpox, it is strongly recommended that you consider getting vaccinated. This is because mpox virus can be transmitted to the fetus during pregnancy or to the newborn by close contact during and after birth. Preterm delivery, miscarriage, stillbirth, and mpox infection in the baby have all been reported after people got mpox when they were pregnant. It is not known how often this happens or might happen during this current outbreak. Data on the risks of JYNNEOS vaccination during pregnancy are limited. If you have questions about vaccination, talk to your healthcare provider. The sooner you are vaccinated after you are exposed, the better the vaccine is likely to work.



17. Can I get the vaccine if I am breast or chestfeeding?

If you are exposed to mpox and are breast/chestfeeding, you should be vaccinated. Data are not yet available on the effects of JYNNEOS in breastfed infants or on milk production. It is also unknown whether JYNNEOS is passed through human breast milk. But because the vaccine does not contain a virus that replicates, getting vaccinated cannot give mpox to your baby.

18. My first dose was subcutaneous (beneath the skin). How will my second dose be given?

If you are aged 18 years or older, the second dose is usually given intradermally (between the layers of skin) to complete the two-dose series (see *How is the vaccine given?* above). However, if you have a concern for keloid scarring or if you strongly prefer to receive the second dose through the subcutaneous route, then the second dose can be given subcutaneously.

19. Can I get my second dose subcutaneously (beneath the skin) if I turn 18 after getting my first dose?

Yes. Once you turn 18, the vaccine is usually given intradermally (between the layers of the skin). But if you have a concern for keloid scarring or if you prefer the subcutaneous route instead, you can get the vaccine subcutaneously. Be sure to tell the vaccine provider your preference.

20. Do I need to get consent from my parents to get vaccine?

At Public Health sites, if you are between the ages of 12 to 17 years, you can consent to receive the vaccine by signing this <u>form</u>. At these sites, if you are under the age of 12 years, you must be accompanied by a parent, legal guardian, or a responsible adult. You must also have this <u>consent form</u> signed by your parent or legal guardian.

21. Where can I get more information?

- Los Angeles County Department of Public Health (LAC DPH) Mpox webpage <u>ph.lacounty.gov/Mpox Vaccine page</u>
- Food and Drug Administration (FDA) <u>Fact sheet for recipients and caregivers</u> (for intradermal vaccination and people under age 18)
- Centers for Disease Control (CDC) <u>JYNNEOS Vaccine What you need to know</u> Vaccine Information Statement (for subcutaneous vaccine for people age 18 and over)
- CDC Mpox vaccine webpage
- California Department of Public Health (CDPH) <u>Mpox vaccine webpageMpox</u>

