



Facts about the MPX Vaccine (JYNNEOS)

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PURPOSE OF THIS DOCUMENT

The purpose of this document is to support Alameda County vaccinators in answering frequently asked questions and dispelling myths about the MPX vaccine (JYNNEOS). This document is adapted from information provided by the [California Department of Public Health \(CDPH\)](https://www.cdph.ca/).

IS MPX A NEW VIRUS?

No. The first MPX infection was noted in 1958 in monkey colonies kept for research. The first human case of MPX was in 1970. The last U.S. MPX outbreak was in 2003 and was due to animal-to-human transmission.

IS THE MPX VACCINE NEW?

No. JYNNEOS, which is the vaccine being used during this current MPX outbreak in the U.S., was approved for use by the FDA in 2019 to prevent smallpox and monkeypox (MPX) infection.

CAN THE MPX VACCINE CAUSE MONKEYPOX (MPX) OR SMALLPOX?

No. The JYNNEOS vaccine is approved for the *prevention* of monkeypox (MPX) and smallpox. The vaccine is made with the vaccinia virus that has been weakened in the laboratory, so it does not cause disease. **The vaccine cannot cause monkeypox, smallpox or vaccinia in people who get vaccinated or those around them.**

HOW IS THE MPX VACCINE GIVEN (ADMINISTERED)?

The JYNNEOS vaccine is given through a shot (i.e., injection), which can be given in two ways:

1. The standard way is a **subcutaneous injection**, which is a shot given beneath the skin in the upper arm. This method has been approved for people ages 18 and over, and is also available through Emergency Use Authorization (EUA) for people under 18 years of age.
2. Under new guidelines from the FDA and CDC, the vaccine can also be given through **intradermal injection**, or in the layer underneath the skin for people ages 18 and over. Intradermal injection is typically given in the forearm and requires a smaller amount of vaccine than the subcutaneous injection to create a similar immune response.

Note: The Centers for Disease Control and Prevention (CDC) recommends that eligible people get two JYNNEOS doses, four weeks apart (see [Interim Clinical Considerations for Use of JYNNEOS](#)). The California



Department of Public Health (CDPH) recommends that people who are moderately to severely immunocompromised (e.g., people living with HIV, cancer, taking immune suppressing medications, recent transplant recipients) receive the second dose of the vaccine four (4) weeks after their first dose. Anyone who gets the second dose after four (4) weeks does not need to restart the vaccine series. **WHAT ARE THE SIDE EFFECTS OF THE MPX VACCINE?**

The most common side effects include tiredness, headache, and muscle pain at the injection site. The vaccine can also cause redness, swelling, soreness, and itchiness at the injection site.

HOW MANY DOSES OF THE MPX VACCINE WILL A PERSON NEED?

The JYNNEOS vaccine is a **two-dose vaccine, with at least four weeks between doses**. A person will begin to get immunity in the days and weeks following their first dose but **will not have full immunity from the vaccine until two weeks after the second dose**. It is not known how long the vaccine immune response lasts.

Note: The California Department of Public Health (CDPH) recommends that people who are moderately to severely immunocompromised (e.g., people with cancer, living with HIV, taking immune suppressing medications, recent transplant recipients) receive the second dose of vaccine four (4) weeks after the first dose. Anyone who gets the second dose after four (4) weeks does not need to restart the vaccine series.

HOW WELL DOES THE MPX VACCINE WORK?

The MPX vaccine protects people against MPX when given before an exposure to the MPX virus. The vaccine can also protect people soon after a MPX exposure or make symptoms less severe. The MPX vaccine may provide protection against MPX from *even* one dose.

SHOULD SOMEONE GET VACCINATED IF THEY HAVE MPX SYMPTOMS?

No. The MPX vaccine should not be given once someone has developed a rash or other MPX symptoms. Vaccine is not necessary at this point because a natural MPX immune response will be developed that is likely to be as good or better than the vaccine.

CAN PEOPLE WITH HIV, A WEAKENED IMMUNE SYSTEM, OR SKIN CONDITIONS (ECZEMA) GET VACCINATED?

Yes. JYNNEOS has been studied in people living with HIV and atopic dermatitis (eczema), and no severe adverse reactions were identified. People with these conditions or with a weakened immune system may have more severe disease if infected with MPX. Note that people with a weakened immune system may be less likely to have a strong immune response after vaccination, so it is important for them to continue other prevention measures even after vaccination.



CAN PEOPLE WITH A HEART CONDITION GET VACCINATED?

While studies did not show an increased risk of myocarditis (inflammation of the heart) after MPX vaccination, it is best for people with heart disease to consult their primary care physician before any vaccination.

CAN PEOPLE WHO ARE PREGNANT OR BREASTFEEDING GET VACCINATED?

Yes. People who are pregnant or breastfeeding and had a recent exposure to monkeypox should get vaccinated. There is very little data on JYNNEOS in people who are pregnant or breastfeeding. Studies in animals have shown no harm to a developing fetus. Because the virus in the vaccine cannot cause disease, there is likely no risk to breastfed infants.

SHOULD PEOPLE WHO PREVIOUSLY RECEIVED A SMALLPOX VACCINE GET VACCINATED FOR MPX?

Yes. The protection from the smallpox vaccine may lessen over time. Therefore, people who were vaccinated against smallpox prior to this MPX outbreak should still get vaccinated if they were exposed to MPX or are otherwise eligible for the vaccine.

CAN PEOPLE GET THE MPX VACCINE AT THE SAME TIME AS OTHER VACCINES?

The JYNNEOS vaccine may be given before, after or at the same time as most vaccines. If vaccination is recommended to someone due to a known exposure to MPX, they should get the JYNNEOS vaccine even if they recently received the Pfizer or Moderna COVID vaccine.

WHO CANNOT GET VACCINATED?

People who had a severe allergic reaction to JYNNEOS should not get vaccinated. People who have had a severe allergic reaction to gentamycin or ciprofloxacin, or to chicken or egg protein and who are currently avoiding chicken or egg products, should speak with a healthcare provider before being vaccinated.

WHAT SHOULD A PERSON DO IF THEY HAVE A SERIOUS HEALTH PROBLEM AFTER VACCINATION?

Signs of a severe allergic reaction include hives, swelling of the face and throat, trouble breathing, a fast heartbeat, dizziness, and weakness. Anyone who thinks they are having a severe, life-threatening allergic reaction should call 911 or go to the hospital right away. Anyone who has other, non-life-threatening side effects of concern should contact their healthcare provider or contact us at [510-268-2101](tel:510-268-2101) for linkage to care.