Monkeypox/Smallpox Vaccine (JYNNEOS™)

This sheet is about exposure to the JYNNEOS™ monkeypox/smallpox vaccine in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is mpox (monkeypox)?

Mpox is an illness caused by a virus. The virus belongs to a group of viruses called orthopoxviruses. The virus spreads from person to person through body fluids. The virus can also pass from a person who is pregnant to their developing baby. For more information about mpox, please see the MotherToBaby fact sheet at https://mothertobaby.org/fact-sheets/monkeypox/.

What is the JYNNEOS™ monkeypox/smallpox vaccine?

The JYNNEOS™ vaccine (also known as Imvamune® or Imvanex®) helps protect against mpox, smallpox, and other diseases caused by orthopoxviruses. JYNNEOS™ does not contain live virus that could cause mpox or smallpox. Instead, it contains a weakened form of a related virus, which cannot make copies of itself (replicate) in the body to cause illness. Getting JYNNEOS™ helps the body’s immune system learn how to protect itself (make antibodies) against orthopoxviruses in general.

JYNNEOS™ can be given before or after exposure to an orthopoxvirus to help prevent illness or reduce symptoms. Most people require 2 doses (shots) given 4 weeks apart. According to the Centers for Disease Control and Prevention (CDC), JYNNEOS™ can be given at the same time as other vaccines. When there is a chance of being exposed to the virus that causes mpox or another orthopoxvirus, it is important to continue taking other steps to avoid exposure even after being vaccinated. CDC has prevention information here: https://www.cdc.gov/poxvirus/monkeypox/prevention.html

ACAM2000® is another type of monkeypox/smallpox vaccine available in the United States. You can read more about ACAM2000® on the MotherToBaby fact sheet at https://mothertobaby.org/fact-sheets/monkeypox-smallpox-vaccine-acam2000/. CDC has information about both of these vaccines and how they are used here: https://www.cdc.gov/poxvirus/monkeypox/considerations-for-monkeypox-vaccination.html.

Is the JYNNEOS™ vaccine recommended for people who are pregnant?

At this time, JYNNEOS™ is recommended only for people ages 18 and older who have been exposed or are at high risk of being exposed to the virus that causes mpox. In these cases, the vaccine can be given even if a person is planning pregnancy or is already pregnant. Pregnancy alone is not a reason to avoid getting the vaccine if someone is otherwise recommended to receive it.

Does getting the JYNNEOS™ vaccine make it harder to get pregnant?

Studies have not been done in humans to see if JYNNEOS™ can make it harder to get pregnant. Animal studies in female rats and rabbits did not show any negative effects on fertility.

I just got the JYNNEOS™ the vaccine. How long do I need to wait before I get pregnant?

Since JYNNEOS™ is not able to replicate in the body to cause illness, there is no recommendation to wait before trying to get pregnant. If someone who is recommended to get JYNNEOS™ gets the first dose and then becomes pregnant, there is no recommendation to avoid or postpone the second dose in pregnancy.

Does getting the JYNNEOS™ vaccine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done in humans to see if JYNNEOS™ would increase the chance of miscarriage. Animal studies in rats and rabbits did not report an increased chance of miscarriage.

Does getting the JYNNEOS™ vaccine increase the chance of birth defects?
Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Studies have not been done in humans to see if JYNNEOS™ could increase the chance for birth defects. Animal studies in rats and rabbits did not show an increased chance of birth defects.

Fever is an uncommon but possible side effect of the JYNNEOS™ vaccine. A high fever in the first trimester can increase the chance of certain birth defects. Acetaminophen is usually recommended to reduce fever during pregnancy. For more information about fever and pregnancy, see the MotherToBaby fact sheet about fever/hyperthermia at https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/.

**Does getting the JYNNEOS™ vaccine in pregnancy increase the chance of other pregnancy-related problems?**

Studies have not been done in humans to see if JYNNEOS™ would increase the chance of other pregnancy-related problems, such as preterm delivery (before 37 weeks of pregnancy) or low birth weight (weighing less than 5 pounds, 8 ounces (2500 grams) at birth). Animal studies in rats and rabbits did not report other pregnancy problems.

**Does getting the JYNNEOS™ vaccine in pregnancy affect future behavior or learning for the child?**

Studies have not been done to see if JYNNEOS™ affects future behavior or learning for the child.

**Does getting the JYNNEOS™ vaccine during pregnancy protect the baby from mpox after delivery?**

It is not known if getting the JYNNEOS™ vaccine during pregnancy would protect the baby from mpox after delivery.

**Breastfeeding and the JYNNEOS™ vaccine:**

Studies have not been done to see if the JYNNEOS™ vaccine passes into breast milk. However, because the weakened virus in the vaccine is not able to replicate and spread through the body, it is not expected to enter the breast milk. Breastfeeding alone is not a reason to avoid getting the JYNNEOS™ vaccine for someone who is otherwise recommended to receive it.

It is not known if the antibodies (protection) a person makes after getting a JYNNEOS™ vaccine can pass through the breast milk and protect the baby against mpox. Talk to your healthcare provider about all of your breastfeeding questions.

**If a male gets a JYNNEOS™ vaccine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?**

Studies have not been done in males to see if JYNNEOS™ could affect fertility or increase the chance for birth defects above the background risk. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here to view references.