

Japanese Encephalitis Vaccine

Travel vaccines may be recommended or required for your trip. Vaccines help to prevent illnesses from bacteria and viruses. They reduce disease spread and can prevent complications and deaths from vaccine-preventable diseases.

What is Japanese encephalitis (JE)?

JE is a viral infection of the brain. The World Health Organization estimates >68,000 cases and up to 20,000 deaths occur each year.

JE is a rare but serious travel-associated disease. JE can cause severe poor health outcomes and death.

- Most people infected won't exhibit symptoms, but less than 1 in 100 people infected with the virus will develop swelling of the brain (also called encephalitis).
- Up to 50% of those who develop encephalitis suffer serious long-term brain damage.
- About 20 to 30 people out of 100 people who get sick with JE virus do not survive.

How is the JE virus spread? Am I at risk?

JE virus is spread to humans by the bite of infected mosquitoes. The virus is not spread from person-to-person or by mosquitoes in Canada. Mosquitoes that spread Japanese encephalitis virus typically bite from dusk until dawn.

JE occurs primarily in rural agricultural areas throughout most of Asia and parts of the Western Pacific, including Australia.

For most travellers going to affected areas, the risk of JE is very low. Risk for JE depends on the destination, duration, season of travel, accommodations, and activities. Talk to your health care provider about your risk of Japanese encephalitis virus infection.

What are the symptoms of JE?

Most people don't have symptoms. People with symptoms usually get sick 5 to 15 days after exposure. Initial symptoms include sudden-onset fever, headache, and vomiting (similar to flu-like illness). Confusion, disorientation, behavioural changes, generalized weakness, and movement disorders might develop over the next few days. Paralysis and coma occur in some cases. Some people, especially children, may develop seizures. Children and travellers over 50 years of age are at the most risk of severe illness.

How can JE be prevented?

Avoid mosquito bites.

- use effective insect repellent
- wear light-coloured long-sleeved pants and shirts, treat clothing and gear with 0.5% permethrin
- sleep under a treated mosquito net
- reduce exposure to mosquitoes (mosquitoes bite during the day and night)

Get vaccinated. The JE vaccine available in Canada is very effective, especially in individuals less than 65 years of age. The vaccine helps you build your own protection against the JE virus. It is non-live and cannot cause JE.

- **The vaccine does not replace insect bite precautions.** Vaccinated travellers should still follow measures to avoid insect bites.

Can I get this vaccine for free?

The JE vaccine is sometimes recommended for travellers, but it is not available for free in Saskatchewan. Travellers going to JE virus-affected areas should talk with their health care provider about purchasing JE vaccine. Some private insurance may cover some or all of the cost of the vaccine. **The Saskatchewan Ministry of Health does not reimburse any costs associated with privately purchased vaccines.**

Who should *not* get the JE vaccine?

- People who have had a serious or life-threatening reaction to a previous dose of JE vaccine, or any ingredient in the vaccine.
- Infants < 2 months old
- Individuals who are seriously ill, with or without a fever, should postpone immunization.

What are common reactions to the JE vaccine?

Side effects may include pain, redness, tenderness, and swelling where the needle was given.

Other reactions may include headache, tiredness, muscle pain, nausea, decreased appetite, and fever.

These reactions are mild and may last 1 to 2 days.

You can treat a fever (at least 6 to 8 hours after immunization) if you are uncomfortable and not sleeping.



TREATING FEVERS AND PAIN:

All ages: acetaminophen (e.g., Tylenol®, Tempra®)

6 months & older: ibuprofen (e.g., Advil®, Motrin®)

DO NOT give acetylsalicylic acid (ASA) to anyone younger than 18 years due to the risk of Reye's syndrome.

It is recommended to stay on-site for at least 15 minutes after vaccination in case you develop anaphylaxis. Anaphylaxis is a rare, life-threatening allergic reaction that can be treated. Symptoms may include hives, swelling of the tongue, lips, or throat, and difficulty breathing. Call 911 immediately if you develop anaphylaxis after you have left the vaccination appointment.

Who should I report reactions to?

Report any unexpected or adverse reactions to your doctor, nurse practitioner, pharmacist, or call 811 or 911 as soon as possible.

What does the JE vaccine contain?

IXIARO® contains purified, inactivated Japanese encephalitis virus adsorbed on aluminum hydroxide (hydrated), phosphate buffered saline (sodium chloride, potassium dihydrogen phosphate, disodium hydrogen phosphate, water for injection).

Important to Know

Storage:

IXIARO® must be refrigerated before use. DO NOT FREEZE.

How to take:

IXIARO® is given as a series of 2 injections into a muscle spaced 28 days apart. Adults aged 18-65 can receive the injections 7 days apart if needed due to last-minute travel.

When to take IXIARO®:

The JE vaccine series should be completed at least 1 week prior to travel to areas of risk. This means that the first dose must be received at least 35 days before departure (or 14 days before departure if adult rapid immunization schedule is used).

Booster doses:

People can receive a third dose of vaccine if at continued risk for JE, 12-24 months following the first two doses. A second booster dose is not needed for at least 10 years. Talk to your health care provider for details.

Immunization Records

Immunization records are stored in many different places in Saskatchewan. Your pharmacy vaccination may not appear on [MySaskHealthRecord](#) or other registries. Visit medSask.usask.ca for tips for locating your immunization records.

Keep printed immunization records provided by the pharmacy in a safe place for future reference and bring them to each vaccination visit.

Mature Minor Consent

Minors that are mature and capable of understanding the benefits and risks of vaccination can provide their own consent to receiving a vaccine. Vaccine providers must ensure that vaccine recipients understand the benefits and risks for each vaccine and the risks of not getting vaccinated.

REFERENCES:

Product monograph for [IXIARO®](#)

ixiaro.ca

Canadian Immunization Guide (CIG): [Japanese encephalitis vaccine](#)

CDC Yellow Book [Japanese Encephalitis](#)

CDC [Japanese Encephalitis Virus](#)

IAMAT [Insect Bite Prevention](#)

HealthLinkBC [Japanese encephalitis vaccine](#)

TDN [Japanese Encephalitis](#)

[Tropimed](#) (subscription required)

CIG: [Anaphylaxis and other acute reactions following vaccination](#)

CIG: [Immunization in pregnancy and breastfeeding](#)

SCPP Disclosure of the [Personal Health Information of Minors to Parents/Legal Custodians](#)