

Japanese encephalitis virus (JEV) vaccination

Fact sheet

Japanese encephalitis is a rare but serious disease caused by the Japanese encephalitis virus (JEV).

Eligible people can receive the JEV vaccine.

Protect yourself and your family against Japanese encephalitis virus— if you are eligible, get the free vaccine now.

What is Japanese encephalitis virus?

JEV is a mosquito-borne virus that can be transmitted to humans.

While most people infected do not experience any illness, they can experience mild symptoms such as fever and headache.

A small number of people will have encephalitis (inflammation of the brain). This may begin with symptoms such as tiredness, fever and headache, nausea, vomiting, or diarrhoea. Confusion, unusual behaviour, sleepiness, seizures, weakness, and abnormal movements may develop. Encephalitis can cause permanent damage to the nervous system or death.

People of any age can become infected with JEV.

How is it spread?

JEV is transmitted to humans through bites from mosquitoes carrying JEV.

It cannot be transmitted from person to person and cannot be transmitted by eating meat of infected animals.

Who is at risk?

Anyone can catch JEV, but those who spend time in areas where JEV has been detected are most at risk.

People who live and work along the River Murray have a higher risk of contracting Japanese encephalitis.

Some activities or conditions may put people at higher risk of exposure to JEV, including:

- > People who work directly with mosquitoes, pigs and water birds
- > People who work in wetland areas/areas with a high concentration of mosquitos
- > Undertaking night-time recreational activities such as camping, hunting or fishing
- > Rough sleeping
- > Living or sleeping in accommodation without screens
- > Working or undertaking other activities outside, particularly at night-time.

Who is eligible?

Free JEV vaccination is available for a limited time for the following eligible groups:

- > people who own a property in an eligible Local Government Area (LGA)
- > people who live in an eligible LGA as their primary place of residence
- > people engaging in outdoor River Murray Flood recovery efforts who regularly spend time outdoors placing them at risk of mosquito bites
- > people employed in a role located in an [eligible postcode \(PDF 140KB\)](#) AND spend at least 4 hours per day outdoors most days as part of their occupation.

Eligible LGAs for property owners:

- > Alexandrina Council
- > Berri Barmera
- > Mid Murray Council
- > District Council of Loxton Waikerie
- > Coorong District Council
- > Rural City of Murray Bridge
- > Southern Mallee
- > Renmark Paringa Council
- > Karoonda East Murray District Council
- > Unincorporated areas next to the Murray River within the postcodes 5330, 5341, 5342, 5343, 5344 and 5345

Eligible postcodes for workers

Eligible postcodes for workers	Largest town in area
5214	Goolwa
5238	Mannum
5253	Murray Bridge
5254	Murray Bridge
5256	Milang
5259	Lake Alexandrina
5260	Tailem Bend
5264	Meningie
5311	Alawoona
5320	Morgan
5321	Cadell
5322	Qualco
5330	Waikerie
5331	Kingston-on-Murray
5332	Moorook
5333	Loxton
5340	Paringa
5341	Renmark
5342	Monash
5343	Berri
5344	Glossop
5345	Barmera
5346	Cobdogla
5353*	Cambrai <i>*only including the area east of Ridley Road/Halfway House Road but including the localities of Sedan and Cambrai</i>
5354	Swan Reach
5357	Blanchetown

The JEV vaccines are also free for:

- > people who work at, reside at, or have a planned non-deferable visit to a:
 - piggery, including but not limited to farm workers and their families (including children aged 9 months and older) living at the piggery, transport workers, veterinarians and others involved in the care of pigs
 - pork abattoir or pork rendering plant.
- > personnel who work directly with mosquitoes through their surveillance (field or laboratory based) or control and management, and indirectly through management of vertebrate mosquito-borne disease surveillance systems (e.g. sentinel animals) such as:
 - environmental health officers and workers (urban and remote)
 - entomologists
- > all diagnostic and research laboratory workers who may be exposed to the virus, such as persons working with JEV cultures or mosquitoes with the potential to transmit JEV; as per the [Australian Immunisation Handbook](#).

Persons who require JEV vaccine as they are travelling are not eligible under this program and instead should contact a travel medicine clinic.

I'm not eligible, how can I get it?

Speak to your doctor or Travel Medicine Clinic if you're not eligible as part of this program but would like to have a JEV vaccine.

What do I need to prove my eligibility?

People eligible to receive a JEV vaccine as listed above will need to provide evidence of ownership of a residence (i.e. address linked to Medicare card) or a letter from their employer.

The owner will need to be present with immediate family and dependents who usually reside with the owner and will need to show evidence via a Medicare card with dependents listed, or Medicare address of the dependents matching that of the owner.

A template letter for employers of people working in one of the eligible postcodes is available at www.sahealth.sa.gov.au/JEVvaccine

Which vaccines are used?

Two JEV vaccines are available in Australia – **Imojev** and **JEspect**.

Imojev is available as part of the SA Health funded JEV Vaccination Program.

Imojev is a 'live' attenuated vaccine, which means it contains a weakened version of the live virus JEV. Imojev can be given to people from 9 months of age; however, Imojev cannot be given to pregnant or breastfeeding women, or people who are immunocompromised.

You should avoid getting pregnant for 4 weeks after getting the Imojev vaccine. You cannot receive Imojev if you have had a product containing immunoglobulin in the preceding 3 months.

JEspect is an inactivated vaccine and can be given to those who cannot have the live vaccine. This includes infants from 2 months to less than 9 months of age, people who are immunocompromised and women who are pregnant or breastfeeding.

JEspect is no longer available as part of the SA Health funded JEV Vaccination Program.

Speak to your immunisation provider about vaccine options if you cannot have the live vaccine.

Tell your vaccine provider if you:

- > have had an allergic reaction after a previous dose of a JEV vaccine, or have had an allergic reaction to any component in the vaccine, including protamine sulphate (for the JEspect vaccine)
- > have previously received the JEV vaccine – you may need a booster dose. Your vaccine provider can also record your previous doses of JEV vaccine on the Australian Immunisation Register, even if you were vaccinated overseas
- > are pregnant or breastfeeding – you should not receive Imojev, but can have JEspect
- > have a weakened immune system – immunocompromised people should not receive Imojev, but they can have JEspect
- > have an infant between 2 months and 8 months of age – the infant should not receive Imojev but can have JEspect.

How many doses do I need?

One dose of Imojev is needed if you are aged 18 years or older at the time of vaccination.

Two doses of the JEspect vaccine, given 28 days apart are needed.

Do I need a booster dose?

As per the [Australian Immunisation Handbook](#), JEV Booster doses are recommended 1–2 years after initial vaccination for those with ongoing risk of JEV exposure for:

- children aged less than 18 years at time of vaccination who received Imojev or JEspect, and
- adults aged 18 years or older at time of vaccination who received JEspect.

People who received a primary course with JEspect can be given Imojev for the booster dose as long as they are not pregnant or immunosuppressed.

Booster doses are funded for people eligible as part of this program.

Please note: People aged 18 years or older at time of vaccination who were vaccinated with Imojev do not require a booster dose.

Can I have it if I am immunosuppressed or taking medication?

If you have concerns about the nature of the medications you are on, or are uncertain about your degree of immunosuppression, you should seek advice from your GP about using the alternative vaccine JEspect.

Can these vaccines be given at the same time as other vaccines?

These vaccines can be given at the same time as some other vaccines. Your immunisation provider will be able to provide more information.

The Imojev vaccine requires a 28-day (4 week) interval before and after another 'live' vaccine is given but can be given at the same time as some other 'live' vaccines.

You cannot have Imojev for 3 months after a transfusion of immunoglobulin or blood product containing immunoglobulin.

How long will these vaccines take to work?

A protective immune response will occur between 14 to 28 days after vaccination.

How effective are these vaccines?

Both vaccines are highly effective.

Most people (more than 95% of people) develop a protective immune response to the virus by about 28 days after getting the vaccines.

Are these vaccines safe?

Yes, the vaccines are very safe.

The vaccines have been used extensively over many years in Australian Defence Force personnel, residents of the Torres Strait Islands and travellers to southeast Asia. Both vaccines are used extensively in childhood and some adult vaccination programs in countries with ongoing transmission of JEV.

As with any medicine, there is a very small chance of a vaccine causing a severe allergic reaction. Severe reactions to JEV vaccine are very rare.

Common side effects of JEV vaccines may include:

- > Pain, tenderness, redness, or swelling where the vaccine was given.
- > Fever may occur, more often in children.
- > Headache or muscle aches can also occur, mainly in adults.

Side effects usually occur within 3-7 days after receiving the vaccine and only last a few days.

Do I need to take other measures to protect myself against JEV?

You still need to protect yourself from mosquito bites because:

- > no vaccine is 100% effective
- > the JEV vaccines take a few weeks to provide protection
- > there are other mosquito-borne diseases in South Australia for which no vaccine is available (RRV, BFV, MVEV, WNV/KUN).

Protect yourself and your family against mosquito bites and mosquito-borne diseases by:

- > wearing long, loose fitting clothing
- > using insect repellent
- > eliminating the water the mosquitoes can breed in.

For more information visit sahealth.sa.gov.au/mozziessuck

Have cases of JE been detected in South Australia?

There have been a total of 11 human cases and 2 deaths since JEV was first detected in South Australia in early 2022. All cases in SA were hospitalised. There have been no cases reported since 2022

What do I do if I think I may have contracted JE?

If you have symptoms consistent with Japanese encephalitis, seek medical attention.

If you have any severe signs such as severe headache, vomiting, confusion, paralysis or seizures you should seek urgent medical attention.

Where do I get more information?

- > Information on JEV: [Japanese encephalitis – including symptoms, treatment and prevention](#)
- > Mozzies Suck: sahealth.sa.gov.au/mozziessuck

If you have questions or need to report an adverse event following immunisation (AEFI) you can contact your GP, or phone the Immunisation Section, SA Health on 1300 232 272.