

Fact sheet for pig owners

Japanese encephalitis virus

Japanese encephalitis virus (JEV) is a mosquito-borne virus that mainly affects pigs, horses, and waterbirds. JEV is considered to be established on the Australian mainland, although the risks in any given area are likely to vary seasonally and between years depending on weather and other local factors.

About the virus

JEV is an arbovirus which means it is transmitted via bites from infected mosquitoes. There is no specific treatment for Japanese encephalitis (JE) in pigs.

Mosquito bites spread the virus

The natural lifecycle of JEV is between waterbirds and mosquitoes, which may spill over to other animals. Like birds, pigs are an amplifying host which means they develop a level of virus in the blood sufficient to infect more mosquitoes when they feed on infected pigs.

Humans, horses, and other animals can also be infected through mosquito bites.

Clinical signs to look for in pigs

- Clinical signs in sows include:
 - abortion
 - stillbirths (at term or delayed)
 - mummified piglets
 - delayed farrowing
 - increased return rates after mating
- Very young piglets may be:
 - unable to stand and suck
 - born with abnormalities such as deformed limbs, oedema, or reduced/absent brain tissue
- Growing pigs (up to 6 months of age) may show neurological signs
- Boars may experience abnormal sperm and infertility and/or inflammation of the testicles.

How you can minimise the risk of JEV to your pigs

Control mosquitoes on your property

Monitoring for mosquitoes at the various stages of their lifecycle helps to determine the most effective control methods. Key measures that will help reduce the mosquito load on your property include:

- Inspecting bodies of water and containers for wrigglers, as well as areas where adult mosquitoes will rest, like ceilings and walls.
- Removing anything in the open that is filled with water or has the potential to hold water.
- Filling in potholes or other areas that collect water.
- Clearing debris from gutters, downpipes, and drains around buildings so that water doesn't pool.
- Trimming overhanging tree branches where mosquitoes may rest.
- Ensuring effluent drainage is free flowing, flushed regularly and does not pool.
- Sealing tanks, wells or other large water containers, or screening with 1mm mesh.

Access information about using chemicals for mosquito control around piggeries at www.farmbiosecurity.com.au

Minimise pig exposure to mosquitoes

Many piggeries operate under the national Australian Pig Industry Quality Assurance (APIQ) program which sets high biosecurity and hygiene standards for commercial piggeries, including now a requirement to implement mosquito control.

All people working with pigs, including those who may have a small herd or pet pig, should all take steps to control mosquitoes, as well as of course continue to use effective biosecurity measures.

All piggeries should have a mosquito management plan.

Vaccination and treatment

There is currently no JEV vaccine available in Australia for pigs, and no specific treatment for animals with JEV. Effective management of mosquitoes on your property is key to preventing infection.

Reporting an animal suspected to have JE

JE is a notifiable disease in South Australia.

If you suspect JE (or any other notifiable disease) in pigs within South Australia, call your private veterinarian or call the **Emergency Animal Disease Hotline on 1800 675 888**.

Your veterinarian can discuss subsidised testing with PIRSA.

JEV in people

Humans can also be infected with JEV. Most infections in people cause no symptoms. Some people experience a fever and headache, but severe cases may result in convulsions, disorientation, and coma. If you experience any symptoms, you should seek medical advice immediately.