

National Arbovirus Monitoring Program - NAMP

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WHAT IS THE NAMP?

The National Arbovirus Monitoring Program (NAMP) covers the whole of Australia and monitors the distribution of economically important insect-borne viruses of livestock and their vectors. The NAMP is jointly funded by the livestock industries and governments.

WHAT IS AN ARBOVIRUS?

An **arbovirus** is an **arthropod-borne virus**. Insects are part of the arthropod group of animals. Arboviruses are transmitted by blood-sucking insect vectors. The virus multiplies inside the vector, which then transmits it to other animals.

The NAMP includes Akabane, bluetongue and bovine ephemeral fever viruses. The insects that transmit these viruses are *Culicoides* (midges) and mosquitoes.

WHY ARE ARBOVIRUSES IMPORTANT?

From a perspective of international trade, it is important for Australia to be able to determine areas within the country that are free from arboviruses. Export of ruminants from Australia, and overseas trade in their semen and embryos, depend on an accurate assessment of any risks to the health of an importing country's livestock industries.

From a disease perspective, it is important to know the distribution of these viruses in order to manage cattle and sheep. As the viruses are insect-borne, they may be present in some areas on a seasonal basis. Cattle and sheep that have not previously been exposed to these viruses can get very sick when infected.

WHY HAVE THE NAMP?

The Program has three major objectives:

Trade support - by providing technical information to meet Australian Quarantine and Inspection Service (AQIS) requirements for export protocol negotiations and to assist exporters to meet export certification requirements. The Program particularly supports exports of live cattle and sheep.

Bluetongue early warning - by the dynamic surveillance of the northern bluetongue endemic area to detect new incursions and provide early warning of any southern spread of the strains present.

Risk management - by providing epidemiological advice to producers and exporters with regard to arboviruses.

HOW IS THE NAMP ORGANISED?

The Program relies on a national network of sentinel cattle herds from which regular blood samples are taken and tested for the viruses. There are ten or more animals in each of these sentinel herds and the frequency of sampling depends on the amount of arbovirus activity in their area. In addition, potential insect vectors are trapped and identified to monitor changes in their location and abundance.

In the Northern Territory, there are sentinel herds on the five government research farms; Beatrice Hill Farm, Berrimah Agricultural Research Centre, Douglas Daly Research Farm, Katherine Research Station and the Arid Zone Research Institute. Several pastoral properties also run sentinel herds for the NAMP.

The results from the testing are recorded in a national database to which other states also contribute. The information in the database is then used to build a profile of insect-borne viruses for the whole of Australia.

MORE INFORMATION

Northern Territory NAMP Coordinator: Lorna Melville Telephone 8999 2251

NAMP website: www.aahc.com.au/surveillance/namp/index.htm

Agnote K41: Bluetongue in Cattle

Agnote K25: Three-Day Sickness or Ephemeral Fever

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