

# final report

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## Executive summary

Project P.PSH.0851 'National Arbovirus Monitoring Program (NAMP) funding', which ran from 15 June 2017 to 30 June 2018, has successfully met its milestones, and concludes with this report.

Animal Health Australia (AHA) reported to stakeholders annually on vector or virus distribution and maintained a public facing, current [Australian bluetongue zone map](#). In addition, distributions of Akabane and bovine ephemeral fever virus were mapped and published annually in the [NAMP Report](#). The NAMP Report was published as a stand-alone document and incorporated into the [Animal Health in Australia report](#) annually.

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## 1 Background

Australia's economy benefits from the export of ruminant livestock and their genetic material (semen and embryos). This trade depends upon a shared confidence between Australia and its trading partners that risks to the animal health status of the importing country can be accurately assessed and properly managed.

The National Arbovirus Monitoring Program (NAMP) provides credible data on the nature and distribution of important specific arbovirus infections in Australian (including bluetongue virus) for use by the Australian Government and livestock exporters. NAMP underpins Australian Government export certification that Australian ruminants are sourced from areas that are free from transmission of these specified arboviruses. In addition, NAMP data are available for other countries when negotiating the import health conditions for Australian livestock and their genetic material. NAMP data are gathered by serological monitoring of eligible cattle and trapping of insect vectors.

NAMP is jointly funded by its primary beneficiaries: the cattle, sheep and goat industries (57%); the livestock export industry (13%); and the state, territory (5%) and Australian governments (25%). This project constitutes MDC funding of the grainfed beef component of the industry contributions.

NAMP is managed by AHA in consultation with a Steering Committee representing all funding parties and a nationally representative Technical Committee of only government agencies (virologists, entomologists, and veterinary and biosecurity officers).

NAMP has three specific objectives:

- **market access**—to facilitate the export of live cattle, sheep and goats, and ruminant genetic material, to countries with concerns about bluetongue, Akabane and bovine ephemeral fever (BEF) viruses
- **bluetongue early warning**—to detect incursions of exotic strains of bluetongue virus (BTV) and vectors (*Culicoides* species biting midges) into Australia by surveillance of the northern BTV endemic area
- **risk management**—to detect changes in the seasonal distribution in Australia of endemic bluetongue, Akabane and BEF viruses and their vectors, to support livestock exporters and producers.

## 2 Project objectives and results

The following objectives were achieved during the project period 15 June 2017 to 30 June 2018.

### 2.1 Reported to stakeholders annually on unusual geographic or temporal variation in vector or virus distribution.

Animal Health Australia provided an annual report to program funder stakeholders on 22 September 2017 by papers presented to the NAMP Steering Committee. A detailed Management Report was prepared, including information on monitoring activities and program performance, vector and virus distribution, budgets and expenditure and any changes required to the program. The next annual

report to program funder stakeholders will be provided at the annual program Steering Committee meeting on 21<sup>st</sup> September 2018.

During the 2016-17 period, no new serotypes of BTV were detected however two known serotypes were detected in regions previously not known to occur:

- Serotype BTV15 was detected in Innisfail.
- Serotype BTV16 was detected in three sentinel herds in SE Queensland and three sentinel herds in the Hunter Valley region of NSW. Retrospective testing also identified that BTV16 occurred on the far north coast of NSW during 2015-16.

At the time of writing, data is incomplete for the 2017-18 arbovirus transmission season.

## **2.2 Updated annually the Australian bluetongue zone map, and distributions of Akabane and Bovine ephemeral fever.**

A current BTV zone map was maintained throughout the project period and publicly available at <https://namp.animalhealthaustralia.com.au>.

Two changes have been made to the BTV zone map in the 2017-18 arbovirus season to date, in response to changes to serological evidence of BTV transmission. The virus zone expanded:

- i. Following evidence of BTV infection detected in a serosurvey of a herd in the Bulloo Shire, within the greater south western Channel Country of Queensland (proposed April 2018).
- ii. Following evidence of BTV infection detected in a serosurvey of a herd located in the mid far north-west region of Qld (proposed November 2017).

Four changes were made to the BTV zone map in the 2016-17 arbovirus season, in response to changes to serological evidence of BTV transmission. The virus zone expanded:

- iii. Following evidence of BTV infection detected in a sentinel herd at Coolatai in the North West slopes region of NSW (proposed August 2017).
- iv. Following evidence of BTV infection detected in a serosurvey herd at Kurundi, NT (proposed June 2017).
- v. Following evidence of BTV infection detected in a sentinel herd near Armidale on the Northern Tablelands of NSW, a sentinel herd near Merriwa in the Hunter Valley region of NSW and in a sentinel herd near Nowra on the Southern Coast of NSW (proposed May 2017).
- vi. Following evidence of bluetongue virus infection detected in a serosurvey herd at Birrindudu, southern Victoria River District of the NT (proposed September 2016). This change was minor and administrative only as it only affected non-working land.

## **2.3 Provided an annual report for independent distribution.**

The annual NAMP Report was published in January 2018 and is publicly available [here](#).

### **3 Conclusions and recommendations**

The NAMP is a successful, ongoing AHA program with a high degree of collaboration between governments and livestock industries. The NAMP met the project objectives (P.PSH.0851) during the period.

There are no specific, technical recommendations for MLA arising from this project.