



Senator the Hon. Joe Ludwig
Minister for Agriculture, Fisheries and Forestry

Tony Burke MP
Minister for Sustainability, Environment, Water, Population and
Communities

Senator the Hon. Chris Evans
Minister for Tertiary Education, Skills, Science and Research

M E D I A R E L E A S E

31 MAY 2012

Research funding to combat Hendra virus

The fight against Hendra virus has been boosted with the announcement of six new research projects supported by \$2 million in funding that will look into how the virus is spread, how infection might be prevented and improving how the virus is detected.

The \$2 million is part of an overall \$9 million funding package provided jointly by the Gillard Government and the New South Wales and Queensland Governments under the National Hendra Virus Research Program announced in July 2011.

An additional \$3 million in Hendra virus research funds provided by the Gillard Government is being managed by the National Health and Medical Research Council.

Minister for Agriculture, Senator Joe Ludwig, Minister for Environment, Tony Burke and Minister for Science and Research, Senator Chris Evans announced the six new research projects ahead of what is historically the highest risk Hendra virus period.

"These research projects will increase Australia's capability to minimise the risk of Hendra virus by providing a better understanding of its behaviour and impacts," Minister Ludwig said.

"Increased knowledge about the virus and an improved ability to detect it will be of real benefit to protecting the health of horses, those in contact with horses and our broader animal industries.

"This Government is committed to strengthening Australia's biosecurity defences. These projects will allow us to work with the industry to boost our protection against Hendra virus and help reduce outbreaks."

Minister for Sustainability, Environment, Water, Population and Communities, Tony Burke, said that the national flying fox monitoring project will give communities better information for managing their local flying foxes populations.

"Flying foxes play an essential role in the environment, but can cause massive problems when they gather in places where people live and work," Minister Burke said.

"The national flying fox monitoring program will give us a better understanding of how many flying foxes there are and where they are going.

“This knowledge will be used to improve the way we manage flying foxes to reduce concerns in the community while still giving the flying foxes the protection they need.”

Minister for Tertiary Education, Skills, Science and Research, Senator Chris Evans, said the Hendra research effort will provide a good demonstration of cooperation across jurisdictions for the national good.

“Hendra virus has the potential to disrupt our horse and livestock industries, as well as posing a risk to human life”, Minister Evans said.

“The collaborative effort between Commonwealth and State Governments through the National Hendra Virus Research Program will ensure that research undertaken to understand and combat Hendra virus will achieve the best results in the shortest time possible.”

The research projects will commence immediately, with all six to be finalised within three years. They will be centrally coordinated by the Rural Industries Research and Development Corporation and carried out by a number of Australian universities and the CSIRO.

The research is being funded by the Commonwealth of Australia, the State of Queensland, and the State of New South Wales under the National Hendra Virus Research Program.

The six research projects were selected from an open call for proposals and were reviewed by a panel of experts from Primary Industries and Resources South Australia, Curtin University, University of Queensland, and the Australian Government Department of Agriculture, Fisheries and Forestry.

SUMMARY OF FUNDED RESEARCH PROJECTS

PROJECT NAME: *Development of improved diagnostics and therapeutics for Hendra virus infections.*

OVERVIEW: The first aim of this project is to develop sensitive and specific tests for rapid diagnosis of Hendra Virus infection in infected horses, other animals and humans. Sensitive pen-side tests for Hendra Virus detection in acutely infected horses will be developed. The second part of this project will be an evaluation of using interferons as an anti-Hendra Virus therapy. Interferons modulate the response of the immune system to viruses, bacteria, cancer, and other foreign substances that invade the body.

DUE FOR COMPLETION: July 2014

RESEARCH INSTITUTION: CSIRO

PROJECT NAME: *Longitudinal cohort study of horse owners.*

OVERVIEW: This research project will survey horse owners from across all industry sectors over a two year period. The project will provide both a research platform and a resource to track horse owner risk awareness, mitigation practices, and the effectiveness and reach of government agency-directed communication and guidance in the context of an evolving and uncertain threat. The study will comprise five surveys conducted at six-monthly intervals over what is anticipated to be three consecutive peak Hendra Virus outbreak periods and two ‘quieter’ intervening periods.

DUE FOR COMPLETION: May 2015

RESEARCH INSTITUTION: University of Western Sydney

PROJECT NAME: *Models that predict risk for Hendra virus transmission from flying foxes to horses.*

OVERVIEW: Using conceptual and mathematical models this project aims to predict periods of high risk of a Hendra Virus outbreak in horses. The project will aim to identify the variables that can increase the size and impact of an outbreak and determine how risk can be minimized through manipulating important risk factors. The project will also assess whether a reduction in uncertainty is likely to change management decisions and therefore recommendations on future research priorities could be made.

DUE FOR COMPLETION: May 2015

RESEARCH INSTITUTION: James Cook University

PROJECT NAME: *Models to predict Hendra virus prevalence in flying fox populations.*

OVERVIEW: This research project will use modelling approaches to develop a suite of predictions on the spatial and temporal patterns of high prevalence and intensity of Hendra Virus infection in flying fox colonies in Queensland and New South Wales. These predictions will focus on identifying high levels of Hendra Virus infection in flying foxes and thus the spatial and temporal distribution of risk of transmission to horses. This project will also seek to identify when and where mitigation strategies could be applied to prevent transmission.

DUE FOR COMPLETION: May 2015

RESEARCH INSTITUTION: Griffith University

PROJECT NAME: *Implementing a national flying fox monitoring program .*

OVERVIEW: This research project will determine the trends in both the abundance and distribution of flying foxes. This will allow for better prediction and management of their associated disease risk and for their conservation management. Through the effective distribution of this information the disease risk, the conservation status of the species, and the effectiveness of the management flying foxes will be better understood.

DUE FOR COMPLETION: June 2015

RESEARCH INSTITUTION: CSIRO

PROJECT NAME: *Early detection of Hendra virus infection by microRNA profiling.*

OVERVIEW: This project will develop reliable tests for differentiating infected from vaccinated animals by using a platform of Hendra Virus antigens other than the G glycoprotein. This project will also address the dearth of specific human post-exposure treatments by evaluating adjunctive therapies to enhance the monoclonal antibody m102.4, which has already shown (in ferrets and non-human primates) to suppress severe Hendra Virus infection when administered during the incubation period.

DUE FOR COMPLETION: July 2014

RESEARCH INSTITUTION: CSIRO

Media contacts:

Minister Ludwig's office: Melissa Patch 0418734413

Minister Burke's office: Joanna Vaughan 0417354185

Minister Evans' office: Rhys Davies 0411138572