The Hon Katrina Hodgkinson MP
Minister for Primary Industries
Minister for Small Business

MEDIA RELEASE

Saturday, 2 June 2012

HENDRA RESEARCH STEPPED UP

NSW Minister for Primary Industries Katrina Hodgkinson today announced $2 million in funding for six new research projects to increase the knowledge about the Hendra virus.

Ms Hodgkinson said the new projects are part of the National Hendra Virus Research Program which are jointly funded by the NSW, Queensland and Australian Governments.

“The projects will help authorities get a better understanding of the Hendra virus and look at how we can safeguard our equine industry and minimise the risk of human infection.

“For instance, the University of Western Sydney will lead a major two-year research project that will survey horse owners on their risk awareness, mitigation practices and the effectiveness of communication and guidance strategies.

“The study will be conducted over peak and non-peak Hendra periods and will survey stakeholders right across the industry,” Ms Hodgkinson said.

The six projects will be centrally coordinated by the Rural Industries Research and Development Corporation.

“Today’s announcement builds on five research projects announced last year, which are being led by the NSW Government’s Elizabeth Macarthur Agricultural Institute at Menangle and the Wollongbar Primary Industries Institute,” Ms Hodgkinson said.

“These projects are looking at vital issues such as how the virus is transmitted, vaccine development, flying fox dispersal, transmission in dogs, and testing and risk management strategies.

Ms Hodgkinson said last year was the largest outbreak of Hendra that NSW and Queensland has seen to date.

“In NSW the virus caused ten horse deaths at eight properties.

“While this new research is fundamental to inform our knowledge about the Hendra virus it’s critical that horse owners remain vigilant.

“This week’s cases in Rockhampton and Ingham in Queensland are a timely reminder of the need for caution in all parts of NSW where flying foxes occur,” Ms Hodgkinson said.

Further information on protecting your horse is available at:
http://www.dpi.nsw.gov.au/agriculture/livestock/horses/health/general/hendra-virus

SUMMARY OF FUNDED RESEARCH PROJECTS

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: 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 evaluating 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: 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 risks 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 the 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