

## Hendra Virus Fact Sheet

### **What is the Hendra virus?**

The Hendra virus is a deadly disease found exclusively in Australia that is transmitted from flying fox to horse, horse to horse, and horse to people. The Hendra virus was first discovered in the Brisbane suburb of Hendra in 1994.

The virus occurs naturally in flying fox populations across most Australian states and territories, with the potential for the disease to appear wherever there are flying fox colonies.

### **How many horses and humans have been affected?**

Since 1994, the Hendra virus has claimed the lives of 81 horses,<sup>1</sup> with more than 30 of these deaths recorded in 2011 and 2012. There have also been seven confirmed cases of Hendra virus infection in humans. Of these people, four have lost their lives, with the most recent death occurring in August 2009.

### **Why is the Hendra virus a concern for Australian horse owners?**

While the prevalence is low, the Hendra virus is one of Australia's most lethal viruses. 75 per cent of horses infected with the virus die as a result of the disease, usually within the first two days of showing signs of illness.

The Hendra virus is just as deadly to the humans that come into close contact with infected horses. 57 per cent of humans diagnosed with the disease have died.

### **How is the Hendra virus spread?**

It is thought that horses contract the Hendra virus by ingesting food or water contaminated with infected flying fox body fluids and excretions. The virus can then be passed onto humans if they come into contact with an infected horse's nasal discharge, blood, saliva or urine.

### **Can the Hendra virus be transmitted from flying fox to human?**

To date there is no evidence to support direct transmission from flying fox to people.

### **Can the Hendra virus pass from human to human?**

There is no evidence to date to support human to human transmission.

### **What are the signs of Hendra virus infection in horses?**

Clinical signs of Hendra virus infection in horses include but are not limited to, acute onset of illness, increased body temperature, shifting of weight between legs, depression, increased respiratory rate, nasal discharge (clear, white or blood stained), head tilting/ circling, muscle twitching and urinary incontinence.

### **What are the signs of Hendra virus infection in humans?**

Hendra virus infection in humans appears as an influenza-like illness, with symptoms including tiredness, fever, headaches and coughing. Inflammation of the brain can

also develop in more severe cases that can sometimes progress to convulsions, coma and even death.

### **How can you reduce the risk of infection in horses?**

Increased hygiene and cleaning practices are essential in preventing the spread of infection. Horse feed and water containers that are beneath trees should be moved under shelter to avoid possible contamination by flying fox fluids. All equipment (e.g. halters, lead ropes and twitches) that have been exposed to a horse's bodily fluids should be cleaned and disinfected before use on other animals. Horses that show signs of illness should be quarantined while awaiting test results to avoid the spread of the virus.

### **How can horse owners and vets protect themselves and others from infection?**

In keeping with the Australian Veterinary Association's policy briefing on the Hendra virus horse vaccine (Equivac<sup>®</sup> HeV<sup>II</sup>), it is strongly recommended that all horses in Australia are vaccinated against Hendra virus to protect humans from its potentially fatal outcome.

However, no vaccine can be expected to be effective in 100 per cent of a population, and while the Equivac HeV vaccine will help to minimise the risk of the virus spreading to humans, vets and horse owners should continue to undertake hygiene practices and to wear appropriate personal protective equipment (PPE) when handling a sick or at risk horse.

Items for a PPE kit can be purchased from most hardware stores or veterinary clinics and should include:

- hand cleansers
- soap
- disinfectants
- waste disposal bags
- disposable gloves
- overalls
- rubber boots
- facial shields
- safety glasses
- P2 respirator (particulate respirator)

### **Can the Hendra virus infection in humans be treated?**

There is no approved treatment for the Hendra virus. An experimental human monoclonal antibody has been shown to successfully treat Hendra virus infections in several animal models and has been administered for compassionate use in humans.



**For further information, pre-recorded video footage or an interview, please contact:**

**Katherine Barbeler**

**Weber Shandwick**

kbarbeler@webershandwick.com

02 9994 4406 / 0439 941 632

**Andrés López-Varela**

**Weber Shandwick**

alopez-varela@webershandwick.com

02 9994 4476 / 0405 631 945

**Hannah Rayment**

**Weber Shandwick**

hrayment@webershandwick.com

02 9994 4492 / 0425 329 921

- ENDS -

#### **About Pfizer Animal Health Australia Pty Ltd**

Pfizer Animal Health is committed to the health and wellbeing of animals, through providing reliable and effective medications for companion animals. We take pride in being leaders in animal healthcare and providing innovative solutions to challenging health issues. We have a leading portfolio of medicines that prevent, treat and cure diseases across a broad range of therapeutic areas, and an industry-leading pipeline of promising new products in current and future areas of medicine. Pfizer has Australian-based research and manufacturing facilities as well as major locations in the US, Asia and Europe so we can deliver quality products with a focus on Australian needs. Pfizer Australia is the largest animal health company in Australia, with a base in Sydney and a large team of field based representatives and veterinarians.

#### **About CSIRO's Australian Animal Health Laboratory (AAHL)**

CSIRO's Australian Animal Health Laboratory (AAHL) is a front line defence, helping to protect Australia from the threat of exotic and emerging animal diseases. The Laboratory combines a capacity to rapidly diagnose animal diseases with high quality research.

AAHL is the most sophisticated laboratory in the world for the safe handling and containment of animal diseases and was custom-built to ensure the containment of the most infectious agents known. For the past quarter of a century the Laboratory has played a vital role in protecting Australia from biosecurity threats and risks posed by serious exotic and endemic diseases.

**Media contact:** Ms Emma Wilkins, Acting Communication Manager Biosecurity Flagship 0409 031 658; [Emma.Wilkins@csiro.au](mailto:Emma.Wilkins@csiro.au)

#### **About Henry M. Jackson Foundation for the Advancement of Military Medicine**

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF) is a private, not-for-profit organization established in 1983 and authorized by the U.S Congress to support medical research and education at the Uniformed Services University of the Health Sciences and throughout the military medical community. For more information, visit [www.hjf.org](http://www.hjf.org)

#### **About Uniformed Services University of the Health Sciences**

The Uniformed Services University of the Health Sciences is the United States' federal health sciences university. USU students are primarily active-duty uniformed officers in the Army, Navy, Air Force and Public Health Service who have received specialized education in tropical and infectious diseases, preventive medicine, the neurosciences (to include TBI and PTSD), disaster response and humanitarian assistance, and acute trauma care. A large percentage of the university's nearly 5,000 physician and 500 advanced practice nursing alumni have provided support, leadership and expertise to operations in Iraq, Afghanistan and throughout the globe. The University is committed to excellence in research with graduate programs in biomedical sciences and public health open to civilian and military applicants that have awarded more than 400 doctoral and 800 masters degrees to date. For more information, visit [www.usuhs.mil](http://www.usuhs.mil).

#### **About Australian Veterinary Association**

The Australian Veterinary Association (AVA) is the only national organisation representing veterinarians in Australia. Its 7500 members come from all fields within the veterinary profession. Clinical practitioners work with companion animals, horses, farm animals, including cattle and sheep, and wildlife.



Government veterinarians work with our animal health, public health and quarantine systems while other members work in industry for pharmaceutical and other commercial enterprises. We have members who work in research and teaching in a range of scientific disciplines. Veterinary students are also members of the Association.

---

<sup>i</sup> [http://www.daff.qld.gov.au/4790\\_11112.htm](http://www.daff.qld.gov.au/4790_11112.htm)

<sup>ii</sup> The product is being sold under permit issued by the Australian Pesticides and Veterinary Medicines Authority (APVMA) Permit PER13510 dated 3rd August 2012.