

28 July 2011

Current Situation

As of 9 a.m. 28 July 2011, in the year-to-date, five horses on four properties in NSW have died after being confirmed to be infected with Hendra virus.

Staff from the Livestock Health and Pest Authorities and the Department of Primary Industries are managing three properties quarantined for Hendra virus incidents on the Mid and North Coast of NSW. They are continuing to work closely with NSW Health and government authorities in Queensland.

The quarantine on the first infected property at Wollongbar has been released according to policy and procedure. No horses remain on the property and a ten day decontamination period has been completed.

Hendra virus at Mullumbimby

The State Virology Laboratory at EMAI confirmed on 27 July 2011 that samples submitted from a dead mare at Mullumbimby were positive for Hendra virus. The samples were collected on 26 July by a private vet from a horse that had died suddenly on 24 July. There was a large fig tree in the paddock in which the dead horse was found.

There are 8 remaining horses on the property. Tracing and assessments of the horses and companion animals that may have been exposed are still being completed.

Companion animals on infected properties

Three dogs and two cats on the previous infected NSW properties have been assessed as being low risk. They have all tested negative for Hendra virus by both PCR and serological testing.

It is recommended that dogs and cats are kept away from suspect Hendra virus cases, including dead horses to reduce the risk of exposure to the virus.

Hendra virus at Lismore and Macksville

The infected properties near Lismore and Macksville remain in quarantine.

The remaining horses on both properties appear well. They are monitored twice daily. All horses that have had close contact with an infected horse are tested initially then 16 and 32 after the infected horse died. All testing to date on these horses has been negative.

Priority testing if someone sustains a sharps injury

Anyone who receives a sharps injury (a penetrating stab wound from a needle, scalpel, or other sharp object [insert typical veterinary instruments]) that may result in exposure to blood or other body fluids from a horse suspected to have Hendra Virus should immediately contact the Department of Primary Industries (phone: 1800 675 888 or the State Veterinary Diagnostic Laboratory on 1800 675 623 during work hours or the duty veterinary pathologist on 0411 030 451 or 0400 380 451 after hours) and the [Public Health Unit](http://www.health.nsw.gov.au/publichealth/Infectious/phus.asp) (see <http://www.health.nsw.gov.au/publichealth/Infectious/phus.asp>).

The Department of Primary Industries will arrange for samples from the horse to be transported directly to a laboratory so that it can be tested immediately for Hendra Virus. NSW Health will be advised of a positive test result so that they can assess the risk and advise on further management.

Priority testing if Hendra virus strongly suspected

If the initial presentation or subsequent deterioration of the animal after samples have been submitted strongly suggests that it may be infected with Hendra virus, please contact a government veterinarian immediately. Transport and testing will be prioritised for urgent cases. Ring the Emergency Animal Disease Hotline on 1800 675 888 or the State Veterinary Diagnostic Laboratory on 1800 675 623 during work hours or the duty veterinary pathologist on 0411 030 451 or 0400 380 451 after hours.

Reminder to fill anticoagulant blood tubes

Laboratory staff advise that it is possible that high concentrations of anticoagulant agents may interfere with testing if sampling tubes are inadequately filled. To ensure optimal test sensitivity please try to fill all anticoagulant blood tubes.

Charges for routine monitoring of healthy horses

All costs for the testing of healthy horses will be charged to the submitter. Please select 'Monitoring' as the reason for submission on the laboratory submission form to distinguish these samples from those from sick horses.

Please advise immediately if the horse develops symptoms suggestive of infection so that testing can be prioritized.

Packaging of diagnostic samples

All submissions for the exclusion of Hendra virus must have a clear warning note, e.g. 'Hendra exclusion' **inside** the Esky and on top of the samples. *Note:* **Do not record this on the outside packaging or on the consignment note.**

Samples for Hendra exclusion may be packed as IATA 650 category B, biological substances UN 3373 as for routine diagnostic specimen submissions, i.e. small foam Esky inside a cardboard box. Include an ice-brick to keep samples cool but not frozen. Double bag the samples.

For further information see the [Vet Lab Manual - Packaging of specimens](#).

Importance of recording the history and management of the horse

It is vital that the laboratory submission form is fully completed. Please record:

- the history and clinical presentation,
- potential contact with fruit bats
- the description and identification of the horse,
- the name and contact details of the owner/manager,
- the full address for the location of the horse including the Property Identification Code (PIC) and
- any other relevant information such as people or animals who have contacted the sick horse or recent horse movements.

This information will assist authorities to best manage the case.

Reminder re Work Health and Safety Responsibilities

Veterinarians and practice principals who conduct a business or undertaking, whether as employers, self-employed people or otherwise, have an obligation under the *Work Health and Safety Act 2011* to ensure the workplace health and safety of themselves, their workers and others (e.g. veterinary students, clients and carcass disposal contractors).

For more information contact the [Workcover Authority of NSW](#) or phone 131050.

Sampling for Hendra virus

Specimens required for diagnosis of Hendra virus infection:

Live horses: From each horse:

1. **10 mL blood in lithium heparin collected into an evacuated tube** - for polymerase chain reaction (PCR).
2. **10 mL clotted blood collected into an evacuated tube** - for serology and PCR.
3. **Nasal swabs from each nostril pooled in phosphate buffered glycerol saline (PBGS) or equivalent virus transport medium (VTM)** - for PCR. If no PBGS is available, swabs should be placed in 2 mL sterile saline.
4. **Swabs from the oral cavity, rectum (rectal mucosa not faeces) or urine collected separately into PBGS** - for PCR.

Dead horses: From each horse:

1. **10 mL clotted blood from the jugular vein collected into an evacuated tube** - this sample can be used for serology and PCR.
2. **Submandibular lymph node collected into a sterile container and chilled** - this sample can be used for polymerase chain reaction (PCR). There is less risk in taking this sample of tissue compared to lung or other tissue.

For further information see the [Hendra virus page](#) in the DPI veterinary laboratory manual .

Note: Due to the zoonotic risk of Hendra virus, minimally invasive postmortem examination is recommended. Dead horses can be sampled adequately for Hendra virus testing without conducting a complete postmortem examination.

Sampling media is available from the the State Veterinary Diagnostic Laboratory (SDVL) on virology.enquiries@industry.nsw.gov.au, 02 4640 6337 or 02 4640 6377. The media may be stored in the freezer until required. Alternatively if media is required at short notice, please contact your local LHPA.

PPE Training

The NSW Department of Primary Industries is developing a new program of refresher training in the use of PPE, if you are interested in attending a session in your area please contact us at biosecurity@dpi.nsw.gov.au.

PPE

Veterinarians are reminded of the importance of appropriate PPE when examining and treating horses. The most recent version of the Guidelines for Veterinarians handling potential Hendra virus infection in horses (Version 4.1) is available at the website www.biosecurity.qld.gov.au . This information was written for Queensland vets but the principles are applicable wherever there is a risk of Hendra virus infection.

Notification of suspect Hendra

Report all suspected cases in horses to the local Livestock Health and Pest Authority, an inspector with the Department of Primary Industries, or the Emergency Animal Disease Hotline on 1800 675 888.

General Recommendations to veterinarians

Veterinarians are urged to review their Hendra virus case investigation procedures, infection control protocols and client communication resources.

Veterinarians should develop, train in and implement infection control procedures to manage the risks associated with working with sick horses.

Infection control procedures are the primary defense against horses in the pre-clinical phase where they may excrete Hendra virus but still appear clinically normal.

Where Hendra virus is a differential diagnosis, veterinarians should provide sound advice to horse owners to reduce their potential exposure, until a negative test result is returned.

General advice for horse owners on protecting themselves and their horse from Hendra is available at: <http://www.dpi.nsw.gov.au/agriculture/livestock/horses/health/general/hendra-virus#Information-for-horse-owners>.

Further information

Further information on Hendra including advice on sampling and information for clients may be found at:

- <http://www.dpi.nsw.gov.au/agriculture/livestock/horses/health/general/hendra-virus/vets>
- <http://www.dpi.nsw.gov.au/biosecurity/animal/info-vets> and
- <http://www.dpi.nsw.gov.au/agriculture/livestock/horses/health/general/hendra-virus>

Contact your GP, local Emergency Department or local Public Health Unit if you have concerns about possible exposure of people to a horse with Hendra virus infection. Contact details for NSW Public Health Units are available at: <http://www.health.nsw.gov.au/publichealth/Infectious/phus.asp>

Information on the current situation in Queensland may be found at http://www.dpi.qld.gov.au/4790_2900.htm.

Ian Roth

Chief Veterinary Officer NSW

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (28 July 2011). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of NSW Department Primary Industries or the user's independent adviser.