



## Reduce the Risk – planning for a safe work environment

This information can be used in conjunction with the Queensland Government publication *Guidelines for veterinarians handling potential Hendra virus infection in horses*. The most current version of these guidelines is available from the Biosecurity Queensland website at [www.biosecurity.qld.gov.au](http://www.biosecurity.qld.gov.au)

Horses have been shown to excrete Hendra virus (HeV) from two days following exposure to the virus, up to and including the time clinical signs are seen.

Research has also shown that by the time a horse is showing clinical HeV signs, the virus is systemically widespread throughout the body and body fluids.

### Infection control in equine practices

Infection control procedures are the primary defence against infection from horses in the pre-clinical phase of HeV infection.

**Standard precautions** are recommended for the treatment of all horses, regardless of the perceived infectious status, and include the following:

- Hygienic practices, particularly hand hygiene before and after horse contact
- Covering cuts and abrasions with water-resistant, occlusive dressings
- Use of protective barriers where necessary (gloves, respirator masks, safety eyewear, gowns etc.)
- Appropriate handling and disposal of sharps and contaminated waste
- Appropriate cleaning and disinfecting of reusable equipment between horses.

**Additional precautions** should be implemented when standard precautions may be insufficient to prevent transmission of disease, especially airborne transmission.

- Used when procedures involve exposure to potentially infectious materials (such as surgery, nasogastric tube placement, endoscopy, dental work and sinus flushing) or if working with horses showing systemic illness.
- Protective barriers such as P2 respirator masks, face shield or safety eyewear, splash-proof overalls, nitrile gloves and rubber boots should be used.

The minimal level of respiratory protection when investigating a potential HeV case is P2 particulate respiratory protection. It is recommended that veterinarians discuss their specific respiratory protection needs with a supplier of safety equipment.



**Disposable particulate respirators must be fitted correctly and are not suitable for use by people with facial hair. People with facial hair should use a powered air purifying respirator (PAPR) that draws air through a filter and supplies it to a hood worn over the head**



An equine veterinary practice plan should be developed to allow a prompt and confident response to potential HeV cases.

The list below may be used to assist in the preparation of an equine veterinary practice plan for HeV:

- Make a business decision whether cases of equine illness will be investigated (or not) and accept the responsibility to manage the risk associated with investigating potential HeV cases.
  - Implement a triage system to help identify HeV risk factors when booking horse consultations.
  - Conduct routine risk assessment of HeV for all horse contact.
  - Ensure routine use of **standard precautions** for all horse contact.
  - Ensure **additional precautions** where necessary.
  - Provide dedicated HeV field kits and personal protective equipment (PPE) for staff (and train staff in the correct use of PPE).
  - Be aware of and manage the potential for heat stress when PPE is used.
- Ensure appropriate handling and disposal of sharps and contaminated waste.
  - Ensure appropriate cleaning and disinfecting of reusable equipment between horses.
  - Avoid generating aerosols and splashes from equipment use (e.g. such as a high-pressure hose for decontamination).
  - Ensure safe handling, transport, storage and cleaning of contaminated laundry/ clothing.
  - Develop a protocol to appropriately manage blood/body fluids spills to minimise the potential for environmental contamination (i.e. cleaning/ disinfecting any spills).
  - Develop a protocol to manage accidental sharps injuries and blood/ body fluid exposure to staff.
  - Ensure safe carcass handling and disposal.
  - Ensure safe handling and disposal of animal excreta, and stable hygiene and environmental cleaning using appropriate cleaning agents and disinfectants, and
  - Develop a procedure for responding to HeV cases (HeV case investigation procedure). Include entry/ exit procedures to be used during any disease investigation.

**!!!** **Splash-proof overalls are recommended as they are lighter and better suited to hotter conditions that may be faced during investigation. Impervious overalls need to be used with great care as there is the real risk of rapidly overheating (i.e. less than 20 minutes), particularly if used in direct sunlight.** **!!!**

The information contained in this fact sheet has been sourced from the *Hendra Virus - veterinary practice manual* (May 2010) by the kind permission of the State of Queensland, Department of Employment, Economic Development and Innovation (Biosecurity Queensland).

## **Use of PPE when examining vaccinated horses.**

Hendra virus vaccine is only available under the conditions of the Minor Use Permit. Although vaccinated horses in trials did not become infected, show clinical signs or shed virus, there is no guarantee of protection. Personal Protective Equipment (PPE) should be worn whenever a Hendra virus case is suspected whether a horse has been vaccinated or not. No vaccine is 100% effective.