



Guidelines for vets - property visits for equine influenza

Modified by PIRSA Animal Health 22 Nov 2007

NSW Department of Primary Industries - Animal and Plant Biosecurity Branch

Equine influenza case definitions

Suspect: Respiratory disease in horses involving fever (temperature above 39.0°C), coughing and / or nasal discharge – also indications that the disease is highly infectious and rapidly spreading to other horses. May have a risk contact in history (movement from interstate especially from NSW and / Queensland).

Infected: Horses where infection has been confirmed by an approved laboratory test.

Circumstances where you may need to sample for Equine Influenza

- You are called to a property where you examine a horse showing clinical signs.
- PIRSA ask you to check an animal due to history of contact or report of clinical signs.
- Re-bleed – this occurs 3 to 4 weeks after the initial samples are taken.

If you suspect equine influenza it is a legal requirement that you notify PIRSA immediately.

- Contact PIRSA immediately if an animal shows clinical signs.
- Collect samples using the Sampling Protocol for Equine Influenza document provided by PIRSA.
- Contact Gribbles to arrange transport of samples.

If PIRSA asks you to check on an animal and no clinical signs are seen samples do not need to be collected and you can contact PIRSA on your return to the office.

1. Make contact with manager / owner to arrange visit.

Equipment and clothing needed:

- ANEMIS inspection form 1.
- Gribbles production animal submission form book.
- Thermometers.
- Clean overalls (1 per expected farm visit plus spares).
- Plain vacutainers, needles and needle holders.
- Spare temperature charts and thermometers.
- Virological transport medium swabs (VTM) or sterile physiological saline for plain cotton swabs if no VTM swabs available. 4 per horse.
- Esky(s) and ice bricks.
- Sealable plastic bags for samples.
- Marker pens.
- Disinfectant (Virkon®, cetrimide e.g. Pine-O-Clean, citric acid, soap and water).
- Plastic bucket and brushes
- Large plastic bags for discarded clothing and other apparel.

2. Prevent spread of infection between premises

Care must be taken not to spread infection. Influenza virus can survive on skin, fabrics and the surface of contaminated equipment. Virus survival times can be as follows:

Hard, non-porous surfaces, plastic, stainless steel:	Up to 48 hours
Cloth and paper:	Up to 12 hours

The virus is readily killed by most disinfectants.

3. Entry onto property

Park the vehicle away from immediate horse contact. Wear rubber boots, gloves and overalls. A **clean** pair of overalls and gloves must be worn for **each** property.

4. Routine surveillance visits

Routine surveillance visits involve inspection of horses where no disease has been reported. **ANEMIS Inspection Form 1** must be filled in for these visits.

Initial examination requires only a thermometer, ANEMIS form and pen. Horses are examined from a distance. To avoid viral contamination, where possible, avoid direct contact with the horses and get the owner/handler to take temperatures.

If animals are found to be showing clinical signs, contact PIRSA and take samples in accordance with the Sampling Protocol for Equine Influenza.

5. Examination of horses

Record identity of each horse examined on **ANEMIS Inspection Form 1**. Inspect horse for signs of nasal discharge or respiratory distress. Take and record rectal temperature of all horses. Ask owner for information on appetite and demeanor of horse.

6. Exit off the property

If no evidence of disease is found, leave a temperature chart and thermometer. Leave a telephone number and request that they contact the Hotline 1800 675 888 if horses show any signs suspicious of disease or any temperature elevations. Return to your vehicle. Wash rubber boots using soap, detergent or disinfectant and place in vehicle. Remove overalls and gloves and place in a large plastic bag, seal and disinfect the bag outside. Disinfect your thermometer. Finally wash hands before leaving. Continue to next property visit.

7. If suspicious clinical signs or elevated temperatures are found, samples must be collected

The following documentation must be completed when samples are collected (both initial sampling and re-bleed):

- **Gribbles production animal submission form.**
- **ANEMIS Inspection Form 1.**

Sample a maximum of 15 horses per premises (if greater than 15 horses, sample febrile horses or horses in early stages of the disease). Use a minimum of your own equipment for examining and sampling horses i.e. use owner's restraining equipment such as halters and twitches.

Preferably using Viral Transport Medium Swabs (VTM) insert a swab deeply into the nostril and vigorously swab the nasal septum and ventral meatus, take 2 swabs from the left and 2 from the right nostril (4 in total).

Label each swab with animal identity and which nostril. For example 'Ed – left nostril 1.'

If VTM is unavailable, a long cotton swab can be used and placed into 1ml of physiological saline, preferably in a separate 5ml container for each swab.

Also collect a 10ml blood sample into a plain tube (red top vacutainer).

8. Re-bleed

3 to 4 weeks after the initial samples are collected a re-bleed is conducted.

Collect a 10ml blood sample into a plain tube (red top tube).

The following documentation must be completed when the re-bleed is conducted:

- **Gribbles production animal submission form.**
- **ANEMIS Inspection Form 1.**

9. Exit off the property (suspicious cases)

After collecting specimens, package them into a plastic bag to take back to your car. At the car, disinfect the outside of the bag and pack into an esky with ice bricks. Remove protective clothing and place into a large plastic bag and disinfect the outside of the bag. Wash and scrub rubber boots using soap, detergent or disinfectant and place in vehicle. Disinfect any equipment you have used while still on site, e.g. thermometer, vacutainer holder, pens. After visiting a suspected infected property, do not visit another horse property for at least 24 hours. After returning home take a thorough shower (including hair wash) and change clothes. Launder all apparel.

10. Transport of samples to the laboratory

- Ensure all documentation accompanies samples that are sent to VETLAB (Gribbles).
- Documentation must include
 - **Gribbles production animal submission form.**
 - **ANEMIS Inspection Form 1.**
- If able to, photocopy documents and attach copy to the outside of the transport container/esky. Place original

documents in the document sleeve of the internal ziplock bag containing the specimens, not in the zip compartment with the specimens.

- Use your normal courier system to dispatch samples to VETLAB, or if appropriate contact Gribbles couriers on 08 8205 5678 to arrange transport of specimens to the laboratory.

11. Laboratory testing

The following testing protocol is performed.

	Laboratory	Specimen Description	Test
First visit	Gribbles	Nasal swab	<i>BD Directigen Test Kit: Equine Influenza A and B Antigen Detection</i>
	AAHL	Nasal swab	<i>Avian Influenza Type A - TaqMan Assay</i>
		Nasal swab	<i>Equine Influenza H3 – TaqMan Assay</i>
		Serum	<i>Equine Influenza H3 Moulton: Haemagglutination Inhibition Test for the Detection of Antibodies</i>
Re-bleed	AAHL	Serum	<i>Equine Influenza H3 Moulton: Haemagglutination Inhibition Test for the Detection of Antibodies</i>

In summary Gribbles conduct a rapid initial test for Equine Influenza A and B antigen. AAHL then perform further testing for Influenza A antigen and Equine Influenza H3 antigen using PCR technology.

On the first bleed antibody levels for H3 are measured by AAHL, this is repeated on the second bleed. A rise in antibody levels indicates active infection

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