

Equine influenza

Work instruction – Veterinary Surveillance

Updated 15150hrs 05/09/07

INSTRUCTION TO VETERINARIAN

This standard operating procedure is for veterinary surveillance visits to suspect Equine Influenza (EI) cases.

Veterinary surveillance will be required for all reports of suspect cases of EI, suspect tracings and within Restricted areas. Horse owners who report horses that are unwell but not showing signs of EI should be referred to their private vet.

You will be instructed to conduct veterinary surveillance work during the Equine Influenza outbreak by Biosecurity Queensland, DPI&F. This direction may come from the SDCHQ or LDCC.

Once you have visited a property to examine suspect horses, you must not visit an uninfected horse property for 24 hours.

DISEASE INVESTIGATION KITS

If veterinarians require sampling materials these can be obtained from a Biosecurity Queensland veterinary laboratory (see contact details below).

Kits, including sampling and packaging materials, protective overalls, and decontamination gear, are available from:

Biosecurity Sciences Laboratory (BSL)
Animal Research Institute
665 Fairfield Road
Yeerongpilly, Brisbane QLD 4105
Phone: (07) 3892 9471 (Specimen enquires)
Fax: (07) 3362 9440

or

Veterinary Investigations, LDCC
DPI&F
203 Tor St.
Toowoomba
Phone: (07) 4688 1639

or

Veterinary Investigations
Forward Control Centre
Biosecurity Queensland Control Centre
Oxley
Phone: (07) 3310 2907

IDENTIFICATION CARDS

In order to satisfy property and horse owners of your legitimate role in surveillance, you will be provided with a photographic identification card. This must be shown to the person in charge at the commencement of a visit.

BACKGROUND

Standstill Zone

The Minister for Primary Industries and Fisheries has notified that the whole of Queensland is a Standstill Zone for all horses including ponies, donkeys, mules and other equine species. This will remain in place until revoked in order to control the spread of the disease. It is illegal to move any type of horse onto or off any property.

Clinical signs and epidemiology

Equine influenza (EI) is a highly contagious viral disease of all equine species (including horses, ponies, donkeys, mules and zebras). Most susceptible animals will show signs of the disease but will recover completely within a few weeks.

Clinical signs of EI include fever, a deep, dry hacking cough and a watery nasal discharge which may later become thick. Animals may become depressed, go off their feed, have laboured breathing and muscle pain and stiffness.

The maximum incubation period is 5 days and horses are infective for 14 days. Most shedding of virus occurs in the early stages of disease when coughing is most pronounced. EI virus is known to be highly contagious.

Transmission of EI to humans under natural conditions of exposure has not occurred during outbreaks of EI in horses.

The virus can survive on skin, fabrics and the surface of contaminated equipment. Contaminated horse transport vehicles, equipment, grooms, and people who have close contact with horses are all important in transmitting infection between places.

The EI virus is relatively fragile and is killed by exposure to sunlight for 30 minutes. It is also susceptible to soaps, detergents and Dettol which are suitable for personal disinfection. Chlorhexidine is not an effective disinfectant for influenza A viruses.

Preventing spread of infection between horses and between premises

Care must be taken not to spread infection.

- Contaminated equipment and personnel can easily transfer virus between horses and between premises. Influenza virus can survive on skin, fabrics and the surface of contaminated equipment.
- Examples of virus survival times are:
 - Hard, non-porous surfaces, plastic, stainless steel: 24-48 hours
 - Cloth and paper: 8-12 hours
 - Canal water: up to 18 days
- The virus is killed by thorough cleaning with soap or detergent and water and disinfection.

PROCEDURES FOR VISITS

Before visit

1. Make contact with the owner/manager and arrange visit
2. Ask for 20 litres of water to be left at the gate
3. Ensure you take the following with you
 - Identification card
 - ANEMIS forms 1, 2 and 3
 - Laboratory submission forms
 - Temperature monitoring forms
 - Advice to Horse Owners sheets
 - Thermometer
 - Spare thermometers
 - Sampling equipment
 - Vacutainer tubes, for clotted blood – 2 per horse
 - Vacutainer needles
 - Vacutainer cups
 - Sterile swabs – 2 per horse
 - Virus transport media – 2 per horse
 - Paper & pencil
 - 4 zip seal bags (1 for holding clean equipment, 1 for samples for lab, 1 for paper and pencil, 1 for rubbish)
 - Sharps disposal container
 - Esky and freezer bricks
 - If required for transport by courier or air:
 - Transport pack including biobottle
 - Consignment note
 - Packaging guideline
 - Protective clothing
 - Multiple pairs Disposable Overalls (2 per person to be decontaminated)
 - Pair gum boots, in good repair and with easy clean treads per person
 - Pack of disposable examination gloves (latex or nitrile) or heavy duty reusable nitrile gloves (2 pr/person)
 - Role of duct tape
 - Disinfection equipment
 - Ground Sheet approx 1m x1m
 - 10 sturdy garbage bags.
 - Pack quality zip seal bags, A4 size
 - 3 buckets, at least 10 litres each
 - Foot bath – fracture resistant
 - Small screw driver, hoof pick, or 150mm nail for cleaning boots
 - Scrubbing brush and nail brush
 - 500ml hand sprayer x 2
 - Water – minimum 20 litres
 - Disinfectant:
 - Virkon S - 2 x 50 gm sachets per decontamination event or a small bulk supply; or
 - Other suitable eg bleach, Dettol
 - Detergent – eg a quality dishwashing liquid or commercial detergent.
 - Soap

Before entry

4. Show your identification card to the person in charge of the property.

5. Complete ANEMIS forms 1, 2, & 3 with owner, or confirm details of previously completed forms.
6. Leave these forms in the car.
7. Ask the owner whether they have been regularly monitoring the horses' temperatures, and whether they have a thermometer for this purpose.

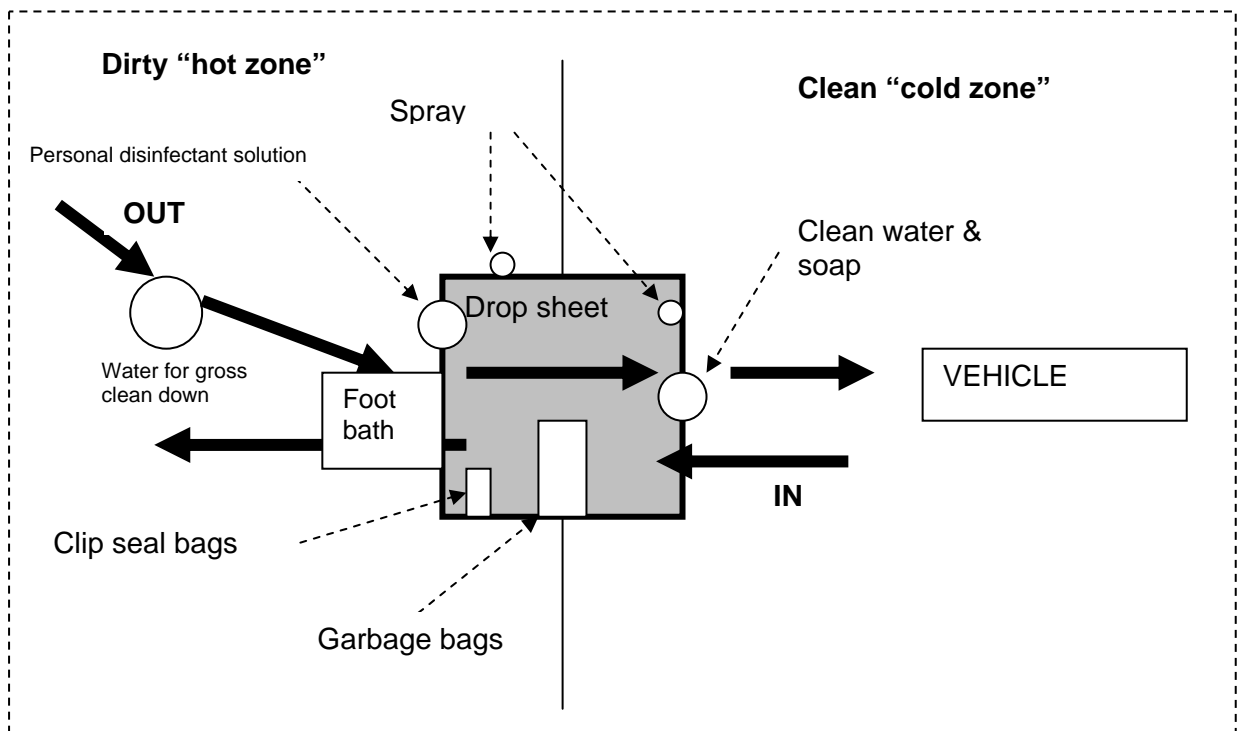
Entry onto property

8. To move into and off properties, stringent decontamination procedures will be required.
9. **Do not take your vehicle onto the property.** Should you do so, your vehicle will have to be decontaminated before leaving, should EI be suspected.
10. If in vehicle – park vehicle outside property. Select site (hard surface is best) that is off property and acceptable to owner. It should be safe to operate and if subsequent visits are likely – mark with hazard tape/or stock mark.
11. Define “clean/dirty” line – can use stock mark to show on ground
12. Remove all unnecessary items from pockets to vehicle (secure area).
13. Preferably, leave mobile phone in car. If required on-farm, enclose it in a sealed zip-lock plastic bag.
14. Note: Check to see car keys are in a place where they will not be locked in the car when the boot is closed.
15. Present all items to go onto property to the line – NOW (not after over the line), only take what is needed!
 - Use owners’ restraining equipment such as halters and twitches. Disinfect this between horses.

Procedure:

Entry Procedure

16. Select and set up a **personal decontamination site** before entering the property. The personal decontamination site should be close to the property entrance/exit to allow you to decontaminate off the property to a clean area.



Suggested layout for a personal decontamination site to enter and exit a property where equine influenza is suspected.

17. Set up a site with a defined “dirty” and “clean” area that allows you to decontaminate yourself plus any gear necessary from the dirty to the clean area. A small (~1m²) drop sheet or plastic rubbish bag can be used as a “clean” base to work on.

18. Spread the drop sheet on the ground first and weight at the corners to prevent it blowing away. This sheet will be designated as the disinfection site. It is good to place the drop sheet close to the boot of the car as this is where you can place your disinfected items once you disinfect them.
19. On the "dirty" side of the plastic sheet or close by place:
 - One container of soapy water for personal (skin) disinfection.
 - At least one container (e.g. tub/footbath) and a small spray pack of Virkon® S or soap/water for disinfection of other materials.
 - A minimum of 5 strong garbage bags.
 - 5 or more clip seal type bags to double bag samples and single bag paperwork that need to be taken off.
 - Nail and scrubbing brushes and tissues (in a clip seal type bag).
 - 10-20 litres of water for gross decontamination if you will not be able to grossly decontaminate elsewhere on the property.
20. On the "clean" side, have your car, clean clothes (in boot), spray pack of Virkon® S or other suitable disinfectant and a bucket of clean water for final rinse off.
21. Remove excess clothing and put on disposable coveralls over the top of your street clothes.
22. Put on rubber boots.
23. Don gloves. (2 pairs of disposable and take spares in a sealed plastic bag). Seal your gloves to the disposable overalls or waterproofs with duct tape if appropriate.
24. Wash or spray disinfectant on all tools taken onto the premises. Keep tools (stethoscope, thermometer, mobile phone etc.) in separate bags so that when one is used, it will not be necessary to decontaminate all of them.
25. Cross into the "dirty" area.

Examination of horses

26. Record the identity of each horse examined.
27. Examine all suspect horses, commencing with those deemed least risk and finishing with those deemed most at risk of being infected.
28. Particularly note the temperature, coughing or respiratory distress, or nasal discharge.
29. Record history and clinical signs, including appetite and alertness.
30. If examining more than one horse, be careful not to spread virus material. Wash hands with soap and water, consider changing overalls and disinfecting boots and examination equipment between horses.

Samples to be collected

In most circumstances, a maximum of three horses should be sampled for each property. The horses with the most severe clinical signs should be sampled. The test is very sensitive and will pick up infection if virus is present in the sample.

31. For each horse collect:
 - 2 x nasal swabs (one for each nostril). A normal 6 inch wooden or plastic handle cotton swab is satisfactory. Insert deeply into the nostril and vigorously swab the nasal septum and ventral meatus. Place both swabs into a single 5 ml virus transport vial (SPGA) (or, if not available, normal saline). Agitate each of the swabs in a single bottle of virus medium until the solution becomes cloudy with mucous etc. and then remove the swab sticks altogether.
 - 1 x 10ml clotted blood samples (red top tube). Do not refrigerate the blood samples until the serum has started to separate.
 - Label specimens with details of property, horse and date.

- Package specimens into a plastic bag, and notes into a separate plastic bag, to take back to your car.

Advice to owners

32. Provide the following advice:

- Monitor the health of horses on the property twice daily, by:
 - Observing for coughing, nasal discharge, inappetance, depression;
 - Measuring rectal temperature (Leave a thermometer if the owner does not already have one for horse use.);
 - Recording findings (temperature monitoring form is available); and
 - Notify DPI&F immediately if temperature rises above 38.5°C or coughing is observed.
- Move horses away from boundaries. Stable or use yard or internal property paddocks
- Implement the following Biosecurity procedures (as per Advice Sheet):
 - Don't go near other people's horses
 - Limit people and vehicle access to your property. Only essential visitors. Keep any visitors away from horses.
 - Keep vehicles away from horses, preferably left outside the gate.
 - Disinfect any visitors and vehicles onto and off of your property. Clean boots, clothes, supply if necessary. Detergent and water, Savlon, Dettol are some suitable disinfectants but don't mix. Keep wet for 10 minutes.
 - Advise visitors to shower and keep away from horses after leaving
 - Don't bring used gear onto property unless disinfected – see DPI&F website
 - Bring feed from clean sources only. Collect at front gate if delivered.
- If disease is not suspected:
 - Advise owner re isolating the horse and actions to prevent disease spread such as:
 - Use separate feed and water containers.
 - Dedicate a groom to deal with these horses only.
 - Decontaminate and disinfect this groom before they are allowed near any other horse.
 - Dedicate equipment and tack to be used for the sick horses.
- If disease is suspected:
 - Advise owner of finding of clinical signs consistent with EI
 - Arrange to muster stock away from all boundaries.
 - You may receive instructions to disinfect off the property, **OR** you may be required to begin preparations to become Infected Premises Site Supervisor. Further information will be forwarded to you from AUSVETPLAN and LDCC.

Maintain good communications with the owner at all times and ensure the owner is kept informed. The owner should also be given a DPI&F telephone number that can be contacted at any time and should also be made aware of the disinfection procedures required to leave the property.

Exit off the property

Departure procedure

33. Cleaning at a site elsewhere to the personal decontamination site:
 - At the **gross wash-down/cleaning site** remove gross contamination from yourself. Don't forget your hair.
 - Use soap/detergent and clean water if possible to physically remove as much contamination as possible from water impermeable equipment (e.g. gumboots and gloves) and tools or equipment you may have used on the premises.
34. Move to the personal decontamination site at the gate/entry.
35. Disinfection:
 - NOTE: Leave contaminated gear on the property if it cannot be decontaminated adequately.
 - Double bag samples, disinfect, and move them to the clean side.
 - Preferably, leave paperwork on the property, and re-record examination records onto clean paper from notes dictated by owner, after decontamination. Alternatively, single bag paperwork, disinfect and move it to the clean side.
 - Disinfect mobile phone bag, metal, plastic and non-porous equipment to the clean side.
 - Stand to the "dirty" side of the plastic sheet or stand in the tub/footbath you laid down in "3" above.
 - If double gloved, take off one pair of gloves and place them in a rubbish bag.
 - Scrub your water impermeable equipment with the water and disinfectant
 - Ensure you get ALL material off of yourself, including the crevices/cracks/tread of your boots. A 6" nail works well to get material out of your boot treads and can be left at the premises if need be.
 - Peel the disposable coveralls down around your ankles over the rubber boots, but leaving them wrapped around the boots.
 - Step out of the boots and onto the plastic sheet.
 - Pick up the disposable coveralls and place them inside the rubbish bag.
 - Disinfect rubber boots to clean area.
 - Take off the 2nd pair of gloves if double gloved and put them in your rubbish bag
 - Double bag disposables, etc to clean area.
 - Tip out the tub/footbath with the Virkon[®] S.
 - Disinfect yourself:
 - Stay standing on the plastic sheet and remove outer clothing if necessary (personal clothes) and hat and double bag to the clean area.
 - Disinfect and scrub all contaminated parts and exposed skin with soap and water.
 - Rinse off with clean water if desired but only after 10 minutes contact.
 - Dress in clean clothes/overalls/hat. Do not walk back over contaminated ground.
 - Put your shoes on.
36. Carefully, without contaminating your clean clothes, place drop sheet and buckets/containers and brushes into a clean plastic bag, dampen with disinfectant and seal.
37. Apply a final spray with disinfectant from the spray pack to all remaining bags that are to leave the property.
38. Liberally wash hands, face & disinfected skin in clean water with detergent or soap.
39. Supervise the same procedures for other people.
40. Complete the ANEMIS forms and the specimen advice sheet with details of the examinations and sampling.
41. Get further instructions from LDCC as to travelling back to LDCC (if EI suspected) or to next job (if no suspicion of EI).
42. Place swab and blood samples into an esky. Do not place specimen advice sheet in the esky – attach to the outside of the esky.
43. Ensure waste is disposed of as clinical waste.

44. If EI is suspected, go home and shower with soap and shampoo hair, change clothes and avoid immediate contact with other horses.
- Launder clothes and hat with detergent and hot water.
 - Instruments and veterinary equipment should be washed with soap or detergent and water and disinfected with Virkon, phenolic disinfectants or bleach.
- **N.B. Do not have contact with other susceptible livestock for 24 hours or until instructed by LDCC.**

Submission to Laboratory

45. Package samples to go to the laboratory
- Samples should be kept chilled e.g. use ice bricks and esky.
 - Packaging requirements must comply with IATA regulations. A packaging instruction will be provided with the Kits
 - All samples should go to the Biosecurity Sciences Laboratory (BSL). Where appropriate direct transport to BSL would expedite processing by 24 hours.
 - Be sure to include the specimen advice sheet (SAS) with the sample.
 - Alternatively they could be sent by courier to:

Specimen Receipt
Biosecurity Sciences Laboratory
Animal Research Institute
665 Fairfield Rd
Yeerongpilly. 4105

OR

Submit samples to another DPI&F laboratory for further forwarding by the laboratory

- If samples cannot be sent immediately, refrigerate them and ensure samples are sent to the laboratory as soon as possible.
- Samples will be tested by Influenza A PCR. This is a screening test. If this returns a positive result the second swab sample will be forwarded to AAHL for confirmatory testing.

Sending reports

46. Send/fax the ANEMIS 1, 2 and 3 forms to LDCC
- Fax # 4688 1645; attention SURVEILLANCE
47. Send/fax a copy of the specimen advice sheet to LDCC
- Fax # 4688 1645; attention SURVEILLANCE

DPI&F VETERINARY LABORATORIES CONTACT DETAILS

Biosecurity Sciences Laboratory (BSL)

Animal Research Institute
665 Fairfield Road
Yeerongpilly, Brisbane QLD 4105
Phone: (07) 3362 9471 (Specimen enquiries)
Fax: (07) 3362 9440

The opening hours of BSL are 8am - 5pm. After 5pm ring the lab first before arriving as there may be someone there who can receive the samples.

Animal Disease Surveillance Laboratory

203 Tor Street
Toowoomba QLD 4350
PO Box 102
Toowoomba QLD 4350
Phone: (07) 4688 1351
Fax: (07) 4688 1195

Tropical and Aquatic Animal Health Laboratory (TAAHL)

180-202 River Boulevard,
Oonoonba QLD 4811
PO Box 1085
Townsville QLD 4811
Phone: (07) 4722 2624
Fax: (07) 4778 4307

ADDITIONAL CONTACT DETAILS

LDCC Manager Veterinary Investigations: 4688 1639
LDCC Surveillance Coordinator: 4688 1640
LDCC Tracings Coordinator: 4688 1637

ADDITIONAL INFORMATION

The Queensland situation
www.dpi.qld.gov.au/

The Australian response
www.outbreak.gov.au/

AUSVETPLAN
www.animalhealthaustralia.com.au/

Case/Site No.: _____

Tracing Ref. No.: _____

Owner: _____

ANEMIS FORM 2 (EI):

DIAGNOSIS

36. *History:* _____

37. *Clinical Signs:*

- Fever (39°C-41°C)*
 Cough
 Lethargy
 Off Food
 Recumbent
 Laboured Breathing
 Stiffness
 Other: _____

38. *Tentative diagnosis: (P)ositive for EI, (N)egative for EI, (I)nconclusive:* _____

39. *Sample taken (Minimum of a swab of each nostril in virus transport medium and 5ml of clotted blood)*

Type	No. of samples	Comments
Nasal swab		
Blood		
Other		

Property operations / Brief assessment of special problems

40. *Security considerations - fences / roads / gates:* _____

41. *Distance from neighbouring horses:* _____

Case/Site No.: _____

Tracing Ref. No.: _____

Owner: _____

ADDITIONAL INFORMATION FOR SUSPECT OR INFECTED PROPERTIES

URGENT TRACING

42. Any movements of horses, tack, materials and products from other properties to this property since 16th August:

Date		Horse, tack, horse float or material moved:	Location moved from (address):
Dispatch	Arrival		

If insufficient space for any item, attach a sheet of paper and write in Case Number. Use black biro – print legibly.

43. Any movements of horses, tack, materials and products from this property to other properties since 16th August:

Date		Horse, tack, horse float or material moved:	Location moved to (address):
Dispatch	Arrival		

If insufficient space for any item, attach a sheet of paper and write in Case Number. Use black biro – print legibly.

44. Visits since 16th August by:
(V)eterinarians, (F)arriers, feed (M)erchants, farm (A)dvisors, (S)tock agents, (O)ther: _____

45. Names & addresses, dates, degree of contact with horses:

(V)eterinarians (F)arriers Feed(M)erchant, Farm (A)dvisor (S)tock agent (O)ther	Date	Name	Address	Contact No.	Purpose of Visit	Degree of Contact (Direct/Indirect, Frequency)

If insufficient space for any item, attach a sheet of paper and write in Case Number. Use black biro – print legibly.

46. Any other information: _____

ACTION:

47. Tracing priority: High Medium Low

48. Date of tracing started: _____

Tracing officer: _____

Relayed report taken/debriefed by: _____

Case/Site No.: _____
Tracing Ref. No.: _____
Owner: _____

ANEMIS FORM 3: EPIDEMIOLOGY REPORT

49. Owner's other premises (if applicable):

Address	Contact No.	Approx. No. of horses	Distance from this property	Degree of Contact <i>(Direct/Indirect, Frequency)</i>

If insufficient space for any item, attach a sheet of paper and write in Case Number. Use black biro – print legibly.

50. Employee's premises (if horses present):

Name	Address	Contact No.	Approx. No. of horses	Distance from this property	Degree of Contact <i>(Direct/Indirect, Frequency)</i>

If insufficient space for any item, attach a sheet of paper and write in Case Number. Use black biro – print legibly.

51. Information regarding neighbours with horses:

Date	Name	Address	Contact No.	No. of horses	Degree of Contact <i>(Direct/Indirect, Frequency)</i>

52. Additional information:

53. Inspector name: _____ Inspector's designation: _____

Inspector's signature: _____ Date: / / Time: _____

Case/Site No.: _____

Tracing Ref. No.: _____

Owner: _____

MAP OF THE PROPERTY *(with fences, boundaries, neighbours, buildings and landforms identified)*

ACTION:

54. Assessment: **(Z)**ero horses, **(U)**nknown, **(N)**egative, **(S)**uspect, **(D)**angerous Contact, **(I)**nfected:

55. Action: **(Q)**uarantine, **(I)**nvestigation, **(F)**ollow-up: _____

56. Quarantine Imposed: / / 57. Quarantine Released: / / 58. Revisit: _____ days

59. Map Sector: _____ 60. Tracing Ref.: _____ 61. Lab accession No.: _____

Authority given by: _____ **Date:** / / **Time:** _____

Field team advised by: _____ **Date:** / / **Time:** _____

Data entered by: _____ **Date:** / / **Time:** _____

AUSVETPLAN

Management Manual. Control Centres management. Part 2

LRD-OV5 Field surveillance teams

Field surveillance team members should be veterinarians or experienced animal health officers, and gazetted under the relevant legislation as inspectors with authority to impose and enforce quarantine.

Skills

- Appropriate clinical skills, and knowledge of gross pathology and field epidemiology.
- Good oral communication skills, with the ability to interview members of the public and convey information to professional colleagues.
- Knowledge of disease control principles and procedures used in an EAD outbreak (this may depend on the particular disease; staff with specialist skills may be required for specific tasks).

Line relationships

- Responsible to the LDCC surveillance coordinator.

Roles and responsibilities

- Discover unreported or undetected foci of infection within the RA and other areas as defined by the LDCC controller.
- Determine the health status of at-risk stock.
- Advise owners of at-risk stock about precautions to take to minimise the risk of stock contracting disease, any restrictions on stock movement, and the necessity to promptly report suspicions of disease.
- Quarantine and secure stock found with suspicious clinical signs, and immediately notify the LDCC veterinary investigations manager.

Duties

- Refer to the AUSVETPLAN disease strategy for the disease involved and to the **Decontamination Manual**.
- Inspect and examine stock, at the direction of the field surveillance coordinator, on at-risk premises within the RA and other areas as defined by the LDCC controller, collecting appropriate specimens. Assess the risk, importance and priorities for these contacts according to the nature of the disease.
- Report all findings to the surveillance coordinator on ANEMIS form 1.
- Apply quarantine under the appropriate legislation, after consultation with the LDCC veterinary investigations manager, when suspicious clinical signs are detected.
- Ensure that biosecurity procedures are adopted and that property visit intervals are adhered to.
- Report to the LDCC surveillance coordinator for debriefing and reassignment.

Title: **Personal Disinfection – entry and exit procedures**

EQUINE INFLUENZA

Version: 1.0

Date: 28 August 2007

Prepared by: **Rick Whittle**

Approved by:

1. Purpose

- To provide direction as to appropriate personal decontamination procedures for persons entering or exiting premises where they might be exposed to Equine Influenza virus

2. Application/Scope

- Disease organisms may be introduced to a premise or removed from it by the movement of persons and equipment. Appropriate procedures are required to minimise the potential for these occurrences.
- This procedure is applicable for all situations where personnel (with small sized equipment, diagnostic materials and ancillary materials) have to enter a premise for surveillance for disease or to undertake activities on Infected or Suspect premises or Dangerous Contact Premises.
- It also applies to property owners and employees etc who need to enter or exit a restricted property.
- The equipment to perform this procedure can be carried in one large storage box and a 20 litre water container for rapid deployment and transportability.

3. Resources/equipment

- Ground Sheet approx 1m x1m
- Multiple Pairs Disposable Overalls (2 per person to be decontaminated)
- Pair gum boots, in good repair and with easy clean treads per person
- 10 sturdy garbage bags.
- Pack quality clip seal bags, A4 size
- Pack of disposable examination gloves (latex or nitrile) or heavy duty reusable nitrile gloves (2 pr/person)
- Role of duct tape
- 3 buckets, at least 10 litres each
- Foot bath – fracture resistant
- Small screw driver or 150mm nail for cleaning boots
- Scrubbing brush and nail brush
- 500ml hand sprayer x 2
- Water – minimum 20 litres

- Virkon S -2 x 50 gm sachets per decontamination event or a small bulk supply.
- Chlorhexidine disinfectant. Preparations vary from 0.75% to 5% liquid concentrates
- Or other suitable disinfectant eg bleach, dettol
- Detergent – eg a quality dishwashing liquid or commercial detergent.
- Soap

4. Warnings

- For safety information on disinfectants see Material Safety Data Sheets
- Do not apply Virkon S to skin. If Virkon S gets into eyes, wash out thoroughly with clean water. Then seek medical advice.
- Do not take vehicles onto the property
- Do not take bulk supplies of resources onto property. Only take on those resources necessary to perform duties or those that can be disinfected off again. Equipment which cannot be decontaminated properly after entry to a property must remain on site or be disposed of safely.
- Do not use chemicals for personal decontamination if they are not registered for use on skin.
- Set up the decontamination site prior to entering the property. Do not re-enter a vehicle or the clean area until decontaminated adequately.

5. Description of activities

Disinfection Guidelines:

- Liberal washing with soap or detergent and uncontaminated running water can physically remove the bulk of all infectious agents and is a valuable disinfection technique.
- Water for cleaning and disinfection must be uncontaminated. Water from a bore or reticulated supplies would be satisfactory.
- Clean equipment and boots before disinfection as organic matter may inactivate some disinfectants.
- Suggested disinfection agents.

For non-personal use,

- ❖ add Virkon[®] S at a rate of 100g per 10 litres (1% solution). Use 20mls of 5% chlorhexidine gluconate per litre of water (0.1% solution)
- ❖ Soaps, detergents and chlorhexidine are effective disinfectants against category A viruses and many bacteria. However, mixing soaps, detergents or chlorhexidine will inactivate them.

For personal use

- ❖ Liberal washing with soap or detergent and clean, (preferably running) water
- ❖ Dettol solution at recommended rates
- ❖ Chlorhexidine solutions formulated for personal use
- Allow sufficient contact time for disinfectants to work. Contact time (time disinfectant needs to be in contact with a surface for the most effective disinfection) for Virkon[®] S and chlorhexidine is 10 minutes.
- Double bagging is used to remove most potentially contaminated gear and samples off the property. To double bag, place the material in a bag, exclude air, seal the bag, then decontaminate the bag with Virkon[®] S, place in a second bag, exclude excess air, seal it and decontaminate the second bag with Virkon[®] S.

Procedure:

Entry Procedure

- Select and set up a **personal decontamination site** before entering the property. The decontamination site should be close to the property entrance/exit or a clean area ('cold zone') of the property from which you are able to exit without re-entering a contaminated area ("hot zone").
- Set up a site with a defined "dirty" and "clean" area that allows you to decontaminate yourself plus any gear necessary from the dirty (hot zone) to the clean area (cold zone). A small (~1m²) drop sheet or plastic rubbish bag can be used as a "clean" base to work on.
- Spread the drop sheet on the ground first and weight at the corners to prevent it blowing away. This sheet will be designated as the disinfection site.
- On the "dirty" side (hot zone) of the plastic sheet or close by place:
 - ❖ One container of disinfectant solution for personal disinfection.
 - ❖ At least one container (eg. tub/footbath and/or bucket) and a small spray pack of Virkon[®] S for disinfection of other materials.
 - ❖ A minimum of 5 strong garbage bags.
 - ❖ 5 or more clip seal type bags to double bag samples and single bag paperwork that need to be taken off.
 - ❖ Nail and scrubbing brushes
 - ❖ 10 litres of water for gross decontamination if you will not be able to grossly decontaminate elsewhere on the property.
- On the "clean" side (cold zone), have your car, clean clothes (in boot), spray pack of Virkon[®] S or other suitable disinfectant and soap and a bucket of clean water for final rinse off.
- Remove excess clothing, even down to underwear (stop at the underwear!) and put on disposable overalls over remaining clothes.
- Put on rubber boots.
- Don gloves. (1 pair heavy duty nitrile or 2 pairs of disposable and take spares in a sealed plastic bag). Seal your gloves to the disposable overalls or waterproofs with duct tape if appropriate.
- Put on protective eye equipment or put in a bag for later donning on site when needed
- Disinfect boots
- Wash or spray disinfectant on all tools taken onto the premises.
- Place mobile phone in a clip seal bag and disinfect bag. The mobile phone is to stay in the bag and be used while still in the bag. Use a large bag for flip open phones.
- Cross into the "dirty" area.

Departure procedure

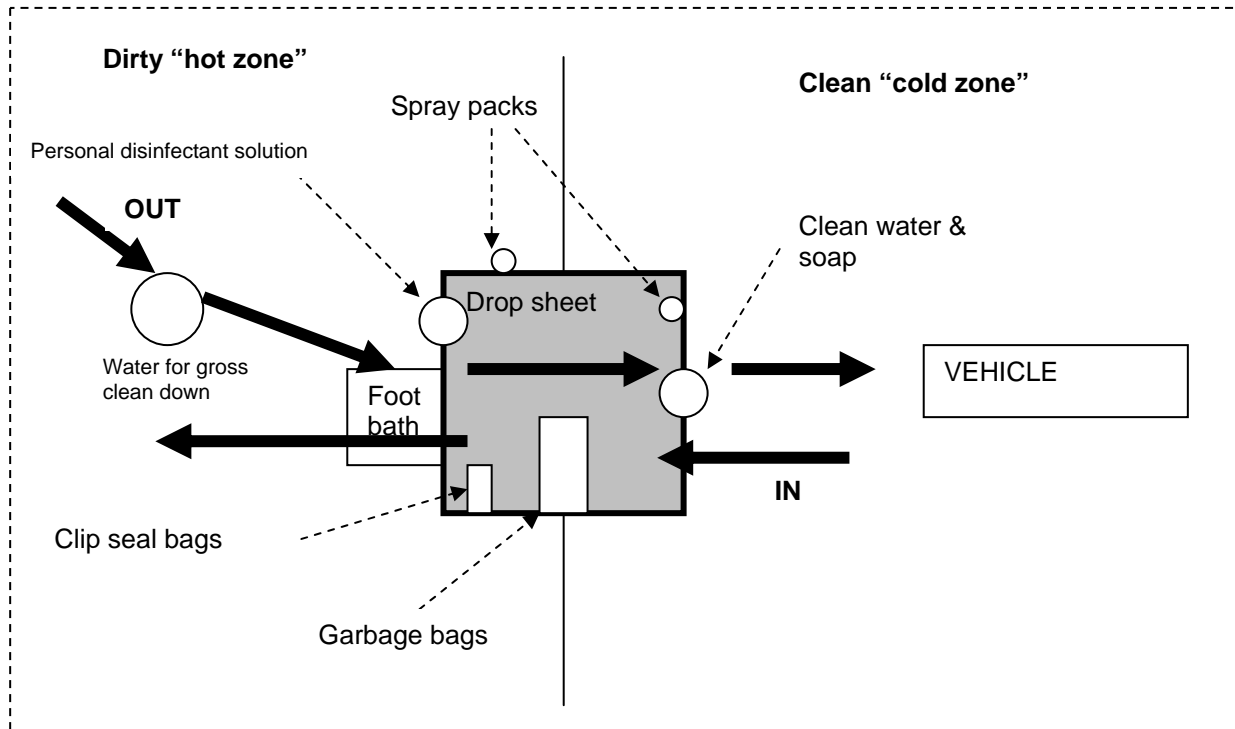
- Clean at a site away from the personal decontamination site:
 - ❖ At a **gross wash-down/cleaning site** remove gross contamination from yourself. Don't forget your hair.
 - ❖ Use soap/detergent and clean water to physically remove as much contamination as possible from water impermeable equipment (e.g. gumboots and gloves) and tools or equipment you have used on the premises.
- Move to the personal decontamination site.
- Disinfection:

- ❖ NOTE: Leave contaminated gear on the property if it cannot be decontaminated off adequately.
- ❖ Double bag samples and single bag paperwork in clip seal bags, disinfect the bags and move them to the clean side. (**NB Don't contaminate samples with disinfectant**)
- ❖ Disinfect mobile phone bag, metal, plastic and non-porous equipment to the clean side.
- ❖ Stand to the "dirty" side of the plastic sheet or stand in the tub/footbath.
- ❖ If double gloved, take off one pair of gloves and place them in a rubbish bag.
- ❖ Scrub your water impermeable equipment with the water and disinfectant
- ❖ Ensure you get ALL material off of yourself, including the crevices/cracks/tread of your boots. A 6" nail works well to get material out of your boot treads.
- ❖ Peel the disposable coveralls down around your ankles over the rubber boots, turning inside out as you go, but leaving them wrapped around the boots.
- ❖ Step out of the boots and onto the plastic sheet.
- ❖ Pick up the disposable coveralls and place them inside the rubbish bag.
- ❖ Remove eye protection and disinfect to clean side.
- ❖ Disinfect rubber boots to clean area.
- ❖ Take off the 2nd pair of gloves if double gloved and put them in the rubbish bag and tie off the rubbish bag.
- ❖ Double bag disposables to the clean area.
- ❖ Tip out the tub/footbath with the Virkon[®] S/disinfectant.
- ❖ Disinfect yourself:
 - Stay standing on the plastic sheet and remove outer clothing **and hat** if it has become contaminated through overalls and double bag to the clean area.
 - Wash and disinfect all contaminated parts and exposed skin with personal disinfectant solution.
 - Rinse off with clean water after allowing sufficient contact time.
 - Dress in clean clothes/overalls/hat. Do not walk back over contaminated ground.
 - Put your shoes on.
- Carefully, without contaminating your clean clothes, place drop sheet and buckets/containers and brushes into a clean plastic bag, dampen with disinfectant and seal.
- Apply a final spray with disinfectant from the spray pack to all remaining bags to leave the property.
- Liberally wash hands, face & disinfected skin in clean water with detergent or soap.
- Supervise the same procedures for other people exiting the premise.
- Return to your practice, shower and dress in clean clothes and footwear.
- **Ensure waste is disposed of as clinical waste**
- **N.B. If you suspect you have been exposed to Equine Influenza, do not have contact with other susceptible equines for 24 hours or until cleared to do so by DPI&F.**

6. References

- [AUSVETPLAN Decontamination Manual](#)
- AUSVETPLAN Disease Strategy Manual for disease under control

7. Appendices



Suggested layout for a personal decontamination site to enter and exit a property where equine influenza is suspected.

SPECIMEN ADVICE SHEET: FORM A

Instructions to Submitters

1. COMPLETE ALL SECTIONS; PRINT clearly using a BLACK pen.
2. NUMBER ANIMALS and CORRESPONDING SAMPLES SEQUENTIALLY FROM 1.
3. EAR TAG NUMBERS OR NAMES WILL NOT APPEAR ON THE REPORT.
4. Use one sheet per animal species.
5. Use FORM B for necropsies.

Lab. Use Only



Affix Accession sticker here

Affix Lab Specimen Label here

Property Number:

--	--	--	--	--	--	--	--

Property Name

Owner Name

Property Addr.

Town/Shire Post Code

Animal Type

.....

Breed/Species

.....

Sex

- Male
- Female
- Desexed

Age

.....

(dy/wk/mth/yr)

Status

- Homebred
- Introduced

Production Type

- Feedlot
- Meat
- Dairy
- Fibre
- Layer
- Marine
- Freshwater
- Other

Reason for Test

- Diagnostic
- Experimental
- Project No.
- Export to
-accreditation
- Health test
- Surveillance
- Meatworks
- Other:

Submitter

(Submitter Ref:))

Name Code

Address

Town Post Code

Reporting Options

- Fax No:
- Post
- Phone No:

Signed: Date/...../.....

Current Outbreak

Date of Onset of Outbreak:/...../.....

Total number on Property:

No. in At-Risk Group:

No. Sick No. Dead

Treatments:

Vaccinations:

History and Clinical Signs

Hours since death: Date of Sample Collection/...../.....

List any previous accessions for this outbreak.....

Diseases Suspected:

Laboratory Use Only

Specimens - Tests Required

	Lab	Sample & No	Test
EM:			
Bio:			
Bot:			
Myc:			
Bac:			
His:			
Hae:			
Par:			
Pes:			
Ser:			
Pro:			
Vir:			
BTB:			

Satisfactory samples Unsatisfactory

Receiving Officer

Pathologist

Equine Influenza Response

Veterinary Investigation Kits

- Personal equipment
 - Mobile phone
 - Identification card
 - ANEMIS forms 1, 2 and 3
 - Laboratory submission forms
 - Temperature monitoring forms
 - Notepad
 - Pencils
 - List of contact phone numbers

- Sampling equipment
 - Vacutainer tubes, for clotted blood
 - Vacutainer needles
 - Vacutainer cups
 - Sterile swabs
 - Virus transport media
 - Esky & cold brick
 - Thermometer plus spares
 - Sharps container
 - If required:
 - Transport pack including biobottle
 - Consignment note
 - Packaging guideline

- Protective clothing
 - Disposable overalls
 - Gumboots, in good repair and with easy clean treads
 - Pack of disposable examination gloves (latex or nitrile) or heavy duty reusable nitrile gloves
 - Role of duct tape

- Disinfection equipment
 - Ground Sheet approx 1m x1m
 - Sturdy garbage bags.
 - Pack quality zip seal bags, A4 size
 - 3 buckets, at least 10 litres each
 - Foot bath – fracture resistant
 - Small screw driver, hoof pick, or 150mm nail for cleaning boots
 - Scrubbing brush and nail brush
 - 500ml hand sprayer x 2
 - Water – minimum 20 litres
 - Disinfectant:
 - Virkon S, 50 gm sachets (2 per decontamination event) or bulk supply; or
 - Other suitable disinfectant eg bleach, dettol
 - Detergent – eg a quality dishwashing liquid or commercial detergent
 - Soap