

NATIONALLY AGREED STANDARD OPERATING PROCEDURE (NASOP)

Title: Collecting emergency animal disease samples for laboratory testing

Version: 1.0

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Approved by: Animal Health Committee

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	1.0	02/05/11	Approved by AHC

NASOPs support national consistency and provide guidance to response personnel undertaking operational tasks.

1. Purpose

- This document guides the emergency animal disease (EAD) sample collection procedures to be used by sampling teams, operating from operations centres, who collect EAD samples for laboratory testing. This NASOP should be supported by jurisdictional SOPs and disease specific control strategy manuals.

NOTE: Disease-specific sample collection protocols may need to be developed by operations centres during the response in collaboration with the designated laboratory.

2. Application/Scope

- This NASOP should be used by relevant personnel in operations centres and laboratories to guide the development of disease specific sample collection protocols.
- The final disease specific sample collection protocol will include the choice of samples, collection and transport, priority of testing and release of test results.
- Separate to this NASOP, an operations centre should ensure that:
 - samples are collected, packaged and transported correctly to ensure 'chain of custody with samples' requirements applicable to the jurisdiction and the disease response
 - samples are packaged according to appropriate transport regulations
 - State Coordination Centre (SCC) has chosen a testing laboratory for the response
 - the laboratory is provided with the best samples possible
 - relevant transport regulations are complied with.
- The appropriate AUSVETPLAN disease strategy outlines the specific diagnostic samples and their collection for isolation of specific suspect causative agents.
- The appropriate AUSVETPLAN disease strategy provides guidance on the samples required for surveillance and proof of freedom and the agreed level of collection for the outbreak.

3. Resources/equipment

- clear instruction on the number and status of premises to be visited for each trip out from the operations centre
- sampling protocol(s) e.g. tissues to be collected, number of samples per herd/flock
- appropriate sampling equipment (consider sample kit checklist at Appendix A)
- owner/manager and livestock details including numbers and locations for each property

- appropriate documentation, e.g. BioSIRT forms, quarantine forms (for properties with animals showing clinical signs), laboratory submission forms, sample movement permits etc
- personal decontamination kit
- agreed entry/exit processes of declared premises as per NASOP 01: *Personal Decontamination– entry and exit procedure*
- appropriate personal protective equipment (PPE)
- sample transport packing system that complies with transport regulations
- mobile telephone or radio for communications between field and operations centre

4. Warnings

4.1. Zoonoses

- Sampling livestock can expose personnel to zoonoses other than the agent under investigation.
- Personnel must take precautions to prevent exposure to organisms during the sampling procedure.
- Potential hazards include aerosols, exposure and contamination of mucous membranes and needle stick injuries.
- Veterinary Investigation section is responsible for the formulation and implementation of suitable procedures where zoonoses are involved with input from other sections of the operations centre and relevant experts.

4.2. Personal injury

- A wide range of potential hazards exist when sampling livestock.
- Wearing PPE can inhibit normal movement.
- Eye and face protection can reduce peripheral vision.
- Suitable footwear must be worn. Given the opportunity the majority of the work should be undertaken on the 'best' work surface.

4.3. Animal handling facilities

- Animal movements may be sudden, unpredictable and potentially dangerous to handlers. Whenever possible, only those personnel with demonstrated competence and confidence should be involved in animal handling particularly when large numbers of livestock are involved. Animal handling facilities such as a crush should be located and used.

4.4. Disinfectant(s)

- The Material Safety Data Sheet (MSDS) for the disinfectant(s) in use must be available, and all PPE as described in the MSDS must be available and used. Care should be taken when disposing of used disinfectant.
- The sampling team must have access to the correct procedure to disinfect the specimen advice sheets and samples off the property without compromising sample viability i.e. contact of a fresh sample with disinfectant may neutralise the disease agent and give false test results.

NOTE: As a general rule, there should be no skin contact with any disinfectant. Soap or a similar cleaning agent should be used to cleanse the skin.

4.5. Environmental

- The operating environment is likely to be outside and exposed to the elements. It may be very hot or very cold. Appropriate clothing for the weather conditions such as hat and sunscreen, or wet weather clothing should be used.
- In severe weather conditions, consideration should be given to re-scheduling the sampling to an alternative time or until weather protection such as portable shelter, has been organised.

4.6. Personal threat

- On occasions, property owners may display extreme emotional behaviour that may be either directed toward or indirectly impact on personnel engaged in the collection of data and samples. In these circumstances appropriate professional support should be provided to the owner/manager and/or the personnel.
- If a sampling team feels physically threatened, they should immediately withdraw from the situation and advise their supervisor.

5. Description of activities

5.1. Preparation

- Preparation before leaving base is essential to ensure the sample collection process does not contribute to disease spread.
- Use 'prior to sample checklist' (Appendix B) used to record preparation activity.
- Sampling teams should ascertain the procedure for release of sample results so the owner/manager can be correctly informed.
- The sampling team should have clear epidemiological instructions on the number and type of animals required to be sampled.
- Sampling teams must advise Surveillance Coordinator of departure, and destination.
- Contact owner to:
 - explain nature of task
 - determine agreed time
 - ascertain livestock and animal handling facilities
 - arrange additional resources, etc
 - seek advice on where to park car off site (car to be left off site)
 - explain process for release of test results.

NOTE: During any contact with the owner, there must be no commitment as to what will happen with results when they are available, unless this has been clearly stated by the Chief Veterinary Officer.

- Dependant on the response being conducted, consideration may be given to sample collection being carried out by owners/managers to be consistent with LCC guidelines.
- Evaluation of the type of samples which need to be collected, the owner's/manager's competency to make this collection in an acceptable manner and acceptance of this approach by response deed parties is required before any decision is made. Training may be necessary if this approach is accepted.
- If a decision is made for sample collection to be undertaken by people other than trained personnel, operations centres will need to develop additional procedures and processes appropriate to the response and personnel involved. This NASOP may assist in the development of these procedures.

5.2. On Site

- Park near designated entry/exit site and position to enable access to sampling resources.
- Establish a suitable entry/exit point (personal decontamination site) with reference to appropriate NASOPs, SOPs etc.
- Sampling teams should be self sufficient in sample collection resources, including disinfectant, and not use owner's resources without prior approval from the operations centre.
 - Sampling teams should contact owner and move onto and around the property with the owner or their delegate.
 - The owner or delegate should agree before property facilities are used.
 - Sampling teams must be instructed to consult the operations centre if facilities are insufficient and personal safety is at risk.
 - Sampling teams should only take those resources necessary to complete the task onto the property—everything else should be left outside.
 - If access is denied contact the operations centre for advice and/or support (legal and police).
 - Sampling teams should conduct only the task assigned to them for each property—additional tasks should not be undertaken without further permission being obtained from the operations centre.

- Sampling teams should follow operations centre protocols outlining the details of the sample collection procedure to be used.

5.3. After exiting

- Samples should be sent or delivered directly back to the operations centre (between surveillance visits or according to operations centre advice) for consignment to the laboratory.
- If samples are to go direct to the laboratory from the field, the samples will need to be packed in accordance with NASOP 30: *Transport and handling of samples*. NOTE: an accredited sample packer may be required in the sampling team for this situation.
- Sampling teams should report to Surveillance Coordinator that samples have been collected and are en-route to operations centre (or laboratory as per above).
- Once at operations centre, sampling teams should be debriefed and should hand over any other forms or information collected.
- Sampling teams should place contaminated waste in designated waste disposal and process their re-usable PPE as per operations centre arrangements.

NOTE: Potentially contaminated waste must not be left in cars overnight at place of accommodation.

6. References

- NASOP 01: *Personal decontamination—entry and exit procedures*
- NASOP 30: *Transport and handling of samples*
- NASOP 31: *Management and handling of samples in an LCC—in preparation*
- NASOP 39: *Relaying laboratory results (to the owner)*
- NASOP on personal decontamination kit—in preparation
- release of laboratory results—in preparation
- NSW Agriculture SOP - Sample collection for laboratory examination/testing prepared by Kevin Cooper
- MSDS for:
 - Virkon^R
 - 70% alcohol
 - povidine iodine

7. Appendices

- Appendix A: Sample kit checklist
- Appendix B: Prior to sampling checklist

Sample kit checklist

The minimal amount of equipment should be taken on site. This checklist is a list of equipment for consideration.

	sterile instruments to collect samples (disposable preferred)
	A4 zip lock bags for forms
	small zip lock bag for items such as phone
	pre labelled sample tubes—sterile and/or loaded with transport media and/or formalin etc. Labelling with pencil or solvent proof/waterproof marker is essential.
	sterile swabs with transport media
	esky and ice bricks
	disinfectant in a spray bottle
	additional disinfectant
	syringes/needles/swabs
	appropriate holder, needles and tubes for blood collection
	sharps disposable container
	bucket—square is better for immersion into disinfectant
	towelettes or paper towel

Prior to sampling checklist—(initial each task on completion)

	locate and read all relevant NASOPs, SOPs, Work Instructions and MSDS
	Movement Permit(s) for sample transport from property to laboratory are in place
	confirm all legal requirements are addressed (identification, legal powers and documents)
	confirm sampling protocol (including number and type of animal to sample and procedure for safe removal of samples from the premises)
	confirm laboratory has been contacted regarding timing of sampling (relative to laboratory capacity to handle samples) and ensure laboratory is able to receive samples
	locate owner/manager/property details
	explain nature of task to owner and determine an agreed time
	ascertain livestock and animal handling facilities on property and identify additional resources which might be required
	arrange additional resources, etc.
	seek advice on where to park car off site (car to be left off site)
	assemble sampling kit
	assemble personal decontamination kit
	assemble PPE appropriate for the task to be undertaken
	advise Surveillance Coordinator of departure and destination

Completion of checklist will be used as an indication of compliance should the process be subject to audit.