



ANIMAL HEALTH SURVEILLANCE QUARTERLY

WRITING GUIDE

ABOUT THIS PUBLICATION

- *Animal Health Surveillance Quarterly* (AHSQ) is published online by Animal Health Australia (AHA).
- Quarterly veterinary scientific publication to demonstrate animal health surveillance activities undertaken in Australia over the previous 3-month calendar period.
- Disease reporting that is transparent, honest and timely as part of Australia's National Animal Health Information Program (NAHIP).
- The NAHIS database collates data from a wide range of government and non-government surveillance and monitoring programs to provide an overview of animal health in Australia.
- AHSQ contributes to Australia's annual animal health report to the World Organisation for Animal Health (OIE) and the annual publication, *Animal Health in Australia*.
- Content is provided by multiple contributors and comprises technical text, and data presented in graphs and tables. Content and contributors routinely include:
 - the Australian Chief Veterinary Officer
 - topical feature articles
 - Wildlife Health Australia
 - aquatic animal health
 - state and territory reports on selected veterinary investigations
 - quarterly statistics on disease monitoring and surveillance activities
 - contacts for follow up on articles.
- Reports of national surveillance programs are highlighted in relevant issues, such as:
 - National Arbovirus Monitoring Program (NAMP)
 - National Dairy Enzootic Bovine Leucosis Eradication Program (NDEBLEP)
 - Northern Australia Quarantine Strategy (NAQS)
 - Screw Worm Fly Surveillance and Preparedness Program (SWFSPP)
 - TSE Freedom Assurance Program (TSEFAP).

AUDIENCE

Information available in NAHIS and published in AHSQ is publicly available and **important for supporting trade** in animal commodities and meeting Australia's international reporting obligations. We send an electronic version of each edition of AHSQ to stakeholders in the animal health system, including delegates from trading partner countries, government and private veterinarians, peak industry bodies at both the national and state level, employees of state and territory government agencies and the Australian Government Department of Agriculture and Water Resources.

DEADLINE

Reports are required within 2 weeks of the end of each quarter (January to March, April to June, July to September, October to December) covering events within the quarter.

SENSITIVITIES TO CONSIDER

TRADE

Overseas markets for live animals and animal products may be sensitive to particular diseases that occur in Australia, as well as Australia's response to notifiable, emerging and emergency animal diseases (EADs).

Authors should ensure there is no potential for misinterpretation of reports. Consider whether there may be any sensitivities involved in reporting the event and address these by:

- Describing the **manner in which the case was resolved**, including:
 - Clearly stating the final diagnosis (if possible) or the treatments and interventions that have brought the incident to a halt.
 - Where investigations may be ongoing beyond the end of the quarter, avoid stating that a diagnosis remains open or unclear or disease unresolved.
- Clarifying **Australia's animal health status** in the international context, with respect to the disease in question, for example:
 - "...the organism is ubiquitous globally and outbreaks occasionally occur following damp weather...."
 - "... BSE has never occurred in Australia, and Australia has official OIE 'negligible risk' status for the disease..."
- Ensuring information on **exotic disease exclusions** is provided. This should include how specific diseases had been excluded and demonstrate a consideration for how the exclusion testing of exotic diseases may have contributed to differential diagnosis. A clear description of how diseases were excluded is important to reassure trading partners that appropriate measures have been taken to exclude trade-sensitive diseases (e.g. the specific type of laboratory test performed or appropriate justification where exclusion based on clinical presentation is used).
- Highlighting **Australia's systems for detection, reporting, tracing and managing disease**, for example:
 - "...the disease was detected during post-mortem inspection. Using the National Livestock Identification Scheme (NLIS), stock could be traced to the source farm. Appropriate management measures were undertaken where required (e.g. quarantine, vaccination, medication)."
- Including measures taken to **address public health or zoonotic disease risk**. For example,
 - "An experienced public health official provided appropriate counselling and information in these cases. More information on ABLV testing of bats in Australia is available in [ABLV Bat Stats](#).¹ ABLV is a nationally notifiable disease in Australia. Cases of suspect ABLV infection or exposure should be reported to the Emergency Animal Disease Watch Hotline on 1800 675 888."
- Ensuring the **quarterly statistics** reported in each edition are consistent with the investigations reported in feature articles and state and territory reports. At the back of each edition of AHSQ, the quarterly statistics section presents a summary of disease investigations for certain nationally notifiable diseases and surveillance programs. Data is entered into NAHIS by state and territory coordinators when diagnostic testing has been undertaken to exclude nationally notifiable diseases. It is important that the information presented throughout each edition of AHSQ is accurate, complete and consistent.

WRITING GUIDE

TOPIC AND FORMAT

There are 1-3 feature articles required each quarter (depending on availability). Feature articles are **800-1500 words** and should be on topical issues that support market access.

Case reports should describe interesting disease investigations or control, surveillance, research and extension activities relating to animal disease.

State and territory coordinators are asked to consider the range of reports included in each AHSQ edition for their jurisdiction and avoid excessive duplication of topics (e.g. plant poisoning, lead poisoning).

Useful examples of style and format can be found in previously published editions of the AHSQ found on the AHA website: <https://www.animalhealthaustralia.com.au/our-publications/animal-health-surveillance-quarterly/>.

Case reports should be concise, around **500 words**. More detailed style and content guidance can be found below.

What makes a good AHSQ case (disease investigation) story

- Incident must have occurred in the relevant quarter
- Notifiable disease detection or exclusion (preferably via a disease specific test e.g. PCR rather than being excluded by absence of consistent histology alone)
- A diagnosis, presumptive at least. If a notifiable is excluded we want to satisfy trading partners that we worked out what it was instead.
- A 'so what' message – what does the detection or exclusion mean or demonstrate that can be applied more broadly.
- Tight and data rich (include the technical details – clinical signs, gross findings, lab results, diagnoses/exclusions)
- Plain English – nothing grandiose e.g. use not utilise
- Overall a veterinary or animal health officer reader should read the story quickly and find it easy to read and be left with a warm feeling about how effectively we are doing surveillance to detect and exclude notifiable diseases, and to be left confident that the quality of our surveillance means that our favourable disease status is as good as we say it is. It should not leave any queries or doubts.

STRUCTURE

There is a standard structure for writing AHSQ reports, whether they describe a disease investigation or a disease control or research activity. Where a record of disease event form has been completed for an investigation, the key information gathered on the form can be logically transformed into a report.

The steps to write a report are as follows, and are expanded below:

1. Write the title
2. Write the topic sentence(s) for each paragraph
3. Write supporting sentences for each topic sentence
4. Write the concluding sentence(s)
5. Edit and refine.

Title

State the disease or suspected disease and affected species. It may be appropriate to highlight the exclusion of an exotic, significant or notifiable disease. Avoid using overly dramatic or sensational titles.

Examples of titles are:

“Hendra virus excluded in two horses” OR “Chlamydiosis in ducks”

NOT “New disease identified in birds” **OR** “Suspect foot-and-mouth disease in ten cattle”

Topic sentence

The topic sentence summarises the paragraph and captures reader interest by indicating what the rest of the report or narrative will be about. It is general and indicates what will follow. It may also be appropriate to highlight the exclusion of an exotic or notifiable disease, or highlighting that effective surveillance, veterinary or inspection procedures were responsible for detecting the disease.

A topic sentence should state key details, such as:

- i. findings (suspect or definitive)
- ii. number and characteristics of the affected animals
- iii. when the disease investigation occurred
- iv. where the disease investigation occurred
- v. in the case of ‘sensitive’ diseases, which notifiable diseases were excluded and how.

These can be described in any order, but can be more appealing to the reader if the most interesting information is at the beginning of the sentence. Sometimes it is the finding (e.g. anthrax), sometimes it is the species (e.g. an elephant) and sometimes it may be the scale of an outbreak (e.g. 200 animals died).

Examples:

“In late May 2016, pregnancy toxaemia killed 20 of a group of 100 stud Merino ewes, aged 2 to 3 years old, on a hobby farm near Kyneton.”

“Hendra virus was excluded in a pony displaying neurological signs at an abattoir in north-east Queensland in May 2017.”

Supporting sentences

Elaborate on the topic sentence by providing specific, concrete details that describe, explain and discuss the topic sentence. Provide facts and evidence to support the general summary in the topic sentence. These specific, concrete details are derived from the author’s main evidence on the case and should be arranged in a logical order. In a disease investigation, these ideas and their order come from the findings of the different sequential examinations performed, namely:

1. history (when, where and what animals were affected)
2. clinical signs
3. necropsy findings (remarkable and unremarkable)
4. laboratory e.g. blood, faeces, tissues, using microscopy, culture, PCR
5. management e.g. husbandry, housing
6. environment e.g. weather, terrain.

Followed by:

7. diagnosis and differential diagnoses, including exclusion of exotics
8. responses to (i) treatment and (ii) management interventions to control the disease

9. predisposing factors (animal, management, environmental).

Only include highlights or significant findings of investigations – those which are important evidence to support the topic sentence. Readers are satisfied by memorable, specific, concrete and correct details.

For example:

“...laboratory samples showed liver disease” is okay, but “...marked increase in hepatic enzymes and histopathology were indicative of severe liver disease....” is much better.

Additional sentences might briefly describe consideration given to differential diagnoses, particularly exotic diseases, and how they were excluded. Identify the specific diagnostic tests performed. If a notifiable disease is included as a differential diagnosis, the method of exclusion should be provided in the article.

An example is:

“All the flocks were screened for avian influenza and Newcastle disease viruses, serologically and by virus isolation, with negative results.”

A sentence or two describing how the problem resolved through treatments or management interventions should be added, for example:

“The animals were vaccinated and moved to a fresh paddock, and no further clinical cases occurred.”

Significant predisposing animal, management and environmental factors should be mentioned, for example:

“The combination of poor body condition, exhaustion from excessive handling, and cold weather were significant factors contributing to the large losses in this case.”

Remember to include the final diagnosis or suspected diagnosis.

Concluding sentence

The concluding sentence(s) should bring closure, give a sense of completeness and provide a final perspective to the report, however this is not always possible. If the concluding sentence(s) sounds stilted, don't include it.

Some suggestions for concluding the report are:

- Emphasise **significant predisposing factors**, for example:

“A combination of cold weather, poor quality silage and advanced pregnancy were significant predisposing factors.”

- Give a **warning or extension message**, for example:

“This outbreak highlights the importance of following the manufacturer's recommended dose rate.”

- Place the event into **context**, for example:

“Outbreaks of x occur occasionally in this region following damp or wet weather.”

- Address potential **concerns** (e.g. human health, animal health or trade) that may arise from your report, for example:

“Affected carcasses were condemned in accordance with Australian requirements.”

WHAT MAKES A GOOD STORY (ANTHRAX EXAMPLE)

The *ideal* anthrax story would include all elements for the nature of the story (exclusion or detection).

A *good* anthrax story would have most of the relevant elements.

A story with less than half the relevant elements is *poor* and probably not suitable for publication.

For exclusion stories (i.e. anthrax negative)

1. *Timely* recognition and reporting of sudden death (admittedly timely is subjective – but 2 weeks is not timely)
2. Disease investigation initiated wearing PPE appropriate to the risk of anthrax where at least one animal is examined within 48 hours of death
3. Use of the ICT test according to recommendations – including < 48 hrs post death – with negative result
4. Further disease investigation informed by the clinical presentation and ICT test – potentially including a necropsy while wearing PPE appropriate to the persistent risk that anthrax might be present despite the negative ICT result
5. Samples submitted for lab testing for anthrax to corroborate the ICT result
6. Samples submitted for lab investigation for alternative diagnoses
7. Disposal appropriate to the risk as assessed from the combination of presentation + ICT + necropsy (e.g. if necropsy finding suggest anthrax despite negative ICT then full ‘anthrax’ disposal)
8. A satisfying alternate diagnosis
9. A ‘so what’ message relating to the exclusion or alternative diagnosis

For detection stories (i.e. anthrax positive)

1. *Timely* recognition and reporting of sudden death (admittedly timely is subjective – but 2 weeks is not timely)
2. Disease investigation initiated wearing PPE appropriate to the risk of anthrax where at least one animal is examined within 48 hours of death
3. Use of the ICT test according to recommendations – preferably but not necessarily within < 48 hrs post death – with positive result (I take it >48 hrs limits sensitivity – predictive value of negative result – not specificity – predictive value of positive result)
4. Either no further disease investigation – or further investigation wearing PPE appropriate for the expectation that anthrax is present
5. Samples submitted for lab testing of anthrax to corroborate the ICT result
6. No samples submitted for lab investigation for alternative diagnoses pending anthrax lab results
7. Disposal appropriate to the risk as assessed from the combination of presentation + ICT (i.e. full ‘anthrax’ disposal)
8. Satisfying laboratory corroboration of field diagnosis
9. Provision of both veterinary/biosecurity and medical advice about the risks and management of anthrax
10. No transmission to humans or spread to other properties (effective response)
11. A ‘so what’ message relating to the anthrax diagnosis

AHSQ ARTICLE CHECKLIST

- ☐ Heading: interesting or controversial?
- ☐ Month of the event
- ☐ Location of the event
- ☐ Are facts correct?
- ☐ Do the stats add up?
- ☐ Incident resolved - how?
- ☐ Investigations ongoing – why and what?
- ☐ Exotic diseases excluded – how?
- ☐ Reportable diseases excluded – state and national?
- ☐ Trade sensitive diseases addressed
- ☐ Manner of testing and exclusion described
- ☐ Highlighting Australia’s animal health systems
- ☐ Public health or zoonotic concerns addressed
- ☐ No slang terminology
- ☐ Spelling and grammar correct
- ☐ Concise