

Management of Avian Chlamydiosis in Birds and Equids Guideline, 2025

Ministry of Health

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1. Preamble

The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability (Standards) are published by the Minister of Health under the authority of section 7 of the Health Protection and Promotion Act (HPPA) to specify the mandatory health programs and services provided by Boards of Health.^{1,2} The Standards identify the minimum expectations for public health programs and services. Boards of Health are accountable for implementing the Standards including the protocols and guidelines that are referenced in the Standards. Guidelines are program and topic-specific documents which provide direction on how Boards of Health shall approach specific requirement(s) identified within the Standards.

2. Purpose

This guideline document was created to assist staff at Boards of Health with the management of confirmed or suspected cases of avian chlamydiosis (which is also referred to as psittacosis) in captive birds, especially birds from the order of Psittacidae (cockatoos, parrots and parakeets), poultry flocks, or in equids such as donkeys, horses, or zebras.

3. Reference to the Standards

Infectious and Communicable Disease Prevention and Control

Requirement 15. The Board of Health shall receive and respond to all reported animal cases of avian chlamydiosis (infection of birds or equids with the causative agent of psittacosis in humans), avian influenza, novel influenza and *Echinococcus multilocularis* infection, in accordance with the *Health Protection and Promotion Act*, the *Management of Avian Chlamydiosis in Birds and Equids Guideline, 2025* (or as current), the *Management of Avian Influenza or Novel Influenza in Birds or Animals Guideline, 2025* (or as current); and the *Management of Echinococcus multilocularis Infections in Animals Guideline, 2025* (or as current).

Requirement 21. The Board of Health shall ensure 24/7 availability to receive reports of and respond to:

- a) Infectious diseases of public health importance in accordance with the *Health Protection and Promotion Act*;² the Mandatory Blood Testing Act, 2006;³ the *Infectious Diseases Protocol, 2023* (or as current); and the *Institutional/ Facility Outbreak Management Protocol, 2023* (or as current);

- b) Potential rabies exposures in accordance with the *Health Protection and Promotion Act*,² the *Management of Potential Rabies Exposures Guideline, 2020* (or as current); and the *Rabies Prevention and Control Protocol, 2023* (or as current); and
- c) Animal cases of avian chlamydiosis, avian influenza, novel influenza, or *Echinococcus multilocularis* infection, in accordance with the *Health Protection and Promotion Act*,² the *Management of Avian Chlamydiosis in Birds and Equids Guideline, 2025* (or as current); the *Management of Avian Influenza or Novel Influenza in Birds or Animals Guideline, 2025* (or as current); and the *Management of Echinococcus multilocularis Infections in Animals Guideline, 2025* (or as current).

4. Reporting of Animal Cases to Boards of Health

The Communicable Diseases – General (Regulation 557) under the HPPA requires that⁴

- A veterinarian who knows or suspects that one or more bird, birds, or equids are infected with *Chlamydia psittaci*, the agent of psittacosis in humans, shall notify the Medical Officer of Health within one business day.
- A director of a laboratory who knows or suspects that one or more bird, birds, or equids are infected with *Chlamydia psittaci* notify the Ministry of Health (the Ministry) within one business day, who will then notify the Medical Officer of Health.

On an annual basis, the Board of Health shall communicate with veterinarians within its jurisdiction their duty to report cases of *Chlamydia psittaci* in birds or equids to the Board of Health.

4.1 Reporting to the Ministry

The Board of Health shall:

- Report all confirmed cases of *Chlamydia psittaci* in captive bird or birds or a poultry flock or equids to the Ministry as soon as possible after receiving the report;
- Consult with the Ministry, who will engage appropriate animal health partners, with respect to the attending veterinarian's plan for managing all animal health and environmental health aspects of the response; and
- Report back to the Ministry, the extent of the exposure(s) and all outcomes of public health action(s), animal management plan, and control measure(s).

5. Response to Avian Chlamydiosis Cases

The identification of a confirmed or suspected case of *Chlamydia psittaci* infection in any avian or equine species shall trigger an investigation by the Board of Health in order to evaluate potential transmission to human contacts of the infected animal(s).

5.1 Animal and Environmental Management Plan

The Board of Health shall contact the veterinarian to obtain a copy of the animal and environmental management plan which should include the following:

- Number, species and individual descriptions (colour, age, sex, as well as band numbers or microchip numbers where applicable, etc.) of all infected animals;
- Date of onset and nature of clinical signs in all infected animals;
- Current health status of infected animals;
- Any veterinary treatment protocols already in place;
- Any previous *C. psittaci* testing results, if available;
- Length of time the owner has had the animal(s) in their possession;
- Source the animal(s) was/were obtained from;
- Location of all facilities where the animal(s) was/were housed for the 60-day period preceding the diagnosis;
- Health status of all potentially exposed animals;
- Guidance for the management of other animals that may be in contact with the infected animal(s);
- Cleaning and disinfection requirements for the housing areas and equipment.

5.2 Management of Infected Animals

The Board of Health shall consult with the Ministry, the Ontario Ministry of Agriculture, Food, and Agribusiness (OMAFRA), and Public Health Ontario (PHO) to determine if the attending veterinarian's animal and environmental management plan is appropriate. Otherwise, the Medical Officer of Health can issue an order requiring treatment of the animal by a licensed veterinarian to reduce shedding of avian chlamydiosis and reduce the risk of transmission to humans.

5.3 Special Considerations

Commercial Poultry

The diagnosis of avian chlamydiosis in poultry flocks (such as chickens, turkeys, ducks and geese) has been relatively rare in Ontario. Any detection of the pathogen in commercial food-producing poultry will require discussion with the Ministry, Canadian Food Inspection Agency (CFIA) and OMAFA to determine the course of action that will protect food safety and human health.

Wild Birds in Captivity

Wild birds are natural reservoirs of this pathogen. If a wild bird is under the care of an authorized wildlife custodian under the *Fish and Wildlife Conservation Act*, the bird does not require treatment unless the veterinarian of record determines it is necessary, or the bird will be in captivity for more than 45 days.⁵ If birds are not going to be treated, personal protective equipment (PPE) and hygiene advice should be provided to the wildlife custodian as per the Canadian Centre for Occupational Health and Safety, Psittacosis.⁶ Requests concerning wild birds not in captivity do not require public health follow-up.

Treatment and Confirmation of Disease-Free Status

Antibiotic therapy is usually prolonged and may be curative, but not always. Some birds will remain persistent carriers even with proper treatment. Therefore, an on-going veterinarian relationship and regular health checks are important.

As shedding of the pathogen is intermittent, post-therapy testing should be conducted at the discretion of the veterinarian of record. A single negative PCR test does not indicate the bird is not a chronic carrier of the pathogen.

Avian Chlamydiosis in Equids

Equids are a family of animals that include horses, donkeys, and zebras. Emerging evidence suggests that spontaneous abortions related to *C. psittaci* in equids may be capable of transmitting this pathogen to people who handle the reproductive tissues and fluids. Since little is known about infection, the zoonotic capability, or the organism tropism in equids, any concern about affected animals should be referred to a veterinarian for diagnosis, treatment, or other advice.

Avian Chlamydiosis in Mammals other than Equids and Humans

At this time, public health follow-up is not required for other mammals which may be infected with *C. psittaci*, as they do not seem to have the ability to infect other mammals or people.

5.4 Determining the Extent of *C. psittaci* Infection Within Premises

In accordance with *Communicable Diseases – General, RRO 1990, Reg. 557*, the Medical Officer of Health shall require the owner, at the owner's expense, to have laboratory examinations performed on specimens of the bird(s) and equid(s) until the Medical Officer of Health is of the opinion that the bird(s) or equid(s) is/are no longer shedding of the infective agent.⁴ In cases where an infected bird or equid has been housed with and has likely exposed other animals, the veterinarian of record will determine if other birds or equids require testing and/or treatment.

In settings with large numbers of birds, a number of diagnostic testing strategies may be employed to determine the extent of the infection within the bird population, including batch testing of birds to minimize costs. Appropriate testing strategies should be determined by attending veterinarians and with consultation with OMAFA Lead Veterinarians, if necessary.

6. Management of Human Exposures

The Board of Health shall, upon being notified of a confirmed animal infected with *C. psittaci*:

- Identify all individuals with an exposure to the infected animal(s) during the 60-day period prior to the animal diagnosis,
- Conduct a risk assessment to assess the extent of human health exposure,
- Inform all persons in contact with animal(s) or contaminated materials during that 60-day period about the associated potential health risks of this contact and direct those that develop respiratory or influenza-like symptoms to seek prompt medical attention. Patients seeking medical attention should inform their healthcare providers about contact with infected animal(s).

The Board of Health may contact the Ministry at IDPP@ontario.ca if further case consultation is required.

6.1 Infection Prevention and Control for Caretakers of Birds and Equids

The number of animal caretakers for animal(s) under quarantine should be kept to a minimum. The Board of Health shall inform animal caretakers caring for the animal(s) about the nature of the disease.

The Board of Health shall advise animal caretakers to take the following precautions throughout the quarantine period of the animal(s):

- Wear protective clothing such as a smock, gown or coveralls, disposable single-use gloves, protective eyewear (e.g. goggles), a single use NIOSH-approved (ideally fit-tested and seal-checked) N95 respirator, designated footwear or shoe covers, and a disposable surgical cap, when handling infected or exposed animals, their bedding, cages, or stalls; Medical/surgical masks might not be effective in preventing transmission of *C. psittaci*;
- Ensure animal caretakers are trained on proper donning and doffing of protective clothing and perform hand hygiene before and after contact with animals and/or their environment.
- Handle healthy animals before handling ill or quarantined animals;
- Cleaning and feeding methods should minimize air circulation of dust, feathers, and litter; and
- Apply wet cleaning methods (e.g., mopping, sponging, scrubbing) of animal housing facilities to minimize aerosolization of the bacteria. This is recommended over dry cleaning techniques (e.g. sweeping, vacuuming, brushing).

7. Other Agencies and Response Considerations

Depending on the setting in which cases of avian chlamydiosis in birds and equids are identified, several other government agencies may be involved in the response from an animal health and welfare perspective, or may be able to provide additional support to the Board of Health.

As avian chlamydiosis is an immediately notifiable disease under the federal *Health of Animals Act*, the CFIA may be involved in responding to reports of avian chlamydiosis in commercial poultry flocks, where it deems this appropriate and warranted by the circumstances.⁷

In private or commercial aviary or farm settings, OMAFA may be able to assist with site visits to assess environmental conditions related to how animal(s) are being kept, and likelihood of disease transmission among animal(s) in settings with larger numbers of animals.

In aviary settings such as breeding operations, or commercial aviaries being run out of private residences, where there may be additional concerns about overcrowding of birds or other animal welfare concerns, Animal Welfare Services should be notified.

In all cases where large numbers of birds are being kept in private residences, and particularly where this is being done for commercial purposes, municipal authorities should be advised of the situation, as this may violate zoning by-laws and pose a risk to the community.

8. References

1. Ontario. Ministry of Health. Ontario public health standards: requirements for programs, services, and accountability [Internet]. Toronto, ON: King's Printer for Ontario; 2023 [modified 2025 Jan 8; cited 2025 Jan 13]. Available from: <https://www.ontario.ca/page/ontario-public-health-standards-requirements-programs-services-and-accountability>
2. *Health Protection and Promotion Act*, RSO 1990, c H.7. Available from: <https://www.ontario.ca/laws/statute/90h07>
3. *Mandatory Blood Testing Act*, 2006, SO 2006, c 26. Available from: <https://www.ontario.ca/laws/statute/06m26>
4. *Communicable Diseases – General*, RRO 1990, Reg 557. Available from: <https://www.ontario.ca/laws/regulation/900557>
5. *Fish and Wildlife Conservation Act*, 1997, SO 1997, c 41. Available from: <https://www.ontario.ca/laws/statute/97f41>
6. Canadian Centre for Occupational Health and Safety. Diseases, disorders and injuries: psittacosis [Internet]. Hamilton, ON: Canadian Centre for Occupational Health and Safety; [2023] [cited 2025 Jan 13]. Available from: <https://www.ccohs.ca/oshanswers/diseases/psittacosis.html>
7. *Health of Animals Act*, SC 1990, c 21. Available from: <https://laws-lois.justice.gc.ca/eng/acts/H-3.3/>

9. Document History

Revision Date	Document Section	Description of Revisions
January 2025	Entire Document	Updated reporting of animal cases by laboratories. Updated information within the document to include equines. Removal of document appendices.

