



Chlamydiosis in Garden Birds

Agent

Chlamydiosis (otherwise known as 'psittacosis' or 'ornithosis') is a disease caused by the bacterium *Chlamydia* (previously *Chlamydophila*) *psittaci*. This is not the same species of *Chlamydia* that causes venereal disease in people.

The specific strain of this bacterium known to infect small garden birds (passerines) is *C. psittaci* genotype A.

Species affected

Chlamydiosis is most commonly recognised as a disease of pet parrots and other psittacine birds (e.g. cockatiels, budgerigars). The disease is also known to affect pigeons, doves and domestic waterfowl (e.g. ducks).

Chlamydiosis has been reported in various wild bird species in Great Britain, including pigeons and doves [e.g. collared dove (*Streptopelia decaocto*), feral pigeon (*Columbia livia*) and wood pigeon (*Columba palumbus*)] and corvids (birds in the crow family). Recent studies have found that chlamydiosis may occur more frequently in small garden birds (passerines) than was previously recognised. The condition has been diagnosed in a range of passerines, including blue tit (*Cyanistes caeruleus*), dunnoek (*Prunella modularis*), great tit (*Parus major*) and robin (*Erithacus rubecula*). It is noteworthy that many of the chlamydiosis incidents that have been confirmed to date involved observations of sick or dead birds involving multiple species of small garden birds.

Pathology

Chlamydia psittaci infection can result in the disease known as chlamydiosis. The disease presentation in birds varies and may include generalised infection affecting internal organs, including the respiratory tract and enlargement of the spleen and liver. Other conditions (e.g. finch trichomonosis, avian pox) have been diagnosed concurrently in some incidents.

Birds can also carry the bacterium without developing clinical disease and may therefore be infected and yet apparently healthy with no detectable signs.

Signs of disease

Birds affected by chlamydiosis tend to show non-specific signs of ill health, for example lethargy and fluffed-up plumage. Wild birds suffering from a variety of conditions can exhibit similar symptoms, and there are no characteristic signs of chlamydiosis that allow it to be distinguished from other diseases without specialist veterinary examination. Affected birds may also appear to have difficulty breathing and/or have discharge from their mouth, nose or eyes. Affected wild birds may also simply be found dead.

Disease transmission

Chlamydia psittaci bacteria can persist in the environment for months in a resistant form. Transmission can occur through direct contact between infected birds, ingestion of infected secretions (faeces, ocular and respiratory secretions), and/ or inhalation of contaminated dust or aerosols.

Disease patterns

Chlamydiosis has been reported as a sporadic cause of disease in small garden birds. These disease outbreaks occurred over a widespread geographical distribution and throughout the year with no clear seasonal trend.

Whilst the number of garden bird chlamydiosis incidents that have been diagnosed in GB has increased in recent years, the number remains low when compared with other infectious diseases of garden birds, including trichomonosis, avian pox and salmonellosis. This increase is thought to be the result of more intensive study in recent years, using specialist tests to detect the infection, rather than a rise in occurrence of the condition *per se*.

Risk to human health

Human cases of chlamydiosis (often known as 'psittacosis') have most often been attributed to direct or indirect contact with infected captive psittacine birds, poultry (particularly commercial ducks), racing and feral pigeons. Although the risks are low, the strains of *Chlamydia psittaci* that affect wild birds do have the potential to affect people.

Humans are most likely to contract infection through inhalation of dust or aerosols contaminated by secretions from infected birds (e.g. faeces, ocular and respiratory secretions). Chlamydiosis can lead to a spectrum of clinical signs in people, ranging from mild to severe. It most commonly causes respiratory disease, causing similar symptoms to a common cold, and in more severe cases it can cause flu-like symptoms or chest problems, such as pneumonia. Antibiotic medication is available and people who develop cold- or flu-like symptoms and have recently been near sick pet or wild birds, should contact their doctor.

Garden birds in the UK may carry *Chlamydia psittaci* and other bacteria (for example *Salmonella*, *Campylobacter* and [*Escherichia albertii*](#)) that can affect people and pets.

We recommend following sensible hygiene precautions as a routine measure when feeding garden birds and handling bird feeders and tables. Following these rules will help avoid the risk of any infection transmitting to people and help safeguard the birds in your garden against disease.

- Clean and disinfect feeders/ feeding sites regularly. Suitable disinfectants include a weak solution of domestic bleach (5% sodium hypochlorite) and other specially-designed commercial products (See *Further information*). Always rinse feeders thoroughly and air-dry them before re-use.
- Dampen surfaces with water before cleaning them to reduce the chance of breathing in dry dust or aerosolised secretions.
- Brushes and cleaning equipment for bird feeders, tables and baths should not be used for other purposes and should not be brought into the house, but be kept and used outside and away from food preparation areas.
- Wear rubber gloves when cleaning feeders and thoroughly wash hands and forearms afterwards with soap and water, especially before eating or drinking.
- Avoid handling sick or dead birds directly. For instance, use disposable gloves or pick a carcass up through an inverted plastic bag.

Wild birds should be prevented from accessing food preparation areas to help avoid contamination with bird droppings.

Risk to domestic animal health

Wild birds could potentially transmit the infection to pet birds, particularly if the pet birds are in outdoor aviaries. Owners of pet birds should prevent contact between captive and wild birds as far as possible; ensure wild bird feeders and water baths are inaccessible to captive birds; and wash and disinfect hands thoroughly after handling wild bird feeders or equipment.

There have been rare reports of disease in cats and dogs associated with *Chlamydia psittaci* infection, most commonly attributed to the animals having contact with pet parrots. The risk of pet dogs or cats acquiring the infection from wild birds is unknown, but is likely to be very low.

Diagnosis

Diagnosis of chlamydiosis in garden birds relies on post-mortem examination. The signs of the disease at post mortem are variable and additional laboratory tests are needed to confirm the diagnosis of the disease.

If you wish to report finding sick or dead garden birds please visit www.gardenwildlifehealth.org. Alternatively, if you have further queries or have no internet access, please call the **Garden Wildlife Health** vets on **0207 449 6685**.

Control

Whilst medicines are available for the treatment of chlamydiosis in captive birds, effective and targeted dosing of free-living birds is not possible.

Where a problem with chlamydiosis exists, general measures for the control of disease in wild bird populations should be adopted:

- Since the infection is spread when infected droppings contaminate food or water sources, ensure optimal hygiene at garden bird feeding stations, including disinfection (as described above).
- Ensure that water provided for garden birds is fresh and clean on a daily basis.
- Feeding stations (such as bird tables and hanging feeders) encourage birds to congregate, sometimes in large densities, thereby increasing the potential for disease to spread between individuals when outbreaks occur. **If many birds in your garden are affected, we recommend that you consider significantly reducing the amount you feed, or stop feeding for a period (2-4 weeks)**. The reason for this is to encourage birds to disperse, thereby minimising the chances of new birds becoming infected at the feeding station. When reintroducing feeding do so gradually, whilst continuing to monitor for further signs of ill health (See *Further information*).

Prevention

Following best practice for feeding garden birds is recommended to help control and prevent transmission of disease at feeding stations all year round (See *Further information*):

- Routine good table hygiene. Clean away uneaten food and droppings before putting out fresh food and disinfect feeders/ feeding sites on a regular basis.
- Provision of clean and fresh drinking water on a daily basis.
- Provision of fresh food from accredited sources.
- Rotate positions of feeders in the garden to avoid build-up of contamination in any one area and pay particular attention to clearing food remains that fall on the ground.

Further information

[Best feeding practices](http://www.gardenwildlifehealth.org) should be followed at all times to help ensure that the birds visiting your garden remain healthy. More information can be found on the Garden Wildlife Health website www.gardenwildlifehealth.org.

Scientific publications

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