CONDITION

Psittacosis

Psittacosis is a bacterial infection usually caught by breathing in contaminated material from birds.

WHAT IT IS
Bacterial infection caught mainly from birds

BODY SYSTEM
Lungs and whole body

MAIN SYMPTOMS
Fever, headache, dry cough, muscle aches

WHAT CAUSES IT
Infection with Chlamydia psittaci bacteria

HOW IT IS DIAGNOSED
PCR or paired antibody blood tests

MAIN TREATMENT
Antibiotics and supportive care

CAN IT BE CURED?
Yes - antibiotics usually clear the infection

IS IT AN EMERGENCY?
Sometimes - with severe breathing difficulty or confusion

LONG-TERM OUTLOOK
Most people recover fully with prompt treatment

Overview

Psittacosis is an infection caused by the bacterium Chlamydia psittaci . People usually catch it from birds. It is sometimes called parrot fever, although many kinds of birds can carry the bacteria.

The infection most often affects the lungs, causing a type of pneumonia. Pneumonia is inflammation and infection within the lungs. Psittacosis can also cause symptoms throughout the body, such as fever, headache, and muscle aches.

People may be exposed while cleaning cages, handling birds, working with poultry, or spending time in a dusty area where birds are kept. The bacteria can be present in dried droppings, respiratory fluids, and feather dust. A bird may carry the bacteria without appearing ill.

Psittacosis is uncommon and can look like flu or other forms of pneumonia. Telling a healthcare professional about recent contact with birds can help them consider the correct tests and treatment.

Most people recover with appropriate antibiotics like amoxicillin or doxycycline . More serious illness can occur, especially when diagnosis and treatment are delayed.

Symptoms

Symptoms usually begin about 5 to 14 days after exposure, although they can sometimes appear later. The illness may start suddenly or develop over several days.

Common symptoms include:

Some people also have nausea, vomiting, diarrhoea, or abdominal discomfort. A sore throat is less typical but can occur.

Psittacosis pneumonia may be mild, but it can also cause significant breathing problems. Symptoms do not reliably show whether psittacosis is the cause because many respiratory infections produce a similar pattern.

Children can become infected, but reported cases are more common in adults. Symptoms in children may also resemble other common infections.

- Fever and chills
- A strong headache
- A dry cough
- Muscle aches and unusual tiredness
- Shortness of breath
- Chest discomfort, especially with coughing or deep breathing

Causes and risk factors

Psittacosis is caused by Chlamydia psittaci . Despite the similar name, this is not the same infection as the sexually transmitted infection caused by Chlamydia trachomatis .

Many bird species can carry C. psittaci . These include parrots, parakeets, cockatiels, pigeons, doves, turkeys, ducks, and other poultry. Infected birds release bacteria in droppings and fluids from their eyes, nose, or beak.

People are most often infected by breathing in tiny contaminated particles. Dried material can

become airborne while cages, bedding, or bird housing are being cleaned. Less commonly, infection may follow direct beak-to-mouth contact or a bird bite.

Exposure is more likely among:

A brief exposure can sometimes be enough. You do not need to own a bird to develop psittacosis.

Spread from one person to another has been reported, but it is considered rare. Routine contact with someone who has psittacosis is therefore unlikely to cause infection.

- Bird owners and breeders
- Pet shop and aviary workers
- Veterinary workers
- Poultry workers and people processing birds
- People cleaning cages, coops, lofts, or heavily contaminated areas

Diagnosis

A healthcare professional will ask about your symptoms and possible bird exposure. Mention any contact with pet birds, poultry, bird droppings, cages, or areas where birds gather. Include exposure that occurred several weeks earlier.

An examination may find signs of pneumonia. A chest X-ray can show inflammation in the lungs, but it cannot confirm that psittacosis is the cause.

Tests that can help confirm the infection include:

Testing may be affected by when the sample is collected and whether antibiotics have already been started. Because results can take time, treatment may begin before the infection is confirmed when the symptoms and exposure history strongly suggest psittacosis.

Other tests may be used to assess pneumonia, oxygen levels, liver or kidney function, or alternative causes of the symptoms.

- PCR testing: This looks for genetic material from C. psittaci , usually in mucus or another respiratory sample. It is most useful early in the illness and may not be available everywhere.
- Antibody blood tests: These measure the immune system's response to the bacteria. Two samples taken at different stages may be needed to show a meaningful rise in antibodies.

- Culture: This attempts to grow the bacteria. It requires specialist laboratory facilities because handling the organism can put laboratory workers at risk.

Treatment and management

Psittacosis is treated with antibiotics. Tetracycline-class antibiotics, most often doxycycline, are commonly used. A different antibiotic may be chosen because of age, pregnancy, allergy, side effects, or another medical condition.

The choice and length of treatment should be based on a clinical assessment. It is important to take the full course as directed, even if fever and breathing improve sooner. Stopping too early can allow symptoms to return.

Supportive care may include rest, fluids, and medicines for fever or discomfort. People with low oxygen levels, severe pneumonia, or complications may need hospital care. Hospital treatment can include oxygen, fluids through a vein, and closer monitoring.

Many people start to improve within a few days of effective antibiotics, but recovery time is not the same for everyone. Cough, weakness, and tiredness may continue after the fever has settled.

If a pet bird may be the source, contact a veterinarian. Birds need their own assessment and treatment plan. Do not give a bird human antibiotics or stop veterinary treatment early.

Complications

Most treated infections resolve without lasting problems. Complications are more likely when pneumonia is severe or treatment is delayed.

Possible complications include:

These complications are uncommon, but they can require hospital treatment. Older adults and people with other health conditions may have less reserve when dealing with severe pneumonia, although serious illness can occur at any age.

- Low oxygen levels or respiratory failure
- Inflammation of the heart muscle or the lining around the heart
- Inflammation affecting the brain or its surrounding tissues
- Liver inflammation
- Kidney injury

- Sepsis, an extreme body-wide response to infection

Prevention

There is no vaccine for psittacosis. Exposure cannot always be prevented because an infected bird may look healthy and may release bacteria only at certain times.

If you keep or work with birds:

In workplaces with substantial bird exposure, protective clothing and suitable respiratory protection may be needed. Workplace safety guidance should determine what equipment is appropriate.

A bird linked to psittacosis does not necessarily need to be permanently removed from the home. Veterinary treatment, careful cleaning, and temporary separation may control the risk. Follow public health or veterinary instructions if an outbreak is being investigated.

- Clean cages and food or water containers regularly
- Wet contaminated surfaces before cleaning them
- Avoid dry sweeping, brushing, or vacuuming bird droppings
- Use good ventilation without directing dust toward people
- Wash your hands after handling birds or cage materials
- Avoid touching a bird's beak to your mouth
- Keep cages from becoming overcrowded
- Seek veterinary advice if a bird is unwell or linked to human illness

Living with it and what to expect

Psittacosis is usually an acute infection, meaning it develops over a short period rather than becoming a lifelong condition. With effective treatment, the bacteria are usually cleared.

Fever and severe aches may improve first. Cough, reduced stamina, and tiredness can take longer to settle, especially after pneumonia. Some people need several weeks before they feel fully back to normal. Return to work, exercise, or other demanding activity may need to be gradual.

Routine follow-up may be recommended if symptoms are slow to improve, the pneumonia was severe, or you have another condition affecting your lungs or immune system. A healthcare

professional may sometimes arrange repeat chest imaging, based on your age, symptoms, and initial findings.

Persistent symptoms do not always mean the infection is still active. Recovery from lung inflammation can take time. However, fever returning, worsening cough, or increasing breathlessness should be reassessed.

Having psittacosis does not guarantee lasting immunity. Another exposure could potentially lead to another infection. If the suspected bird source is still present, veterinary assessment and safer cleaning practices help reduce future exposure.

When to get medical help

Arrange prompt medical assessment if you develop fever, headache, cough, or shortness of breath after contact with birds or bird droppings. State clearly that you have had bird exposure, including the bird species, type of contact, and approximate date.

Contact your healthcare service again if you are being treated but symptoms are worsening, fever returns, you cannot keep fluids or antibiotics down, or you are not beginning to improve as expected.

Seek urgent or emergency help for:

These symptoms can occur with severe pneumonia or another urgent condition. They should not wait for a routine appointment.

- Severe or rapidly worsening difficulty breathing
- Blue, grey, or unusually pale lips or skin
- New confusion, fainting, or difficulty staying awake
- Severe chest pain
- Coughing up more than small streaks of blood
- Signs of very low oxygen, if you monitor oxygen at home

Common questions

Can I catch psittacosis from a parrot?

Yes. Parrots, parakeets, and cockatiels are well-known possible sources, but many other birds can carry the bacteria. Pigeons, doves, ducks, turkeys, and other poultry have also been linked to infection.

Can a healthy-looking bird spread psittacosis?

Yes. Some infected birds have no obvious symptoms. Others may have poor appetite, weight loss, breathing problems, eye or nose discharge, or unusual droppings. Stress can increase bacterial shedding.

Is psittacosis contagious between people?

Person-to-person spread is possible but rare. Most people become infected by inhaling material contaminated by birds rather than through contact with another person.

How long after bird exposure do symptoms start?

Symptoms most often begin 5 to 14 days after exposure, but a longer gap is possible. Mention bird contact even if it did not happen immediately before you became unwell.

Do I have to get rid of my bird?

Usually not. The bird should be assessed by a veterinarian, and you may need to change how its cage and surrounding area are cleaned. Follow any veterinary or public health advice about treatment and temporary separation.

Can psittacosis go away without antibiotics?

Mild symptoms may be mistaken for another infection, but untreated psittacosis can worsen or cause complications. Antibiotics are the standard treatment. Do not rely on symptoms settling without medical assessment if psittacosis is suspected.

Sources

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- Centers for Disease Control and Prevention. Laboratory Testing for Psittacosis
- Centers for Disease Control and Prevention. Preventing Psittacosis
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- NSW Health. Psittacosis fact sheet