

ZOONOTIC DISEASE

Zoonotic disease refers to any infectious disease transmissible TO humans from other vertebrates.

- Transmission FROM humans to animals is sometimes called reverse zoonosis.
- Illness can be bacterial, viral, fungal, or parasitic.
- Zoonotic disease can be spread by direct contact with an ill animal or a carrier with no symptoms, BUT direct contact is not always required.
- Zoonotic disease can be airborne or transmitted by water, food, or a contaminated surface.

People who keep parrots rarely become seriously ill with a disease contracted from their birds. However the risk is not zero. Anyone who spends time with birds should be aware of the reality of zoonotic disease.

Remember:

- Birds can carry organisms capable of causing illness without developing the disease themselves.
- Infected birds may shed a pathogen off and on, so one negative test may not mean “all clear.”
- Birds may not show obvious signs of illness until they are very sick.
- Signs of illness in a bird may be subtle and include a change in appetite or thirst (most commonly a decrease but sometimes an increase), fluffed feathers more often than usual, lethargy, excessive tail bobbing related to breathing, difficulty flying or climbing, or discharge from mouth or eyes.
- As a rule of thumb, if your feathered companion is acting oddly, trust your instincts and take your bird to an avian specialist veterinarian.



Caution: This brochure does not describe all zoonoses, all symptoms, or all possible means of transmission. It is not medical advice. If you are concerned about your health because of exposure to ill birds or other animals, CONSULT YOUR DOCTOR. If your bird is showing any sign of illness, PLEASE HAVE YOUR PET EXAMINED BY AN AVIAN VETERINARIAN.



Sources:

- www.cdc.gov/onehealth/basics/zoonotic-diseases.html
- www.parrots.org/lp/bird-diseases/
- www.sciencedirect.com/science/article/pii/S1326020023006581



ZOONOTIC DISEASE



REDUCING THE RISK

- Keep your bird's housing, dishes, and toys clean.
- Old droppings can dry, becoming airborne dust.
- Keep bird dishes and other items separate from human dishes and food preparation surfaces.
- Raw meat and eggs should be considered contaminants. Thoroughly clean any surface they touch and keep away from bird food and dishes.
- Don't expose your bird to wild birds or their feces.
- Rodents and some insects may also spread disease.
- Sunlight is good for companion birds, but outdoor time must be planned with safety in mind.
- Do not expose parrots or other companion birds to poultry or water fowl.
- If your companion bird shows any sign of illness, have the bird examined by an avian veterinarian. Ideally, a healthy bird should have regular check ups, even when no symptoms are observed.
- Do not obtain a bird from a questionable source.
- Have new birds checked by an avian vet and quarantine any bird new to your household.
- Wash your hands before and after handling birds.
- Sharing food with your parrot can be fun but follow some health rules:
 - Do not expose the bird to your saliva.
 - No sharing food after you've taken a bite!
 - No sharing food after your bird has taken a bite.
- Remember that disease-causing organisms can be carried on shoes, clothing, skin, and hair along with other utensils, grooming tools, and toys, etc..

COMMON AVIAN ZOOONOTIC DISEASES



Avian Influenza (also called bird flu or H5N1)

- Most frequently spread by wild aquatic birds.
- Great concern in poultry farms but rare in humans.
- Symptoms similar to those of any common flu.

Avian Chlamydiosis

(also known as Chlamydiophilosis or Psittacosis)

- Once called "parrot fever" but now known to occur in a variety of animals.
- Causes flu-like symptoms in humans.
- Some pet birds, including budgies and cockatiels, may be asymptomatic carriers.
- Spread by handling infected birds or breathing dust from infected feces.
- Cannot be cultured so a polymerase chain reaction (PCR) assay test is needed to make a diagnosis.

Salmonellosis

- Many Salmonella bacteria produce an endotoxin that may cause this disease.
- More common in wild birds but can infect pets.
- These bacteria can survive in soil or water after being shed in feather dust or feces.
- Not all infected birds become ill; some are asymptomatic carriers; but can be fatal to others.
- In humans, symptoms are usually gastrointestinal.

Colibacillosis

- Caused by a strain of E. coli bacteria.
- More common in chickens but may infect parrots.
- Spread by contact with an infected bird's feces.
- Most people, if infected, recover after a few days of intestinal upset and fever.
- Very young, elderly, or immune compromised people can require medical care.

Encephalitis Viruses (includes West Nile)

- Typically spread by mosquitoes who bite an infected bird and then bite another bird or a human.
- Most people bitten by an infected mosquito will not become sick, but vulnerable people may experience high fever, headache, stiffness, and vomiting.



Avian Tuberculosis or Mycobacteriosis

- Not very common in birds or humans.
- important to note because mycobacterium avium is resistant to antibiotics.
- May cause wound infection.

Newcastle Disease

- A virus highly contagious in poultry flocks.
- Can spread through respiratory secretions or feces.
- In birds - a respiratory illness; in humans - most commonly causes conjunctivitis.

Campylobacteriosis

- These bacteria can be spread by bird feces and live in birds who appear healthy.
- In humans, appears with gastrointestinal symptoms.

Bird Fanciers Lung also known as Farmer's Lung

- In humans causes hypersensitivity pneumonitis or allergic alveolitis.
- Not a true zoonotic disease because it is not caused by transmission of any infectious organism.
- BUT is caused by repeated exposure to a chemical, something in agricultural dust, or bird-keeping activity from airborne proteins in feather dander or droppings.
- A person's genetics may play a role in whether the condition will be developed.
- When susceptible people repeatedly breathe in the substance, they experience inflammation of the alveoli (small air sacs in the lungs).
- Symptoms may include fever, cough, weight loss, and breathlessness.
- Humans and their parrots often must be separated while the dander is removed from a residence.

REVERSE ZOOONOSIS

Birds can't catch cold or flu from a person. However, a person can pass E-coli or other Gram-negative bacteria, possibly causing illness to a bird.

- Birds normally have some Gram-negative bacteria in their guts, but Gram-positive should predominate.
- Gram-negative bacteria are more resistant to antibiotics.

