Pet Birds

For Pet Owners

Worms & Germs
Promoting Safe Pet Ownership

Feathered-Friend Facts

- In 2006, there were approximately 11 million pet birds in US households. In comparison, there were over 70 million dogs and over 80 million cats kept as pets in the same year.
- **Psittacine birds** (order Psittaciformes) include members of the **parrot family** (Psittacidae) and **cockatoo family** (Cacatuidae), and are likely the most common type of pet bird.
- In many bird species, males and females cannot be distinguished by looking at them. A blood test is commonly used to determine if a bird is male or female, if necessary.
- The **life span** of pet birds varies a great deal by species. In general, larger birds live longer. Finches, canaries and budgerigars (budgies) may live up to **15 years**. Cockatoos and macaws may live more than **60 years**!
- Birds can be excellent pets and long-term companions, but proper care and appropriate training are very important for keeping a pet bird happy and healthy.
- In general, well-kept birds are relatively low-risk pets when it comes to transmitting diseases to people. However, it is still important to be aware of the diseases birds can carry. Proper care is vital to your bird's health, and yours!

Getting a Bird

- Although birds can often be purchased from pet stores, it is best to obtain a bird directly from a reputable breeder.
- **Avoid buying wild-caught birds** - the medical history of such birds is unknown, and the animals are more likely to be (or get) sick, because they have been stressed by capture, transport, and mixing with many other birds.
  - **Do <u>not</u> buy birds that may have been illegally imported**. Smuggled birds are common. Purchasing such birds contributes to the deaths of countless other smuggled birds for every one that survives.
- When selecting a bird, it's important to pick one that appears bright and active, with well-kept feathers and without signs of discharge from the eyes, nose, mouth or under the tail. It is also important to avoid birds that already have undesirable behaviours (e.g. feather picking) which may be difficult to change.
  - It is best to buy a **weaned bird**, as weaning a young bird can be a long, difficult process. Doing so does not have any significant effect on the ability or likelihood of the bird bonding with its new owner.
- **Baby chicks are not appropriate pets**. Chicks have been associated with *Salmonella* outbreaks in people, they constantly contaminate their environment with stool, and are likely to be abandoned, given up or euthanized when they lose their "cute and fuzzy" appeal.
- Bear in mind that people can develop allergies to antigens in bird feathers and dried bird stool, just as a person may develop allergies to fur and dander from dogs and cats.

Bird Basics – Taking Care Of Your Bird

Behaviour

- Birds are sociable animals that require regular social contact. Many bird species also have a tendency to "bond" to a particular mate, or, when kept as pets, often to one of their human owners.
- Preventing boredom is very important, especially for caged birds. Offer your bird a variety of toys, including puzzle toys, foot toys and chew toys. Leave no more than three toys in the cage at a time, and change the toys weekly.
  - Avoid toys with mirrors, which may cause the bird to bond with its reflection, rather than its owner.
- Birds are generally "creatures of habit" – they like **routine**. Disruption of their regular routine can lead to stress and undesirable behaviours (e.g. screaming, feather picking).

Feeding

- A psittacine's diet should consist mostly of **pelletted feed**, which provides balanced nutrition. A bird offered mixed seeds will often just pick out its favorites (sorting), and therefore will not get the nutrients it needs, while it gets too much of others
- Psittacine diets should also include up to 20% **dark pigmented vegetables** (e.g. carrots, beats, sweet potatoes). Small, limited amounts of fruit can also be offered, but fruit such as apples, grapes, bananas and citrus are poor nutrient sources for birds.
- Other kinds of birds may have different dietary needs or restrictions. **Lories and lorikeets** need a diet that simulates nectar. **Toucans and mynahs** need low-iron diets.
- Changing a bird's diet can be quite difficult because some birds are very stubborn. All diet changes must be made very slowly. Do not take away the old diet completely until the bird is eating an adequate amount of the new diet.
- **Fresh water** should be available at all times. Avoid adding supplements to the water such as vitamins, because this may make the bird less likely to drink if it dislikes the taste of the water.

Housing

- A bird's enclosure should be large enough for the bird to move around easily and stretch its wings out completely. The bird's tail should be well clear of the cage floor when the bird is perched.

  - Cages should be lined with newspaper, which should be changed daily. Shavings or corn cob bedding don't let a person see the amount of droppings in the cage, and can cause breathing problems in birds.
  - Several different sizes and types of perches, appropriate for the size of the bird, should be placed in the cage. Concrete perches are alright as long as the bird has other perches as well. Don't use perches covered in sand paper – these can damage the feet and some birds will ingest the "sand."
  - Make sure that perches are not positioned over food or water bowls in order to prevent contamination of bowls with droppings.
- A full-spectrum light, which can typically be purchased at a pet store, should be provided for indoor birds, and the amount of light they have each day should be kept regular by using an electrical timer.

Basic Veterinary Care

- The consistency, colour and quantity of a bird's **droppings** are an important indicator of a bird's health. There are **three components** to bird droppings, all of which are excreted together through the vent at the base of the tail. There is a clear liquid component (the urine), a thicker white-to-cream coloured component (the urates), and the formed, worm-like waste material from the intestinal tract (the true feces). When bringing your bird to the vet, it is often helpful to bring the newspaper from the bottom of the bird's cage (contained in a plastic bag) so the droppings can be evaluated.
- A normal, healthy bird should naturally wear down its **beak**, preventing overgrowth. However, in psittacines the tip of the beak can become quite sharp, and this tip can be trimmed by your vet using a grinding tool.
- **Nails** should be trimmed as needed to help prevent scratches, if they are not sufficiently worn down by the bird.
- For indoor birds, **wing feathers** should be trimmed such that the bird is not able to fly or gain lift, but is able to glide to the ground should it jump (e.g. from a person, perch, table) so that it will not injure itself.

Handling Pet Birds

- Proper handling of birds is very important in order to reduce stress on the animal and decrease the risk of biting or scratching due to fear or discomfort.
- If a bird must be transported (e.g. to a veterinary clinic), small birds should be transported in their cage, with a blanket or towel. Remove water bowls and any swinging objects/toys prior to moving the cage. Larger birds can be transported in a cat carrier or purpose-made bird carrier.
- The best way to "**pick up**" a bird is to allow it to perch on the finger, arm or forearm. Ensure that the bird's nails are appropriately trimmed to avoid scratches. Do not allow unfamiliar birds to perch on your shoulder or head, as they may bite, particularly if startled or if they feel insecure. Always be aware of what the bird is doing and how it is behaving, should it become stressed and try to bite or jump. When handling any bird, speak in a reassuring tone and avoiding sudden movements in order to keep the bird calm.

Keeping Pet Birds Safe

- Chocolate, avocados, and any food containing caffeine or alcohol should not be fed to birds.
- Seeds and pits of some fruits (e.g. apples, cherries, plums, peaches) can be toxic to birds.
- Never allow a bird to eat directly from a person's mouth or off their utensils.
- Avoid rope toys – frayed pieces may be swallowed, or may wrap around limbs/digits.
- Never use twist-ties to hang anything in a bird's cage.
- Ensure that all cage materials, clamps and toys are lead-free and zinc-free.
- Avoid use of air fresheners (e.g. plug-ins, aerosols, scented candles) around birds.
- Do not use Teflon-coated cookware or appliances (e.g. curling irons) anywhere near a bird.
- Keep birds away from large, open containers of water (e.g. sinks, bathtubs, toilets, pots).
- Many plants can be toxic to birds, including (but not limited to) parsley, clematis, lily of the valley, poinsettia, philodendron and rhododendron.

Additional Information: There are lots of resources about pet birds available on the internet, but not all are reliable. If you are thinking of getting a bird, find a veterinarian in your area to whom you will be able to bring your bird, and discuss with him/her any of your internet findings in order to determine what is the most reliable information.

Is My Bird Sick?

Birds are very good at hiding signs that they are sick, so by the time a bird really looks sick, it may have already been ill for quite some time. It is therefore very important to consult a vet as soon as you notice your bird is sick. Common signs of illness in birds include:

- Decreased appetite, refusal to eat, lethargic or weak
- Discharge from the eyes or nose
- Abnormal or overgrown beak or toenails, or feather problems
- Masses or swelling anywhere on the body
- Change in voice
- Other abnormal behaviour (e.g. unwilling to perch, feather picking, tail bobbing, self-trauma)
- Change in colour or consistency of droppings, or droppings on the feathers under the tail

The more familiar you are with your bird's normal behaviours and habits, the easier it will be to detect subtle changes early in a disease process (even though your bird may act normal at the veterinary clinic because it's excited). Illnesses in birds may be due to **feeding or housing problems**, but it is very important to rule out infectious disease. Medical problems should always be ruled out first before concentrating on possible **behavioural issues**.

Can My Bird Make *Me* Sick?

Birds do not often transmit diseases to people, but they can potentially carry several zoonotic diseases, including those listed below. Be aware that birds can carry and transmit some of these pathogens without appearing sick themselves. Please refer to specific disease information sheets, your veterinarian or physician for more details.

Campylobacteriosis:*

- This is a bacterial infection caused by one of several species of *Campylobacter*, including *C. jejuni* and *C. intestinalis*, which are commonly carried by chickens in particular. In people, infection causes diarrhea, but many birds with *Campylobacter* do not appear sick at all. The bacteria are transmitted by swallowing anything contaminated with droppings from an affected bird (e.g. contaminated poultry products). The risk associated with pet birds has not been well studied. Some of the types of *Campylobacter* in birds may not even affect humans.

Mycobacteriosis:

- In birds, this bacterial infection is also known as avian tuberculosis, and is most commonly caused by a group of bacteria called the *Mycobacterium avium* complex (MAC). In the past, it has been estimated that 40% of AIDS patients that are not treated preventatively will develop disease due to MAC, but MAC infection is uncommon in otherwise healthy people. Signs of MAC infection in humans cover a broad range, but often include fever, weight loss and anemia. Although these bacteria can be found in birds, they are also common in the environment (e.g. soil, water), and exposure to birds is not considered a significant risk factor for disease.
- Among birds, only psittacines are thought to be susceptible to *M. tuberculosis*, the primary cause of tuberculosis (TB) in humans. Suspected transmission of *M. tuberculosis* between humans and pet birds has been reported, but is very rare, and often involves owners who pre-chew their bird's food. The incubation period for infections with *Mycobacterium* is very long - an animal or person can be infected for a long time before they get very sick. The bacteria are typically shed in the droppings of birds, and ingestion of stool contamination is the primary route of transmission.

Psittacosis:

- This is an infection caused by the bacterium *Chlamydophila psittaci*, which may be carried by 16-81% of psittacine birds, as well as pigeons and wild birds. Illness in birds occurs occasionally, but the signs are vary a lot. Chronic disease is common in parrots and pigeons. The bacterium is shed in the stool and transmitted by swallowing it, or by inhaling dried, dusty droppings. Psittacosis is uncommon in people (less than 1 in 100 000 people per year in Western Canada), but sporadic cases and outbreaks do occur, likely more often than we think. The disease usually causes flu-like illness in humans, but can cause severe pneumonia and other problems. Psittacosis may be missed in the early stages of infection if the physician does not know a person has had contact with birds.

Salmonellosis:*

- This infection, caused by one of many serotypes of *Salmonella*, typically causes diarrhea in people, but in some cases it can cause much more serious disease. The bacteria are passed in the stool of infected animals, which may or may not show signs of diarrhea. It is estimated that 0.2-3.0% of pet birds may be carrying *Salmonella*. Transmission is by stool contamination of food, water, or hands followed by transfer to the mouth. Most cases of transmission from live birds to humans are due to exposure to chickens, particularly young chicks.

Cryptococcosis:

- This infection, caused by the fungus *Cryptococcus neoformans*, is relatively uncommon in birds. When infection does occur it is difficult to diagnose and treat. Infection in healthy humans is rare, but transmission from birds has been reported. Pigeon roosts in particular can be a problem with this fungus. Avoiding dried, dusty bird droppings is likely the best way to prevent transmission.

Dermatophytosis (ringworm):

- This fungal skin infection is typically caused by one of several species of *Microsporum* or *Trichophyton*. Dermatophytosis in birds occurs but is considered uncommon. In humans it can cause well-delineated areas of red, raised, itchy skin with central pallour, which therefore appear as a "ring." There are a very small number of reports of transmission of dermatophytes from birds to people. The fungus is transmitted by contact with the skin, feathers or dander of an infected animal, particularly if the person's skin is damaged or moist.

Avian Influenza:*

- Highly pathogenic strains of avian influenza virus (e.g. H5N1) can cause severe illness in both domestic birds and people, although many wild birds (particularly water fowl) seem to be resistant to disease even from these more virulent viruses. Both sick and seemingly healthy birds can shed the virus in their respiratory secretions and stool, and contact with this contaminated material can spread the virus to other birds and people. In areas where the disease is not commonly found (e.g. Canada, USA), the risk is primarily restricted to direct or indirect contact with wild birds (particularly migratory birds), or with birds that are allowed outside and may therefore have direct or indirect contact with wild birds. The best way to prevent this disease is to keep pet birds indoors and avoid keeping "backyard" poultry. All domestic birds should be kept in a secure enclosure that prevents contact with wild birds at all times.

* Notifiable disease in people in Canada

Other "Zoonotic" Diseases of Pet Birds

- Pet birds can also be infected by ***Giardia intestinalis*** and ***Cryptosporidium* spp.**, some types of which can potentially infect humans, causing diarrhea. However, transmission of these pathogens from pet birds to people has not been reported.
- Birds can be infected by several **viral encephalitis viruses** (e.g. eastern and western equine encephalitis (EEE/WEE), West Nile). Mosquitoes are typically responsible for transmission of these viruses to mammals. Direct transmission of these viruses from birds to humans or other animals is a *theoretical* concern, because birds develop such high viral loads. There is very little information regarding infection in pet bird species. The best preventative measure is to avoid exposure to the insect vectors.
- **Yersinosis** is an infection cause by the bacterium *Yersinia pseudotuberculosis* that occurs primarily in Northern Europe. The same strains that infect birds can also infect people, but evidence of direct zoonotic transmission remains circumstantial. Transmission is thought to be via fecal or urinary contamination of food and water. Clinical signs in animals and humans are generally non-specific. In humans infection can mimic acute appendicitis.
- Bird **mites** are generally species-specific, although *Dermanyssus gallinae* and *Ornithonyssus* spp. will occasionally bite humans that handle infested birds or work in mite-infested buildings where birds are housed.
- Birds do <u>not</u> transmit **rabies**.

Bird Bites

- **All birds may bite.** Psittacines and other seed-eating birds in particular have powerful jaws. A large macaw can exert enough force with its beak to sever a finger with a single bite.
- <u>All</u> bite wounds should immediately be cleaned vigorously with lots of soap and water, and monitored closely for signs of infection.
- Get medical attention for <u>any</u> bite over a joint, hand, tendon sheath (e.g. wrist, ankle), prosthesis, implant or genital area, and for any bite to a person with a weakened immune system (e.g. HIV/AIDS, transplant and cancer patients).

Infection Control

Although birds are relatively low-risk in terms of their potential to transmit disease to humans, there is always some risk. The risk of illness in a bird and zoonotic transmission can be reduced by **proper handling**, **good management**, **personal hygiene** and **routine healthcare**. A bird that is not stressed and is well cared for is less likely to be susceptible to infection, and therefore less likely to transmit infection to a person.

- Kissing a bird, or allowing a bird to take food directly from a person's mouth, should not be permitted.
- Anyone handling a bird, especially children, should be taught how to do so correctly and as safely as possible.
- Keep birds and cages **away from the kitchen**, food and any areas where food is prepared.

Hand Hygiene

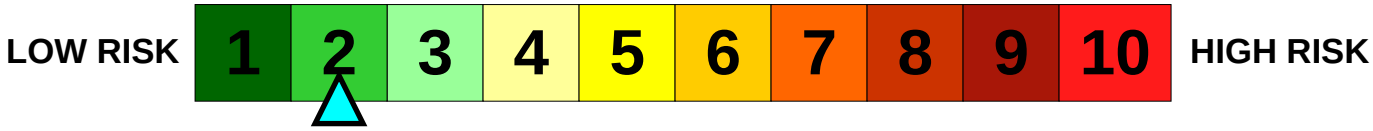
- Hands should be thoroughly washed with soap and water, or use an alcohol-based hand sanitizer, after handling a bird, cleaning its cage, or contacting droppings or cage bedding.
- Children should be supervised by an adult to ensure that this is done properly.

Cleaning Up

- Cage bedding (newspaper) should be changed daily. This prevents build up of droppings and bacterial growth in the bottom of the cage, and also prevents droppings from drying out, as dried stool can form dust which may be inhaled, along with the bacteria in it. Lightly spraying the bedding with water can help reduce such dust.
- Periodically the entire cage should be thoroughly cleaned and disinfected:
  - All bedding should be removed and the inside of the cage should be scrubbed with soap and water using a stiff-bristled brush in order to remove any remaining excrement/debris that may be adhered to the bars or floor.
  - Once the cage looks clean, a household disinfectant (e.g. bleach (diluted 1:9 with water)) should be applied. The disinfectant should be left in contact with all surfaces for at least 10 minutes, followed by **thorough rinsing with water**. Allow the cage to dry completely prior to placing fresh newspaper and replacing the bird.
- Hands should always be washed thoroughly with soap and water after cleaning the cage.
- **Food and water bowls** should be scrubbed with soap and hot water at least once daily and dried completely before being placed back in the cage. Having two sets of food/water bowls allows these items to be replaced immediately and therefore provides more time to properly clean the dirty bowls.
- Any **fresh produce** that are not eaten promptly by the bird should be **removed** in order to prevent spoilage.

For **healthy adults and older children** (over 5 years old), the zoonotic disease risk associated with a pet bird is:

HEALTHY ADULTS / OLDER CHILDREN



Groups at higher risk of acquiring a zoonotic disease from pets, including birds, are **immunocompromised individuals** (e.g. HIV/AIDS, transplant and cancer patients), infants, **young children** less than five years of age, and the elderly. Nonetheless, pet ownership can have significant emotional benefits for members of these groups. With selection of an appropriate pet and close attention to infection control measures, the risk can be significantly reduced.

With regard to birds living with high-risk individuals, important points to consider include the following:

- Be diligent and thorough about **hand washing** after handling a bird or cleaning its cage.
  - High risk individuals should try to have someone else clean their bird's enclosure regularly. Otherwise the person should wear rubber gloves when cleaning the enclosure and be very diligent about washing his/her hands as soon as the task is completed.
- **Know how to handle** a bird correctly (in a calm, gentle manner), and only handle the bird when necessary to minimize the risk of bites or scratches.
- Keep the bird in **good health** through proper management and veterinary care.

For these groups, the zoonotic disease risk associated with a pet bird is likely:

YOUNG CHILDREN / IMMUNOCOMPROMISED PERSONS