

Vomiting and Regurgitation in Birds: Common Causes

Drs. Foster & Smith Educational Staff

Regurgitation and vomiting are signs commonly seen in birds. Regurgitation is the forceful expulsion of the contents of the mouth, esophagus, or crop. A bird that is regurgitating will often bob its head and stretch out its neck, and the food does not look digested, e.g., whole seeds are regurgitated. Regurgitation is usually a normal behavior. Vomiting is the expulsion of the contents of the proventriculus, ventriculus, or intestine. Vomiting is more of a spitting action, and the bird shakes its head from side to side. Vomiting is a sign of illness and should be evaluated promptly. Unfortunately, though it is often difficult to differentiate between regurgitation and vomiting.

Vomiting in birds can be a sign of a severe disease, and veterinary attention should be given as soon as possible.

What are the causes of vomiting and regurgitation in pet birds?

There are a large number of causes of vomiting and regurgitation ranging from infections, to something the bird ate, to diseases of multiple organs in the body. Some of the common causes are listed in the following table:

Cause	Comments
<p>INFECTIONS</p> <ul style="list-style-type: none"> ● Bacterial: <i>Mycobacterium</i>, megabacteria, <i>Pasteurella</i>, <i>Salmonella</i>, and many other gram-negative and gram-positive bacteria ● Fungal: <i>Candida</i>, <i>Aspergillus</i>, <i>Mucor</i> ● Viral: Pacheco's Disease, polyomavirus, pox virus, papillomatosis, Psittacine Beak and Feather Disease, adenovirus, herpes virus, paramyxovirus ● Parasitic: <i>Capillaria</i>, <i>Plasmodium</i>, tapeworms, <i>Trichomonas</i>, <i>Giardia</i>, roundworms, coccidia ● Other: Proventricular Dilation Syndrome, Macaw Wasting Disease, Neurotropic Gastric Dilation 	<p>Infections with gram-negative bacteria are one of the most common causes and often secondary to stress, another illness, or fecal contamination of food or water, and are one of the major causes in smaller birds; abscesses may form in some cases; <i>Candida</i> is also often secondary to another illness or stress; <i>Trichomonas</i> is a common cause, especially in budgies; pox virus and tapeworms are more common in imported birds</p>
<p>DISEASES OF OTHER ORGANS</p> <ul style="list-style-type: none"> ● Heart disease ● Liver disease ● Pancreatitis ● Kidney disease ● Diabetes mellitus ● Peritonitis ● Septicemia ● Electrolyte imbalances ● Trauma 	<p>Heart disease is more common in toucans and mynahs; liver disease, especially hepatic lipidosis (fatty liver) and hepatitis, is a common cause in many bird species - hepatic lipidosis especially in budgies; trauma includes flying into a window or the bite of another animal which may cause internal bleeding or infection</p>

<p>NUTRITION</p> <ul style="list-style-type: none"> ● High protein diet ● Hypervitaminosis D ● Hypovitaminosis A ● Hypovitaminosis E or selenium deficiency ● High iron levels ● Food allergy ● Formula at wrong temperature or consistency ● Overfeeding ● Change in diet 	<p>Young birds are especially sensitive to the temperature and consistency of the food, and the amount given at one time; abnormal vitamin levels occur over a long period of time; high protein diet is a more common cause in cockatiels</p>
<p>TOXICITIES*</p> <ul style="list-style-type: none"> ● Heavy metals: arsenic, copper, lead, zinc ● Plants: See Poisonous Plants for Birds ● Foods: chocolate, nicotine, salt, moldy or spoiled foods, avocado, alcohol, cigarettes ● Pesticides/insecticides: carbamates, lindane, organophosphate, rotenone, arsenic ● Household products: cholecalciferol, rubbing alcohol, chlorine, teflon, detergents, pine oil, aluminum chloride (deodorants), potassium chloride (matches), nitrate, phosphorous, thallium 	<p>Zinc and lead toxicity are common causes; heated teflon such as on frying pans and ironing board covers is very toxic.</p>
<p>GASTROINTESTINAL DISEASE, BLOCKAGE, OR COMPRESSION</p> <ul style="list-style-type: none"> ● Goiter ● Ascites ● Aerophagia (swallowing air) ● Crop conditions: impaction, stasis, crop burn ● Egg binding ● Gastrointestinal conditions: foreign body, intussusception, volvulus, stenosis, hernia, ileus; grit impaction; ulcers ● Esophageal stricture ● Neoplastic: papilloma, leiomyoma, adenoma, fibroma 	<p>Conditions which take up space in the chest or abdomen can put pressure on the digestive system; goiter is a common cause in budgies; crop conditions are more common in young and hand fed baby birds; papillomas in the mouth are also common; egg binding is a more common cause in canaries</p>

<p>DRUG REACTIONS**</p> <ul style="list-style-type: none"> ● Antibiotics: doxycycline, polymixin B, trimethoprim/sulfadiazine, sulfadimethoxine, enrofloxacin ● Antiparasitics: fenbendazole, praziquantel, levamisole ● Anti-fungal medications: fluconazole, itraconazole, or ketoconazole 	<p>Only give these medications to a bird under direct supervision of a veterinarian, and closely follow the directions; contact your veterinarian if your bird is taking any medication and shows new signs of illness</p>
<p>BEHAVIOR</p> <ul style="list-style-type: none"> ● Motion sickness ● Courtship ● Excitement or stress ● Normal weaning behavior 	<p>Courting behavior to other birds, mirrors, toys, or even owners is a common cause</p>

- Adapted from: *Rupley. AE. Manual of Avian Practice. W. B. Saunders Co., Philadelphia PA. 1997; 92.*

* For more information see [Common Poisons](#)

** For more information see [Common Drugs & Nutraceuticals](#)

How is the actual cause determined for a specific bird?

It can be very difficult to differentiate between regurgitation and vomiting, and even harder to determine an exact cause. The veterinarian will need a complete history, including:

- When the condition started
- How often it occurs
- Other signs of illness noticed by the owners
- Whether the condition is related to a certain event, e.g.; after eating, while playing with toys, etc.
- What the bird is fed
- How the bird is housed
- The sanitary conditions
- Access to potential causes such as foods, household items, toxins, and exposure to other birds
- Presence of the condition in other birds
- Medications or supplements being given to the bird
- Display of any courtship or nesting behavior
- Other diseases the bird may have or has been treated for either currently or in the past

The diagnosis requires careful observation of the bird and a complete physical examination. If at all possible, bring the bird's cage along with you to the veterinarian's office, because it can often offer significant clues. Laboratory tests including a [complete blood count](#), [chemistry panel](#), and a fecal exam to look for parasites are often needed. [Radiographs](#) may help determine a diagnosis (see [The Parrot Who Liked Heavy Metal or "How to Get the Lead Out."](#)). An endoscope may be used to view the upper digestive tract and collect samples. The bird's mouth or anal area may be swabbed and a [culture and sensitivity](#) performed to determine if a bacterial or fungal infection could be the cause. Specimens from the crop will also be viewed microscopically and cultured. Blood may be tested for the presence of viruses or antibodies to them.

How is vomiting or regurgitation treated?

The treatment of vomiting will vary considerably depending upon the cause. Supportive care in the form of stable temperatures, fluid therapy for dehydration, nutritional management (sometimes withholding food may be necessary) are very important. Depending upon the severity of the illness, the bird may need to be hospitalized. Other therapies may include:

- Giving medications to treat infections
- Changing the diet

- Providing appropriate therapies for diseases of other organs
- Removing the toxic agent from the environment and/or the bird
- Performing surgery or endoscopy to remove foreign objects or tumors and to correct other intestinal blockages

If a bird is regurgitating often and the cause is determined to be behavioral, it may be helpful to remove the toys or mirror that are the focus of his regurgitation.