



Rodent Wellness



5201- A Virginia Beach Blvd.

Virginia Beach, VA 23462

Phone: 757-473-0111

Website: www.petcarevb.com

Facebook: PetCareVet



According to the American Veterinary Medical Association there are five basic types of rodents, each with their own unique personalities and needs. Gerbils and hamsters are playful and outgoing but don't really like to be handled, especially by children. Mice and rats make excellent pets, are highly intelligent, social, will bond with their owners and rarely bite. Guinea Pigs are lively, entertaining creatures who are gentle in nature and enjoy being gently handled.

As with all companion animals, it is important for an adult to provide supervision at all times when children are interacting with their pet. Rodent bodies are fragile and can easily be injured. Also, rodents can be active at different times of the day and may become cranky or difficult for the child to handle if it is their natural quiet or resting time.

Rodents have varied requirements for space and social interaction and have differing qualities as pets. All of them need their water bottles cleaned and filled daily and the appropriate food needs to be offered fresh every day. It is important to keep your pet healthy by feeding a high quality food such as Oxbow Animal Health's pellets, hay, and treats. Their treats can be hidden around their cage to provide foraging and exercise time as well as mental stimulation.

Rodents need their bedding area cleaned often. Rats, mice, and guinea pigs can be trained to use a litter box. Cages should be cleaned at least once a week and wet spots should be taken out every day. Tanks and accessories should be washed at least once a week. Plastic tubes, solid wheels (such as comfort wheels and silent spinners) should be cleaned as often as necessary, which may be daily depending on your pet

Finally, it is very important for you to monitor your pet rodent for signs of illness. Things to look for include less activity, eye or nasal discharge, decreased appetite, rough hair coat, and lumps under the skin. Often they will not show signs until they are very sick so it is important to monitor their health. Please note that life expectancies range anywhere from one year for mice and small hamsters, one to two years for gerbils and larger hamsters, two to three years for rats, and 5-7 years for guinea pigs.

Gerbils

- Friendly, curious, active
- Life span is 2 to 4 years

- Possess excellent hearing
- Teeth grow continuously throughout their lives
- Need plenty of environmental stimulation to keep from being bored
- Active burrowers that like to explore
- Will often hide their food with bedding



Cage/Environment: Gerbils should be housed in escape-proof cages. Because they also like to chew, they should never be housed in anything made of wood.

The most popular cage is a ten-gallon aquarium. According to the American Gerbil Society, an aquarium is easy to clean and provides plenty of room for your gerbil to run, burrow, and play. Plastic cages, which are commonly sold in many pet stores/online, tend to provide poor ventilation as well as being easily chewed.

If you choose a glass aquarium, be sure it has a wire mesh top. The top should fit snugly against the edges of the aquarium to prevent the gerbil from escaping. If using a glass aquarium, make sure to clean it at least every other day and that you have a wire mesh top securely in place so that your gerbil can't climb or jump out. Adequate ventilation is very important because ammonia from urine can cause respiratory problems.

Cages should also be able to accommodate an exercise wheel, a hide box, and a tunnel for play. Wheels should have solid surfaces because injuries can occur if a gerbil's tail or legs get caught in wire made wheels.

Bedding can be shredded paper (avoid shiny ads as they may contain toxic substances), hardwood shavings, or composite recycled newspaper pellets. Cedar and pine shavings are not recommended because they contain resins that can be irritating to a gerbil's skin, eyes, and respiratory system. Aspen shavings and **Carefresh**® are preferred bedding materials. Carefresh® is a commercial paper bedding which is soft and absorbent. Rodents enjoy burrowing in the material.

In addition, tissue paper, paper towels, facial tissue, and old mittens or socks can make excellent nesting materials. Avoid artificial fiber bedding as it can wrap around a gerbil's legs or cause problems if eaten.

Nutrition: Hay such as timothy, meadow, orchard, and oat should be fed in unlimited quantities on a daily basis.

We recommend a balanced pelleted diet such as Oxbow Animal Health's [Hamster and Gerbil Food](#) or Mazuri's [Hamster/Gerbil diet](#). Pellets need to be fed in a sturdy crock bowl to prevent tipping and any leftover food needs to be discarded. Bowls need to be washed daily.

Treats such as fresh fruits and vegetables should be sparingly given. In order to prevent digestive upset you need to feed the same treats consistently and avoid gas-forming vegetables such as broccoli or cauliflower.

Oxbow Animal Health offers a variety of [healthy treats](#) such as the Simple Rewards Line and their Organic Barley Biscuits.

A water bottle with a sipper tube works better than a water bowl as the latter can be easily tipped over or contaminated with waste or bedding. Hang the water bottle on the outside of the cage so just the tip of the spout is inside. This will discourage chewing on the sipper tube. Water must be changed daily and the sipper tube should also be cleaned daily to prevent clogs which would prevent the tube from working.



Behavior: Gerbils are very territorial in nature. Both males and females produce a yellow-brown musky secretion for scent marking from a gland located on their underside. They also mark territory with urine and feces.

Gerbils that are caged together before puberty will bond and, if not living in an overcrowded environment, will live in harmony. If introduced as adults, both male and female gerbils will fight with females usually being most aggressive.

When handled gently, they will rarely bite and, with time and patience, they can bond with their owners and make loving pets. Always scoop him/her up gently around their stomach area.

Gerbils love to dig and burrow and are awake during the day. They have excellent hearing, which in nature allows them time to escape approaching predators. Make sure that they have plenty of grass hay and cardboard tubes to provide plenty of opportunities for hiding, playing and exercise.

Health: Poor nutrition, digestive or dental problems and obesity are all potential problems. Signs that your gerbil needs to see a veterinarian immediately are:

- Wet or soiled tail
- Blood in the urine
- Sneezing
- Front teeth are overgrown
- Missing patches of fur
- Sitting hunched
- Sores on feet
- Not eating or drinking
- Lumps/sores on body

Regular veterinarian check-ups are important part of keeping your little one healthy and happy.



Hamsters

- Sleep during the day
- Natural escape artists
- Life span is 1 ½ to 3 years
- Love to hoard food
- Have poor eyesight but excellent hearing and a keen sense of smell

Cage/Environment

Because hamsters like to chew, they must be housed in escape-proof cages. They can live comfortably in wire cages with thick plastic bottoms and glass aquariums.

If using a glass aquarium, make sure to clean it at least every other day and that you have a wire mesh top securely in place so that your hamster can't climb or jump out. Adequate ventilation is very important because ammonia from urine can cause respiratory problems.

If using a wire cage with a thick plastic bottom make sure the door is large enough for you to be able to reach inside and safely remove your hamster.

Bedding can be shredded paper (avoid shiny ads as they may contain toxic substances), hardwood shavings, or composite recycled newspaper pellets. Cedar and pine shavings are not recommended because they contain resins that can be irritating to a hamsters skin, eyes, and respiratory system. Aspen shavings and Carefresh[®] are preferred bedding materials. Carefresh[®] is a commercial paper bedding which is soft and absorbent. Rodents enjoy burrowing in the material.

Put cardboard boxes, cardboard tubes, timothy hay tunnels, an exercise wheel (one that has a solid surface. No wire wheels as their feet can easily get caught), and plenty of timothy hay so that your hamster can dig, tunnel, play and burrow to his/her heart's content.

Nutrition: Unlimited hay such as timothy, meadow, orchard, and oat should be fed in unlimited quantities on a daily basis.

We recommend a balanced pelleted diet such as Oxbow Animal Health's [Hamster and Gerbil Food](#) or Mazuri's [Hamster/Gerbil diet](#). Pellets need to be fed in a sturdy crock bowl to prevent tipping and any leftover food needs to be discarded. Bowls need to be washed daily.

Treats such as fresh fruits and vegetables should be sparingly given. In order to prevent digestive upset you need to feed the same treats consistently and avoid gas-forming vegetables such as broccoli or cauliflower.



Oxbow Animal Health offers a variety of [heathy treats](#) such as the Simple Rewards Line and their Organic Barley Biscuits.

A water bottle with a sipper tube works better than a water bowl as the latter can be easily tipped over or contaminated with waste or bedding. Hang the water bottle on the outside of the cage so just the tip of the spout

is inside. This will discourage chewing on the sipper tube. Water must be changed daily and the sipper tube should be cleaned daily to avoid blockage from food material which prevents the sipper tube from working.

Behavior: Hamsters are highly inquisitive creatures who are nocturnal but active at night. When handled properly, they generally will not bite, but if awakened from a deep sleep, startled, or threatened may do so.

Hamster's expandable cheek pouches allow them to carry food and bedding back to their nests. They are notorious for hoarding food and will stash it around their cages to enjoy later. You may also see them eat their own "poop". This is normal as it provides them with the extra vitamins and nutrients their bodies need.

Because of their love for chewing, hamsters will gnaw on just about anything so it is important to provide them with plenty of hay, wood blocks, empty toilet paper rolls, boxes and items made from hay like the Oxbow timothy hay tunnel to keep them busy.

Some hamsters are social and like to be housed in pairs while others prefer to be alone. If housed in pairs, it is best to pair them before they reach puberty in order to prevent fighting. Mature females will fight with other females and males except during breeding. Mature males will fight with other males. Neutering will cut down on aggression and unwanted babies.

Health: Poor nutrition, digestive or dental problems and obesity are all potential problems. Signs that your gerbil needs to see a veterinarian immediately are:

- Wet or soiled tail
- Blood in the urine
- Sneezing
- Front teeth are overgrown
- Missing patches of fur
- Sitting hunched
- Sores on feet
- Not eating or drinking
- Lumps/sores on body
- Diarrhea

As with all mammals, regular veterinarian check-ups are important part of keeping your little one healthy and happy.



Rats

- Intelligent and social
- Very sensitive to respiratory infections
- Usually nocturnal but will adjust their schedule to that of their owners

- Average life span is 2 – 3 years
- Eat out of boredom so obesity is always a risk factor

Cage/Environment: Cages need to provide adequate ventilation which makes wire cages with plastic bottoms ideal. Aquarium tanks provide less ventilation and are not recommended due to the ammonia build-up from urine issue. Due to this build-up, a rat's cage needs to be thoroughly cleaned at least twice a week.



Natural burrowers, rats love to build tunnels using their bedding. Always use bedding that has no added fragrances such as Oxbow Animal Health's Pure Comfort. You can also use shredded newspaper (avoid shiny ad inserts as they may contain toxic substances). Avoid cedar and pine shavings as they can contain resins that can irritate their skin and lungs. Aspen shavings and Carefresh® paper bedding are good choices for bedding material. In addition, tissue paper, paper towels, facial tissue, old mittens or socks can make excellent nesting

materials.

Cardboard boxes, an exercise wheel, timothy hay made tunnels all make great toys that will provide hours of fun and exercise. Ropes are also entertaining as your little one will enjoy carrying and tossing these items around.

Nutrition: Rats are omnivores, which means they eat both plant and animal material. Oxbow Animal Health makes a fortified kibble, Adult Rat Food, which contains all-natural grass and whole grain ingredients. It has a balance of protein, fats, carbohydrates, vitamins and minerals.



Grass hay like timothy, orchard, oat, botanical and organic meadow stimulate natural foraging activity which helps in preventing obesity. Give your rat unlimited amounts.

Vegetables and fruits should be considered treats and fed only a tablespoon or less per day. Greens such as kale, romaine lettuce, and parsley are excellent choices. Apples, strawberries, bananas, peas and squash can also be fed. As with any new food, introduce new vegetables and fruits slowly to avoid upsetting

your rat's stomach and causing diarrhea.

Do not give your rats sweet treats like yogurt drops or seed sticks. Starchy foods like pretzels, cookies, bread, and cereals are high in calories and can easily lead to obesity.

A water bottle with a sipper tube works better than a water bowl as the latter can be easily tipped over or contaminated with waste or bedding. Hang the water bottle on the outside of the cage so just the tip of the spout is inside. This will discourage chewing on the sipper tube. Water must be changed daily and the sipper tube should be cleaned daily to prevent clogs which would prevent the tube from working.

Behavior: Rats are relatively intelligent and social animals that enjoy the company of other rats and humans. They are usually nocturnal, meaning that they sleep during the day and are active at night. However, many rats will adjust their schedules to be awake when their owner is at home to give them attention.



When handled gently, rats will seldom bite. Some like to cuddle and enjoy an occasional ride on your shoulder. Others love to play with toys and are in constant motion. They can be taught to respond to their name, use a litter box, climb ropes, and can be clicker trained.

Male and female rats can be housed together but pairs do better if raised together from a young age. Adult rats may be introduced to each other, preferable in a neutral cage that has been used by neither rat, so that territory protection and fighting

is diminished. Some rats introduced as adults get along well together, while others do not so make sure you watch them closely.

Health: Many problems arise from poor nutrition and digestive issues. Dental disease, tumors, and obesity are also common. Signs that your pet rat needs to see a veterinarian are:

- Wet or soiled tail
- Blood in urine
- Missing patches of fur
- Body lumps
- Foot sores
- Sneezing or wheezing
- Overgrown front teeth
- Not eating/drinking
- Sitting hunched in a corner
- Red discharge from eyes or nose

If you have any questions concerning your rat's physical well-being, call us at 473-0111.

Rodent Respiratory Disease Complex

Rodent Respiratory Disease Complex is commonly seen in rats, hamsters, and guinea pigs. Affected rodents show signs of repeated sneezing, nasal discharge, brown to red eye discharge and diminished appetite. They may also make a "chattering" noise due to congestion. Sometimes the infection spreads into the inner ear which will cause the animal to develop head tilt.

Often the pet may not show signs of this disease but can be a carrier. Under stressful conditions (dirty cage, poor diet) the animal may develop signs and become ill.

Rodent Respiratory Disease Complex may be caused by a combination of:

Viral Diseases

- Sendai Virus – a type 1 paramyxovirus seen in mice, rats, and hamsters that cause rhinitis, bronchitis, and pneumonitis
- Corona virus – in rats, known for causing mild respiratory signs, but more severe salivary gland inflammation and conjunctivitis of the eyes
- Adenovirus – pneumonia in guinea pigs, labored breathing in others

Bacterial

- Murine Respiratory Mycoplasmosis (MRM) is very common in rats. Infection is persistent and probably lifelong. Cases are worsened by increased ammonia in a dirty cage, other viruses, Vitamin C or A deficiency, and aging.
- Cilia-Associated Respiratory (CAR) Bacillus - primarily affects rats, but can also affect guinea pigs and hamsters
- *Corynebacterium kutscheri* - seen in rats, hamsters, and mice. Usually subclinical but becomes clinical with dietary deficiencies or other concurrent infections that suppress the immune system
- *Streptococcus pneumoniae* – primarily responsible for nasal discharge and respiratory distress in rats and guinea pigs. May lead to arthritis and cause heart disease.
- *Streptococcus zooepidemicus* – common in guinea pigs and causes lymph node abscesses
- *Bordetella bronchiseptica* – significant in guinea pigs. Causes nasal discharge, pneumonia, labored breathing, and heart disease.

Any rodent kept in a soiled, poorly ventilated cage that results in elevated urine ammonia levels will be more prone to Rodent Respiratory Disease Complex. Crowded conditions with too many rodents sharing a small space or situations where rodents are fed a poor diet will predispose them to this disease.

Treatment usually involves antibiotic therapy and improving diet and cage/environment. Sometimes despite changes, the disease will re-occur. Fatty acid supplements such as HealX Sunshine Factor red palm oil have been shown to prevent recurrence of this disease.



Rabbit and Rodent Enrichment and Exercise

Providing an appropriate and stimulating environment allows our exotic companion mammal pets to express their full range of natural behaviors and is essential to maintaining good health. Many of these animals live in social groups in the wild, and keeping two or more individuals together can greatly improve their quality of life. However, even animals that have been housed together for prolonged periods may become aggressive towards each other due to competition for preferred foodstuffs or when

they reach sexual maturity. In the wild, animals can avoid such aggression by fleeing or hiding. Such opportunities may be much more limited in the domestic environment we provide our pets, and must be kept in mind as we design their cages.

Providing multiple hiding places, escape routes, and other upgrades are keys to appropriate cage design. Enclosure size may be less important than the arrangement and complexity of the space. Adding shelves and raised areas will encourage activity and exercise. Tunnels, boxes, and plastic igloos provide complexity to the environment, but make sure they are suitable in size for the species you are housing. Providing multiple nest areas also enhances the environment. Suitable bedding, preferably made of shredded or recycled paper, is an essential requirement for many species that are strongly motivated to build well-constructed nests. Solid-floored running wheels also promote activity in mice, hamsters and many rats, and allow an outlet for the animal's natural tendency to explore large areas.

A few more pointers include:

- Grouping many of these animals *before* the onset of sexual maturity helps establish stable social groups as these pets mature.
- Neutering rabbits, guinea pigs and other rodents should be considered to prevent fighting.
- Rats and gerbils usually form stable groups but introduction of new individuals often triggers aggression.
- Golden hamsters are more solitary animals, but can be housed in single sex groups if housed together from an early age.

- Many small animals scent mark extensively, and if cage mates are separated during cage cleaning, and returned to a clean cage, they may fight. Avoid by placing small quantities of old bedding into the cleaned cage, or perhaps not clean as rigorously.
- Mice may defend nest areas and fight with cage mates. Providing multiple entrances to nest areas will help circumvent such problems.
- Burrowing is a particularly important activity for gerbils, who build tunnels when deep enough bedding is provided. Gerbils should also be provided a sand bath to promote natural grooming behavior.
- Feeding an appropriate diet contributes both to maintaining good health and provides a source of environmental enrichment.

This material summarized from “Behavior, Enrichment, and Exercise for Exotic Companion Mammals” by Paul Flecknell, MA, VetMB, PhD, DECLAM

Rat Bite Fever

Rat-bite Fever (RF) is an infectious disease that is caused by bacteria which are normally part of the respiratory flora of rodents. People usually acquire the disease from infected rodents or consumption of contaminated food or water. Please note that Rat-Bite Fever is **not** spread from one person to another.

How do people become infected with Rat-Bite Fever?

- Bites or scratches from infected rodents such as rats, mice, gerbils or hamsters
- Handling rodents with the disease even without a bite or scratch
- Consuming food or drink contaminated with the bacteria

Symptom and Signs in humans:

- Fever, muscle pain, joint pain, vomiting, headache, rash
- Occur 3 – 10 days after exposure to an infected rodent but can be delayed as long as 3 weeks
- Within 2 – 4 days after the onset of fever a rash may appear on the hands and feet
- Signs from consuming contaminated food and water may also include sore throat and severe vomiting

Signs of Rat-Bite Fever in rodents:

- Loss of activity, loss of appetite, and rough coat
- Later the pet may show signs of weight loss, hunched posture, inflamed eyelids, and eventually, death

Treatment:

- If you have any symptoms it is recommended that you contact your physician immediately

- If you have Rat-Bite Fever, your doctor can give you antibiotics that are highly effective at curing the disease
- Without treatment, Rat-Bite Fever can be serious or even fatal. Severe illnesses can include infections of the heart, brain, lungs, and intestinal abscesses.

Prevention:

- Practice regular hand washing, especially after handling rodents
- Use alcohol based hand sanitizers when soap is not available
- Keep rodent cages clean and free of soiled bedding
- Clean the cage in a well-ventilated area or outside
- Closely supervise young children, especially if they are less than 5 years old. Make sure they wash their hands well after handling rodents and rodent cage/bedding.
- Do not kiss pet rodents or hold them close to your face

What should be considered when purchasing a pet rodent?

- It may be difficult to identify a rodent with Rat-Bite Fever initially as the disease is variable
- Don't pick a rodent that is quiet, tired, has diarrhea, or looks sickly
- The rodent should be lively and alert with normal breathing and no discharge from the eyes or nose
- If one of the pet rodents in the cage at the pet store has diarrhea or looks sick, the others may have been exposed. Do not choose any of these animals as your pet.
- Wash your hands immediately after handling pet store animals.

From the National Center for Infectious Diseases

(http://www.cdc.gov/healthypets/lcmv_rodents.htm)

Common Exotic Pet Toxins

Pesticides – these are a common source of intoxication for domestic pets and exotic pets alike. If your pet spends time outside, it is at risk for exposure to pesticides placed not only in your yard, but from run-off from adjacent yards or farmland. Herbivorous grazers and reptiles that eat insects from outdoors can ingest the toxins, but sometimes animals may become intoxicated from skin exposure alone. Always be aware of what your house and yard are treated with, as well as that of your neighbors. DO NOT allow your pet to graze or hunt if the safety of the food source is in question. If you are treating your pet for any external parasites (such as snake mites) with any of these products, DO NOT use them in conjunction with each other, especially products within the same class of chemical. Organophosphates, Pyrethrins and Metaldehyde are all examples.

Always check with us before you use/put any type of pesticides near/or around your pet's environment.

Rodenticides are rarely ingested by exotic animals. There are three main classes: vitamin K1 blockers, bromethalin, and vitamin D3 amplifiers. It is important to differentiate between these three types for treatment, so if you suspect that your pet has eaten one of these compounds, please make every effort to bring in the box, or otherwise identify the compound.

Fipronil – this compound is the main ingredient of “Frontline”, “Parastar”, “Certifect”, and “PetArmor” flea and tick preventative product lines. While it is safe for most companion pet animals, it is highly toxic to rabbits, fringe-toed lizards (*Uma* spp.), fish, and aquatic invertebrates. Clinical signs include muscle twitching, tremors, convulsions +/- excitement, or lethargy and ataxia. Sudden death may occur as well. Onset is usually quick (< 7 hours), and if caught and diagnosed in time, this may be treated with supportive care and anti-seizure medications, such as diazepam or midazolam. Muscle relaxants may help as well.

Heavy Metals – both of these metals are present in many household settings, unbeknownst to the owner. Signs of heavy metal toxicity may include lethargy, depression, anemia, weakness, anorexia, weight loss, limb rigidity, diarrhea, vomiting, partial or complete blindness, seizures, and/or death. Birds, turtles, and mammals that chew or lick their environment are the most likely candidates for toxin ingestion. If heavy metal toxicity is suspected, a complete blood count and a serum chemistry should be performed in house. Radiographs (x-rays) should be taken, but not all heavy metal sources will show up on a radiograph (paint, for example). Blood samples can be sent off for analysis of lead and zinc if the diagnosis is still in question, but therapy should be instituted in the meantime if toxicity of either metal is suspected.

- A. **Lead** is absorbed in the gastrointestinal tract and stored in bone and soft tissues. Lead is absorbed more efficiently if the patient is young, or deficient in calcium, zinc, or iron. Common sources include, but are not limited to: weights (curtain, fishing, diving, aquarium plant), some aquarium thermometers, bells with lead clappers, shotgun pellets, batteries, computer USB cables, solder, stained glass, paints, (even some “lead-free” paints have lead drying agents), galvanized wire or mesh, glazed ceramics, linoleum, costume jewelry, mirror backing, and seeds for planting (coated with lead arsenate).
- B. **Zinc** is absorbed in the gastrointestinal tract and stored in various soft tissues, but not in bone. Common sources include, but are not limited to: hardware cloth, board game pieces, staples, galvanized mesh or wire, galvanized nails, twisty ties, some paints, some shampoos, zinc oxide ointments, Desenex cream, and pennies minted from 1983 on.

Medications – as Paracelsus stated long ago, “Dosage differentiates the poison from the remedy.” Many commonly used medications, including antibiotic, anti-fungal, and anti-parasitic drugs, can be toxic to your pets if given at improper dosage ranges. In addition, individual animals may have allergic reactions to specific classes of medication (these reactions are impossible to predict). Always store medications where all of your pets (and children) cannot reach them. Always give the amount of medication directed by your veterinarian, and call your veterinarian if you have any questions or concerns about a medication, a pet’s reaction to a medication, or a dosing regimen.