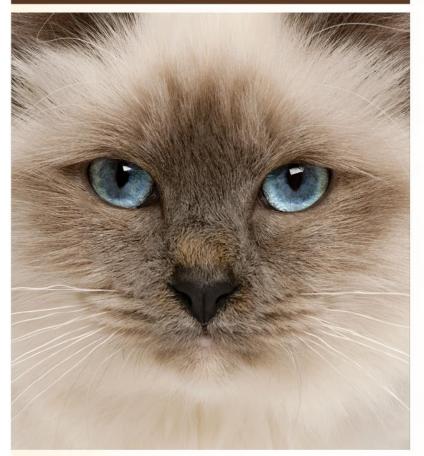
Your Birman

Caring for Your Faithful Companion



Birmans: What a Unique Breed!

Your cat is special! She senses your moods, is curious about your day, and has purred her way into your heart. Chances are that you chose her because you like Birmans (sometimes called "Mitted Cats") and you expected her to have certain traits that would fit your lifestyle, like:

- Might "chirrup" or trill her meows to call you when she misses you
- An affectionate companion and family cat
- Good with children and other pets
- Requires minimal grooming
- Excellent companion

However, no cat is perfect! You may have also noticed these characteristics:

- Needs regular exercise and diet regulation to avoid weight gain
- Needs the company of other pets or people and does not do well in isolation
- Exhibits signs of separation anxiety if left alone too much

Is it all worth it? Of course! She's full of personality, and you love her for it! She is gentle, friendly and loves to be involved in your daily activities.

The origin of the Birman remains a mystery with many unverified tales of their beginnings. Born all white, Birmans do not develop their full color until maturity. They keep their unique white "mittens" on all four paws. Birmans are very social and happy to be involved in your daily activities. They are less apt to climb and jump onto high places, preferring to hang out at ground level or on the couch. Birmans have a playful side and will play fetch or chase when engaged, but prefer to lounge with their family.



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Your Birman's Health

We know that because you care so much about your cat, you want to take great care of her. That is why we have summarized the health concerns we will be discussing with you over the life of your Birman. By knowing about the health concerns common among Birmans, we can help you tailor an individual preventive health plan and hopefully prevent some predictable risks in your pet.

Many diseases and health conditions are genetic, meaning they are related to your pet's breed. The conditions we will describe here have a significant rate of incidence or a strong impact upon this breed particularly, according to a general consensus among feline genetic researchers and veterinary practitioners. This does not mean your cat will have these problems, only that she may be more at risk than other cats. We will describe the most common issues seen in Birmans to give you an idea of what may come up in her future. Of course, we can't cover every possibility here, so always check with us if you notice any unusual signs or symptoms.

This guide contains general health information important to all felines as well as information on genetic predispositions for Birmans. The information here can help you and your pet's healthcare team plan for your pet's unique medical needs together. At the end of the booklet, we have also included a description of what you can do at home to keep your Mitted Cat looking and feeling her best. We hope this information will help you know what to watch for, and we will all feel better knowing that we're taking the best possible care of your friend.

General Health Information for your Birman

Weight Management

Obesity is a major disease that contributes to a surprisingly large number of illnesses and deaths in cats.

This revelation is more well-known and well-understood today than in the last few decades, but too many owners are still ignoring the dangers of extra weight on their pets. Excess weight is one of the most influential factors in the development of arthritis, diabetes, and other life-threatening diseases. Everyone knows—many firsthand from personal experience—how even shedding just a few pounds can result in improved mobility and increased overall motivation to be active. And the same is true for your pet.

Research suggests that carrying excess weight may shorten a pet's life by as much as two years, and can cause the onset of arthritis two years sooner. Diabetes, an inherited disease, has a much higher chance of developing in overweight pets, and may never become a problem for a healthy-weight cat. The more obese a cat becomes, the more likely it will become diabetic. Hepatic lipidosis, or fatty liver, is another potentially fatal disease in overweight pets; hepatic lipidosis can develop in as few as 48 hours when an overweight cat stops eating for any reason.

So how can we help our pets stay trim? Understanding your

cat's dietary habits is key. The average cat prefers to eat about 10-15 times a day, just a few nibbles at a time. This method, free-feeding, works well for most cats, but boredom may increase the number of trips your cat makes to the food bowl. By keeping your cat playfully active and engaged, you'll help your pet stay healthy and have some fun at the same time! A string tied to a stick with something crinkly or fuzzy on the other end of the string, and a little imagination—you and your cat will both be entertained. Food puzzles, like kibbles put in a paper bag or under an overturned basket or box, may help to motivate cats with more food-based interests to romp and tumble.

For really tough cases of overeating, you will have to take a firm stance, and regulate your cat's food intake. Instead of filling your cat's bowl to the top, follow the feeding guide on the food package and be sure to feed a high-quality adult cat diet as recommended by your vet. Replace your cat's habits of eating when bored with extra playtime and affection. Cats typically adjust their desires for personal interaction by the amount of affection offered to them, so in other words, ignoring your cat means your cat will ignore you. By the same token, loving on and playing with your cat a lot will cause your cat to desire that time with you. A more active cat means a healthier, happier pet—and owner!

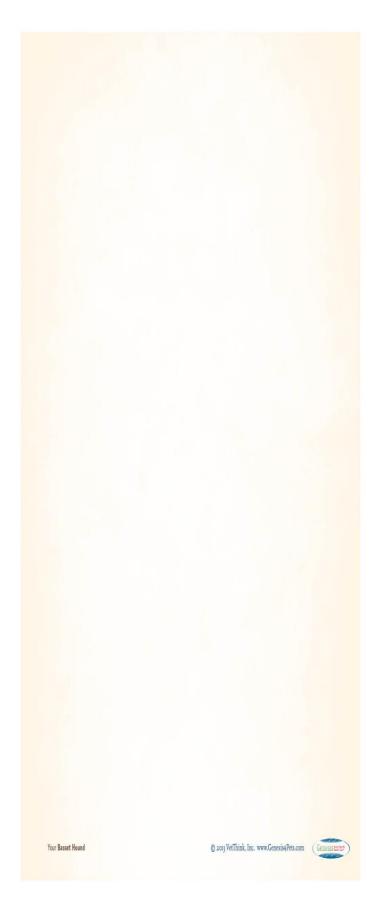
Dental Disease

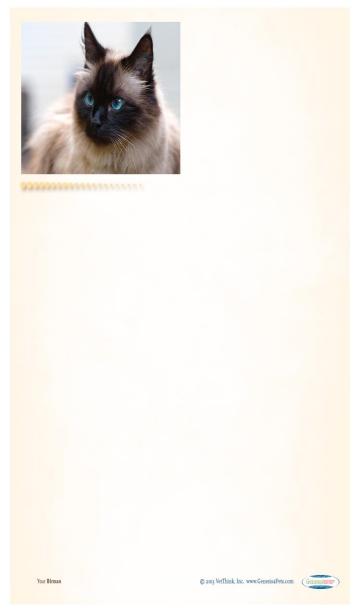
Dental disease is one of the most common chronic problems in pets who don't have their teeth brushed regularly. Unfortunately, most cats don't take very good care of their own teeth, and this probably includes your Birman. Without extra help and care from you, your cat is likely to develop potentially serious dental problems. Dental disease starts with food residue, which hardens into tartar that builds up on the visible parts of the teeth, and eventually leads to infection of the gums and tooth roots. Protecting your cat against dental disease from the start by removing food residue regularly may help prevent or delay the need for advanced treatment of dental disease. This treatment can be stressful for your cat and expensive for you, so preventive care is beneficial all around. In severe cases of chronic dental infection, your pet may even lose teeth or sustain damage to internal organs. And, if nothing else, your cat will be a more pleasant companion not knocking everyone over with stinky cat breath! We'll show you how to keep your cat's pearly whites clean at home, and help you schedule regular routine dental exams.

Vaccine-Preventable Infections

Like all cats, Birmans are susceptible to bacterial and viral infections such as panleukopenia, calicivirus, rhinotracheitis, and rabies, which are preventable through vaccination. The risk of your cat contracting these diseases is high, so the corresponding vaccines are called "core" vaccines, which are highly recommended for all cats. In addition, vaccines are available to offer protection from other dangerous diseases like feline leukemia virus (FeLV). In making vaccination recommendations for your cat, we will consider the prevalence of these diseases in our area, your cat's age, and any other risk factors specific to her lifestyle.







your Birman often have a different blood type, usually type B or very rarely, type AB. Determining your cat's blood type is essential before starting a transfusion, so knowing your cat's type ahead of time can save crucial minutes. Blood typing is recommended for all cats, but is especially important for purebreds. This test can be done as part of a routine wellness blood testing, and the results can be added to your pet's microchip record as well for fast action even if you aren't there.

Neonatal Isoerythrolysis (NI)/Hemolytic Icterus
Neonatal isoerythrolysis, or NI, is a rare immune-mediated
disease that is caused when a newborn kitten with type A blood
suckles colostrum (first milk) from a mother with type B blood
or vice-versa. The mother's immunity against type A blood is
contained in her colostrum, so when the kitten nurses, the
antigen is absorbed into the kitten's bloodstream through
ingestion. The resulting immune reaction develops antibodies
that attack and destroy the kitten's own red blood cells.
Consequently, affected kittens usually die within a few days of

birth. NI can occur in many cat breeds, but is more often seen in breeds with a higher likelihood of having type B blood like your Birman. If you plan to breed your cat, you will need to learn more about this problem beforehand from your veterinarian.

Neutrophil Granulation

Neutrophils are a type of white blood cell present in normal blood that we expect to see (under the microscope) in certain quantities and conditions as part of routine blood testing. The number and appearance of neutrophils and other white blood cells can give us clues about your cat's health. Usually granules present in these neutrophils would be a cause for alarm and indicative of infection or illness, but with your Birman, these granules may be perfectly normal. These unusual cells are not a problem, and are not associated with any disease, but we need to keep this normal biologic variation in mind when interpreting your cat's special lab results.

Portosystemic Shunt

Portosystemic shunt is a disorder seen occasionally in cats, in which some of the blood supply to the liver is shunted around it instead. This condition deprives the liver of the full blood flow it needs to grow and function properly, leading to an undersized, poorly nourished liver that cannot fully remove toxins from the bloodstream. These unfiltered waste materials. such as ammonia and bile acids, eventually build up in the bloodstream and act as poisons to the body's systems. For example, in severe cases, high blood-ammonia levels can cause neurological issues. Cats affected by a portosystemic shunt are also extremely sensitive to drugs and anesthetics, as the liver cannot efficiently cleanse the bloodstream of the added chemicals. If your cat shows symptoms of a portosystemic shunt, we will perform blood testing or a liver ultrasound scan can to check for the disorder. In some cases, surgery can restore proper blood flow to the liver.

FIP Susceptibility

Feline Infectious Peritonitis, or FIP, is a fatal disease caused by a type of coronavirus. All cats may carry this virus in a dormant state, but if the virus undergoes a combination of specific mutations, it can act on a susceptible cat's immune system, causing the cat to develop FIP. Birmans seem to be more at risk for developing FIP than other breeds. FIP causes damage to the blood vessels (vasculitis) and fluid build-up inside the abdomen or chest. Blood testing is available for detecting coronaviruses in cats, but these tests don't differentiate well between non-harmful coronaviruses and the actual FIP disease. Screening cats for this disease before breeding or selling them is therefore difficult and unreliable. FIP is always a risk for any kitten, but more so when purchasing a purebred cat from a breeder; once FIP has developed in a cattery population, it is tough to get rid of it. Be very careful to ask about any history of FIP infection in a kitten or cat's family or cattery history before purchasing your pet. Unfortunately, there is currently no effective treatment for FIP, and it is a fatal disease.

Multiple Eye Problems

Not many things have the dramatic impact on your cat's quality

of life as the proper functioning of his eyes. Unfortunately, Birmans can inherit or develop a number of different eye conditions, some of which may cause blindness if not treated right away, and most can be extremely painful! We will evaluate your cat's eyes during every visit to look for any troublesome signs.

Cataract

Cataracts are a common cause of blindness in older Birmans. Onset of the disease presents with the lenses of the eyes becoming more opaque, or more cloudy than clear. Surgery to remove cataracts and restore the cat's sight may be an option, although most cats adjust well to gradually losing their vision and still get along well in life. We will always examine your cat's eyes closely at each biannual exam and will discuss treatment options with you if your cat develops cataracts.

Eyelid Agenesis

Eyelid agenesis is a birth defect in which the upper eyelid does not form properly. This malformation leaves the eye constantly vulnerable to foreign materials contacting the cornea, like dust, eyelashes, and hair. In addition, the eye is never properly hydrated, and remains irritated, red, and dry as a result. Over time, this irritation causes painful corneal ulcers and scar tissue to develop, eventually leading to partial or complete blindness. In mild cases, treatment may include the application of eye lubricant and cryosurgery to remove the eyelashes rubbing the eye. Usually though, affected cats are treated through surgical eyelid reconstruction. Once healed, the new eyelids should function normally, and the cat should be able to live a healthy life with normal vision.

Corneal Sequestration

Corneal sequestration is a painful condition common in breeds with prominent eyes, like Birmans. A corneal sequestrum is a hard black patch of dead tissue that develops on the front of the cat's eye, or the cornea. This condition usually develops as the





result of chronic inflammation due to viral infection, eyelid defects, or even eyelashes that grow the wrong way. Some early cases may be managed fairly well for months to years using topical medications, but in more advanced cases, preventive surgery may be able to repair the defect and save the eye before the sequestrum detaches. So keep an eye out for any signs of eye infection in your cat, and we'll check for this condition and other potential eye problems at each biannual wellness exam too.

Hypotrichosis

Hypotrichosis is caused by a recessive genetic defect found in several cat breeds, including Birmans. This disease causes thinning of the hair or balding, which tends to develop in patterns or patches on the torso and head. A kitten can be born with symmetrical hair loss, or thinning of hair may ensue shortly after birth. In time, affected areas may develop additional pigmentation or thickened skin. Skin biopsy samples will indicate if your cat has a lower-than-normal number of hair follicles, sebaceous glands, or sweat glands. Hypotrichosis is not painful, but special care is required to protect your cat's skin. No effective treatment is currently known for this condition. Because it is genetically linked, affected cats and their close relatives should not be bred.

Taking Care of Your Birman at Home

Much of what you can do at home to keep your cat happy and healthy is common sense, just like it is for people. Watch her diet, make sure she gets plenty of exercise, regularly brush her teeth and coat, and call us or a pet emergency hospital when something seems unusual (see "What to Watch For" below). Be sure to adhere to the schedule of examinations and vaccinations that we recommend for your pet. During your cat's exams, we'll perform her necessary "check-ups" and test for diseases and conditions that are common in Birmans. Another very important step in caring for your pet is signing her up for pet health insurance. There will certainly be medical tests and procedures she will need throughout her life and pet health insurance will help you cover those costs.

Routine Care, Diet, and Exercise

Build your pet's routine care into your schedule to help your Mitted Cat live longer, stay healthier, and be happier during her lifetime. We cannot overemphasize the importance of a proper diet and exercise routine for your pet.

- ✓ Supervise your pet as you would a young child. Keep doors closed, pick up after yourself, and block off rooms as necessary. This will help keep her out of trouble, off of inappropriate surfaces for jumping, and away from objects she shouldn't put in her mouth.
- Despite her long hair she sheds little, and requires brushing only once or twice a week.
- ✓ Birmans have generally good teeth, and you can keep them perfect by brushing them at least twice a week!
- Check her ears weekly for wax, debris, or signs of infection and clean when necessary. Don't worry—we'll show you how!
- ✓ She needs daily play sessions that stimulate her natural desire to hunt and explore. Keep her mind and body active or she may develop behavior issues.
- ✓ Cats are meticulously clean and demand a clean litter box. Be sure to provide at least one box for each cat and scoop waste daily.
- ✓ It is important that your cat drinks adequate amounts of water. If she won't drink water from her bowl try adding ice cubes or a flowing fountain.
- ✓ Feed a high-quality feline diet appropriate for her age.
- Exercise your cat regularly by engaging her with highactivity toys.

What to Watch For

An abnormal symptom in your pet could be just a minor or temporary issue, but it could also be the sign of serious illness or disease. Knowing when to seek veterinary help, and how urgently, is essential to taking care of your cat. Many diseases can cause cats to have a characteristic combination of symptoms, which together can be a clear signal that your Birman needs help.

Office calls

Give us a call for an appointment if you notice any of these types of symptoms:

- ✓ Change in appetite or water consumption
- ✓ Tartar build-up, bad breath, red gums, or broken teeth
- ✓ Itchy skin (scratching, chewing, or licking), hair loss, or areas of shortened fur
- ✓ Lethargy, mental dullness, or excessive sleeping
- ✓ Fearfulness, aggression, or other behavioral changes
- ✓ Abnormal behaviors, particularly worse a few hours after meals
- ✓ Progressive hair loss in kittens

Emergencies





Seek medical care immediately if you notice any of these signs:

- Scratching or shaking the head, tender ears, or ear discharge
- Cloudiness, redness, itching, or any other abnormality involving the eyes
- ✓ Inability or straining to urinate; discolored urine
- ✓ Sudden hind leg weakness or paralysis, labored breathing, collapse, weakness on one side of the body
- ✓ Bruising on the gums or skin, unusual bleeding from minor injuries

DNA testing is a rapidly advancing field with new tests constantly emerging to help in the early diagnosis of inherited disease even before your cat shows symptoms. For the most up-to-date information on DNA and other screening tests available for your pal, visit www.Genesis4Pets.com.

Your Birman counts on you to take good care of her, and we look forward to working with you to ensure that she lives a long and healthy life. Our goal is to provide you both with the best health care possible: health care that's based on your pet's breed, lifestyle, and age. Please contact us when you have questions or concerns:

Pet Medical Center 254-690-6769

References:

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Gough A, Thomas A. Breed Predispositions to Disease in Dogs and Cats. 2nd Edition. Wiley-Blackwell; 2010.

Feline Advisory Bureau. Inherited disorders in cats - confirmed and suspected [Internet]. [cited 2013 Jun 10]. Available from: Pages Used The Feline Health Center. Health Topics [Internet]. Cornell University Feline Health Center

Partners in Health Care



Kitten to Adolescent Health Care Recommendations

How We'll Keep Your Birman Healthy	ınt to 27		•ge -9 weeks	Services We'll Provide Head-to-tail physical examination Eye disease screen Heart health check Skin and coat exam Blood disorder evaluation Parasite detection/prevention Vaccinations Discuss socialization and at-home kitten care	Birman-Specific Problems We're Looking For Breed-specific physical abnormalities plus Dental alignment, heart murmur, hernia Cataracts, Eyelid agenesis, and Corneal sequestration Portosystemic shunt Hypotrichosis Hemophilia
	Kitten to Adolescent: Infant to 27	0	10–13 weeks	Head-to-tail physical examination Eye disease screen Heart health check Skin and coat exam Blood disorder evaluation Parasite detection/prevention Vaccinations Discuss grooming basics and FIP susceptibility	Breed-specific physical abnormalities plus Cataracts, Eyelid agenesis, and Corneal sequestration Portosystemic shunt Hypotrichosis Hemophilia
		O	14–16 weeks	Head-to-tail physical examination Eye disease screen Heart health check Blood disorder evaluation Parasite prevention Vaccinations Schedule spay/neuter surgery Discuss obedience	Breed-specific physical abnormalities plus Cataracts, Eyelid agenesis, and Corneal sequestration Portosystemic shunt Hemophilia
		0	4–6 months	Head-to-tail physical examination Eye disease screen Heart health check Blood disorder evaluation Pre-surgical diagnostics Spay/neuter surgery Discuss microchipping and declaw options	Breed-specific physical abnormalities plus Cataracts, Eyelid agenesis, and Corneal sequestration Portosystemic shunt Hemophilia
		O	6 months through 2 years	Head-to-tail physical examination Eye disease screen Heart health check Blood disorder evaluation Parasite prevention Vaccinations Discuss lifetime genetic considerations	Breed-specific physical abnormalities plus Cataracts and Corneal sequestration Portosystemic shunt Hemophilia All major diseases important in the breed with diagnostic plan

Adult to Golden Years Health Care Recommendations

lthy			\ge	Services We'll Provide	Birman-Specific Problems We're Looking For
Birman Healthy	years rough years			Head-to-tail physical examination Eye disease screen Blood disorder evaluation Parasite prevention Vaccinations Discuss behavior and nutrition	Breed-specific physical abnormalities plus Cataracts and Corneal sequestration Hemophilia
How We'll Keep Your	Senior: 44 to 54 in People Years	O	7 years through 10 years	Head-to-tail physical examination Eye disease screen Heart health check Parasite prevention Vaccinations Discuss mental and physical well-being	Breed-specific physical abnormalities plus Cataracts and Corneal sequestration Arterial thromboembolism
	Golden Years: 55+ in People Years	O	11 years and older	Head-to-tail physical examination Eye disease screen Heart health check Parasite prevention Vaccinations Discuss mental and physical well-being	Breed-specific physical abnormalities plus Cataracts and Corneal sequestration Arterial thromboembolism

Note: We recommend twice-a-year examinations so that we may diagnose problems sooner. This approach also gives you the budget-friendly option of spreading preventive testing over two visits rather than one.