The background is a vibrant orange color. It features several yellow geometric shapes: a large solid circle in the upper left, a smaller solid circle in the upper right, a dashed vertical line on the far left, a dashed diagonal line in the lower left, a dashed horizontal line in the lower left, a solid square on the left side, and a solid triangle in the upper right. A large white semi-circle is positioned on the right side of the image, containing the text.

Spring is the Season for
Allergy Symptoms in
Pets

DERMATOLOGY IS THE #1 REASON WHY DOGS VISIT THE VETERINARIAN¹

Help provide excellent patient care by watching for these signs of skin disease in your boarding and grooming patients

SIGNS OF SKIN PROBLEMS IN DOGS



UNDERSIDE



TOPSIDE

Folded areas like face folds, lip folds, armpits, groin, under neck, under tail, and in between toes are prone to bacterial and yeast infections. Check the areas carefully (in red) and let a veterinarian know if redness, brown staining or discharge, scabs or sores are seen.



UNDERSIDE



TOPSIDE

Hair loss and redness over the rump and tailbase (in red) may indicate flea allergy dermatitis. Check carefully for fleas and flea dirt. Secondary infection is common.



Lumps and bumps



Ear redness, discharge



Red, irritated skin



Dry, scaly skin, dandruff



Frequent biting, chewing, scratching, rubbing or licking



Moist dermatitis in skin folds



DERMATOLOGY TIPS

- Always wash your hands and use hand sanitizer after handling a pet with skin disease; clean and sanitize any grooming tools used
- If you see sores or red irritated skin, this could be a sign of fleas, mites, bacterial or yeast infection
- If you see signs of skin problems, alert a veterinarian that the dog needs to be examined and have skin scrapings and cytologies done **before bathing**
- Red, itchy or painful smelly ears with brown or yellow discharge can mean an ear infection—tell a veterinarian right away if you see this **before cleaning the ears**
- Some skin and coat issues may be improved by a medicated shampoo, but a **veterinarian is best suited to make a specific recommendation based on a diagnosis**
- Infections such as scabies or ringworm

Dog Allergy Symptoms

HAIR

Hair loss and/or
“hot spots”

SKIN

Repetitive scratching,
licking and chewing
of the body; scabs or
other skin lesions



HEAD

Repetitive head-shaking

EARS

Chronic or
recurrent skin
and/or ear
infections

FACE

Rubbing the face
against carpets or
walls, sometimes
resulting in redness
and/or swelling

IF YOU SEE ANY OF THESE SIGNS, PLEASE ALERT THE VETERINARIAN



Red, irritated skin



Dry, scaly skin, dandruff



Bald spots or thinning hair



Darkened, greasy skin with odor



Blue gray color change, scabs, sores



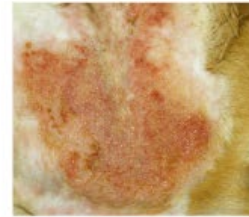
Scabs, sores



Scratches, scabs, sores, pimples



Hot spot (before clipping)



Hot spot (after clipping)



Ear infection



Lumps and bumps



Brown paws (may indicate yeast infection)



Moist dermatitis in skin folds



Moist dermatitis in skin folds



Moist dermatitis in skin folds

Allergies can affect multiple regions of the body in different degrees of severity

HAVE AN ITCHY DOG?

Frequent scratching is one sign of allergic itch, but there are other telltale signs as well:



Frequent licking,
chewing, biting
or scratching



Excessive rolling,
rubbing or scooting



Recurrent ear problems
(head shaking, ear
discharge/odor, or
scratching at ears)



Hair loss



Body odor



Skin changes
(rash, redness, greasy
skin, or scabs)

The more we know about itch, the better informed we'll be to treat it. Sharing your dog's itch history is critical in uncovering the underlying cause of itch and the proper course of action.

- Where is your dog itchy?
- How itchy is your dog on a scale of 0-100 (0 indicating a normal dog and 100 indicating extremely severe itching)?
- How long and how often has your dog been itchy? Are there certain times of the year your dog is itchy? (duration, seasonality, etc)
- What have you already tried to relieve the itch?
- What are you using for flea control?

DIAGNOSIS BEGINS WITH RELIEF

When getting to the underlying cause of a dog's itch, it's important to provide relief while completing the diagnostic work-up that leads to a tailored treatment plan for each pet and each owner.



PREPARE FOR A FLARE OF ITCH

Allergic dermatitis requires lifelong management—even when controlled, occasional flares can occur, especially for seasonally affected dogs. Fleas and infections may exacerbate flares of allergic itch.



If you suspect a flare, contact the practice to schedule an exam for your dog to be seen.



Partner with your veterinarian to understand the cause of the flare.



Do not stop anti-itch treatment for your dog during the flare.



Additional treatment may be needed to provide relief after a flare of allergic itch.

HOW TO RATE YOUR DOG'S ITCH

100

EXTREMELY SEVERE ITCHING

Dog is scratching, chewing, licking almost continuously. Itching practically never stops, regardless of what else is happening around your dog.

80

SEVERE ITCHING

Prolonged episodes of itching when your dog is awake. Itching occurs at night and also when eating, playing or exercising or when otherwise distracted.

60

MODERATE ITCHING

Regular episodes of itching when your dog is awake. Itching may occur at night and wake the dog. No itching when eating, playing, exercising or being distracted.

40

MILD ITCHING

Moderately frequent episodes of itching. There may be occasional episodes of itching at night. No itching when sleeping, eating, playing, exercising or being distracted.

20

VERY MILD ITCHING

Occasional episodes of itching. Your dog is slightly more itchy than before the problem began.

0

NORMAL DOG

Itching is not a problem.

Successful long-term management of allergic dogs also includes year-round flea prevention and careful monitoring of any skin infections.

OTITIS: What it is and what to watch for in pets

Is your pet scratching at his ears or shaking his head more than normal? Otitis could be the problem. Learn more about what could be going on with your pet and how your veterinarian may get to a diagnosis.

Otitis is a general term to describe inflammation of the ear, but it can be broken down into three different types:

Otitis externa

Otitis externa describes when the external ear canal is inflamed. Inflammation can occur when the glands inside the ear canal produce too much wax and fibrous tissue, causing the canal to narrow. It can also be caused by infection (both from bacteria and fungus). Otitis externa can cause pain, redness, itching and head shaking. If the condition lasts a long time or recurs over and over, it can lead to a ruptured eardrum and inflammation of the inner ear canal.

Otitis media

Otitis media describes inflammation of the middle ear structures, which is often caused by an extension of infection from the external ear canal or a ruptured eardrum. The signs of otitis media can look similar to those of otitis externa: Head shaking, pain, itching, rubbing, discharge and rotating of the head are often seen.

Otitis interna

Otitis interna describes inflammation of the inner ear structures caused by repeated inflammation of the middle ear. It has similar signs to otitis externa and otitis media, but it can include deafness and loss of balance. Neurologic signs such as facial

nerve paralysis and nystagmus (uncontrollable eye movement from side to side) are sometimes seen as well.

How your veterinarian can help your pet

These conditions can be diagnosed using several methods. Your veterinarian will most likely start by performing an exam with an otoscope (a device used to look in your pet's ears) to diagnose outer and middle ear infections. Your veterinarian may also perform a microscopic examination to check

for yeast and bacteria in the ear. If an inner ear infection is suspected, a computed tomography scan (commonly called a CT scan) or magnetic resonance imaging scan (commonly called an MRI) may be needed of your pet's ear canal to see if fluid is collecting or if soft tissue is growing.

Be sure to see your veterinarian if your pet is experiencing any of the signs of otitis externa, media or interna. These conditions can cause serious problems if they last for long periods of time or are left untreated.



Ear inflammation and infection:

5 facts to fight the fiction

"Otitis externa" is the fancy medical term for inflammation or infection of your pet's outer ear canal. Here are some things some folks believe about recurring ear problems ... and the facts.



You might think ...
"All ear infections are the same, so I can use the same medicine that worked the last time."

Fact! The veterinarian needs to examine a pet for each ear infection to determine the cause. Ear infections can be caused by a variety of bacteria and yeast, and the treatment recommendations and medications selected will depend on the specific infection and contributing factors. What's more, the veterinarian needs to examine the pet to determine whether this infection has shown up before or wasn't resolved.

You might think ...
"If I pluck the hairs out of my dog's ears, my dog will never get another ear infection."

Fact! You should avoid hair plucking if

the hair isn't causing a problem. Experts don't recommend routine hair plucking, because it can cause inflammation.

You might think ...
"My dog has an ear infection, because he caught it from another animal."

Fact! Ear infections often occur secondary to inflammation in the ear, which may be a symptom of an underlying condition such as allergies. When the environment in the ear is altered, bacteria or yeast can cause infection. These infections aren't caught from another pet.

You might think ...
"My dog scratches, licks, or chews because he's bored, grooming himself, or imitating the family cat."

Fact! Scratching, licking and chewing

are signs of an itchy, allergic dog. If you notice these symptoms, schedule an appointment with the veterinarian. What does this have to do with otitis externa? Allergies are one of the most common causes of ear inflammation and infection. And if a dog is showing signs of allergies, it should have its ears checked too.

You might think ...
"My dog's ears will be cured so he'll never get another infection."

Fact! This may be true if the ear infection didn't occur due to an underlying problem. But if allergies were the culprit, the ears will be managed along with the allergy over your pet's lifetime. Your veterinarian needs your help to keep watch over the ears and may ask you to clean them regularly to help prevent inflammation and infection.

Doggie ear disease: What to know, what to tell your vet

If you think your pup is suffering from ear problems, hightail it to your veterinarian. Think through these questions to prepare your pooch for an ear examination—and help him heal faster.

When your dog starts to show signs of ear trouble—things like scratching the ear, a bad odor, redness or swelling around the ears, crusts or scabs on the inside of the outer ear, hair loss, head shaking, a brown, yellow or bloody discharge, among the many—it's time to hightail it to the veterinarian.

Many ear diseases look the same—it's the underlying causes that vary. Before your veterinary team can diagnose the specific problem, they'll need a detailed history. This starts by getting your dog's medical record. If the dog has had previous skin or ear disease, getting a copy of the medical records may help tremendously in developing a list of possible diagnoses. And just like a good detective novel, your veterinarian will begin at the start and retrace the "footsteps" looking for clues along the way.

Questions to consider

- 1. When did the symptoms first occur?** This is an important question. Your veterinarian isn't asking when this current episode of symptoms occurred, but the very first time you noticed symptoms X, Y or Z.
- 2. Has your dog EVER had problems with excessive licking, scratching, chewing, biting or rubbing? Has your dog EVER had ear problems before this episode?** If so, when? What medication was used to treat the problem, and how did your dog respond to that treatment?
- 3. Where does the dog live—indoors, outdoors or both?** Think about how you would describe the environment, especially the outdoor environment.
- 4. Is your dog on heartworm and flea preventive?** If so, what product, how often is it administered and is it year round or seasonal?
- 5. Are there any other pets in the household?** If so, what kind? Are they suffering from any of the same symptoms as your dog? If you have cats, do they go outside?
- 6. Are any of the humans in the household showing "new" skin problems?** If so, what kind?

7. Do you board the dog, take her to obedience school, training or to the groomers? If so, when was the last time?

8. Do you know if the parents of the dog or any siblings have pruritic skin problems? If so, what was done and how did the dogs respond to treatment?

9. What does your dog eat?

10. How do the ears seem today? Are the ears the best, worse or average since the problem began?

11. Do you notice whether your dog's symptoms are better, worse during different seasons, or do you see no difference?

On to the exam

After you answer these questions for your veterinarian, the next step will likely be a complete physical examination of your dog, followed by a dermatologic examination. By preparing your answers ahead of time, you can help your veterinarian suss out the culprit for those itchy, uncomfortable ears—and get your pup on the road to recovery.



GETTY IMAGES

Source: Paul Bloom DVM DACVD DARVP

Succeed with ear cleaning

Don't let faulty ear cleaning be the reason your veterinary patients suffer from chronic ear disease.

Cleaning the ears is an important and crucial step in the effective management of chronic ear disease in dogs and cats, says James Noxon, DVM, DACVIM.

Do your veterinary clients understand just how important it is? If not, run through Dr. Noxon's handy list with them.

1 Cleaning removes debris, such as wax, that may cause irritation of the ear canal.

2 Cleaning removes debris that will block movement of medication into the horizontal canal and the self-cleansing mechanism.

3 Cleaning removes material that may interfere with the "self-cleansing" mechanism.

4 Cleaning may help to lower the burden of bacteria in the ear.

5 Cleaning removes debris (e.g. pus, biofilm) that can

interfere with the activity of topical (and systemic) otic medications.

The cleaner you get the canal, the better the chances are that your topical medication will work, says Dr. Noxon. "Keep in mind that the efficacy of some topical medications—such as polymyxin B sulfates and some aminoglycosides—is dramatically reduced in the presence of a suppurative exudate," he says. Starting with an ear cleaning works in everyone's favor.

Of course, the type of ear cleaning you select is

your choice. For mild cases, it may suffice to use a basic technique of filling the canal with cleanser, massaging the canal, then removing excess cleanser and debris with a cotton ball. Repeat this process until otoscopic exam confirms that most of the debris has, in fact, been removed, Dr. Noxon says.

Lastly, a good rule of thumb, according to Dr. Noxon: Deep ear cleaning or flushing (under general anesthesia) is indicated if you cannot definitively visualize the tympanic membrane prior to treatment. ■



Grain-free diets are healthier.

It's a myth

Many pet owners believe that grain-free pet foods are easier to digest, provide pets with better nutrition and are less likely to cause allergies than pet foods containing grain.

The facts

Properly processed grains are highly digestible.

- While uncooked grains are poorly digested by dogs and cats, properly cooked grains in pet foods are highly digestible.
- Dogs and cats can digest the carbohydrates from grains with an efficiency of greater than 90%.^{1,2}

Diets containing grains provide excellent nutrition.³

- Grains are carbohydrates, which are an important source of energy.
- Grains also contain fiber, which supports gastrointestinal health and decreases the total fat and calories in a diet.
- Essential fatty acids and other nutrients in grains contribute to a healthy skin and coat.
- Concentrated protein sources from grains, such as corn gluten meal, can be highly digestible sources of many essential amino acids.

Grains are unlikely to cause allergies.

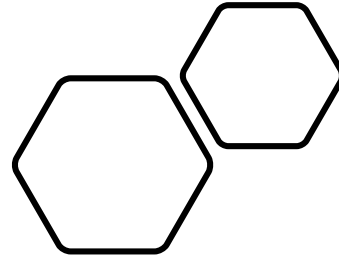
- Less than 1% of dogs are sensitive to grains.
- True food allergies are caused by immune reactions to proteins in the diet.
- Allergies to proteins in grains can occur, but are far less common than allergies to other protein sources, such as beef or dairy.⁴

Remember

Properly processed grains provide necessary nutrients as part of a nutritionally complete and balanced diet.

1. Carciofi AC, Takakura FS, de-Oliveira LD, et al. Effects of six carbohydrate sources on dog diet digestibility and postprandial glucose and insulin response. *J Anim Physiol Anim Nutr.* 2008;92:326–336.
2. de-Oliveira LD, Carciofi AC, Oliveira MC, et al. Effects of six carbohydrate sources on diet digestibility and postprandial glucose and insulin responses in cats. *J Anim Sci.* 2008;86:2237–2246.
3. Carbohydrates. In: Case LP, Carey DP, Hiraakawa DA, eds. *Canine and Feline Nutrition*. St. Louis, MO: Mosby; 1995:17–20.
4. Verlinden A, Hesta M, Millet S, Janssens GP. Food allergy in dogs and cats: a review. *Crit Rev Food Sci Nutr.* 2006;46:259–273.

Here at Crosswinds,
We support routine
Early Detection
Bloodwork.



This can help catch possible disease processes earlier which in turn creates longer, healthier lives for our pets.

Even if blood work comes back normal, we want to celebrate good news with owners and have a base line for future referencing

Pets age faster than people

Age affects health. And one year in a pet's life equals many in yours. Find out how old your pet is in people years.



cat		dog				
age	0-20 lbs	age	0-20 lbs	20-50 lbs	50-90 lbs	>90 lbs
1	7	1	7	7	8	9
2	13	2	13	14	16	18
3	20	3	20	21	24	26
4	26	4	26	27	31	34
5	33	5	33	34	38	41
6	40	6	40	42	45	49
7	44	7	44	47	50	56
8	48	8	48	51	55	64
9	52	9	52	56	61	71
10	56	10	56	60	66	78
11	60	11	60	65	72	86
12	64	12	64	69	77	93
13	68	13	68	74	82	101
14	72	14	72	78	88	108
15	76	15	76	83	93	115
16	80	16	80	87	99	123
17	84	17	84	92	104	131
18	88	18	88	96	109	139
19	92	19	92	101	115	
20	96	20	96	105	120	
21	100	21	100	109	126	
22	104	22	104	113	130	
23	108	23	108	117		
24	112	24	112	120		
25	116	25	116	124		

Even when pets seemed healthy, testing uncovered problems in:

1 in 7 Adults

1 in 5 Seniors

2 in 5 Geriatrics

Talk with your veterinarian about scheduling your pet's next examination. Learn more about tests for pets at pethealthnetwork.com.

Based on a study of 268,817 cats and dogs (adult 15%, senior 21%, geriatric 42%).¹

young
adult
senior
geriatric

Charts courtesy of Fred L. Metzger, DVM, MRCVS, DABVP

Reference

1. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA. Study based on chronological age of patients (weight was not available).

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PetHealthNetwork

Brought to you by IDEXX

Why is your pet's routine wellness visit so important?

Routine wellness visits are a great way to help your pet live a healthy life for as long as possible. These visits can also help us catch potential health issues earlier and may help you avoid additional costs associated with treatments if disease goes undetected.

A typical wellness visit might include:

A physical exam

We look for changes in your pet's teeth, weight, joints, skin, and ears. These changes may be signs of illness.

Diagnostic screening tests

We check your pet's internal health. These results help us manage and track your pet's overall health.

A review of results

We look for changes in results from year-to-year. Changes can act as early warning signs of health problems.

Schedule your pet's next wellness visit today

What we look at during a visit and why



HEART AND LUNGS

Infection or disease can make it difficult for your pet's heart and lungs to deliver enough oxygen-rich blood to the body.



LIVER

Your pet's liver may have trouble managing proteins, fat, digestion, and waste. These problems could be caused by disease, a blockage or even medication.



PANCREAS AND INTESTINE

Problems with these digestive organs may be due to an inflamed pancreas, diabetes, or some types of cancers.



KIDNEYS

SDMA* testing detects kidney disease earlier than other types of kidney tests.^{1,2} Results also reflect other diseases your pet may have that affect the kidneys.³



THYROID

If the thyroid glands aren't releasing the right amount of hormones, your pet's metabolism could be affected.



BLOOD

A complete blood count (CBC) tells us if your pet is fighting an infection or has some bleeding problems. A blood test can also find diseases spread by ticks and mosquitoes.



URINE

Urine tests tell us if your pet has problems like infection or stones in the kidneys or bladder. They can also tell us about some cancers.



FECES

Fecal antigen testing tells us if your pet has parasites, such as worms. Other types of fecal tests may miss these common causes of intestinal infections, which can cause problems in people, too.

*Symmetric dimethylarginine.



The Adventures of Mac and Cheese!

This Month, Mac and Cheese teach us about
routine early detection bloodwork !

What is included in your pet's early detection blood panel?

Our early detection blood panels are completed at our outside lab, IDEXX. Each panel includes:

- **Complete blood count (CBC)**
- **Organ chemistries**
- **Heartworm test**
- **Urinalysis**
- **Intestinal parasite screen**
- **Electrolytes**

These tests will check your pet's internal health and help us track changes from year-to-year.





Complete Blood Count (CBC)

The CBC monitors your pet's white blood cells, red blood cells, and platelets. This information can tell us if your pet is fighting off an infection or has a bleeding problem.

- **White blood cells:** Help the body fight infection and other diseases.
- **Red blood cells:** Carry oxygen throughout the body and help eliminate waste.
- **Platelets:** Aid in clotting of blood to stop bleeding.

An increase or decrease in any of these cells can potentially indicate illness.



Kidney Values

The kidneys are located on either side of the spine below the ribs and behind the stomach and intestines. They filter blood and pass waste out of the body as urine. The kidneys also aid in metabolizing certain drugs.

The following tests give us information about how efficiently the kidneys are working:

- **BUN**
- **Creatinine**
- **SDMA**



Liver Values

The liver is the largest internal organ. It is located in the upper right portion of the abdomen just below the diaphragm. The liver filters blood from the digestive tract, secretes bile to aid in digestion, and metabolizes certain drugs.

The following tests give us information about how well the liver is producing certain enzymes:

- **ALT**
- **ALP**
- **Total protein**
- **Blood glucose (sugar)**



Thyroid Hormones

The thyroid is a butterfly shaped gland that sits low on the front of the neck. This gland produces hormones that regulate that body's metabolic rate.

The following tests give us information on how well the thyroid gland is producing certain hormones:

- **T4**



Pancreatic enzymes

The pancreas is flat and is located in the abdomen. It is surrounded by stomach, liver, and intestine. This gland aids in digestion and blood sugar regulation.

The following tests give us information on how well the pancreas is producing certain hormones:

- **Amylase**
- **Lipase**



Heartworm test

Heartworm disease is spread by mosquitoes and affects both dogs and cats. Adult worms live in the right side of the heart and lungs and can live up to 6 years.

This test can be run in house within 10 minutes or be included with our early detection health screen at our outside lab, IDEXX.

Remember to keep your pets on monthly prevention and test annually!



Urinalysis

Not only does a urinalysis confirm the presence of a urinary tract infection (UTI), but also gives us valuable information in healthy pets.

A urinalysis scans for the health of the bladder and kidneys. This test can also confirm the presence of diabetes (sugar) in your pet.

This test can be run in house within 3 minutes or be included with our early detection health screen at our outside lab, IDEXX.

Intestinal Parasite Screen



Not only does an intestinal parasite screen confirm the presence of a certain parasites (worms), but also gives us valuable information in healthy pets.

An intestinal parasite screen also scans for the health of the intestines. This test can also confirm the presence of excess bacteria in the bowels.

This test can be run in house within 10 minutes or be included with our early detection health screen at our outside lab, IDEXX.