Managing
The Misery
of Mange Mites
Insider Secrets to Help You Win the Battle Against Mange
PLUS: tips most vets can’t or won’t tell you
Happy Dog Naturals
Curing Mange Naturally
www.HappyDogNaturals.com
Please understand that we are not professional authors. We are mange experts who are passionate about helping dogs and who genuinely want to help the 4- and 2-legged members of your family through a difficult situation. We penned this booklet to help you heal your dog, not to win any literary prizes. Hopefully you’ll find enough help and value in this booklet to overlook its flaws.
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This booklet is dedicated to Belle. She is responsible for the thousands of dogs around the world that have recovered from mange and that Happy Dog Naturals even exists. She was the sweetest soul and we've tried to model a compassionate company like she would if she was running things. She lives on with every dog she continues to help.
There’s nothing worse than watching your pet suffer and not being able
to help. Skin issues are a leading cause of visits to veterinarians and the primary reason for repeat visits. One of the most commonly misdiagnosed skin disease is parasitic mange mites.

Mange is an umbrella term for skin disease caused by skin mites. In this booklet we The words mange and mites use the words interchangeably. We also use Demodex to refer to Demodectic mange and Demodectic mites. The world is full of many types of mites, and some of them can annoy dogs but they don’t cause mange. This booklet is specifically about Demodectic, Sarcoptic and Cheyletiella mange and their namesake mites.

Demodex and Sarcoptic are microscopic and invisible to the human eye. Cheyletiella can sometimes be spotted upon close examination. They are all parasites, capable of inflicting horrendous itching, pain, infection, inflammation, and plenty more. Dogs are defenseless to fight them so the mange they cause can be progressive and worsen quickly.

Sarcoptic and Demodectic mites are particularly elusive to diagnose. Demodex are deep and well protected, Sarcoptic are wickedly fast and both are microscopically small. They elude capture so easily that diagnostic skin scrapings miss them 80% of the time. Rarely will a you hear that a negative scrape does not mean there aren’t mites. (Usually you hear the exact opposite). Without mites under the microscope, the diagnosis is confusing. Mange looks like allergies because it has an allergic component to it. As such, mange is commonly confused with or misdiagnosed as allergies. Other skin disorders such as dermatitis are occasionally named as culprits. (We hear chillingly similar versions of this every single day as people share their journey to finding us.)

Bottom line: Mange looks just like several other skin diseases and is misdiagnosed more often than not. You should always pursue the possibility of mange if your dog has any related symptoms. Mange is nothing to mess with. As a rule the longer mites have been there the deeper they’re embedded and the mange damage throughout the body has caused a series of compounding problems. You want to get on top of it as fast as you can or your dog’s health could be headed for bigger trouble.
This goes double if your pet has already begun treatment for another skin condition and doesn’t improve with treatment or suffers a flare up after it stops. When mange is missed, the commonly diagnosed conditions are routinely treated with steroids and/or antibiotics. If your dog actually has mange these could make it worse while your pup continues to suffer.

As weird as it sounds, you’re among the lucky minority if you get an positive mange diagnosis. You won’t be trapped in a cycle that will only make things worse. And kudos to you if you happen to be one of the few that discovers mange yourself!

Whatever you’re told, we recommend deferring your decision and taking a little time to research your options before you authorize any type of medical treatment for your pet. Typical allergy and dermatitis medications can make mange worse and conventional mange treatments use toxic chemicals that have caused serious, sometimes debilitating or fatal side effects.

No matter what form of treatment you settle on, make sure you know its risks and benefits and be sure it’s tailored to your dog’s condition and breed.

Treating mange should never be about just killing mites. If you’re looking for healthy long-term resolution, It’s more to it than that, especially Demodectic mange. There’s no one-size-fits-all solution that addresses everything related to all types of mange. Nothing.

Our signature product, Mite Avenge, is effective on all types of mites but it is used differently because each type of mange is caused by a unique species with its own behaviors, diets, habitats, and life-cycles. We use separate treatment plans and tools that take into consideration these traits to get results fast.
Our unique formulas set us apart by being effective without using risky toxic chemicals. But it’s our holistic approach that puts us in an exclusive category of one. Our success comes not just from treating mange’s parasites, but also from treating the cause and complications of the disease. It’s the only way to give the dog its best shot at recovery and minimize the chance of it coming back and as far as we know, we’re the only one’s who’ve figured this out.

When you’ve decided to treat mange yourself it’s important to know what mite is behind it. There will be information to help you hone in on the most likely suspect in a few pages so you don’t waste money and time going after the wrong thing.
An Eternity of Mange

Mange mites have been around forever. Even the dinosaurs probably had them. Prehistoric birds spread them. They made it onto the ark. Famine, drought, freeze, plague, nor blight could put them out of business. There’s not a country on the planet today where they don’t thrive. Like cockroaches, they’ve always been, always will be, indestructible and everywhere.

Dogs have been domesticated since at least 14,000 BC, well before the written word. Apparently mange has been around since then too. Scientific documentation didn’t begin until the 1800s but there’s more than enough evidence to prove that mange isn’t a disease that came late to the party.

Sarcoptic mites are extremely fond of wildlife which made them seasoned travelers and virulent disease spreaders. Egyptian hieroglyphics suggests Scabies has been irritating mankind (thus dogs too) for at least 2,500 years. The Old Testament describes a scabies-like disease, Aristotle mentioned it in the fourth century BC, It wiped out the sheep industry in King Henry II’s day. (Apparently is still a big problem with goats as we have a client in Scotland who routinely uses Mite Avenge on her goats.)

Plenty of evidence shows Demodex was a problem too. What with the harsh conditions and questionable diets early dogs faced, their immune systems were likely weakened enough to cause a Demodectic mange plague.

Today, mange claims all sorts of victims. Mites are just hungry parasites with no regard for anything besides food. They victimize all mammals including cattle, swine, llamas, goats, wolves, bunnies, dogs, cats, rats, deer, foxes, squirrels, bears, wombats, and humans.

**Stranger than fiction:** Can you believe the legendary chupacabra is real? You know, the vicious, fanged beast that supposedly drinks the blood of livestock. Scientists now believe chupacabra are actually wild dogs (coyotes) severely infected with a deadly form of Sarcoptic mange. University of Michigan biologist Barry O’Connor says the ugly, naked, leathery, red, smelly monstrosities are actually sad hungry dogs full of mites and rank with infection. O’Connor believes the animals are weak from their blood being sapped by carnivorous mites and have a hard time hunting. Thus their reputation for ravaging livestock is likely because attacking penned animals is easier than running down a rabbit or deer.
What Kind of Mites Does Your Dog Have?

Count yourself lucky if you have a positive diagnosis that your dog has mites. It’s hard to imagine much that’s positive about mange but at least you’re not going to be subjected to watching your dog scratch & bite while important time is lost to treatments that at best may be useless or at worst, counter-productive. Feel free to fast forward if you don’t need to narrow the field.

Let’s be clear on one thing. Just because your dog itches and doesn’t have a positive diagnosis doesn’t guarantee the problem is mange. If you’ve tried the allergy protocol and nothing helped or the symptoms returned once the drugs stopped (usually with a vengeance) there is a good chance that karma (or whatever) sent you to the right place.

The Basics - All types of mange shares some common symptoms. We call these universal indicators. They’re also the same indicators for allergies & dermatitis so you can imagine how easy it is to get a mis-diagnosis in the absence of a positive skin scraping.

But here’s where it gets cagey. There are no rules. No definitives. There are no givens. Your dog may have none of them, a combination of some, or every single one. Some are red flags and hopefully you don’t have red flags from two types of mites. While not terribly common, dual infestations happen.

Within each type of mange, every case is a little different. There is no guaranteed set of symptoms or level of severity for that matter. However, drilling down into the subtle idiosyncrasies will help us cut to the chase. First: the indicators common to all three types:

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**Universal Symptoms & Indicators for ALL Mange Types**

- Itching
- Dry skin
- Hair loss
- Redness
- Bumps or bites
- Scabs or flakes
- Thickened skin
- Irritation or inflammation
- Skin discoloration
- Lesions
- Crusts

But wait - there's more..
Misc. Demodectic Mange Symptoms or Indicators

- Juvenile under 3 years of age
- Senior over 8 years of age
- Known immune system problems
- Recent stress, medical procedures, shots, steroids, medications or antibiotics
- Current or prior conditions such as Cushing’s, thyroid, cancer, Parvo, etc.
- Prior history of Demodex
- Family history of Demodex
- Allergies (current or prior)
- Yeast infection (current or prior)
- Flaky skin
- Musty smell or other odor
- Blackheads or acne-like bumps
- Skin infection
- Inflamed lymph nodes
- Darkened patches of skin
- Condition worsens after steroids wear off
- Antihistamines don’t help
- Itching worse at night
- Paw problems
- Greasy coat
- Ear problems
- Lethargy, loss of appetite
- No other people or pets show symptoms

Misc. Sarcoptic Mange Symptoms or Indicators

- Had contact with infested animal or person in last weeks
- Has been near areas, or articles (clothing, bedding vehicles, rugs, etc.) where mites or eggs may have been deposited
- Recently visited areas frequented by wildlife
- Symptoms developed 10–30 days after exposure
- Traumatized skin
- Small red pustules or welts on skin
- Linear trail of bite marks
- Yellow crusts
- Darkened patches of skin
- Inflamed lymph nodes
- Started on elbows, abdomen
- Symptoms worse in areas with sparse hair
- Itching may be worse in heat
- Responds to home diagnostic Pinna-Pedal ear flap test 70–80% of the time.
- Does not respond to palliative medications
Misc. Cheyletiella Mange Symptoms or Indicators

- Unkempt-looking coat
- Scales or dandruff-like flecks
- Flakes or dandruff on the skin appear to move
- Mites may be visible with naked eye in uppermost skin layer
- Multiple red, itchy bites/bumps
- Other animals exhibit similar symptoms
- People in your home itch

- Symptoms appeared 3–5 weeks after exposure
- Does not respond to palliative medications
- Exposure to rabbits

Think it’s allergies? Think twice.
COMMON MANGE and ALLERGY SYMPTOMS

EARS
SYMPTOMS: red, odors, waxy, frequent infections
BEHAVIOR: scratching, rubbing, shaking head

FACE
SYMPTOMS: hair loss, swelling/inflammation
BEHAVIOR: scratching, rubbing face with paws

SKIN
SYMPTOMS: irritated/inflamed, odor, hair loss, discoloration, flakes, bumps/lesions, infection
BEHAVIOR: scratching, chewing, licking, discomfort, self-abuse

PAWS
SYMPTOMS: inflamed, odor, hair loss, discoloration, discharge
BEHAVIOR: chewing, licking

Allergies is an easy answer. But it’s often the wrong answer
Mange tests fail to detect mites 80% of the time. That doesn’t mean the dog doesn’t have mites. It means that none were found. But mange and allergy symptoms are so similar that allergies are almost always diagnosed instead.
Demodectic Mites

We'll start with Demodex because it is the most complex type of mange. If your pet has Sarcoptic or Cheyletiella mange, don't worry, your sections will only be a few pages.

Demodectic mange is obviously caused by Demodectic mites. Little else about the disease is obvious. By now you've probably read a lot of the parroted cut and paste content out there but some of it strays into downright disinformation. For example, one reference we uncovered said they were blood suckers. Many call them insects. Demodicosis has got to be the most confounding type of mange but stick with us, we'll sort it out for you.

Every dog on the planet has Demodex mites. There are three types of Demodectic mites, the common being *Demodex canis*. Dogs pass them back and forth by very close contact. However, they are not a contagious mite. (We'll deal with that contradiction shortly.) Puppies get a few from mom shortly after birth, at which time they plow 5-6 layers deep into the dog's pores and follicles where they feast on yeast, oils, sebum, dead skin cells and other sebaceous junk. If they leave the follicle it's for a nighttime not-so-quickie, moving at a speed of 1-2 inches an hour.

The majority of dogs live in harmony with their invisible little guests and don't even know they're there. Under normal circumstances the dog's immune system keeps the number of mites down to the level that nature intended. But when its immune system can't do its job, the dog doesn't have the resources to control the mites and sets the stage for them to bloom out of control. Suddenly, out of nowhere, the dog develops mange — Demodectic mange specifically, sometime called red mange, puppy mange, follicular mange, demodicosis or demo for short.

Even though dogs can pass these mites among themselves during periods of close contact, the disease is not contagious. Incoming mites are absorbed into the recipient's existing population. As long as the new host's immune system is healthy, the overall population gets strictly managed and the dog stays healthy.
The natural host of *Demodex canis* is the domestic dog. Although it can temporarily infect humans, *D. canis* mites cannot survive on the human skin and therefore will die shortly after exposure and therefore are not considered to be zoonotic (contagious to people).

Demodex can take two forms: localized and generalized. Localized appears as one to five patches and tends to be mild. Generalized is characterized as multiple patches on the head, legs, and trunk that coalesce to form large bald areas. Generalized demodicosis is progressive and can be quite severe.

**The culprits** - Demodectic mites are microscopic (somewhere around a whopping 0.00984252 of an inch) cigar-shaped parasites. They primarily live in follicles, and occasionally pores and sebaceous glands where they burrow deep to mine the richest food supply.

They exist in tiny spaces protected by oils, sebum, dead mites, waste and detritus. When an accumulation of this material builds up, the exposed surfaces oxidize and continually harden. A follicle may have several pockets of this crud which provides excellent protection to isolate the mites from the outside world but it also does a bang-up job of blocking things up and making an inflamed, itchy mess.

It’s no wonder secondary skin and fungal infections are so common with demodicosis. Here’s why: infected follicles aren’t just jammed with mites (living and not), waste, and follicular flotsam. Pathogenic bacteria, yeast organisms and a whole lot more (see below) are trapped to fester in a closed environment.

- The arachnids (relatives of spiders) are laden with over 90 types of toxins that are secreted into the follicle throughout their lives, then upon death the entire toxin pool (plus their stored feces) is released into the follicle upon death. The resulting inflammatory and histamine (allergic) reactions account for additional irritation, inflammation and itching beyond that caused by the mites’ presence. The toxins are also immunosuppressive and contribute to the existing toxin load with dog’s body. Heavy toxin loads

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**You Probably Didn’t Want to Know This**

*D. canis* spends its 20–35 day life cycle entirely on the host. Within the confines of its cramped crowded, dark little world, Demodex molt through several stages before adulthood. The follicle is a complete environment. All life stages can be found at any time cultivating yeast, leaking toxins, building barricades, breeding but definitely NOT pooping! They hold it for 3–4 weeks until death when a lifetime worth of toxins and feces floods the follicle.
slow down recovery and can permanently damage the structure of immune cells in the blood.

- Demodex have an enzyme (capase 3) that once activated, ultimately results in cellular death within the follicle wall and hair loss.
- Fungal infections within the follicle happen to 61% of Demodectic dogs due to dermatophyte fungi which only occurs with mange.
- Demodicosis causes thickened skin that causes enlarged follicles with cavities that harbor cells that directly affect the killer and fighting cells in the immune system.

When you add all that together you've got a dynamite recipe for beating the immune system up with more brutal blows.

Now multiply the degree of immune suppression generated in the follicle just described by the number of affected follicles on your dog. Suddenly the reason the immune system continues to erode smacks you in the face. Immune suppression = more mites. With more mites comes more immune suppression. The cycle repeats and repeats. And with the high reproductive rate (about twelve hours after mating a female lays 50–60 eggs that hatch in 2 days) each round can escalate in severity. No wonder demodicosis is progressive.

Chemicals do nothing to help with any of these issues or the other problems affecting the poor dog. They just add more dead mites into the mess. Just treating the mites is why recurrence is so high with non-holistic approaches. Holistic treatment deals with the big picture including cleaning out the follicles. We’ll get to that soon.

**Cause** - Demodectic mange is the only type of mange that is not caught. It is developed. It does not just happen randomly. Demodicosis is a by-product of a deeper problem. Demodectic mange is the result of a naturally weak immune system or one that was somehow compromised. An incompetent immune system cannot manage the natural mite population and it explodes.

Countless things can affect a dog’s natural equilibrium and compromise the immune system. Some of the worst offenders are genetic predisposition (breed, family history of mange), autoimmune disease, compounding health issues or procedures (past or present), environmental toxins, pregnancy, re-homing, life changes, stress, medications, food sensitivities, yeast overgrowth, inappropriate diets, and age. The disease develops entirely due to outside factors.

While any dog can develop Demodectic mange, some dogs are more high-risk than others.
More young dogs develop Demodectic mange (puppy mange), than any other age bracket. Why? Because they are born with anemic immune & digestive systems. These important systems don’t mature until as late as 3 years of age. The youngster must cope with an under-functioning immune system during its most stressful, active and invasive months.

Localized puppy mange may spontaneously self-resolve if the pup’s immune systems matures to a point where they can get the mites under control. About 30% to 50% of puppies under a year old with localized infestations get lucky. Some folks say ignore it and it will go away but that leaves a lot to chance. If the dog isn’t one of the lucky, after a year the mites are dug in, more likely to spread and become generalized. With extra time they can create compounding problems like secondary skin, or yeast infections, and have plenty of time to damage an already weak immune system and lay the foundation for life-long chronic problems.

Rescues hold the dubious honor having the highest risk of developing demodicosis. The overwhelming majority of the dogs we work with are rescues with Demodex. These poor things arrive as blank slates, we don’t know what they’ve been through. Thousands of stories later, I’m comfortable saying that most rescues’ immune systems have suffered significant assault. Typically there’s been a situation that’s mentally and physically stressed the animal. Throw in shelter shuffle, nutritional deficiencies, existing parasites or disease, sterilization & medical procedures, fear, accidental over-vaccination. You get it. The worst whammy of them all? Most rescues are puppies with inherently weak immune health. It’s a wonder any escape Demodex at all.

Older dogs are the second biggest risk category. After about 8 years of age, a dog’s body has been through so much that its physiological systems are not functioning as optimally as they once did. To compensate, bodily resources
get reallocated, first to life supporting functions. The immune system is lower on the priority list so as age advances, the immune system lags — gradually declining from simple atrophy.

Certain breeds genetically have more delicate immune systems, making them more susceptible. The condition is common in bulldogs and bulldog relatives such as Boston Terriers, Pit Bulls, Pugs, etc. Other predisposed breeds include Old English Sheepdogs, Beagles, Collies, Dachshunds, Afghan Hounds, Dalmatians, Pointers, Shar Peis, German Shepherds, Chihuahuas, Great Danes, Shih-Tzus, and Fox Terriers.

Symptoms include hair loss, itchiness, inflamed skin, rashes, lesions, bumps, pimples, redness, crusts, flakes, scales, odors, yeast infection, secondary infection, and enlarged lymph nodes. Your dog may have any or all of these symptoms in varying levels of intensity. Symptoms can be localized, generalized or restricted to just the paws.

In generalized cases secondary skin infection is almost a given and often there is a characteristic unpleasant odor. Self-inflicted damage caused by the insane scratching is also common.

Skin scraping is the most common professional diagnostic tool. A lubricant is applied and a dulled blade is scraped over the skin. The contents are prepared on a slide and examined under a microscope and a verdict is rendered. Now here’s a not terribly uncommon quote pulled from a clinic’s site that is totally misleading; “Negative skin scrapings (almost always) rule out demodicosis. Scrapings are about 80% accurate”. Sorry, that’s flat out wrong. Any negative result only means only means that mites were not found. It does not mean they’re not down there. Demodex are deep and well protected and usually behind an oxidized barrier, not unlike a blackhead (sorry). Demodectic skin also tends to be thickened which makes it all the harder to extract much of anything.

The truth is (and our empirical experience backs this up) scrapings are wrong more often than right and are about 80% inaccurate for ruling out demodex. That same site says hair plucking is about 80% accurate to rule out demodex which isn’t right either. Another suggestion they offered was the tape test. That’s where clear tape is firmly pressed against the skin in areas where the skin is dry and scaly or in hard to reach areas like between the toes. The tape
is ripped off, stained and put under the microscope. Considering the mites’ habitat this is the least likely way to find a Demodectic mite. All diagnostics are highly fallible, even punch biopsies (one of our clients had to watch her puppy endure ten punches and no mites were found. Allergies were diagnosed and the dog got worse until she gave up and used our holistic system for Demodex.

Let’s ponder this for a moment. When a test showed no mites it’s determined the dog couldn’t possibly have mange. Well, doesn’t every dog have mites? If the test was accurate, shouldn’t a couple of those show up? The big takeaway is that a negative diagnostic test is no proof that the dog doesn’t have mites.

In fairness, over the years we’ve heard of a few vets that do tell their clients that tests aren’t reliable. Just recently a woman shared that after her dog tested negative, all three doctors in the clinic thought it was mange. They did some trial and error treatments that were unproductive, then they referred her to us. As of this writing, her dog is still being treated with Mite Avenge and she’s following our 6-step program but she says she can hardly believe it’s the same dog.

The diagnostic process we recommend for dogs with mange symptoms is a vet visit for overall health and a scraping. During this visit, regardless of what the diagnosis and recommended treatment is, we strongly recommend declining any treatment at that time. Explain that you want to look into the recommendations to make sure you are comfortable with whatever is going in or on your pet.

Whatever you decide to do be careful what is administered to your pet. Be adamant that no steroidal treatment ever be used on your dog. Again, NO steroids. Many non-steroidal treatments are available without resorting to steroids. If symptoms persist after exploring non-steroidal allergy treatment, you may want to revisit the possibility of mites. Many of our customers find relief after spending much time and money chasing a diagnosis made on a false skin scraping.

Demodectic mange treatments take many forms. The most common treatment is clinically prescribed chemicals, drugs, and pesticides. Non-prescription commercial products, home remedies, and doing nothing are
the other available options.

The other two mange mites live off the blood of the dog, Demodex mites do not. They feed on yeast, oils, sebum, dead skin, follicle wall cells, hair root cells, and more yeast. This poses interesting challenges and inherent risks when it treating Demodex with chemicals. Chemical treatments are systemic pesticides that permeate every cell of the body with a neurotoxic poison. And therein lies the rub. Demodex are not eating the body directly. They’re consuming things the body produces. To achieve this sort of indirect kill, high levels of poison must be in the body for a long period of time in order to become part of the body’s by-products the mite consume. Keep in mind these neurotoxins will be administered for months, and stay in the body well afterwards.

There’s an arsenal of chemical choices available. Ivermectin is the go-to choice but you’ll also hear about other antiparasitics like Amitraz, Milbemycin, Moxidectin, Bravecto, Selamectin, Advantage, Frontline, Paramite, and unfortunately, more. One of the heavy hitters is a dip called Mitaban (Amitraz). It’s got a strong reputation for harm and needs to be administered wearing a hazmat suit. Amitraz toxicosis isn’t uncommon and may result in a comatose state or death. (We have a customer whose dog will have seizures for life because it wasn’t given the antidote in time.) A few chemicals have been banned because of their dangers. (Promeris is one yet it still has its fans. I just watched an online video where a vet explained why it was pulled off the market. However, he still stands by it and mail orders it from Africa to use in his practice. He went on to urge dog owners to do the same if their dog has mange!)

All of these chemical choices are synthetic pesticides. They flow through the body, permeating every cell of with poison. All are neurotoxins that kill mites by damaging their central nervous system. They are used for heartworm or flea prevention but in low doses that are relatively safe in. The doses needed for mange are 50X higher, the risk of side effects increases exponentially. These include allergic reactions, tremors, seizures, shaking, vomiting, gas, dilated pupils, muscle weakness, blindness, in-coordination, lethargy, lack of appetite, dehydration, excessive sugar in the blood, low body temperature, excessive urination, abdominal pain, sedation, depression, low blood pressure), irregular heart rate and rapid breathing. In fairness, these drugs are widely used and many dogs have no issues.
Internal pesticides take two moths to show results and can take many more to finish the job. Creams don’t penetrate the skin far enough to treat the deeper mites. Dips are strong poisons that kill on contact but also get absorbed through the skin. They are all synthetic substances that target pests are quickly becoming immune to. However, they are still the most well known option. Treatment choice and dosage varies widely depending on the veterinarian.

Before coming to us, one woman’s vet used a rolling attack of drugs and chemicals, changing the drugs every 8 weeks (regardless of how her dog was responding), apparently to avoid the mites from becoming immune. The dog lost a third of its body weight under this rolling attack approach. Some mites have already grown numb to certain chemicals. One of our customers said he had his dog on ever increasing amounts of Ivermectin with no results for a year before deciding!

Many mange drugs that can pose life-threatening illness or even death to a dog that carries the MDR1 (multi-drug resistance) gene. The gene is restricted to herding breeds and not every dog in that breed carries it. The bottom line is, no dog of a herding breed should ever be given chemical mange drugs unless it has tested negative for the gene. Herding dog breeds include Collies, Australian Shepherds, German Shepherds, Sheepdogs and related breeds.

Another treatment option is ignoring the problem and hoping it goes away. Doing nothing is usually only recommended for puppies under a year old. A medicated shampoo will be prescribed along with a recommendation to keep an eye on it. The idea is hopefully the mange will resolve itself but we aren’t big fans of the watch and wait method simply because 50% of puppies don’t outgrow it. For those, so much precious time is lost while the infestation continues to spread and become more deeply entrenched. Demodex are aggressive, move around on the dog, and reproduce quickly. The longer they are on the dog, the longer it takes to clear them, which is why we don’t recommend taking the risk of waiting. All too often we hear from owners who wish they hadn’t.

Pesticides aren’t the only thing out there. One quick trip to the Internet will tell you there’s no shortage of commercial mange products for home use. Many of these do contain chemicals that are worth looking into. One of the more popular brands contains turpentine. Others contain unpronounceable ingredients with no explanation regarding their safety. Many are one-size-fits-all products that also promise to take care of anything wrong with a dog’s skin. If you go this route, look into what’s in them and cross-check
it against effectiveness on mites. All chemical, and many other mange products are immune suppressive. As a responsible pet advocate it’s a good idea to understand the full range of possibilities that come along with your treatment.

The Internet will also deluge you with home remedies. However, some home treatments are silly or downright dangerous. Home remedies that use things like motor oil, Malathion, mayonnaise, Windex®, Pine Sol®, Dawn®, acne medication, vinegar and raw lemons. These are sketchy at best and definitely have no place on your dog. Creativity has its place but please, if you value your dog don’t become a do-it-yourself pharmacist. Common sense should prevail, don’t put anything on or in your dog that you wouldn’t use yourself. Make sure there is sound science behind any treatment you use to deal with this serious problem.

You are really the best person to treat your pet. Nature has given you the best tools but you have to remember natural, safe treatment takes time and patience. There is no timetable to this. Treatment duration takes as long as it takes. How long varies depending on the product used, the severity of the infestation and the dog’s overall immune health.

This disease is famous for coming back again and again. Treating your dog yourself will help you stay off that merry-go-round because you will also treat the underlying cause of the disease. Other caregivers will just treat symptoms. The only way to make things right is to eliminate the mite overpopulation while inflating and rebuilding the immune system. This takes time but it’s time well spent. Immune system failure caused the problem and no matter how many we annihilate, without a robust immune system, Demodex WILL rebound.

Nature provides excellent tools to dispatch mange if you know how to put them to work. Happy Dog Naturals does because we’re mange specialists and unlike other generalist outfits, that’s all we do. We’ve also pioneered the only holistic program that works on the whole dog. It’s proven and has saved dog when nothing else worked. We know how to kill mites gently but we also know that immune support is your secret weapon and we take it seriously. We’re the only company that scrutinizes every ingredient in our products and the third-party products we sell to be safe, appropriate for the condition and in the best interest of the health of your dog. (Pet supplements are not regulated and we take extreme measure to ensure we get as close to human grade as possible.)

**Die-Off Effect:** It doesn’t matter whether you are using a chemical or natural treatment, something is bound to happen when there are dead parasites and a lot of other ugly things happening in a dog’s skin. One of those things is things can seem to get worse before they get better, a phenomenon known as the Die-Off Effect. As odd as it sounds, it’s a sign that the battle
is underway, and you have the mites on the run. Nonetheless, it's best to be prepared for what might happen.

Upon death mites instantly dump all the toxins in their bodies, release a lifetime of feces, and sort of liquefy into a gelatinous glob. When this is added to an unhealthy environment already loaded with pathogenic organisms, the follicles can become overwhelmed and even swell shut. Some dogs never experience this, others feel off for a day or so after a treatment and some fall victim to secondary infection. Typical die-off can exacerbate all symptoms including itchiness, inflammation, redness, swelling and irritation.

The dog’s defenses get even weaker as the dog’s system tries to resolve these new issues, which in turn can cause lethargy and symptoms of allergy and/or illness.

Mite Avenge is designed to limit the effects of massive kills by gently clearing things out a bit at a time (sort of like peeing back the layers of an onion). This slower process not only limits the level of toxin release and lowers the risk of infection, it gives you time to rebuild the dog’s immune system during the process. Classically, if die-off is going to happen, it rears its head after the second week after several killing sprees.

If die-off does occur the only option is to power through it. Immune support is a crucial part of holistically beating Demodex and we’ll cover that in detail shortly. But if you find yourself facing die-off, increase immune support, especially Ester C and step up your povidone iodine wipe-downs. Avoid stopping treatment if at all possible to avoid losing ground to follicle clogging and mite migration.

No matter what treatment method you use, immune rebuilding must occur before you can stop treatment otherwise your dog will have no means to prevent the mites from coming right back.

**Immune Support** - There’s more to beating this disease than killing mites. The mites are only the outward symptom of the root problem. The problem that caused Demodex to develop in the first place is poor immune health. It’s not realistic to expect to cure the disease by treating the symptoms without fixing the cause.

Immature immune systems will mature but compromised immune systems rarely self repair. We can’t stress how important immune support is when battling Demodex. Even puppies need support until their immune systems are robust enough to keep the mites from over-running them again. If immune health could be rated, a dog with generalized Demodex’ would have a negative score. There has to be strong immune support to lift them up enough to stop the progression and help the dog heal. Essentially, the immune system must be artificially inflated until it is healthy enough to
keep the mites under control.

Immune work takes time and a variety of tools. It would be perfect if there was one simple pill that fixed everything but there’s not. Nor is there one easy solution for each category — but we’ve tried to make it a little easier for you by reducing the vastness of immune support into four areas.

There’s no one single thing that’s broken and no one easy or fast fix. It’s impossible to tackle all the body’s support systems but we’ve done our best to tame the vastness of immune health. With much burning of the midnight oil, we’ve identified the very most important areas of the immune system that affect Demodex recovery. We call them the Pillars of Immune Health. Let them guide as you formulate your immune support plan.

Pillar 1 • Digestive Health - No one really thinks about gut health and mange. But they should. The bowel defends the body against pathogens. The gastrointestinal tract is where 80% of immune health originates and 100% of yeast production is regulated. Sadly, today’s synthetic society is so hard on dogs that poor gut health is a common problem and an unhealthy digestive health is a direct contributor to poor immune health.

More than half of your dog’s antibody-producing cells are found in the bowel wall. The bowel’s natural bacteria (good-guy flora) protect these cells by destroying invading pathogens (bad-guy bacteria) that want to wreak havoc.

Poor digestive health is a given with demodicosis The flora imbalance let aggressive pathogenic bacteria take control without a push-back. Bacteria and yeast run the show, permeating mucosal immune tissue, stealing nutrients, obstructing digestion, creating inflammation and weakening intestinal walls. An unhealthy gut trashes its immune-related function and can eventually compromise the liver, the lymphatic system, endocrine system and immune response mechanisms.

Poor gut health even extends as far as your dog’s skin. Once pathogens rage out of control because of an unbalanced digestive system, they are excreted onto your pet’s largest immune organ – the skin. On the skin they dominate beneficial microorganisms that act as a barrier to prevent bacteria from entering the body and attack the toxin filtering system. Unhealthy digestive systems makes the likelihood of yeast and/or secondary infection soar.

Repairing digestive health is one of the fastest way to give the immune system a shot in the arm. Here’s how:

• Load your dog up with prebiotics, probiotics and digestive enzymes. The population of beneficial bacteria is on the endangered species list and your dog’s body desperately needs them to be replenished. Provide prebiotics to feed the good bacteria so they can fight off attack and crowd out bad bacteria. (Dr. Harvey, one of our nutritional gurus
maintains that probiotics without prebiotics is money down the drain.) Digestive enzymes help dogs process food in a trauma zone and as a double bonus they enable your dog to get more nutrients out of his food and absorb an incrementally higher percentage of the supplements you provide. Our Microflora Plus combines all three. It’s the number one digestive supplement for dogs plus it’s NASC certified.

- Supply plenty of Omega Fatty Acids from fish oils - A balanced uncontaminated marine-based omega fatty acid supplement for dogs is best. Fish body oils are more beneficial than oils from other sources because dogs can’t efficiently convert omega-3 from vegetable sources into DHA. Our wild, deep sea salmon oil from Wholistic Pet Organics has the optimal balance of omega for mange and is certified pure by the NASC.

- Repair damage to intestinal tissue caused by pathogens, clear intestinal toxin buildup and provide a full panel of amino acids to help to stop intestinal inflammation and enhance repair of the intestinal walls. Our 4-Whey Pet Health builder does all that and a lot more.

Pillar 2 • Reduce Yeast - A compromised immune system sets up the perfect scenario for yeast to reach pathogenic levels. Yeast feeds mites, Yeast naturally secretes enzymes and toxins. Excessive amounts of these secretions overload the liver, build up in body tissue and suppress the immune system. Yeast also builds up on the skin causing a variety of problems on the surface It’s safe to say that a dog with excessive yeast is going to have a hard time beating Demodex. This pillar follows digestive support because those tools are essential tools for yeast reduction as well as these:

- Feed a proper diet. We won’t recommend brands but will tell you to feed a grain-free, filler-free diet with the fewest number of carbohydrates possible. No sugar or anything that can be converted to sugar. Feed low glycemic veggies. Get as close to nature as possible. In the natural realm, raw is considered to be the best choice.

- Probiotics, prebiotics, digestive enzymes and essential fatty acids.

- Kill yeast. Grapefruit seed extract is the most potent anti-fungal we recommend for dogs. Other yeast fighters are Pau d’arco, oregano oil, olive leave extract, caprylic acid, colloidal silver, chopped garlic, apple cider vinegar and Ester C.

- Detoxify. Killing yeast releases toxins that stress the liver, kidneys, drag down the immune system and make a dog feel awful. Help your dog clear them with natural detoxifiers like milk thistle, 4-Whey Pet Health Builder and neem leaf powder.

- Remove topical yeast. Remove topical yeast once a day in mild situations and twice daily in more severe cases. Rub your dog down with diluted povidone iodine to kill skin yeast. Povidone iodine also decimates surface bacteria and is painless on damaged skin. Vinegar solutions
also destroy surface yeast but they are not antibacterial and can sting the skin. Povidone iodine wipe-downs are so important we explain the process in at least 3 places on our website.

Pillar 3 • Detox - Dogs are regularly exposed to toxins in vaccines, wormers, drugs, processed dog and people foods, mold, chemicals, pesticides, herbicides, household substances, medications, plants, plastics, tap water — and they build up inside your dog. No living being is equipped to purge the all garbage it absorbs. Dogs included. Pound for pound they have a higher toxin load than humans and smaller organs to filter and eliminate it. Toxins stress the body, affect various parts of the immune system, undermining performance and draining resources that the dog could otherwise use for healing. The hardest hit purification organs are the liver, kidneys and skin. The lymphatic system is next and ultimately the rest of the body and its functions are affected.

Once a dog develops mange, things get more dicey. Mites and yeasts are full of nasty toxins, which they are more than happy to share, creating an even higher toxin load and dragging immune system further into the red zone. And that’s just when they’re alive. Killing off yeast and mites floods the body, increases the odds of die-off sickness and adds to the existing toxin load, which, if it remains high for a long period of time, can permanently damage the immune system.

The official ruling is that toxic insult impairs immunity, which in turn may alter disease susceptibility. Here are some tools to help you dog manage toxins:

• Detoxify and invigorate the liver with natural detoxifiers. Milk thistle is a powerful detoxifying herb. 4-Whey Pet Health Builder helps dislodge toxins that have taken up residence in fatty tissue and helps ferry them out of the body. It also has the amino acids that enable an adequate detox flow. Other helpful supplements that have detoxifying properties include Ester C, B vitamins, burdock root, dandelion root, cranberry, chlorella, spirulina, licorice, Oregon grape, red clover, SAMe and yellow dock.

• Provide amino acid supplements to increase toxin elimination. Toxin removal suffers when the dog’s body allocates the available amino acids to higher priority functions with immediate needs. Our 4-Whey Pet Health Builder has an unsurpassed amino acid panel with excellent bioavailability. It’s aminos combine to help your dog produce glutathione which has many magical properties including being a great detoxifier.

• Provide the purest water possible. Tap water contains things that are best not consumed.

• Exercise your dog for at least 30 minutes every day. This boosts lymph circulation, which clears toxins from the body.
Pillar 4 • Boost Immune Function - The immune system is an amazingly complex network that runs throughout the body, nurturing the organs that make immune cells. Big and small, all the players have one thing in common — cells. The immune system depends on every cell and cellular integrity is the heart of healthy immune function but sadly, your dog’s cellular integrity is under heavy fire. The heroes of immune support are antioxidants, (molecules that take out free radicals). It’s a sacrificial process because the antioxidant molecule dies with the free radical. With the exception of glutathione, antioxidants are one-hit-wonders with a lot of enemies. Antioxidants are not one-size-fits-all. They’re specialists. Because different types of antioxidants target and destroy specific types of pathogens, you need a lot of redundancy in your immune boosting efforts. It was recently demonstrated that a cocktail of such antioxidants limited cell damage and help keep the pet’s cells healthy. An ideal immune boosting plan focuses on cellular support with a variety of antioxidant-rich supplements.

- Colostrum (transfer immunity)
- Ester C
- Grapefruit seed extract
- Milk thistle
- Medicinal mushrooms
- Glutathione*
- Natural Vitamin E (d-alpha-tocopherol, not dl-alpha-tocopherol)
- Vitamin A
- Coenzyme Q10
- Green tea extract (decaffeinated)
- Alpha Lipoic acid
- Selenium
- Zinc
- Beta-Carotene
- Herbs such as oregano, thyme, ginger, parsley, etc.
- Turmeric (curcumin), Echinacea
- Whole leaf Aloe gel
- Pau d’arco
- Celery seed
- Carotenoids: Come from bright pigments in fruits and vegetables such as carrots, pumpkin, sweet potato, kale, blueberries, raspberries, spinach, tomatoes, etc

* Glutathione supplements don’t survive the digestive tract. Your dog is the best glutathione manufacturer in the world if you provide necessary precursor amino acid your dog doesn’t produce. (4-Whey Pet Health Builder is a great source for it.)
Give your dog a haircut. By nature, dog hair is designed to shed water. Long hair, thick hair, and double coats can work against getting the saturation required to flood Mite Avenge deep below skin level where we want it. Treatments are more effective (and skin health is improved) with a new ‘do. Trim your pet’s hair as short as you dare – but don’t go longer than 1 inch. (A total shave is not mandatory but it’s not wrong either.) Segregation is only required for animals with Demodectic mites.

- Fresh air and sunshine are very therapeutic. Regular exercise and playtime is a must. Exercise is a proven immune booster.
- Make sure the dog gets plenty of rest. This is crucial to enforce for high energy dogs who don’t like to take it easy. If the dog is in a high traffic area, put a crate in a quiet room and give her frequent rest periods.
- No special cleaning is necessary. Demodex mites are not an environmental hazard. They do not run around the house nor can they infect, contaminate or bother anything or anyone.
- Mite Avenge can safely be used in conjunction with other internal mange treatments.
- Spot-on flea treatments and other topical products can also be used together with Mite Avenge. Just time application of spot-ons to allow for them to become waterproof before applying your next Mite Avenge treatment. Other topical products may be applied four hours after a Mite Avenge treatment.
- Mix solution immediately before use. Do not allow to sit in sun or near sources of heat. These degrade the potency quickly.
• Demodex treatment schedule: Bathe with benzoyl peroxide shampoo then apply Mite Avenge as directed, drenching your dog over and over, massaging it in well as you go, at least twice a week until the skin returns to normal and hair has regrown. Continue treating for 4 more weeks to eradicate hatching nymphs.

• Tips for proper bathing technique can be found in our blog and site’s shampoo pages in our store. These instructions are specific for mange.

• For the optimal Mite Avenge application, after bathing, place your clean wet dog in the plastic container. Using the applicator bottle, completely saturate your dog with Mite Avenge by applying the solution uniformly across all areas of the skin and fur. Use every drop necessary to soak the dog down. Do not discard the Mite Avenge runoff that is collecting in the bottom of your plastic container.

It’s not enough to simply pour it on. Demodex are too deep. Push hair against the grain to reveal the skin and continually recirculate the runoff at the bottom of the tub over your dog. Repeatedly flood the same areas to get down to the mites deep beneath your pet’s skin. Address all facial areas, wipe out the ears, saturating everything, everywhere. Once treatment is complete, apply praise liberally, and discard any remaining Mite Avenge in the plastic container.

• Avoid getting shampoo or Mite Avenge in the eyes, our protective eye drops help ensure you and your pet’s comfort. Do NOT rinse Mite Avenge off. Allow to slowly air dry. Do not force air dry or use direct heat. Pat all parts of the paws thoroughly dry.

• Do not treat with Mite Avenge less than twice a week. More is fine, less is not. Inconsistent treatment is a common cause of problems and/or failure.

• Consider treating your dog at night. The following is not supported by official data but is still share-worthy. Some customers report that Mite Avenge delivers a better kill rate at night, when mites are closest to the surface or on the move. For this to be effective the dog must be in dark environment for at least 2 hours prior to beginning treatment to give the slowpokes time to move towards the surface. Pre-dawn or late evening treatments are popular with people using this trick.

• How long to treat? We cannot tell you how long this will take as treatment durations vary depending on an number of things, many of which we cannot measure.

Your dog’s situation is not exactly like any other dog’s. Some of the factors at play are age, severity of infection, how long the mites have raged, degree of follicle impaction, how deep the mites have managed to burrow, the overall condition of the dog & whether there are other health issues, and most importantly — the current condition of the immune system.

We can tell you that on average it takes 12-14 treatments to kill off the
overpopulation of egg-laying adults. Some dogs take less, some more.

• When to stop? Your sign that the overpopulation is under control is:
  Your dog’s skin looks completely normal. Everywhere. (The only exception
  is skin discoloration that may not have faded yet.).

There should be no sign of prior mange symptoms such as flaking, odors, inflammation, irritation, bumps, secondary infection, excessive itching, etc. There should be a respectable amount of hair regrowth.

Once you’ve reached this blessed point, continue treating for 4 more weeks to eradicate hatching nymphs.

• Dogs under 30 pounds may need less than one bottle of Mite Avenge per treatment. Instructions for preserving leftovers are available elsewhere in this booklet. Dogs over 30 pounds require a full bottle and very large dogs may require two bottles.

• If skin drying becomes a problem, apply organic coconut oil to your fingertips and massage in until absorbed to moisturize your pet’s skin. This helps topical yeast too. If your dog licks it (guaranteed to) it’s totally safe and healthy.

• NEVER allow corticosteroids (Cortisone, Prednisone, etc.) to be administered to a dog with Demodectic mange or any undiagnosed health problems symptoms until the possibility of mange has completely been ruled out. These may control the itch, but immunity is severely lowered, allowing the mites to multiply much faster.

• You can’t cut the legs out from under the disease by treating only the symptoms. Your dog’s recovery odds and speed are directly affected by how you strongly tackle the root problem with aggressive immune work.

• Try to eliminate anything remotely immunosuppressive. Nurture and support your dog’s immune system as it recovers. We and our dogs are exposed to potentially immune altering substances—ranging from vaccines to food preservatives to cleaning solvents to garden chemicals—which dogs in years past never encountered. Perhaps this is a clue as to why mange is now affecting such vast numbers of dogs.

• No steroids, medical procedures or other immunosuppressive measures should occur until the dog has been clear of mites for 90 days. Try to hold off longer if possible, especially with juvenile dogs.

• Avoid vaccinations until the crisis is behind you for quite some time. Vaccines interfere with the immune system, which is trouble you don’t need right now. Tell your veterinarian that you want a health waiver until your dog is clear of Demodex for at least 3 months or more. (It says on the vaccine vials that they should only be given to healthy animals.)

• Human antihistamines may give your dog some relief as many of her symptoms result from her own body’s reaction to mite toxins. Our blog has an excellent article titled Over-the-Counter Antihistamines Just Might Be Your Dog’s New Best Friend. It’s one of our most recommended
reference articles and worth a read for every owner with an itchy dog.

- Yeast is natural and belongs on your dog. But when demodex strikes, yeast becomes excessive and can hinder or prevent recovery, not to mention making your dog more miserable. The other top-of-blog articles are our 3-part series of yeast articles on internal yeast, skin yeast and paw yeast. Because every dog with too many Demodectic mites also has too much yeast, this is a must-read set of articles. They are short, interesting, and by the time you’ve read all three you’ll know more about this important aspect of demodicosis than many vets! You’ll also know exactly how to recognize and handle your dog’s yeast issues.
Six Steps to Beating Demodectic Mange
(Excerpted from Happy Dog Naturals’ blog)

Demodectic mange mites are a special kind of misery. Localized infestations can linger benignly (or even go undetected) then suddenly turn into a generalized nightmare that engulfs a dog. Itching can range from mild to severe as can hair loss. There are typically bumps, pustules, redness and sometimes there’s a distinctly unpleasant odor. Skin scrapings often come out negative even when there is a presence of mites and what is actually an infestation of microscopic parasites is unfortunately mis-diagnosed. Figuring it out can be a nightmare. But if you’re using the standard protocol of drugs and hope, the treatment can be an even worse one and the thought of beating Demodectic mange is more than likely just a faraway dream. There’s so much they don’t tell you that you need to know.

What’s an owner to do? You take matters into your own hands and you cure Demodectic mange yourself! But please understand — getting rid of Demodectic mange for good can’t really be oversimplified into a one-hit-wonder. We won’t lead you on, doing it right might get complicated. That’s why we wrote this — to help you succeed. When you use Mite Avenge or anything else, many confusing things can happen when you start to kill mites. Our blog has an excellent article on what to expect when treating mange. It’s a must-read!

However, we know that the best way to treat it is naturally, even if you don’t use our products. Any way you chose to do it, long-term resolution involves a multi-step process that takes time and patience. If your dog has been diagnosed with Demodectic mange, it’s important to be thorough. It can be done. Here are the basics that will help you:

1. **Flush your dog’s skin with Benzoyl Peroxide shampoo.** Flushing your dog’s skin with 2½ to 3% benzoyl peroxide pet shampoo is crucial. Do a flushing bath immediately before every Mite Avenge treatment to deep clean and prepare the skin. Used properly, it will also flush out some mites as it helps improve an unhealthy skin environment.

   The optimal technique for flushing out debris and mites can be found on the shampoo pages of our website and in our blog. Additional flushing baths are fine and can be done as often as daily if desired. If
drying becomes a problem, apply organic coconut oil to moisturize your pet’s skin. Our website has detailed treatment instructions and pro tips under the Demodectic section in the menu bar.

Important: Demodex mites can be 5–6 layers down, coated in thick sticky sebum and protected by brick-like blockages. Benzoyl peroxide shampoo is the only thing known to gradually cut through the gunk.

2. Eliminate the overpopulation of Demodex mites. The schedule for Demodectic mange is to apply one Mite Avenge treatment as directed twice a week. Treating more often is fine but treating less often is not. The treatment instructions here will help you achieve the optimal treatment.

Cease treatment four (4) weeks after the skin returns to its normal healthy condition and hair has regrown. If you’re unsure, keep treating. The most common causes for recurrence are stopping treatments prematurely and not fully correcting the underlying immune system issues. Both will cause the mites to re-surge and often the dog ends up worse off than you started.

Important: Demodex repopulate quickly so do not cease treatment prematurely. Infrequent or inconsistent treatment encourages mite migration, reverses the progress made clearing out follicles, slows recovery by killing fewer mites, and allows more eggs to be laid.

3. Repair and restore immune health. Behind every case of Demodex is:
   • A naturally weak or compromised immune system
   • Accompanying yeast issues

Need Less Than A Full Bottle?
Short haired dogs under 30 pounds may not require a full 24 oz. of Mite Avenge for a successful treatment. Mix a full bottle of concentrate as directed and apply mixed solution liberally. Use enough solution to thoroughly drench the coat down to skin level then set the applicator bottle aside and continue treatment as instructed. To avoid product degradation, proper storage of remaining activated Mite Avenge is critical.

• Immediately store any left over solution in a dark place to prevent light degradation.
• Store product at room temperature. Avoid extreme temperature changes such as refrigeration, heat sources or outdoor areas where temperatures fluctuate.
• Do not warm leftover solution to a temperature greater than 100º F (essentially no warmer than a baby’s bottle).

Correctly stored solution should remain viable for 7–10 days.
Your dog may not show outward symptoms but make no mistake, both are present. Self-repair is hampered by the internal vortex the mites create, which is why immune support is important to recovery and remission. (It’s the secret sauce if you will.)

Sometimes Demodex will reproduce faster than we can kill the mites. When we see treatment stall, or recurrence of the condition after treatment ceases, this is a sure sign the immune system is not strong enough to maintain control.

*Important*: A weakened immune system does not self-repair and may continue to decline because of the immunosuppressive properties of yeast and mites. You can’t turn things around until you resolve these issues.

4. **De-yeast your dog daily.** Yeast feeds mites. It’s a destructive pathogen that also sabotages immune health, impairs recovery, causes painful irritation, odor, infection, and loads of other problems. It’s a stubborn enemy that usually needs to be attacked two ways.

It is a powerful enemy that must be attacked from both the inside and out.

Externally, your best weapon is to wipe your pooch down with diluted povidone iodine daily. It’s easy. The instructions on the povidone iodine page in our online store will make you an expert in less than 3 minutes.

The other half of the battle is fought internally. Digestive tract restoration, anti-fungal supplements, and foods are important yeast defeaters that will be your dog’s heroes. Wondering how to go about controlling yeast internally? Remember those Immune Function section we mentioned in step 3? Go there. There’s a page about yeast there that will be your hero.

*Important*: A weakened immune system does not self-repair and may continue to decline because of the immunosuppressive properties of yeast and mites. You can’t turn things around until you resolve these problems. You must provide extra support to the four areas of the immune system that most affect Demodex.

5. **Fix the diet.** Don’t feed the disease. Dog food is famous for fillers, additives, high carbohydrate and junky ingredients. These are Robin Hood substances that steal from your dog and give to the mites.

Evict wheat, corn, and other grains from your pet’s diet. Ban sugar under any alias and slash the carbs as low as you can. No table food or treats with any carbohydrates. These contribute to the yeast that feeds Demodex mites. Reducing their food source making it easier to eliminate them. A species-appropriate raw diet is considered to be the best but if
that is not possible, feed a high quality, balanced, grain-free food made from natural ingredients that’s low in carbohydrates.

We won’t recommend or endorse any brand but you may want to research your current or proposed food. If so, you want to hit up DogFoodAdvisor.com

**Feeding Tip:** While you’re in the store, check the foods you consider buying before you purchase. Use your phone and go to – DogFoodAdvisor.com – for excellent independent reviews of a huge number of brands.

6. **Limit all stress.** Stress is the one of the biggest drains on a dog’s immune system and can make things easy for Demodectic mites. Make sure your dog gets regular exercise and lots of rest too.

**Important Bonus Tips**

**Brush your dog daily!** Unless of course you don’t want improved circulation for healing, to remove the latest surface debris that yeast and bacteria just love, to decongest the follicles, reduce itching, and generally spoil your dog.

Daily brushing requires a tool that exfoliates and stimulates the skin but won’t cause more damage or irritation with daily use. (If you don’t have something already, consider our Furminator.)

**Provide maintenance care after treatment is complete!** The riskiest periods for Demodex to rebound are 6-12 months after recovery for an adult dogs and until a puppy reaches 3 years of age.

- Continue benzoyl peroxide baths at least weekly to maintain open follicles and an unfriendly environment that makes gaining a foothold harder.
- Continue immune support at maintenance levels during this high-risk window.
- Closely examine the skin often for signs of suspicious symptoms. If you see symptoms reappear, get back on the full 6-step program pronto.

**It’s important to accept that this is a process that takes time.** You have committed to a far safer approach than chemical options but the journey can ebb and flow depending on the conditions of the underlying causes and other life changes.
Sarcoptic Mites

Sarcoptic mange, or dog scabies, is a serious skin disorder in dogs caused by an infestation of the *Sarcoptes scabiei* or scabies mite. This microscopic mite is highly contagious and easily transferred to other household pets as well as humans by casual contact. It burrows into the dog’s skin and causes intense itching and hair loss. It causes scabies when transferred to humans. This highly contagious disease is found worldwide and occurs in all breeds, sexes and ages of dogs.

The tiny mites burrow under a dog’s skin, creating tunnels and storing their eggs in a trail behind them. The tunnels are sometimes visible as thin, scaly lines just below the skin. Scabies mites prefer the dog's abdomen, chest, legs, and ears, but can affect any area on the dog. The parasite’s bite also prompts an allergic reaction in many instances. Of all the disorders that cause itching in dogs, Sarcoptic mange is one of the most intense.

Eradication takes time because you are dealing with all life stages - adults, their eggs, and reproductive stages. Sarcoptic mites dig into the dog’s skin and burrow in tunnels that can resemble a microscopic ant farm under your pet’s skin. That’s where the female and her offspring feed on your dog. She will lay 30–50 eggs in a burrow before dying. The larvae hatch, leave the burrow, and move all over the animal’s body where they form new burrows in the skin. There they feed, mature, and reproduce to start the hideous process all over again. To eradicate the infestation, the mature mites must be killed, then the larvae that hatch for the next few weeks must be killed before they can reproduce. Unless the cycle is completely broken, re-infestation will occur.
While the females stay below burrowing into the dog’s skin to lay their eggs, male Sarcoptic mites tend to run on the dog’s skin surface biting and injecting their poisons and toxins. Rashes and bite marks can often be seen on a dog with Sarcoptic mange.

Sarcoptic mites leave trails of damaged skin, toxins, waste and decaying bodies in and on your dog. It’s easy to see why Sarcoptic mites cause intense itching and dermatitis. Scratching, gnawing and biting will cause injury and add to the hair loss (sometimes the entire dog can go bald). The skin may appear almost bruised and leather-like. The inflamed skin is then a breeding ground for secondary bacterial infections. However, Mite Avenge quickly wipes out the active infestation with powerful, all natural miticides. Its all natural ingredients then help soothe and heal damaged skin like no other product can. Many happy customers report their dog’s skin becomes normal and healthy and the hair grows back faster than they ever imagined.

Sarcoptic mites are transmitted by direct contact. Your pet picked them up by simply being in the wrong place at the wrong time. Sarcoptic mange has nothing to do with neglect. It can be contracted by contact with any infested host, or simply by visiting an area where an infested host has left a few mites behind. (Sarcoptic mites are rampant in wildlife such as foxes, opossum, raccoon and deer.) This mite should be taken seriously as it is highly contagious and is easily transferred to other household pets as well as humans by direct contact.

It usually takes about a week for the first signs to appear after contact with an infected source. The hair loss is first seen on the ears, elbows, ventral chest, abdomen and hocks, and is accompanied by intense itching and the appearance of reddened papules, scales, crusts and sores. The lesions can spread over the entire body in severe cases, resulting in extensive hair loss, secondary bacterial and yeast infections, and overall debilitation and emaciation.

Self-inflicted injury is possible due to intense scratching. Sleeplessness, lethargy, and loss of appetite may occur. Hair loss can spread to the entire body without effective treatment. Symptoms are usually progressive as this is an aggressive mite.

Sarcoptic mites frequently do not show up in skin scrapings. They are difficult to diagnose because the females are burrowed deeply into the skin and the males are literally too fast to be caught by a skin scraping. The
veterinary rule of thumb is usually “if it’s suspected, treat for it.” We don’t disagree with this type of bold approach because of how nasty mange is, but we do question the commonplace practice of subjecting a dog to steroids, antibiotics and/or highly toxic pesticides without batting an eye. It’s almost always better to start with a safe but aggressive natural treatment like Mite Avenge. If it’s not mites, your dog will not have been unnecessarily exposed to toxic substances, and the soothing oils will provide comfort regardless of the cause of your pet’s problem.

A simple check for Sarcoptic mange you can conduct is about 95 percent accurate in detecting Sarcoptes mites. You can perform the Pedal-Pinna Reflex Test. Gently manipulate and scratch the dog’s ear, and if the dog begins to move his hind leg as if to scratch its ear, then it likely has mange. This test works because in nearly all cases of mange, the mites infect the ears.

The first step in the treatment of Sarcoptic mange is to isolate your dog to prevent the condition from spreading to other pets and humans.

A vet may prescribe anti-parasitic medications, topical pesticides like Selamectin or Advantage Multi, dips like Mitaban, Paramite or Lyme sulfur, injections of systemic pesticides like Ivermectin, as well as other drugs and topical treatments to ease symptoms and treat secondary skin infections. Results are usually seen after a month of treatment.

These are all chemical-based. Many are systemic neurological pesticides. Intolerance, unwanted side effects, allergic reactions and target pest immunity are possible. It should be noted that Ivermectin, the go-to chemical treatment, is not even designed for treating mange. It is a powerful anti-parasitic pesticide licensed for cattle and swine. It is only licensed for use in dogs and cats as a heartworm preventative, but in very small doses compared to what is used to treat mange. When Ivermectin is used to treat mange, it is not FDA approved. As an unapproved treatment, the workaround is to prescribe it ‘off label.’ Normally, in small doses, Ivermectin has few side effects; however, the dosage necessary for treatment of mange can cause serious issues. And it’s a death sentence for dogs of certain breeds that carry the MDR1 gene mutation.

Nature provides us with substances that powerfully treat mange without further insulting an animal’s health. Mite Avenge’s natural miticides are more
gentle, have nearly no chance of reactions or side effects, are non-chemical and non-toxic, and mites cannot become immune to them.

Sarcoptic mites burrow in such a way that it makes them relatively easy to kill. Mite Avenge usually eliminates a Sarcoptic mite infestation and breaks the mites’ life cycle in 10-15 days. Severe infestations and certain sizes of dogs may take slightly longer. The typical treatment schedule is 3 weekly treatments unless the infestation is severe — meaning a 3-bottle multi-pack is appropriate in most situations. Certain situations require more.

To achieve a thorough eradication and help prevent re-infestation, cleaning and treating your pet’s environment is necessary along with treating your pet. This can be accomplished with safe natural methods that are addressed in the tips section later in this booklet.

To reduce the probability of transmission, all household pets must be treated whether they are symptomatic or not. In addition, proper nutrition and exercise are important in fighting this condition.
• If a dog is doomed to have mange in his lifetime, believe it or not, this is the type of mange you want your dog to get. Why? Sarcoptic mites have the least complicated treatment protocol and the fastest time to your new favorite word... CURED! Sarcoptic mange requires fewer supplies too. Treating with Mite Avenge will set you back about half the price of one vet visit.

• You are innocent! There is nothing you could do that would cause your dog to catch Sarcoptic mites. Contracting these parasites is a random, wrong-time-wrong-place thing. Sarcoptic mange (or any mange actually) has absolutely nothing to do with how you care for your pet.

• Sarcoptic mites have nothing to do with the immune system, breed, age, location or any other factor. Any dog can pick them up and there is nothing you can do to prevent them from hopping aboard your pet.

• Sarcoptic mites are difficult to find with skin scrapings, they’re just too fast. Nearly 80% of the time they’re negative, even in the presence of mites! Negative scrapings are not proof of anything.

• It is possible for a dog to be plagued with two types of mites at the same time. Most dual infestations are a combination of Sarcoptic and Demodectic mites.

• Contagious mites are nothing to mess around with. Some home treatments (and occasionally medical ones) are silly or downright dangerous. Home remedies that use things like motor oil, Malathion, mayonnaise, Windex®, Pine Sol®, Dawn®, undiluted vinegar and raw lemons have no place on your dog. Common sense should prevail; don’t put anything on or in your dog that you wouldn’t use yourself. Make sure there is sound science behind the treatment you use to deal with this serious problem.

• Isolation from other pets and family members is helpful but not required for animals with Sarcoptic mites. Isolating the dog after release from the ‘clean room; is not necessary (more on clean rooms in a bit).

• Mite Avenge can safely be used in conjunction with other internal mange treatments, including chemical as well as flea and tick treatments. When using spot-on flea and tick treatments, observe the waiting period for the product to become waterproof before beginning treating with Mite Avenge.

• Gentle brushing is a helpful as your dog heals. It increases circulation, and provides benefits that enhance healing.

• Sarcoptic mites require 3 weekly treatments to break the mites’ life cycle and eliminate the mites that are torturing your dog. Treat on the same day of the week and voilà — your nightmare will be history in 14 days!

• Instructions for storing leftover Mite Avenge are included with your order
for those with small dogs that need less than 24 ounces per treatment.

- You must treat all your dogs. This mite is very contagious and fast. Every warm blooded creature, including wildlife (urban foxes are famous for Sarcoptic mange), is a potential victim and/or carrier.

- You may get infected too. The dog version of this mite cannot reproduce on you and will self-extirpate in a couple of weeks. Tea tree oil can be applied straight to dispatch them sooner or you can call your doctor for a prescription cream.

- As with other contagious parasites, all of them must be removed from your home. Decontaminate the entire place and anywhere your dog has been. Sarcoptic mites are fast and will climb stairs. They’re robust and can live up to a week off of a host, in that time they are highly mobile and can make their way into, closets, basements and carpet. You’ll also need to vacuum your vehicles and apply DE if your dog has recently traveled in your ride.

- If you are using food grade diatomaceous earth (DE) to help eliminate mites in the environment, apply it 24 hours before treating with Mite Avenge and decontaminating your home.

- But don’t clean yet! The fun doesn’t start until the day you treat your dog for the first time.

- Breathe. It’s not that bad and you only need to do the cleaning drill one time (with your first treatment).

- No special shampoo is required but our Flush & Kill shampoo can help facilitate a more thorough treatment.
Cheyletiella Mange

Cheyletiellosis — the mange no one’s ever heard of! Cheyletiellosis or as it’s commonly known, walking dandruff. It got the nickname walking dandruff because of the dandruff-like flakes that are always present when Cheyletiella mites strike.

*Cheyletiella yasguri* maneuvers around beneath the skin’s keratin layer. It is contagious, non-burrowing, carnivorous parasite. Their revolting dining habits are what cause patchy, scruffy-looking areas on a dog accompanied by a copious amount of flakes. The flakes are a result of Cheyletiella mites externally digesting their food by injecting saliva into the skin to break it down. Then they come back and pig out. Any decaying matter that these slobs don’t consume eventually dries up and falls off in flakes that resemble dandruff.

The reason dogs get walking dandruff is that they were in the wrong place at the wrong time. There’s nothing you did or didn’t do to put your dog in this predicament. Cheyletiella mites are aggressive travelers and hungry opportunists who thought your dog looked delicious and hopped aboard.

Cheyletiella are transmitted by direct contact with an infested 2-or 4-legged host or by indirect contact if the victim has visited an area where a host has deposited mites or eggs.

The mites lay in wait off of a host for up to 10 days while seeking a new one. During this time they are little tourists that stay busy infesting other territories and laying eggs. This can translate into a big problem in a household.

If you suspect Cheyletiella, the primary symptoms associated with it include excessive scratching, skin scales, underlying skin irritation and hair loss. The skin sometimes has small, red raised areas where the mites have bitten and the coat, usually unkempt-looking, is scattered with flakes that look like dandruff. You may also be able to see the small, pale yellow mites on close inspection or watch in terror as skin flakes (dandruff) mysteriously move on the surface of your dog’s skin.

Cheyletiella are diagnosed and treated by the same one-size-fits-all skin scrapings and neurotoxic pesticides as Demodectic and Sarcoptic mites. If your dog is afflicted with Cheyletiella mites, the good news is that they are not immune to Mite Avenge and can be eradicated in a mere 3 weeks. A household decontamination (as described elsewhere in this booklet) is required to prevent re-infestation.
Cheyletiella — Good to Know

- Cheyletiella mites have nothing to do with the immune system, breed, age, location or any other factor. Any dog can pick them up and there is nothing you can do to prevent them from hopping aboard your pet.
- Any warm-blooded creature can catch or transmit Cheyletiella mites. However, the most common transmitters are rabbits.
- Pale, slightly yellowish in color, chunky, fat-waisted mite
- May be visible with the naked eye
- A dead giveaway is if you see dandruff or flakes move across your pet's skin
- Symptoms usually develop 3–5 weeks after exposure
- A negative test result is not reliable diagnosis
- Other animals and/or people itch (20–80% contract it after exposure)
- Skin irritation & hair loss typically minimal
- Young animals have an increased risk of infection due to their immature immune systems
- Carnivorous, eats keratin debris and tissue fluids
- Length of treatment following Mite Avenge treatment plan is 3 weeks
- Length of treatment with chemicals is indefinite
- All household cats, rabbits & dogs must be treated
- Household decontamination is required
- Herding breeds like Collies, Shetland Sheepdogs, Old English Sheepdogs, and others known to carry the MDR1 gene mutation should never be treated with chemicals
- Pale, slightly yellowish in color, chunky, fat-waisted mite
- May be visible with the naked eye
- A dead giveaway is if you see dandruff or flakes move across your pet's skin
- Symptoms usually develop 3–5 weeks after exposure
- A negative test result is not reliable diagnosis
- Other animals and/or people itch (20–80% contract it after exposure)
Decontamination is part of the first treatment process. Because it is a process, all steps are outlined below.

• Create a clean-room. Just before beginning your first Mite Avenge treatment, decontaminate one room with a door so you can confine your pet(s) temporarily after treatment. This is your clean-room. Don’t allow your dog(s) into the clean-room until after their Mite Avenge treatment. See Decontamination Tips at the bottom of this page.

• Prep. Mix the Mite Avenge solution in the applicator bottle according to direction. Mix the entire bottle of concentrate. Do not mix a portion as it is difficult to get the ratios right. Have the prepared Mite Avenge solution, your plastic container, shampoo, protective eye drops and/or anything else you anticipate needing at the ready.

• Wash your dog. Wash your dog. Any shampoo is acceptable but you may want to try FLUSH & KILL Shampoo as its added essential oils may accelerate eradication.

• Apply Mite Avenge. Close the tub drain or better yet, place your clean wet dog in a watertight closed container that’s slightly larger than your dog. (Depending on your pet’s size, it could be a plastic sweater box, Rubbermaid-type plastic tub, drywall pan, portable dog washtub, etc.) Completely saturate your dog with Mite Avenge by applying the solution uniformly across all areas of the skin and fur. Use every drop necessary to soak the dog down. Do not discard the Mite Avenge runoff that will collect in the bottom of the plastic container as you will want to recirculate it for a thorough drenching.

• Work it in. It’s not enough to simply pour it on. Mange mites are too deep and hair repels water. Push hair against the grain to reveal the skin and continually recirculate the runoff from the bottom of the tub over your dog. Repeatedly flood the same areas to get the solution under your pet’s skin where the mites hide. Carefully treat all facial areas, wipe out the ears, saturating everything, everywhere. To avoid getting shampoo or Mite Avenge in the eyes, we suggest using a washcloth that provides more control than the mitt we send.
• Do NOT rinse Mite Avenge off. Allow to slowly air dry. Do not force air dry or use direct heat. Pat paw pads and between the toes thoroughly dry.

• Once treatment is complete, apply praise liberally, and discard any remaining Mite Avenge runoff.

• Shower and change clothes. Avoid contact with your dog until you’ve ditched your clothes outside and scrubbed down. A few desperate survivors may have jumped ship and are now on you.

• Move your dog to the clean room.

• Finish cleaning. You must decontaminate the rest of the household to avoid re-infestation by these aggressive mites. The decontamination tips at the bottom of this page will help you.

• Shower and change clothes again. One last scrub down to take care of any mites that might have been picked up during the decontamination process.
About Us

• We love dogs. Obsessively. And tens of thousands of dogs in the Happy Dog Naturals pack are glad we do.

• We love dog people. What? You like dogs too? Can we be best friends?

• We love helping. Seriously; making a difference in any capacity matters.

• We’ve been in your shoes! it’s how we got into this business in 2010. Our story echoes so many of yours.

• We love being the world’s foremost mange expert. Mange is all we do — which makes us laser-focused specialists. Everyone else out there has divided interests to water down their expertise. This diluted focus just makes them plain old generalists. What we know means a second chance at life for some dogs and safer, more effective treatment with a faster return to health for all.

• We love natural choices. We think natural is always best. Which is why our products only contain the finest natural oils and ingredients. We even use recycled packaging.

• We love being a woman-owned family business. We get to do things our way. Everything is done with our mantra in mind: it’s all about the dogs!

• We love having the freedom to create amazingness. Without Big pharma and special interests around, we get to invent and deliver excellence. You’d have to hunt long and hard to find a customer who isn’t a raving fan. Our founder taught us well.

• We love you too. You are awesome for taking the time to learn how to help your dog with safe, natural methods.
Happy Dog Naturals makes no representation about the suitability for any purpose of the information in all of its informational materials.

All information shared by Happy Dog Naturals, is solely intended to convey general information. The information is not in any way intended to be a substitute for professional veterinary advice, diagnosis or treatment plan.

If you think your pet may have medical emergency, call your veterinarian immediately.