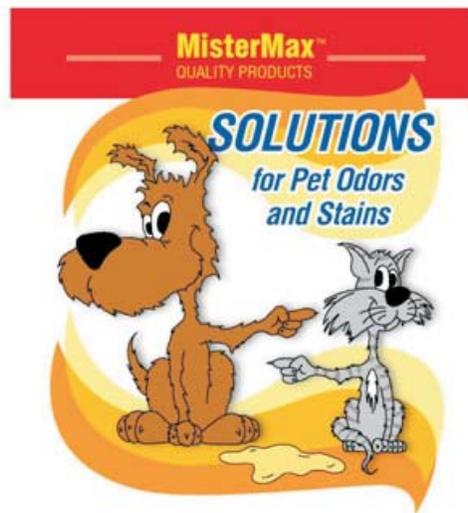


MISTERMAX



TREATMENT GUIDE



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WHY URINE IN CARPET IS SO DIFFICULT TO REMOVE

When urine is allowed to dry and remain in the carpet or other material, it begins bonding itself to the fibers. The longer it is allowed to remain the stronger the bond becomes.

Proteins (chains of amino acids) physically bond to the fibers while other portions of the urine crystallize into salts, forming ionic (electric charge) bonds. At this point it has become impossible to completely remove by cleaning alone.

In the meanwhile, Mother Nature begins the process of decay. This painstakingly slow process is the root of your odor problem.

WHY URINE STINKS AND GETS WORSE OVER TIME

The composition of urine is complicated. Think of any possible combination of substances previously ingested: water, fish heads, mice, bones, etc, all of which contain many elements. Some of the parts are transformed by the body into yet other identifiable compounds before a watery elimination. For our discussion we will address the parts of urine referred to here as "organic wastes"; those portions of urine that decay.

The process of decay results in bacteria consuming the waste while converting it into gases. It is nature's way of getting rid of it. Organic wastes are a natural source of food for bacteria. Feeding on the wastes the bacteria produce obnoxious vapors, releasing primarily ammonia sulfur and methane gases in various combinations which we perceive as a bad odor. Put yet another way, what our noses discern as an obnoxious odor is in reality bacteria excrement.

Ammonia is the principle gas produced from urine decay. Chemically alkaline, the increasing presence of ammonia causes the pH to rise steadily, which in turn inhibits bacterial growth and the natural process of decay. While preferring a balanced, neutral pH, bacterial growth slowly continues nevertheless, gradually producing ever more inhibiting ammonia and other malodorous gases. In this loop, it can take Mother Nature several years to remove the odor's source. Simply stated, when it comes to urine, naturally occurring bacteria eat very slowly, but other than that have no table manners at all!

ENZYMES AND BACTERIA

Enzymes are very specific in that some break down only fat, while others carbohydrates, proteins, etc. Some 10,000 specific types have so far been isolated and cultivated: more are discovered almost daily. While an enzyme is a non-living molecule, a live bacterium cell can do nothing with its food supply unless first prepared by enzymes for bacterial consumption. In other words, enzymes alone cannot remove the wastes without the help of living bacteria, while the bacteria in turn need help from the enzymes. In this natural process, both enzymes and bacteria are required and have to work together in order to remove the wastes.

"Enzyme" is a common description referring also to the more costly products containing cultured bacteria spores in addition to enzymes. The thought of "Bacteria" is frightening to many people, therefore the word "Enzyme" is normally favored over the more descriptive term, "bacterial/enzyme". Some products sold contain only free enzymes intended to assist the bacteria already present, while others have only bacterial spores. Any of these products are commonly, and perhaps more politely, referred to as "enzymes" The bacteria growing in your urine contaminated carpet can be pathogenic or not. That is, any of several species can be present and multiplying, some of which may bear disease. All sorts of bacteria and bacterial spores (eggs) are present in nature and in our bodies. Most are friendly toward us while others are not. For example, our eyes would be glued shut with dried mucous were it not for some friendly microbes. Our digestive system could not work without them. Bacteria help make bread, cheese, yogurt and a host of other foods. There are many safe uses and our bodies need them. For the most part, bacteria as a whole have gotten a bum rap since we could not live for very long without them.

Bacteria are a multitude of microscopic simple, single-cell life forms called, singularly, bacterium. Bacteria grow when a bacterium matures, dividing into two identical "sister" cells. Growing in "colonies", countless numbers of bacteria are required to remove any amount of organic wastes. They must multiply continuously and extremely vast numbers are essential.

To give you some idea, magnification 30,000 times is required to view a single bacterium. "Tiny" is non-descriptive. In this microscopic world an average puddle of urine is about the same size as the Atlantic Ocean for you and I. Put in this perspective, how many of us do you think it would take to swallow the Atlantic Ocean (and vaporize the results)? Try to estimate the number of people it would require! On the upside, a bacterium can mature and divide very quickly, and Bacterial activity produces needed enzymes in the process.

SEWER BACTERIA

Bacteria approved for your purposes, the Bacillus Subtilis, is essentially a sewer bacterium. It was selected because it only feeds on decay and is considered "non-opportunistic" - "Friendly", if you will. All bacterial/enzyme products licensed for restoration work contain strains of this sub-species. Safe but very sensitive and vulnerable, **Bacillus Subtilis** cultures grow well only under ideal conditions. **Moreover, the bacteria have high moisture requirements and will not survive unless submerged in a flooded environment - a very definite drawback for any application outside a sewer or the laboratory.**

MISTERMAX PRODUCTS ARE THE BEST THERE IS

MisterMax Quality Product treatments dramatically speed the natural process of organic waste removal for technical reasons too numerous and complex for discussion here, but its most central and unique characteristic should be mentioned; the **MisterMax Quality Products** bacillus.

Cultivated and grown specifically for our products, **MisterMax Quality Products** are unique in that its cell wall is surrounded with a 'slime layer' or coating. This protective coat allows the bacteria to survive and multiply, even after the treated areas become dry (relative to the air). In addition, the coat thermally protects the microbe in a range of (minus) -10 degrees to about 240 degrees F. Sluggish at cooler temperatures, it survives a premature death in order to complete the job when it warms. The coating helps protect the cell from previously applied disinfectants, or medicinal antibiotics that may have been released with the urine. These and other harsh conditions as found in carpeting are certain death for any unprotected Bacillus Subtilis.

The recommended shelf-life is two years, although we have had occasion to use **MisterMax Quality Products** about three years old with no apparent loss of potency.

While protected from extreme conditions, **MisterMax Quality Products** are ideally suited to wetness, warm room temperatures and a good deposit of urine, but its advanced, high-tech microbes survive and multiply under conditions where others cannot: It lives through wide ranging temperatures, dryness, even residual antibiotics or previously applied disinfectants as well as other inhibitors. These features are unique to the **MisterMax Quality Products** bacterium.

Activated by its food source, voracious, **MisterMax Quality Products** bacteria double in number within minutes, exponentially doubling again then again and again , each and every half-hour, completely taking over the worst stale urine deposit within just a few days. Among its other features this unique bacteria converts the wastes directly into carbon dioxide, a safe, odorless gas found in everyday clean air.

Other important **MisterMax Quality Product** additives, its nutrients, selective free enzymes, stabilizers and other components are designed to promote and enhance bacterial activity. Your initial treatment may produce increased odors when contamination is severe and full of naturally occurring bacteria. Our Dominant, rapidly multiplying **MisterMax Quality Products** bacteria increasingly produce odorless carbon dioxide rather than obnoxious odors. After two to five days the foul odor will diminish rapidly and its work for you will soon be complete. Its food source gone, the **MisterMax Quality Products** bacteria retires, vanishing without a trace.

MisterMax Quality Products are principally used to eradicate urine. Urine contamination is a common and stubborn problem that cannot be resolved with conventional cleaning methods. Pet urination can result in significant damage. Contaminants, combined with relentless bacterial activity, tend to decompose any material. Over a period of time your fabrics will become irreversibly stained and other materials permanently damaged. In the most severe cases a structure may become contaminated, as well - even inside the walls.

In the event your damaged carpet and pad are replaced with new, it is probable the hard floor beneath is seriously affected. **MisterMax Quality Products** can solve this problem, too. The floor should be treated before carpeting is replaced. It is always a good idea to inspect the walls for contamination, especially in the case of cats.

The best solution to your odor problem is to have friendly microbes quickly eat the source of odor out of there for you. The sooner you can get **MisterMax Quality Products** on the job, the better. Odor cannot emanate from a source that is gone, and other less friendly bacteria cannot grow without its food.

More good news: **MisterMax Quality Products** effectiveness is not limited to urine. In fact, any type of organic substance in a state of decay will do these special little guys just fine. Try it! **MisterMax Quality Products** love any and all that icky stuff!

INJECTING FOR URINE CONTAMINATION

What you should know

Why Inject?

Urine penetrates deeply into absorbent materials. As it dries, the water evaporates leaving behind an aggregate of organic and other components that soon crystallizes forming a multitude of "salts." In effect, the dried salts form a barrier to any liquid you may later try to introduce. Unless you are able to gain access to contaminated fabrics from both sides; the most positive, effective way to treat dried urine is by injecting directly into the contaminants with a high-quality bacterial/enzyme digester.

"Flooding" the area from the top is easier but is a poor alternative to injecting for the following reasons:

The salt "plug" resists penetration from the top and most of your bio-chemical will tend to seek the course of least resistance, soaking into areas previously devoid of urine. Unless there is adequate penetration of the plug, the effectiveness of your treatment will be diminished.

To treat by flooding wastes costly biological products unnecessarily, and spreads a dilution of urine into an ever wider area, contaminating that as well.

In carpeting, permanent staining is more likely to occur when over-wetting the area. More of the urochrome, a natural dye found in urine, can flush to the surface and deposit on your face yarns

Understanding Carpet Construction:

The vast majority of carpet is "tufted" with the face yarns woven in a "backing." The backing consists of two layers, the primary from which the face yarns, or pile protrudes, and a secondary layer that provides overall additional stability. A latex-type glue binds these layers together to form the carpet backing

This type of carpet usually has foam padding installed underneath to lend more comfort and give it that cushy feel. The pad is highly absorbent. Together, the carpet, pad, the tackless strips that hold it in place, and even glues or staples when used in the installation, are correctly referred to as, "Carpeting."

Discussion:

Hot urine, having soaked through the carpet backing, quickly saturates the pad, spreads in a widening circle and penetrates through to the hard floor beneath where, given enough volume, it spreads even farther. A mere 1/2 cup in volume, say, the hot urine deposited from a 40 Lb. dog, goes clear to the hard floor where it spreads into a circular area nearly a foot in diameter. Additional "accidents" in the same spot spreads the urine farther yet. The absorbency of the pad soaks up excess liquid depositing more to the carpet backside contaminating the secondary backing everywhere it touches.

Recurring urination in the same area can cause extreme problems, even with smaller animals and particularly in the case of cats. Cats prefer "going" near walls or in corners (they feel less vulnerable during elimination). Whenever we find cat urine having spread a foot or better away from walls, we can assume that it has pushed through the tackless strips and penetrated under the wall. Unabated, this condition continues spreading, wicking the contaminants up inside the wall affecting everything in it.

We have had to remove the outer layer of a wall six feet up in order to gain access to the urine inside due to wicking action from the floor level. In another instance, not only had cat urine permeated the walls, the condition was discovered only when urine dripped into a common garage area beneath the structure.

These unfortunate conditions and hundreds more have been treated successfully using our products and specially developed techniques, and with permanent results. Treatment of carpeting is relatively easy with some effort and a little patience. Follow our instructions and remember; this first rule of deodorization:

"Remove The Source Of Odor." Our digesters, coupled with these tested methods, do just that.

Detailed instructions follow on the next page.

TREATMENT INSTRUCTIONS

CAUTION You must use great care when handling a sharp needle! You can easily puncture your flesh! These needles are normally packed in sterile condition-of course, once used in stale urine decay, a severe infection could result. In the event you do jab yourself it is recommended you visit a doctor immediately and receive a tetanus shot! Disassemble when not in use. **Store away from children.**

Locating Urine:

Unless you know the locations and the extent of contamination, it is unlikely you will be able to treat your odor problem effectively. Once located, and properly marked off, you are half way there.

The four basic tools used for urine detection are listed in the order of their effectiveness:

Your nose (sniffing can pinpoint contaminants in an instant)

EUS (a sharp tipped, Electronic Urine Sensing device that squeals when encountering urine)

UV light (ultraviolet, or black light, that fluoresces the minerals contained in urine)

Your eyes (urine on carpeting is not always apparent in full-spectrum daylight)

Injecting Carpeting:

Determine the extent of contamination under the carpet and mark the area off with masking tape. These areas are nearly always circular in shape, but the size of the areas will vary considerably, sometimes with puddles overlapping one another.

You should have a spray bottle of our enzymatic digester ready, a larger container of the same, and a shallow bowl in which to pour. Drawing the liquid from the bowl is the easiest method of filling the injector.

Assemble your injector and draw the digester through the needle into the syringe. Starting about four inches inside your markings, pierce the carpet backing with the needle and lift the tufts slightly with your other hand. Slide the needle in horizontally between the secondary backing and the top of the pad. Push one ounce, or 30 cc's, into the void. Repeat the procedure each four to six inches, grid fashion, throughout the contaminated areas until satisfied that you have adequately covered it all. You can expect that one ounce will cover four to six inches in diameter depending on the density of the fabric and thickness of the pad. Generally, you will have to refill your injector many times.

Using your spray bottle, cover the face yarns well and walk around on the entire treatment with your full weight in order to spread and squeeze in the good stuff. When white foam from the digester appears up through the carpet backing beneath your feet, you will know that you have achieved good penetration.

EVAPORATION:

This process occurs continuously as urine crystals are digested. During evaporation moisture has to move to the air in order to vaporize, thereby, wicking some undigested urine to the surface, as well. While it does continue working for you, the dry air slows the enzymatic process. Leave your masking tape in place so that you do not get lost later, as you will need to retreat the face yarns several times over the course of a week or two so that all of the urine disappears uniformly. Once treated underneath, you will not have to retreat by injection. Initially, increased odors could occur; this condition should dissipate within five days

When you are satisfied that the urine is gone, remove your masking tape markings. Under normal circumstances and unless the carpet is otherwise soiled or stained, further cleaning is rarely necessary.

Stains

Pet Stains, Specifically Urine Affected Fabrics: We are frequently asked about "stains". We know to many of us, those less familiar with professional terminology and theories of cleaning, that any variation of a fabric perceived, a "soiled spot," is commonly considered a stain. While soiling can more easily be removed, true staining implies a permanent condition due to a change in the structure of the dyes, a bleaching, or the addition of a dye

We can guarantee that our unique cleaning products will remove the odor of urine, indeed, remove the source of the odor, however, the potential condition technically known as staining is somewhat more complex; and therefore, totally satisfactory results may not always be achieved with a single procedure

Dried Urine always attacks dyes, though not necessarily visible in full spectrum, everyday light. Stains that are visible may require special techniques and the assistance of a qualified professional with spot-dyeing expertise. Following the process of bacterial/enzymes treatments, some staining may remain. Before hiring a dye specialist, there are a couple of additional steps you may consider.

Urine is composed of dissimilar elements, some of which do not decay. For example, the traces of hard minerals locked in with the urine are non-organic and do not decay; as a consequence our bacterial/enzymes do not feed upon them. Medications and biologically modified color additives in pet food are found in urine, as well. Notwithstanding dyes taken into the fibers, most of the residual inorganic elements will clean out later, once these organic components are digested by our product. As a rule, unless the stickiness of urine affected areas have attracted common soiling, the residual elements are not normally discernible once the microbes have completed the task of eliminating that which decays. When necessary, to remove what may remain of non-organic residue and other soiling, a vigorous cleaning with hot water extraction equipment is the method we recommend

Another condition occurs when untreated urine affects the resin coating of "stain-resist" carpeting. This happens as dried urine becomes increasingly alkaline, reversing the polarity of the ionic charge that binds the resin to the fiber. When so loosened, stain-resist resins deposited topically on the fibers appear as a yellowish/beige color to blemish the face yarn. The good news is that this condition can be reversed!

Resin-based stain can be corrected with an application of a citric acid solution once decay has been enzymatically removed. The acidic environment induces an anionic charge, thus resetting the resin into the fibers. Voila! The color disappears! This fabric-safe technique also works well on wool carpeting that is not necessarily stain-resist treated. **This simple procedure frequently works wonders**

The presence of urochrome complicates staining. A natural yellow dye, urochrome is found in all urine in varying degrees. More often than not, the dye taken into the fibers is slight and cannot be detected among the native dyes of your fabric: white fabric tends to show it more; and other variables include the relative dye-ability of the fibers. Urochrome staining worsens with recurring urination in the same area, as the quantity of the dye increases with each subsequent episode of contamination. In such cases of extreme discoloration, the unwanted color will have to be stripped out first for satisfactory spot-dyeing results

Color and shade considered, lighter urochrome stains can sometimes be blended to match native dyes without stripping, particularly when the urine has caused some bleaching of the fabric. A light application of colorfast blue may well do the trick since this is usually the primary color that urine strips out first

Whenever yellowing remains in yarn it should be treated with a solution of citric acid before attempting any other stain removal techniques. Application should follow completed enzymatic digestion of the contaminants. Both of these procedures can be performed with minor instruction, however: **working with bleaches and dyes to blend or match colors should be reserved to those qualified to do so.**

With this caveat, most soiling that is associated with urine in fabrics commonly, but erroneously, referred to as a "stain," will be removed along with the odors with proper use of MisterMax Bacterial/enzyme cleaning products. All factors considered, totally satisfactory results are the rule and are achieved regularly without the need for additional procedures whatsoever.

Oriental Rug Urine Decontamination

Hand made antiques are the most valuable of all area rugs. Originating in eastern cultures, these rugs, in a broad sense, are commonly known as "Orientals." Woven by hand with the assistance of crude looms, they were constructed primarily from dyed wool. Unlike modern colorfast dyes, those used in antiques tend to be unstable and bleed easily when wetted.

"Color bleed" is a condition whereby one color migrates into another. Lignin, a natural dye exuding from the fabric may further complicate matters. Since wetting is essential for adequate cleaning, these rugs are a special challenge for those professionals who care for them.

In addition to wool yarns, some of the binding materials used in the weaves include cotton, silk and linen. Dyes used were primarily vegetable based, but included other experimental and exotic dyes, as well. The key here is that all of the materials used came from "natural" sources; the fabrics, dyes, etc., everything used in its manufacture were derived from any source readily available to its creators at the time.

Natural fibers used in the spinning of yarns are complex, each type having unique characteristics. These fibers are porous, or absorbent. All grew with a lumen, or hollowness; a natural fiber is constructed like a tube that is hollow on the inside. While the complex surface and twist of the yarn tend to hide dry particulate soiling, staining is more likely to occur when liquid soiling is taken into the lumen, then dries.

Immersion cleaning of wools is recommended as natural fabrics require thorough soaking in order to adequately flush the accumulated soils. Oriental rug cleaning professionals commonly use a water bath with a lowered pH. Acids added to the bath tend to freeze unstable dyes thereby reducing the risk of color bleed.

High alkalinity as found in dried urine increases the risk of dyes bleeding: a high pH, or alkaline condition, can more easily bleed the colors of these acid set dyes into surrounding areas. Dried urine becomes increasingly alkaline over a period of time and can cause "color bleed."

The following procedures and products are recommended for the treatment of urine contaminated "oriental" rugs. The discussion presumes the urine has **thoroughly dried** *

- Contact a knowledgeable rug cleaning professional, one that has the proper facilities (immersion).
- Treat the contaminants with a low pH surfactant (pH range: 3 -5). Phosphoric or citric are the two most compatible acids for our live microbes, but clear, white vinegar (acetic acid) can be used.
- Treat the area(s) liberally with a MisterMax quality bacterial/enzyme digester on both sides. Walk on the areas with your full weight to squeeze it in for the best penetration.

Let dwell for 2-4 days.

- Soak in acid bath. Clean and rinse using normal procedures.
 - While the rug is still wet, lightly reapply MisterMax quality bacterial/enzymes. Let it air dry
- Following these procedures will leave your rug devoid of urine and smelling fresh once again.

VETERINARY BEHAVIOR CONSULTANTS
Patrick Melese D. V.M., M.A.
Common Behavior Problems in Cats



Cats have surpassed dogs as the most popular pet in America and have found a niche in the homes of people who lead busy lives in relatively small homes. In general they make great pets, but have their share of problem behaviors, which often can cause their owners great frustration. Many owners are unaware that help is available from medical professionals to deal with these problems. An example of a common behavior problem is house-soiling which includes urinating or, less commonly, defecating outside of the litter box, as well as spraying on walls and other vertical surfaces. The first step in any of these house-soiling problems is **to have your cat examined by your veterinarian** to be sure there is no medical cause (such as a urinary tract infection, intestinal parasites or other intestinal or metabolic disorders), which can predispose the cat to eliminate outside of its litterbox.

URINE SPRAYING is a normal territorial marking behavior, which is common for un-neutered male cats but is also seen in neutered males and females. Spraying in the house is usually associated with the cat's perceived need to assert its territory, and/or to react to a stressful environment. To curb this unwanted behavior, neutering is indicated if the cat is a sexually intact tom after which treatment usually includes identifying possible inciting causes (for example strays, neighbor or even resident cats which may be annoying the offending individual) which are eliminated to the best of the owner's ability. All urine odor sources must be neutralized with special odor eliminators, and the cat's daily activities are examined for any changes to alleviate possible stress on the cat. An anti-anxiety medication such as Vallium and Buspar are often used at least temporarily if stress is found to be an important factor in the case. Occasionally female hormonal treatments are indicated, but these drugs have many potentially dangerous side-effects which can limit their use. Various behavior modification principles can be used such as making the areas which are sprayed aversive to the offending cat using things such as aluminum foil, Snappy Trainers (a sort of modified safety mouse trap), and other booby trap devices. Even with these effective remedies, spraying can be difficult to completely control in some cats

URINATING AND DEFECATING OUTSIDE OF THE LITTER BOX (other than spraying) is all too common among cats who spend significant time inside. In these cases, the litter pan itself is always looked at as a suspect since too many people do not have sufficient boxes for their cats, do not pick out and change the litter suitably for their fastidious pets or have other factors about the litter box (location, cover, litter type, perfume, etc.) which their cat does not care for. Complete odor control in the inappropriate locations (see above) is always required and the cat's environment and daily life must be evaluated for additional stressors. Confinement to a small bathroom or utility room is often Characteristics mentioned above, and to establish a new behavior pattern of regular use of the box.

Additionally, a strict feeding schedule (e.g. twice per day) is adopted, allowing the owner to begin to predict elimination patterns so the cat can be supervised to reward appropriate use of the box and perhaps punish potential errors. **PUNISHMENT WHICH IS AFTER THE FACT BY EVEN A MINUTE OR TOO HARSH A REPRIMAND CAN ONLY MAKE THE PROBLEM WORSE!**

If immediate punishment must be used, startling noises, water streams and other more "remote" punishments are more likely to be effective since they are less directly associated with the owner. When the cat is finally allowed to begin supervised outings from confinement, the places where it used to inappropriately soil are made aversive as mentioned above and these things are very slowly faded away over weeks or months while the new habit of proper litter box use is well established. Supervision must continue until the owners feel sure the problem has resolved.

SCRATCHING furniture is another common cat problem, which is again a normal territorial marking behavior. Cats have scent glands both at the corners of their jaws as well as the pads of their feet. When a cat claws, it accomplishes at least 3 things: 1. Dead layers of claw, which continually build up are removed, 2. The cat also leaves both a visual as well as a scent mark of its presence in the territory, and 3. The cat expends pent up energy and relieves boredom. To control excessive scratching one must be sure the cat has people to play with, as well as many interesting and constantly changing toys. The cat must also be taught to use acceptable alternatives. Scratching posts come in many different styles but one must make or purchase them from the cat's point of view. It must be tall enough to get a good stretch on, have a substrate which allows a good run of the claws (sisal rope, burlap, tight weave carpet, many sofa fabrics all have been accepted by cats) and be placed in a central location where all the would be intruders would see your cat's mark. Teach the cat when you first adopt it to use the proper place by using catnip rubbed on the post(s), gently holding the paws up and using a scratching motion to have the cat "get" the idea and gently reprimand the cat for using the wrong areas using a water pistol, a can with a few pennies in it or other device not too related with your presence. You may need to provide a variety of acceptable things for your cat to scratch and even to continue to clip the claws short for a period of time. Seeking the aid of an authority on cat behavior problems will usually help if your cat resists and last resorts can include blunt claw covers carried by some veterinarians.

In addition to the problems addressed above, aggression towards cats, other animals or people, abnormal ingestion, self mutilation, vocalization and many other problems are regularly handled by those few veterinarians specially trained in applied animal behavior.

This handout is not a substitute for a professional behavioral consultation!

*(Dr. Melese is a local veterinarian and Director of **VETERINARY BEHAVIOR CONSULTANTS**, the San Diego based veterinary business, which advises veterinarians and pet owners about how to solve behavior problems in their pets. He also gives lectures to various groups including local veterinary associations, the students at The School of Veterinary Medicine at U.C. Davis, the Animal Health Technology Program at Mesa College, and various other private and public groups.)*

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HOUSEBREAKING TECHNIQUES

(VETERINARY BEHAVIOR CONSULTANTS Patrick Melese D. T!M., M.A.)

How to set up your puppy for Success

Dogs have the natural tendency not to eliminate (urinate and defecate) in what they perceive as their den area. When puppies are young their urinary and digestive systems do not allow them to "hold out" for long periods of time. Most puppies need to urinate every 45-60 minutes, a few minutes after waking up, eating, and about 20 minutes after drinking (what goes in usually must come out). Bowel movements tend to occur up to 5-6x per day as well as after waking in the morning, about 1/2 hour after meals and any time puppy gets excited or scared. After 3.5-4.5 months most puppies should be able to "make it through the night."

Our goal then is to teach the puppy to eliminate directly outdoors by asking to go out and not using any part of the house as a toilet area, but rather to regard the entire house as his or her den.

Establish a daily routine taking the above points into account. Be consistent in meal and exercise times realizing that puppies up to twelve weeks old need 3-4 meals per day. From 3 to about 6 months 2-3 meals per day should be sufficient. **DO NOT OVERFEED YOUR PUPPY AS THIS CAN CAUSE OBESITY THROUGHOUT LIFE IN SMALL BREEDS AND MUSCULOSKELETAL PROBLEMS IN LARGE BREEDS.** Ask your vet for feeding suggestions. I recommend allowing about 20 minutes for each meal; allow fresh water to be consumed only at this time if you are having trouble with your dog urinating in house (unless very hot then leave water out at all times). Use a premium quality puppy food and manufacture recommendations for feeding by weight of puppy (depends of calories per cup or. can of food). If you must err do so on the slightly under-feeding side.

Provide short periods of exercise (about 5 minutes) prior to each meal asking the puppy to do various training exercises. Spend at least 10 minutes calmly playing with puppy after meals practicing bite inhibition and handling exercises to get puppy used to handling. Look for any signs of wanting to go out; when these are seen, distract the puppy (clap, call it's name, toss a bean bag or can filled with pennies near pup, say no! etc.) then bring to outside location (or paper if you must paper train - I do not recommend it if you can avoid it since it makes teaching to go outside harder) and encourage to eliminate. Wait until the pup is finished and praise him/her and give small food reward.

Some Pointers which will help with housebreaking:

1. Select **only one outside toilet area** where you keep tasty food treats to immediately reward puppy when he or she uses that spot.
2. If puppy is being difficult to housebreak do not allow free access to the entire house. Use the leash to tie puppy close to you, which allows social contact without mistakes occurring out of your sight. You may need to consider "**crate training**" where you use the pup's den (a portable kennel works well) to confine the puppy when not supervised to assure it learns to hold it's urine and stool until taken to eliminate outside. Do not expect an unreasonable lengthy crate time without opportunity to go out (no more than 2-3 hours for a puppy under 3 months) or you may teach your puppy to eliminate in the crate - that would be unfortunate at best and could teach your puppy to go where it sleeps, making it nearly impossible to housebreak.
3. Anytime puppy gets **scared or excited** bring him/her out to toilet area immediately afterwards (sets off desire to eliminate as described above).
4. **Avoid leaving puppy isolated** outside or in room, garage, etc. Dogs are social creatures and need to be with their pack (you). Ignoring this need can lead to behavioral problems. Keep puppy in bedroom with you at night; you can use an exercise pen, dog travel container, tie to foot of bed, etc. if needed. Doing this can give many hours of social contact at minimum time cost to you.
5. **NEVER** punish dog by rubbing nose in own excrement, or other physical abuse; it is almost always ineffective and you are asking for aggressive dog problems. **NEVER** punish dog after the fact - remember they only understand **immediate** rewards and punishments! You will only destroy the close bond you are trying to develop during this critical period.
6. When mistakes are found after the fact, act indifferent (hold your temper), put your puppy away (do not let puppy see you cleaning up), clean up the mess and use an odor neutralizer (such as Anti-lcky-Poo [1-661 312-0283] or another product available through your vet) to prevent puppy thinking the spot smells like a toilet area!