

HOUSE SOILING

CORNELL VETERINARY MEDICINE

House soiling is the most common behavior problem reported by cat owners. The solution to your cat's problem will depend on the underlying causes of their behavior.

Why do cats eliminate outside the litter box?

Your cat may have litter box trouble for any number of reasons, including medical problems, an aversion to the litter box, or a preference for urinating or defecating in places outside the box.

MEDICAL PROBLEMS

Any medical condition that interferes with a cat's normal urination or defecation behavior can cause litter box problems. Inflammation of the urinary tract, for instance, can make urinating painful and increase the frequency and urgency of urination. These experiences can cause a cat to urinate or defecate outside the litter box, particularly if he associates the litter box with pain. Kidney and thyroid diseases as well as diabetes mellitus are also possible culprits in a failure to use the litter box, as they often lead a cat to drink more and urinate more frequently. Similarly, digestive tract problems may make it painful for a cat to defecate, increase the frequency or urgency, and decrease a cat's control over defecation. Finally, age-related diseases that interfere with a cat's mobility or with his cognitive functions can influence his ability to get to the litter box in time.

LITTER BOX AVERSIONS

An aversion to the litter box can also lead to house soiling. It could be the box, the litter, the location of the box, or all three that your cat finds unsavory.

A cat with an aversion to her litter box will usually eliminate on a variety of surfaces. You may find puddles of urine or feces on soft surfaces like carpets, beds, or clothing, or on hard surfaces like tile floors or bathtubs. Depending on how much your cat wants to avoid the litter box, he may continue to use it, but only inconsistently.

INAPPROPRIATE SITE PREFERENCES

Your cat may dislike something about your litter box, but it's also possible he or she just prefers eliminating in another spot. In this case, the cat may have a preference for a type of surface or for a location. Cats that prefer certain surfaces usually stick with that choice. For example, a cat that finds it pleasing to eliminate on soft surfaces like clothing or carpets would be unlikely to use tile floors. Cats that prefer an alternate location often have an aversion to the current litter box location.

As with aversions, cats that prefer certain surfaces or locations may continue to use the litter box inconsistently. One cause for house soiling may lead to another. For example, a cat with a urinary tract disorder that can't make it to the litter box in time will urinate wherever she is. She may then develop a preference for the new site and continue to eliminate there.

URINE SPRAYING

When your cat rubs against your leg with his face, or scratches his scratching post, he is also depositing his scent from the glands in his cheeks and paws. Another equally normal but less pleasant marking behavior is urine spraying - the deposition of small amounts of urine around a given area. By spraying small amounts of urine around an area, a cat announces his or her presence, establishes or maintains territorial boundaries, or advertises that he or she is ready to mate.

Cats usually spray on vertical surfaces, like the backs of chairs or walls. A spraying cat will stand, lift its tail and quiver, then spray small puddles of urine in several consistent locations (see Figure 1). Cats don't squat to spray, as they do to urinate. Cats that spray are usually unneutered males and, to a lesser extent, unspayed females, but 10% of neutered males and 5% of neutered females also spray. In households with more than seven cats, it's likely that one or more of the cats will spray.

Cats may spray when they perceive a threat to their territory, such as when a new cat enters the home or when outside cats are nearby. Alternatively, cats may spray out of frustration with their circumstances, including such conditions as restrictive diets or insufficient playtime (a reaction that owners often misperceive as revenge), or in response to the smell of new furniture and carpet.

WHAT YOU CAN DO TO STOP THE LITTER BOX PROBLEMS

First, address the problem promptly. The longer the behavior persists, the more likely it is to become a habit.

Second, if you have more than one cat, identify the culprit. You may need to separate them to find the responsible party. Alternatively, your veterinarian can provide you with a special non-toxic stain given by mouth that will show up in the urine. In cases of defecation outside the box, you can feed one cat small pieces (about twice the size of a sesame seed) of a brightly colored non-toxic child's crayon that will show up in the feces.

Third, if you find urine puddles in the house, you'll need to distinguish between spraying and other forms of house soiling. Watch your cat for signs of spraying or set up a video camera to keep an eye on the situation when you're not around.

Once you have identified the house-soiling cat, it is wise to take him to your veterinarian for a thorough physical examination and appropriate diagnostic tests to check for underlying medical problems. Cats with medical conditions may not always act sick.

IDENTIFY THE CAUSE

Once medical causes have been ruled out, your detective work begins. Here are some patterns that may point to a cause:

- Does she prefer a certain type of surface? If so, it may be possible to modify your litter to match it. If she likes soft surfaces like carpeting, buy a softer, finer litter, and put a carpet remnant in her box. If she has a penchant for smooth, shiny surfaces, consider putting tiles in her box, covered with only a small amount of litter. Over time more litter can be added.
- Is there a certain location she prefers? She may have developed a preference for a new area because something bothered her about the old area. Try placing a litter box in her "preferred" location. Once she reliably uses it, gradually move the box just a few inches a day back to the

desired location. Stop moving the box if she stops using it; instead, simply move it back to the spot where she last reliably used it, then gradually begin moving it again.

- If you have multiple pets, does another animal terrorize your cat while she's in the litter box or as she exits? This may make your cat afraid to use the box. If you currently use a covered box, replace it with one that gives her a 360-degree view. This will give her more confidence while she's in the box and make her less prone to ambush. Also, position the box so that she has more than one way out (i.e., don't have the box surrounded on three sides). Finally, place multiple boxes in multiple locations to give your cat more options.
- When your cat uses the box, does he cry, refuse to bury his waste, perch on the edge of the box without touching the litter, or eliminate right near the box? If so, first be sure the box is clean. Some cats refuse to use a box containing any urine or feces whatsoever.
- Your cat may dislike the litter you use, especially if you've recently and suddenly changed brands. If you must switch brands, do so gradually, adding small amounts of new litter to the old. Most cats prefer unscented litter.
- The box itself may be the offender. Larger cats need bigger boxes, and kittens and elderly cats need boxes with low sides. Although humans like covered boxes for reducing odor and stray litter, from your cat's point of view, covers hold odors in. You may need to purchase several types of boxes and several types of litter to determine which combination your cat likes best. Provide as many boxes as there are cats in the house, plus one. This decreases competition and gives each cat a box of his or her own.

WILL MEDICATIONS STOP MY CAT FROM HOUSE SOILING?

Anti-anxiety drugs are more likely to prevent spraying behavior than other types of house soiling. Whenever it is used, medication can only be part of the solution, and must be used in conjunction with environmental changes. Also, medication can have potentially damaging side effects, and not all cats are good candidates. Cats placed on medication for long periods must be monitored closely by a veterinarian.

WHAT CAN I USE TO CLEAN MY CAT-SOILED CARPET, COUCH, AND OTHER ITEMS?

Cats will re-soil and spray areas they have marked with their scent, so cleaning cat-soiled items is crucial for breaking the cycle of elimination. Cleaning is most effective when it's done soon after an item was soiled, and odors must be neutralized, not just deodorized, to escape a cat's keen sense of smell. Avoid cleaning products containing ammonia or vinegar as they smell like urine and can be irritating.

WHAT OTHER METHODS SHOULD I CONSIDER TO STOP LITTER BOX PROBLEMS?

- Sheets of plastic, newspaper, or sandpaper, electronic mats that deliver harmless, mild shocks, or a carpet runner with the nubs facing up can be used to discourage your cat from entering a soil-prone area.
- Try changing the significance of a soiled area. Cats prefer to eat and eliminate in separate areas, so try placing food bowls and treats in previously soiled areas. Playing with your cat in that space and leaving toys there may also be helpful.
- Try denying your cat access to a given area by closing doors, or by covering the area with furniture or plants. Baby gates will not keep a cat out of a room.
- Catch him in the act. A bell on a breakaway collar tells you his whereabouts. If you can catch him within the first seconds of his elimination routine, startle him with a water gun or shake a jar of pennies, so that he associates being startled with those actions. It is important that you startle rather than scare him; fear will only worsen the problem. Moreover, if you catch him after he's

eliminated, your window of opportunity is gone—you must catch him just as he's about to eliminate.

- Consulting with a veterinary behaviorist may provide important insight into the cause of inappropriate elimination and potential strategies to address this common problem.

HOW CAN I STOP MY CAT FROM SPRAYING?

Because spraying is different than other types of house soiling, different tactics are necessary to manage it.

- Consider spaying or neutering. If your cat is intact, consider having him or her neutered or spayed. Cats are often driven to spray by hormones, and neutering or spaying will reduce the influence of hormones on this behavior.
- Identify and remove stimuli. Identify stimuli that cause your cat to spray. If outside cats are responsible, motion detectors that trigger sprinklers can be used to deter them from coming onto your property. Additionally, you can discourage your cat from looking outside by closing blinds or shades, or by placing double-sided tape or electronic mats that deliver mild shocks onto your windowsills.
- Ease her frustrations. If you are introducing a new diet, for instance, do it gradually or discontinue it until the spraying is under control. If boredom may be a cause, increase your cat's playtime.
- Separate feuding cats. Spraying can result from territorial disputes between cats in the same household. They may need to be separated and reintroduced slowly, using food treats to reward and encourage peaceful behavior.
- Clean sprayed areas. Applying odor neutralizers anywhere your cat has sprayed may prevent him from spraying there again. Another useful commercial product is Feliway, a synthetic pheromone that, when applied to household surfaces, mimics the scent of cat cheek gland secretions. Many cats will not spray on areas that have this scent.

"HE'S DOING IT TO PUNISH ME!"

It's common for owners to think cats soil in inappropriate places as a way of taking revenge, but cats probably don't have the kind of sophisticated cognitive abilities that they would need to make these tit-for-tat calculations. What's more, although humans are disgusted by urine and feces, cats don't see them as unpleasant, so they would be unlikely to use waste products as weapons against their humans.

House soiling can be a frustrating problem, but you should never hit, kick, or scream at a cat. Punishments like these are not only ineffective, the anxiety they cause may actually worsen the house soiling problem. Similarly, rubbing a cat's face in its excrement is ineffective because cats are not disgusted by their urine and feces, and they cannot make the connection between the treatment and the mess, even moments after they've done it.

CONCLUSIONS

A common and frustrating problem, inappropriate elimination can be difficult to control. A full resolution depends on early intervention, followed by detective work to determine the cause of the behavior, and time and effort on your part to solve the problem. In partnership with veterinarians, both cats and the people who love them can live in harmony and good health.