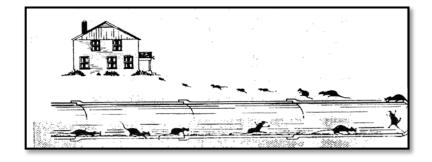


ALLEGHENY COUNTY HEALTH DEPARTMENT HOUSING AND COMMUNITY ENVIRONMENT PROGRAM 3190 Sassafras Way, Pittsburgh, PA 15201 - Phone: 412-350-4046



HOW RATS ENTER HOMES FROM SEWERS

Information on identifying and controlling a rat problem that may have started in the sewer system.



Some Basic Facts:

- The problem of rats in sewers is an almost universal one.
- Rats thrive in these subterranean passageways because the environment provides them with their most important requirements: shelter and food.
- The shelter of sewers is ideal for rats. Compared to above-ground areas, sewers are warmer in cold weather and cooler in hot weather. In addition, few humans or other animals are around to bother them and food is plentiful, especially with garbage disposal systems dumping bite-sized food into the sewer system.
- Rats are excellent swimmers as well. Except during floods, life in the sewer is no problem for them.

Rats Don't Stay in Sewers

If rats would stay underground, they would be of little menace to anyone except sewer workers performing maintenance. Many municipalities with a large rat population have found that rats are born and bred in the sewers.

In these labyrinths rats multiply so quickly, in fact, that they expand beyond the crowded conditions of the sewer and come above ground in search of food and shelter. Rats also leave the sewers during flash floods, sewer construction projects and other conditions where there is an interruption in the food supply. They seek shelter in private homes, garages and sheds.

Rats Easily Get to the Surface

Rats have no problem getting to the surface and finding their way into homes. They find breaks and separations in brick and terra cotta sewer pipes and tunnel to the surface. These breaks occur due to age, settling, wear & tear, tree roots breaking through, or during excavation. Rats can burrow up through as much as eight feet of solid ground (*Figure 1*).

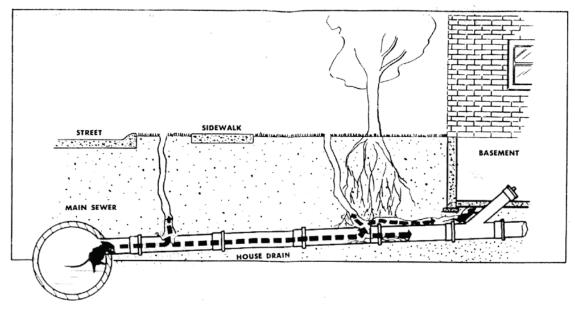


Figure 1: Rats leave the main sewer and access a home through a lateral line.

Once rats get to the surface, they find food under fruit trees, in gardens, flower beds, pet kennels and our homes. Once near the foundation, rats easily take advantage of dirt floors, holes in concrete floors and stone walls. They can crawl up the lateral house drain and enter the home through an uncovered basement floor drain, roof drains, sewer vents and even toilet bowls (*Figures 2, 3*).

Figure 2: Rats climb up the drain pipe and exit through the toilet bowl in the basement.

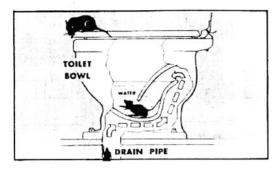
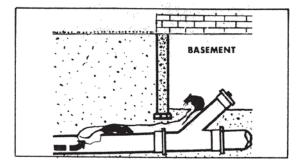


Figure 3: Rats find a break in the lateral line and burrow into the basement.



Control of Sewer Rats

Despite studying rats in sewers, little effort is used on a regular basis to control rats in sewers. Municipal governments only get involved when sewer lines are being replaced or when there is specific evidence of rat activity in a sewer like burrow holes directly above the intersection of a sewer main and a house drain (*Figure 1, see holes between the street and sidewalk*), rat holes around catch basins or sewer man holes, or actual evidence of rats entering basements via floor drains and fixtures. If rats are entering a home or property via the sewer system, a plumber can evaluate the condition of the house drain and lateral line with a sewer camera. Lines that are broken, obstructed by tree roots and subject to clogging and infestation by rats may need to be replaced between the house and the street. Repair and maintenance of the house line and control of rats in the house are the responsibility of the homeowner.

What Municipal Governments Can Do

One answer that has proved effective over the years is the use of pesticide bait mixtures molded into paraffin blocks. The blocks are mold and mildew resistant, convenient to handle, easily placed in the sewer, require no special containers and are large enough to reduce the cost of frequent inspections and replenishment. The anti-coagulant rodenticide that is used in the bait is safe to handle without polluting the water supply. Municipal government and municipal sewer authorities are the only agencies that are able to open and inspect a sewer system.

City and County municipal governments have the authority to maintain and treat sewers that are infested by rats. As long as treatment is limited to municipal property (a below-grade sewer system that is inaccessible to the public), a state pesticide applicator certification is not required. Training for municipal staff on the use of bait in sewers, along with an initial supply of bait to control the rats, are available from Allegheny County Health Department's Housing & Community Environment Program.

For more information on sewer rat control, call the Allegheny County Health Department's Housing & Community Environment Program at 412-350-4046.

Original Source: J. T. Eaton Co. 1972 1393 E. Highland Road, Twinsburg, OH 44087 800-321-3421, jteaton.com