

The Norway Rat in Downtown Los Angeles



Testing of Norway rats in downtown Los Angeles continues to provide evidence of viral and bacterial agents, enforcing the need for strict management practices.

Historically, rodents have been responsible for more human illnesses and deaths than any other group of mammals. They are found worldwide, and are associated with such diseases as plague, murine typhus, hantaviral diseases, rickettsialpox, rat-bite fever, leptospirosis, lymphocytic choriomeningitis, and listeriosis. Although consistent efforts by the Los Angeles County Department of Health Services significantly reduce the risk of many of these diseases, rodents and their fleas remain a continuing threat to the health and well-being of the residents of Los Angeles County. In particular, there is an on-going battle to control the Norway rats in the downtown area.

Rats in the environment cause enormous economic loss. They severely damage structures and other property by their behavior, and can cause fires by gnawing on the insulation of electrical wires. Rats in large metropolitan areas cause additional public health problems by attacking stored food. Although

they devour some, they contaminate and spoil much more with their urine and feces. Each year in the United States, thousands of people, mostly children, suffer infection, injury, and sometimes death due to rat bites.

A successful rodent management program should target rat populations within a specific area. Examples of populations are the rats within a city block, a particular alley, or those in a section of sewer. The elimination of rats at a single location or address does little to abate the collective problem. At any given time, each environment has a certain capacity to support a given number of rats. Permanent reduction or elimination of one or more of the vital factors of food, water, or harborage will result in a permanent reduction in the rodent population within the specified area.

Environmental sanitation is the best method of controlling rat populations. The elimination of all possible food sources will greatly reduce the number of rats. Refuse storage facilities should include enough containers to hold all garbage and rubbish that normally accumulates between collection days. Good refuse containers are heavy duty, water tight, and resistant to rat damage. They have tight fitting lids which can be locked to prevent pilferage.

Sanitation is the Key to Rodent Control!

- **Keep garbage bin lids closed and secure with locks if necessary.**
- **Keep sidewalks and alleys clean.**
- **Secure openings that permit rats to enter structures with durable metal or concrete, and destroy rat burrows.**
- **For proper clean up procedures or to report rats and conditions causing rats, contact the Vector Management Program at (626) 430-5450.**



A successful rodent control program requires active and consistent participation by all members of the business community.

Recognizing the signs of Norway rats is important in a management program. Rats are usually active in the evening and at night, but may be seen during the day, especially when infestations are heavy. One of the most common signs that indicates the presence of Norway rats is the accumulation of newly deposited fecal material (droppings). These droppings are approximately 1/2 to 3/4 inch in length and 3/16 inch in diameter. Fresh droppings are relatively moist, soft, and dark colored. Old droppings are dull and greyish, and crumble when stepped on.

Steps for Control

- **Use a recommended pesticide for flea control and follow all directions. Remember, it is the fleas that transmit plague and murine typhus.**
- **Repair structures and perform rat-proofing by recommended methods.**
- **Trap rats during and after structure repairs, but bait only after cleanup and sanitation to enhance bait acceptance.**



Rats habitually use the same runways between food, water, and harborage. Norway rats prefer continual body contact with at least one vertical surface, such as a wall near ground or floor level. Outdoors these runways are narrow pathways of beaten earth swept clear of debris. Indoors, urine and fecal encrusted runways are found along walls, steps, and occasionally rafters. Rub marks can also be observed along regularly traveled runways. These are dark, greasy smudges that form from the contact made by the rat's body.

The Norway rat prefers burrows for nesting and harborage. An active burrow is free of cobwebs and debris. Fresh rub marks on hard packed soil at the opening indicate a well established and presently used burrow. Property owners or managers should keep continual watch for the signs of freshly disturbed soil at the base of structural foundations, and along sidewalks and driveways. Burrows are seldom located far from a source of food and water.

Gnaw marks are another sign of rats. The incisor teeth of rats grow at a rate of 4 to 6 inches a year, so rodents must gnaw each day to keep their teeth at the proper length. Norway rats will gnaw through blacktop to burrow beneath foundations and alleyways. They also gnaw on wood to gain entrance into a structure. Fresh gnaw marks in wood are light colored and show distinct tooth marks. Small chips of wood or other material also indicate recent gnawing activity.

Routine inspection is recommended for storage and warehousing areas. Sweeping floors at frequent intervals removes rodent food and permits detection of fresh rodent signs. A white band six inches wide painted along the floor next to the wall speeds the discovery of the signs of recent rodent activity.

In a community-oriented rodent management program, trapping and baiting are successful only when used in conjunction with improvements in sanitation and other environmental factors. Their effects are temporary when used alone.

**A pest bulletin distributed by:
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