

Smelling a rat

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Peter Martin considers the health problems posed by rats

Urban legend has it that you're never more than 6 feet away from a rat. While research suggests that rats are not nearly so prevalent, they are regularly encountered – dead and alive – by building surveyors in the course of their work. As rats can carry a range of diseases, including the potentially fatal Weil's disease, it is important to take appropriate precautions when surveying.

In the UK the brown rat, *Rattus norvegicus*, is one of three commensal rodents; that is, creatures that are closely associated with human activities. Sewers, canals and rivers are prime brown rat habitats, but so too are run-down or derelict areas near readily accessible food sources, including takeaways and areas where rubbish has accumulated. Such is the rat's affinity with water that problems associated with them are compounded following flooding. They can – and do – live practically anywhere.

Infection

There can be few building surveyors who have never come across a rat at some stage in their career. All surveyors should be aware that exposure to rat urine or water that is contaminated with it can lead to Weil's disease, which is a serious form of [leptospirosis](#).

The bacterium that causes the infection can enter the body through cuts and scratches, and through the lining of the mouth, throat and eyes. Following initial flu-like symptoms, a severe headache, vomiting and muscle pain, Weil's disease can cause jaundice, meningitis and kidney failure. In severe cases, it can be fatal. Clearly the risks are highest where there is evidence of an ongoing rat infestation, but infection is still possible even where their presence has been eradicated.

Rats can also transmit other diseases to humans, which include [listeria](#), rat-bite fever, [salmonellosis](#), toxicaria and [toxoplasmosis](#).

Before conducting a survey, surveyors should follow the advice given in the RICS guidance note [Surveying Safely](#), 1st edition (see [Keeping it safe](#)) and carry out a pre-assessment of the hazards and risks that are likely to be encountered on site.

For instance, are there rats known to be present, or is the nature, condition or location of the building such that you might presume their presence? Are there toilet or washing facilities available on the site? Before you set out, make sure that any cuts or grazes are covered up with waterproof dressings. Having gloves and plasters with you is a good additional precaution.

During a survey, be particularly vigilant in areas such as basements and roof voids. Be aware

of the following signs that there may be rats present:

- electrical cables, rubber pipework or pipe insulation that have been chewed
- rat droppings, which have a characteristically spindle-like shape, are around 20mm long and are usually found in groups
- smudge marks along walls or hairs caught on low-level brickwork
- scratching or scurrying noises in the walls and above ceilings
- nests and piled nest materials.

Even in the absence of clear evidence, it does not necessarily mean that rats are not present.

If you cut yourself during a survey, you should immediately wash your skin with soap and running water before covering the cut with waterproof dressings. Avoid hand-to-mouth contact. Try to take your breaks away from the building, and always wash your hands before you have anything to eat or drink.

Attacks are rare

While rats rarely attack humans, you should never corner a live rat: it could jump at you and give you a vicious bite. Equally, do not touch a dead rat with unprotected hands. If you really need to move the rat, you must wear gloves.

After a survey, if you think you may have been in contact with rat urine and you begin to experience flu-like symptoms, you should seek medical attention as soon as possible. Do not wait until jaundice sets in because early treatment is essential to shorten the illness and reduce its severity.

The [Health and Safety Executive](#) leaflet [Leptospirosis: Are you at risk? INDG84\(rev1\)](#) includes a card to show your doctor. Under the [Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013](#), the Executive must be notified of any confirmed instance of Weil's disease.

Infections caused by rats are very rare, but it is wise to take the recommended precautions. Surveyors should also be aware of dangers to health from creatures including mice, birds, especially pigeons, bees, wasps and other insects such as lice, ticks and fleas, and biohazards including bird droppings (guano), birds' nests and anthrax, the latter of which can be present in very old haired plaster.

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Further information

- Related competencies include [Health and safety](#).
- This feature is taken from the RICS *Building surveying journal* (July/August 2016).