



The Society of
Food Hygiene
and Technology



Rodent Control

WHY DO WE NEED TO ELIMINATE RODENTS FROM FOOD PREMISES?

There is specific legislation concerning rodent pests in any premises. The Prevention of Damage by Pests Act 1949 insists that you keep your premises free of rodents or report the infestation if public health or property is threatened. For food businesses the requirement extends to vehicles.

The Food Safety Act 1990 and the Food Safety (General Food Hygiene) Regulations 1995 lay down requirements that 'food rooms' are kept as pest free as practicable. In fact The Food Safety Act 1990 protects the consumer from contaminated food from the farm to the shop shelf 'from crops to cling film'.

In food premises rodents are hazardous pests because any food exposed to their attack may become a risk to public health.

Rodent infestation presents five potential problems:

Damage - Rodents will eat or try almost every type of food stored. They also gnaw packaging, electric cables, pipes, thermal and electrical insulation within the fabric of the building so that the financial loss in terms of repairs and loss of value added food products can be substantial.

Contamination - Rodents contaminate far more than they consume, with urine, droppings and hairs. The average mouse sheds 80 droppings a day and urinates throughout its territory.



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Disease - Rodents carry and may transmit a number of diseases which can be harmful or fatal to man and domestic animals.

Reputation - Reported incidents of rodent contamination of food, often leading to prosecution, can irreparably harm the reputation and goodwill of the retailer, manufacturer or caterer responsible. Customers and orders may be lost forever.

Distress - Both the employees and customers can be greatly affected psychologically by the presence of rodents or finding evidence of their contamination in a product.

Rodents in food premises are unacceptable by law and to the consumer! Prosecution can lead to heavy fines and even closure of premises if there is an immediate health risk.

What rodents are we talking about and how do we prevent them being a pest?

The following recommendations on rodent control should be applied in conjunction with the advice given in Hygiene in Focus: Preventive Pest Control.

RODENTS

Traditionally there have been three rodent pests listed in the UK. The House Mouse (*Mus domesticus*), Common or Brown Rat (*Rattus norvegicus*) and the Black or Ship Rat (*Rattus rattus*). In reality the Ship Rat is now extremely rare in the UK, only being found occasionally in imported goods, on ships or aircraft, although there have been reports of suspected colonies around ports.

In practice it is the House Mouse and the Common Rat which pose the hazards to food premises in the UK. These are the two species which we must exclude from any contact with food for human consumption.



Prevention of Rodent Infestation

PROOFING

This means the sealing up of holes and cracks to prevent the entry of rodents from outside and against rodents, too many to cover fully, (see Hygiene in Focus: Preventive Pest Control) but some of the most used and effective are bristle strip on the base of doors, stainless steel wool forced around pipes and expanded metal mesh over louvres or air bricks. It is worth remembering that a juvenile half grown rat can flatten itself down to creep under a gap the thickness of a fountain pen. A newly weaned mouse can pass through a crack no more than 1 cm wide.

HOUSEKEEPING, STACKING AND MAINTENANCE

Rodents need food and water, although mice can live on certain foods for up to six months without drinking.

Ensure that waste food, spillages and pools of water are cleaned up regularly and the food waste removed to lidded, rodent proof bins or containers. Check your waste disposal system to make sure the frequency of the removal is adequate and the containers do not overflow.

Stack raw materials away from finished goods, rodents do come in with raw materials or packaging. Stack goods about 45 cm from the wall. Rodents like to hide in dark places against walls, so this space behind stacks denies them this area and allows for inspection and baiting.

Maintain the building services in sound condition, especially drains and manhole covers, as rats favour living in the drainage system and popping up



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through a broken cover or rodding eye inside the premises to feed. Avoid roof voids if possible, if not possible however, construct access points for inspection and baiting where necessary. Eliminate dead spaces under machinery, conveyor belts and lift shafts.

RODENT MONITORING AND ERADICATION

Even if all the preceding measures are carried out to the full, it is still very likely that food premises will be vulnerable to infestations of rodents, perhaps brought in with raw materials. Early inspection and monitoring of these, plus rapid implementation of control measures by specialists is necessary.

Inspection - A thorough inspection at regular intervals, looking for signs of rodents is absolutely necessary. Signs such as droppings, trails in dust, body smears, holes, damage to goods, sightings of live rodents and smell are what the professional pest controller will be observing.

Baits - The most usual method for helping to both monitor rodents and control them. The baits are food based, palatable to the rodents and normally have a toxic ingredient which will kill the rodent. This can be 'acute' which requires only one feed or 'chronic' which requires a number of cumulative feeds. The cumulative baits are the most frequently used as the rodent continues to eat not realising the food is toxic. Some have a "*delayed action effect*" after only one feed. All toxic ingredients and formulations have to be approved by the Health & Safety Executive for use against rodents indoors or outdoors. To ensure that the public and non target animals are protected, most baits are placed in tamper resistant containers which can only be opened by authorised personnel using a key. The exact number of rodent baits should be recorded on a list and shown on a line plan of the premises. They should be checked regularly and at least as frequently as once every six weeks.



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Contact Rodenticides - These are similar toxic materials but in a dust or gel form which are placed carefully into known rodent harbourages. They work when the rodents groom themselves and ingest or inhale them. Great care must be taken with these preparations to avoid contamination of other areas.

Fumigation - Phosphine gas released from solid tablets is used against rats in outdoor burrows when deemed safe. Ships and aircraft holds may also be gassed to rid them of rats or mice.

Trapping - Break-back traps and sticky boards are a last resort to catch the odd rogue rodent surviving previous treatments. They may have to be used where other methods are unacceptable. Live traps were only used for academic or monitoring purposes, although a sophisticated infra red alarm and trapping system can protect complex premises. Now, with the shift to environmentally friendly control/eradication measures, they are now being seen as an alternative to noxious baits.

Effective rodent control depends upon the following criteria being observed:
A thorough survey of the premises.

Assessing the extent of the infestation when it exists, and risk assessment of possible consequences.

Selecting the appropriate method – trapping or chemical, and if the latter rodenticides and formulations. Also proofing may be the solution

Trapping, baiting effectively and correctly and applying any other formulations which may aid the programme (e.g. contact dust).

Use enough bait and baiting points - too little will not be effective.



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Ensure follow up visits take place at regular intervals after the initial treatment to ensure control is maintained.

Be flexible and adapt techniques to encourage rodents to feed on the bait.

Ensure the premises have been effectively proofed against reinfestation and that practices such as quarantining raw materials, good housekeeping and waste disposal are in place.

Rodent control, indeed eradication, may be considered easy or even a humorous pastime. It is not! It is a serious technical business, exploiting the rodents' behaviour in order to attain optimum control, which means eradication of rodents from your food premises and a system to ensure that they stay eradicated.

It is best to seek and use professional pest control advice and services when dealing with rodents, such as those offered by companies who are members of the British Pest Control Association. Remember the idea is to prevent rodents even gaining entry to your premises but, if they do, rapid, effective control is essential.

A good rodent control programme is necessary in any food premises for it will give you the security and peace of mind to concentrate on your job, selling, producing or serving safe, top quality food.