



TIP SHEET 21

PEST PREVENTION

Pests carry disease, and exposure of food or food contact surfaces to vermin including birds, rodents, and insects, creates the risk of food contamination and the spread of infectious diseases.

The Food and Agriculture Organization (FAO) of the United Nations defines Integrated Pest Management (IPM) as "the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment."

In other words, a range of integrated measures are required to minimize pest populations, including mechanical preventions (e.g., sealed doors and windows, air curtains, etc.), mechanical controls (e.g., baits, traps, etc.), waste minimization, and appropriate and controlled use of pesticides.

Most countries have regulations incorporated into their food safety legislation concerning pest management. Although not exhaustive, the pest management regulations place the onus on the food business to ". . . take all practicable measures to prevent pests entering the food premises; and to eradicate and prevent the harborage of pests on the food premises and those parts of vehicles that are used to transport food."

LEARNING OBJECTIVES	APPLICABLE CODE ELEMENTS
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- IDENTIFY THE RISKS POSED BY PESTS IN A FOOD MANUFACTURING FACILITY
- DETERMINE THE MECHANICAL PREVENTIONS, MECHANICAL CONTROLS, AND CHEMICAL AND BIOLOGICAL CONTROLS NECESSARY TO ELIMINATE THE RISK OF PEST CONTAMINATION
- DEVELOP AN EFFECTIVE PEST PREVENTION PROGRAM

- 11.2.7
- 11.2.12



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KEY TERMS

○ CODEX ALIMENTARIUS COMMISSION

The internationally recognized entity whose purpose is to guide and promote the elaboration and establishment of definitions, standards and requirements for foods, and to assist in their harmonization and, in doing so, to facilitate international trade. The Commission Secretariat comprises staff from the Food and Agriculture Organization and the World Health Organization. The Codex Alimentarius Commission adopted the principles of the Hazard Analysis and Critical Control Point (HACCP) system in 1997.

○ PESTS

Vermin, including birds, rodents, insects, or other unwanted species that can carry disease and pose a risk to packaging, feed or food.

PROCESS STEPS

A fully maintained pest prevention program is essential to the safe function of any food manufacturing operation. The pest prevention program must:

1. Identify the pests that are likely to be present in your vicinity and at different times of year;
2. Ensure all external windows, ventilation openings, doors and other openings are effectively sealed when closed and proofed against pests. This applies to all parts of the facility including raw material, product and machinery storage areas.
3. Maintain an effective waste management program that removes waste regularly from the food production area into a designated waste handling area, and the waste area is kept tidy and waste holding is minimized. Waste containers must be covered at all times.
4. Ensure all staff are aware of the contamination risk caused by pests,
5. Ensure all staff is familiar with regulations concerning pest management and the storage, application and handling of pest control chemicals.
6. Ensure that pest control operators (whether employed or external) are appropriately trained and authorized. Maintain licenses and credentials of the pest control operator(s);
7. Detail the proactive methods used to prevent pest problems, including mechanical preventions, baits, traps, and chemical applications as appropriate.
8. Outline the frequency with which pest status is to be checked; identify the location of bait stations, traps and chemical sites for ease of checking.
9. Don't just depend on the pest controllers. Record sightings and frequency of pest activity to identify the target pest (s) for each pesticide application.
10. List the chemicals used; and ensure chemicals used are approved by the relevant authority and that SDS are accessible; and
11. Outline the methods used for disposal when pests are found.



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The location of internal and external pest control devices must be completed based on the risk to the site, employees, and the product. Factors that can affect this include product type, processing type, location of site, surrounding environment, types of facilities, external storage of equipment (such as equipment graveyards), neighboring facilities and land use. The site and surrounding areas must be kept free of waste, redundant equipment and associated debris to minimize harborage for vermin.

Pest control devices should be located at all product storage, material and packaging storage facilities in addition to the main processing facilities. Inspections for pest activity must take place on a regular basis, the results recorded and the actions taken if pests are present. This can be incorporated into the operation's internal audit program.

Examples of records of pest control applications include service reports, pesticide usage logs, pest sighting logs, corrective action reports and trending of activity by the service provider.

In addition to the pests most commonly seen in food product manufacturing facilities (i.e., flies, mice, rats, roaches, etc.), pest management procedures need to also consider and control domestic and feral animals and birds where applicable.

Any products that have been found to be contaminated by pests shall be disposed of according to the site's policy. All activity is to be documented with the records clearly identifying the results of the disposal, investigation and outcomes and resolution.

Personnel handling pest control chemicals must be trained and authorized to do so. Where external pest management contractors are used, they must be licensed by the relevant local authority and use only approved pest control chemicals. Chemicals must be stored appropriately and separate from any food materials or products (refer to SQF Fundamentals, element 11.6.4.1), and used chemical containers disposed of correctly.

RELEVANT RESOURCES

- Recommended International Code of Practice, General Principles of Food Hygiene, CAC/RCP 1-1969, Rev. 4-2003, Codex Alimentarius Commission (WHO, FAO)
www.fao.org/docrep/005/y1579e/y1579e02.htm
- Standard 3.2.3 Food premises and equipment, Food Standards Australia and New Zealand (FSANZ)
<https://www.foodstandards.gov.au/publications>