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Introduction

This Handbook has been created to:

- Assist Food Service Business Operators achieve the best results in managing and preventing pests and complying to existing laws and requirements.
- To help Food Service Business Operators select a professional Pest Manager and ensure that the service outcomes meet their requirements.
- To offer tips and advice for Food Service Business Operators to self manage their pest management.
- To give guidance on products and devices and their effectiveness or suitability for a food service business.



Chapter 1

WHAT YOU NEED TO KNOW...

Essential information for all Food Businesses.

Why you need professional help with pest control.

Regulations

PEST CONTROL ESSENTIAL INFORMATION

- Local council and State Government regulations say that you must keep all food areas free from pests, vermin and contamination.
- Heavy fines and penalties up to \$100,000 apply if you don't adhere to regulations.
- Government can close down your business if you refuse to follow regulations.
- Legal action from customers who get sick as a result of pest infestation.
- You can be "named and shamed" by the Government.
- Reputation damage.
- Pests cost you money by eating and contaminating food, fixtures and fittings and making staff and customers sick.

Go to state government websites for regulations in your area.

WHY DO YOU NEED PROFESSIONAL HELP WITH PEST CONTROL?

SOME STATES REQUIRE THAT LICENCED PEST MANAGERS DO THE WORK.

- Professionals who are trained, experienced and have the right equipment won't damage your premises or endanger food or your staff.
- Professional Pest Managers will do the job correctly and safely and are trained not to contaminate your food preparation surfaces.
- Ensures Government and customer confidence that you take their health seriously.



Chapter 2

TYPES OF PESTS

What pests can we find in a food preparation business or in a shop or restaurant?

Basically, there are rodents (rats and mice), crawling insects (cockroaches, ants, weevils and other stored product beetles), and flying insects (house flies, blow flies, fermentation flies and stored product moths).

Rodents

RATS AND MICE

Rats and mice cause millions of dollars' worth of damage every year and can also spread serious diseases. Rodents have been responsible for the loss and contamination of food from the crop stage through to the storage of processed food in both domestic and commercial premises.

Rodents have been associated with the transmission of disease organisms, the most notable being the occurrence of Bubonic Plague in Europe, causing the loss of 25 million lives.

PEST STATUS

Rats and mice are a common problem in food businesses, consuming foodstuffs, damaging containers and contaminating surfaces with droppings and urine.

They can enter through gaps in roofs, walls and under doors. They can even come in on pallets of goods coming from suppliers who have a pest problem.

Once they are in, you must act to get rid of them promptly before they start to breed and take over the building. Fire can result from short circuiting caused by rodents gnawing electrical wiring.

Rodents are a threat to the health of your customers and staff and can cause severe damage to stock and to the building itself.

The three main species of rodents are:

- House mouse
- Roof rat
- Norway rat



At the first sign of rats or mice, you must act.

Crawling Insects

COCKROACHES

Cockroaches contaminate vast quantities of material each year and are potential carriers of disease. **As with rodents, their presence in businesses is not allowed.**

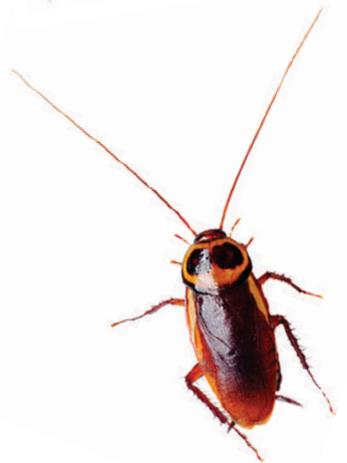
Any unprotected foodstuffs are susceptible to cockroach infestation and contamination. Cockroaches feed from sewers, drains and garbage areas which bring them in contact with disease organisms including salmonella and other organisms associated with dysentery, typhoid, hepatitis and tuberculosis.

It is generally accepted that for every cockroach seen there are at least a further ten that are hidden away out of sight in areas such as cracks and crevices, dishwashers, electrical motors and switches, ovens and almost any warm, moist areas where food is available.

Most food businesses will suffer from a cockroach infestation at some time. You must get rid of them. Your customers and the local health authorities insist upon it. If you don't, you could end up losing not only your reputation, but many thousands of dollars and even possibly your business itself.

The four main pest species are:

- German Cockroach
- Australian Cockroach
- American Cockroach
- Smoky Brown Cockroach



ANTS

Ants don't eat a lot of food, but they contaminate large quantities necessitating it to be discarded. They also scare your customers away.

The three main pest species are:

- Black house ant
- Coastal brown ant
- White footed house ant

Stored Product Pests

STORED PRODUCT PESTS

Stored Product Pests (SPP) are a very big group of mainly beetles and a few moths which are responsible for the contamination and destruction of millions of dollars' worth of foodstuffs every year. They eat foods which have been processed in some way or other so that they can be stored before being eaten, eg. flour, pasta, biscuits, chocolates, cheese, processed meats (salami etc), cereals, muesli, milk powder and dried fruit.

Stored Product Pest control is really a job best left to the experts.

Some of the major Stored Product Pests which you might find on your premises are:

- Saw-toothed Grain Beetle
- Rice Weevil
- Biscuit (or Drugstore) Beetle
- Indian Meal Moth



Flying Insects

FLIES

Flies are one of the most common carriers of disease in Australia.

Flies spread diseases such as typhoid, cholera, diarrhoea, amoebic dysentery, giardiasis and worms (pin and tape).

The three main pest species are:

- House fly
- Blowflies
- Fermentation fly



Chapter 3

INTEGRATED PEST MANAGEMENT

What is Integrated Pest Management?

An effective pest control program that covers areas such as:

- Building maintenance and exclusion practices
- Advice on good housekeeping practices
- Inspections and monitoring
- Physical control methods
- Chemical control methods
- Habitat/environment management

INTEGRATED PEST MANAGEMENT

THE 3 KEY ELEMENTS TO A SUCCESSFUL CONTROL PROGRAM ARE:

Exclusion

This is the most effective way to control the entry of pest insects and rodents into your premises. It may be costly in the first place but will provide long lasting protection and minimal upkeep in the future.

Restriction

This process refers to the methods used in creating unfavourable conditions for pests to harbour and breed. There are many ways in which you can do this including: sealing gaps between tiles; replacing broken tiles; removing all food and liquid wastes; not leaving dirty crockery and cutlery exposed overnight; placing foodstuffs in sealed containers overnight or inside a cool room and regular cleaning and sanitation of all surfaces.

Destruction

Destruction is just a simple term which means the same thing as “pest control” or “pest management” and refers to chemical and non-chemical methods that are commonly used to eradicate pests once they have moved into your building.

Chapter 5

PEST CONTROL PRACTICES

A number of devices/techniques are commonly seen in food handling premises. Some of these are not very effective for the purposes for which they are being used, and some are being completely misused.

This chapter explains some guidelines for their correct use.

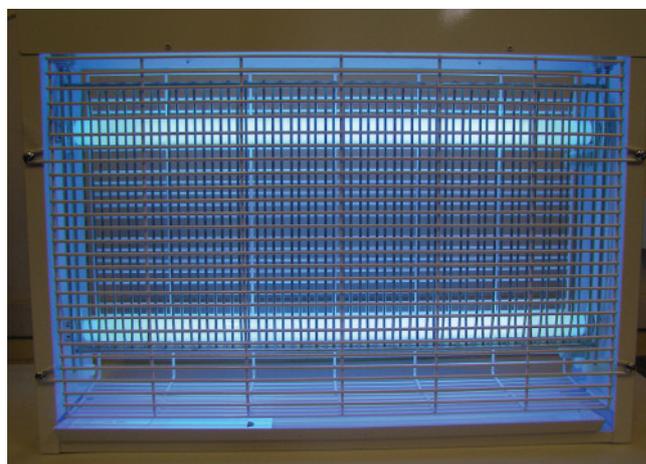
ELECTRONIC FLY KILLERS

These are commonly seen hanging in cafes, takeaway shops, restaurants and supermarkets and can be heard emitting a 'zap!' as a flying insect is attracted by the UV light and then electrocuted by the grid.

The only problem is that the dying fly spins around and scatters fragments of dead insects already in the tray. These fragments can land on foodstuffs or food handling surfaces transmitting bacteria.

Such units are not suitable for use within these areas and should be replaced with the glue board or catch pad variety.

Some food regulations stipulate the distance within which electronic fly killers can be used from foodstuffs, food packaging or preparation areas. Make sure that you know what regulations apply in your State or particular business.



TIME RELEASE AEROSOLS

These units comprise an aerosol fitted in a device which activates the aerosol on pre-determined intervals eg. every 15 minutes.

The aerosol usually contains pyrethrin or synthetic pyrethroid insecticides. These compounds are only effective against flying insects and are ineffective against cockroaches.

They are only effective in relatively small areas such as garbage rooms or store rooms.



COCKROACH “BOMBS”

These are total release aerosols which contain a residual insecticide plus an insect growth regulator to break the insect’s life cycle. They are also used for flea control.

These too are mainly effective against flying insects and will only kill insects which are exposed at the time of treatment.

If using these “bombs”, make sure that you **follow the label instructions closely**, as some explosions have taken place when sources of ignition (eg. pilot lights) have not been extinguished.



ELECTROMAGNETIC/ULTRASONIC DEVICES

These units are sold as a means of controlling rodents and insect pests but are of very dubious efficiency. They can be considered as totally ineffective against insects and of very limited value against rodents.

Electromagnetic forces generated have been shown to be of no value at all in repelling rodents and the ultrasonic signals do not penetrate surfaces as “sound shadows” are cast. A unit operating in one room will have no effect in any other room, in the roof void or sub-floor.

Rodents have been shown to become accustomed to the noise signals after time and have been seen chewing off the labels to use as nesting material and nesting behind units themselves.

It is also not unheard of to have German cockroaches take up residence inside the units! You are much better advised to spend the money on conventional pest control.



Chapter 6

HOW TO CHOOSE A PEST CONTROLLER

There are many, many pest controllers out there and they all claim to be able to provide first class service to their clients. So, how do you choose which pest controller will give you the best possible service?

THESE ARE SOME RELEVANT POINTS WHICH YOU MIGHT WISH TO CONSIDER BEFORE SIGNING A CONTRACT.

- Does the Technician actually have a Pest Control Licence or is he/she undergoing the relevant training? Some companies operate without obtaining licences for all of their Technicians and are in breach of the regulations.
- Does the company have a good reputation in the area? Ask to see testimonials from satisfied customers. If they don't have any, that could be a warning sign.
- Is there an easily understood contract? A licenced pest controller should provide you with a contract or scope of work outlining what pests and areas are to be treated and the required frequency of treatments.
- Is the company a member of AEPMA? If they are, it would indicate that they are serious about keeping up to date with all the latest developments in pest control.
- Is their paperwork suitable for your purposes? There are often different levels of contract and documentation available. Make sure that you are receiving the documentation required by the local authorities or auditors. After each visit you should receive a written report detailing any pest activity, pesticides used and what recommendations you need to adopt.
- Ask for a "Pest Sighting Register". This is a form which allows you to record pest activity which you sight on your premises.



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- Is there a map of the locations of all the rodent bait stations installed? A different technician who services your premises will need to know their locations. All bait stations should be tamper resistant, numbered and fixed in place.
 - Has the company supplied Material Safety Data Sheets? These are essential reference documents in case of spillages or poisoning.
 - Is the company insured? Does it have Public Liability and Professional Indemnity Insurance? Ask to see copies of their insurance documents.
 - Does the company have any technical backup? You might have a problem which can't be solved by the technician. It's good if you can call upon a more experienced person who has widespread experience in the field.
 - Do you have a contract which provides a "free service period" after any services? There is no such thing as a "guarantee" against re-infestation as nothing can stop insects or rodents returning to your premises. Make sure that the pest controller will return free of charge within the "free service period" to carry out the necessary work.
 - Do you have sufficient visits per annum to help ensure the pest free conditions are maintained? Some premises with high production eg. large bakeries, may have weekly visits. It is not possible to issue hard and fast rules about service intervals but with food businesses, monthly services are normal. Eight visits per annum should be considered the least frequent service desirable.



Chapter 7

MORE INFORMATION



The AEPMA website (www.aepma.com.au) has information on a range of pests.

It also has a link to *A Code of Practice for Pest Management in the Food Industry* which has a wealth of details on pests and pest control in the food industry.

REGULATIONS OVERVIEW

Australia New Zealand Food Standards Code – Standard 3.2.2 – Food Safety Practices and General Requirements:

Division 6 (Misc.) - Clause 24 – Animals and Pests

- (1) A food business must: -
- (b) Take all practicable measures to prevent pests entering the food premises; and
 - (c) Take all practicable measures to eradicate and prevent the harbourage of pests on the food premises and those parts of vehicles that are used to transport food.

Go to www.comlaw.gov.au for Standards 3.2.2 & 3.2.3 that are mandatory for all Australian food businesses.



PEST MANAGEMENT SERVICE REPORT



Client Name: _____ Date: _____ Job No: _____
 Technician: _____ Lic. No: _____ Time in: _____ am/pm

Service Type: Initial Routine Additional

Pests Treated/ Inspected	Activity		Treatment Level			Products		Qty/Vol	Batch ID#
	Y/N		P	L	M	H	Name		
Ants									
Cockroaches									
Rodents									
Spiders									
Other (specify)									

Areas Serviced: _____

Actions Taken: _____

Recommendations/Comments: _____

P = Pro active or seasonal treatment against future pest ingress. **L** = Strategic targeted treatment to reduce low level pest activity.
M = Targeted treatment to reduce medium level pest activity. **H** = High level broad spectrum treatment for heavy pest activity.

Client Signature: _____

Position: _____

Rodent Bait Station Monitoring									
No.	Inspected	Rebait	Activity	%	No.	Inspected	Rebait	Activity	%
1					26				
2					27				
3					28				
4					29				
5					30				
6					31				
7					32				
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ACKNOWLEDGEMENTS

We gratefully acknowledge the contribution and support of the following in this handbook:

Peter Lamond

Patrick Legey

David Gay

Meg Bond



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