

# HOTELS & RESORTS

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## **Introduction**

Hotels and resorts encompass a broad range of buildings and other structures which reflect many different functions. Hotels provide accommodation and often conference facilities ... resorts offer leisure and sports facilities.

In many cases some of these functions are combined, and in few cases a single complex offers facilities for accommodation, business, leisure, sports and entertainment. Indeed, most hotels provide more than just a place to eat and sleep. However, even where these functions are separate, there is one thing that hotels and resorts have in common. This is the fact that they all provide services to visitors who are "passing through". In providing these services, the objective is to produce a positive impression on the visitors so that they will be immediately pleased and hopefully return again or recommend the complex to friends and business colleagues.

In approaching pest management in these facilities, it is important to remember that all the other efforts aimed at producing a positive impression on a visitor can be wiped out by pests. For instance, a hotel guest who sees cockroaches in his bathtub or his soup is unlikely to return. A sunbather attacked by ants beside a swimming pool will be very

upset. It is therefore vital to deal with these pests which cause a visual nuisance or constitute a health threat to visitors. Pests of the structure and contents, such as termites and carpet beetles, though important, are less likely to adversely affect the revenue and reputation of the establishment than pests which affect the visitors themselves. The following pests are particularly important:

- Cockroaches.
- Ants, particularly biting or stinging species.
- Fleas.
- Spiders.
- Occasional invaders.

## **Factors Favouring Pests**

### **Factors Favouring Pest Entry**

- The constant influx of new visitors may result in pests being introduced with baggage.
- Materials shipped in for exhibitions may harbour pests.
- Food and other provisions purchased for restaurants, gift shops, etc. are a potential source of pests.
- Ornamental plantings provide pest harbourages close to doorways and make invasion more likely.
- Exterior lighting for the convenience of visitors, or for security, may attract flying insects.

- Employees from homes infested with cockroaches or other ‘transportable’ pests may introduce pests.
- Contract laundry services may be a means of introducing pests with linen.

#### **Factors Favouring Pest Survival**

- Warm buildings or warm climate.
- Food supplies in restaurants.
- Food and drink “leftovers” from room service.
- Water supplies in buildings, from dripping air conditioning units, and for watering grass, shrubs and trees in the grounds.
- Numerous harbourages in and around buildings.
- Exterior rubbish (e.g. food and drink packaging left by visitors).

#### **Factors Favouring Pest Dispersal**

- Conduits for water, electricity and heating or cooking systems allow lateral and vertical movement of pests between rooms in buildings.
- Lift shafts provide vertical access to each floor level.
- Corridors allow lateral movement in buildings.
- Outdoor furnishings carrying pests may be moved around.
- Grounds maintenance machinery can carry pests from one area to another.
- Linen from an infested laundry can carry pests throughout a building.

#### **Factors Making Pest Management Difficult**

- Some hotel rooms are occupied 24 hours a day.

- Some public areas, such as foyers are in use all day and night.
- Children may be present.
- Pets may be present.
- Some visitors/guests may be hypersensitive to pesticides.

#### **Planning a Pest Management Program**

In many cases, through tradition or ignorance, customers often pay for a low-cost, token pest control service which seldom achieves pest eradication. In some cases it is argued that the savings on pest control compensate for any revenue lost as a result of customer complaints about pests. However, while the immediate revenue losses may be small, in the long run the loss of reputation of these establishments can be very costly.

In other cases, the customers may simply be unaware that the technology exists to eradicate indoor pests and to minimize pest problems outdoors. Once they become aware of this technology they are often prepared to pay for it. There are even cases where hotel managers have found it very worthwhile paying 10 times more for a pest eradication service than for a service which never succeeds in solving pest problems. Therefore the best basis for selling service to this kind of establishment is on the basis of a superior program rather than the lower cost. Such a program will address not only the problems of the pests but also the sensitivities of the visitors and guests with regard to the methods used to deal with pests.

The details of the program will vary from place to place, depending on the type of establishment climatic factors, site factors (e.g. plantings, irrigation, soil type), construction materials and methods, maintenance standards, hygiene programs, pest history and management policies. For some resorts, the question of whether they are open all year or only seasonally is relevant.

The best programs involve the integrated use of appropriate control agent and non-control agent methods. Adelaide Pest Control has developed a range of insecticides which work extremely well in such programs and which help solve pest problems without adversely impacting visitors. Our Pest Management System for Hotels and Resorts consists of a programmed approach which contains the following elements.

1. Obtaining management co-operation.
2. Inspection of premises.
3. Developing recommendations for non-control agent measures.
4. Developing recommendations for control agent treatments.
5. Obtaining the co-operation of cleaning staff and other staff.
6. Implementation of initial treatments.
7. Implementation of follow-up treatments.
8. Monitoring the results.

### **1. Obtaining Management Co-operation**

Management co-operation is essential to ensure access to all locations (e.g. wine cellars,

machinery rooms, storage areas) and to open lines of communication with housekeeping and maintenance personnel, kitchen staff, ground staff, security people and others whose co-operation may be necessary. Without co-operation and commitment at the highest level, it is unlikely that people at lower levels will co-operate and make changes that may be necessary. Management cooperation can be encouraged by explaining the possible impact of pests and the need for the combined efforts of in-house personnel and pest management professionals.

### **2. Inspection of Premises**

An initial inspection of the whole establishment, inside and outside, must be conducted for the purposes of identifying the type and extent of pest problems and factors contributing to those problems. In view of the often complex nature of these establishments, and in order to start building working relationships with on-site staff, it is recommended that the inspection be conducted by the supervisory staff accompanied by all service technicians who may later be working independently on the site.

The findings of the inspection should be recorded to form a baseline for future comparisons of the pest situation and to help in operational planning. In addition to pest-related data, notes should be made of the names of key contacts in all relevant departments, times of opening restaurants, bars, tennis courts, swimming pools, etc., site cleaning schedules, mowing and irrigation schedules outside. In situations

where visitors or guests have 24-hour access, such as foyers as well as some bars and casinos, it is useful to know the quietest time for dealing with pests.

### **3. Developing Recommendations for Non-Control agent Measures**

Based on the inspection, a range of non-control agent pest management measures will be developed which may include the following:

- Fitting tight, self-closing exterior doors on buildings.
- Caulking crevices around doors, windows and vents.
- Fitting insect-proof screens on windows and vents.
- Trimming or removing foundation plantings, creepers and overhanging trees.
- Keeping grass short.
- Establishing a bare strip of gravel or concrete against the foundations of buildings.
- Using crushed shell, stone or gravel mulches instead of organic mulches for outdoor plantings and indoor planters.
- Cleaning gutters and outside drains.
- Using trickle irrigation instead of overhead irrigation for trees and shrubs.
- Ensuring good drainage under air conditioners.
- Minimizing exterior lighting at night.
- Eliminating bird roosting sites.
- Keeping rubbish bins closed, and emptying and cleaning them frequently.
- Installing numerous outdoor litter containers with tight-fitting lids,

and emptying and cleaning them frequently.

- Properly siting and draining compost heaps.
- Avoiding buildup or organic debris on mowers and other machinery.
- Caulking crevices around plumbing fixtures, work surfaces, etc. in food handling area.
- Fixing plumbing leaks in kitchens, guest rooms and restrooms.
- Improving food and waste handling in kitchens.
- Retrieving room-service or poolside trays faster.
- Vacuuming the edges of fitted carpets in hotel rooms, restaurants, theatres, etc. Most of these non-control agent measures will be conducted by on-site staff, but the pest management professional needs to define and prioritize such work.

### **4. Developing Recommendations for Control agent Treatments**

Control agent treatments will be based on the findings in the inspection, and must be customized to the particular pests and the particular sites of use. In general, for sites such as kitchens, this means when food is not being prepared.

For pests which nest outdoors, efforts should focus on locating and treating nests. Thus for ants, nests can be treated with modern control agents. For mound nesting ants or ants which have deep gallery systems, drenching treatments are most effective.

For pests such as fleas, which may be a nuisance over large expanses

of ground, area spraying with power sprayers is effective.

Where insect pests such as outdoor-living cockroaches may be invading buildings, treatments around the perimeter are recommended to intercept these insects. Band spraying around the foundations, eaves, windows, doorways and vents is essential. In addition, injecting weepholes and exterior cracks and crevices under thresholds, around doors and windows, around plumbing and air vents, is recommended.

Where ornamental plantings adjacent to buildings are harbouring pests, they should be sprayed.

For pests which have already entered or been carried into buildings, the following four types of insecticide application are necessary:

- Treatment of exposed insects with directed contact fan sprays.
- Spot treatments of surfaces (especially wall/floor or wall/ceiling junctions, doorways, underside of counters, etc.) across which insects must crawl in their search for food or water, using fan sprays.
- Crack and crevice treatment of shallow harbourages in which cockroaches or other insects may hide, using pinstream applications.
- Deep treatment of wall and ceiling voids, conduits, crawl spaces and other voids where insects may nest or retreat, using insecticidal dust.

Of these four types of application, treatments of cracks and crevices

and voids are likely to be the most useful for insects such as cockroaches which hide or avoid light. Moreover, such subsurface applications have the advantage that the insecticides are less subject to destruction by cleaning, oxidation and ultraviolet light. Of course for pests such as fleas, treatment of entire rugs may be necessary; in hotel rooms this is best accomplished between occupancies. While most treatments in public areas should be conducted in shutdown periods, treatments of planters in foyers can be conducted anytime since people are accustomed to seeing plant-care operations.

#### **5. Obtaining Co-operation of Staff**

The inputs of on-site staff are essential to deal with hygiene and maintenance problems which contribute to pest problems. In addition, the staff can be extremely valuable in reporting pest problems, such as the location of ant mounds and cockroach harbourages, for future follow-up by the pest management contractor.

Once the staff has been directed by management to co-operate, productive co-operation is best achieved through staff education about pests. This can be done in meetings with staff aimed at explaining the appearance and basic habits of pests, the environmental conditions which encourage pests, the routes of entry of pests and the harm they can cause. In addition, any essential preparation prior to insecticide applications can be explained.

## **6- Implementation of Initial Treatments**

Where a pest problem exists, control agent and non-control agent countermeasures must be taken. Typically, the non-control agent methods involve longterm maintenance and hygiene efforts which yield slow results. To quickly deal with a pest problem requires an initial offensive based on the control agent recommendations which have been developed. This offensive is best conducted in a short period of time (a few days at most) in order to achieve a fast reduction of the insect population. It has been shown that populations of fast-breeding insects, such as German cockroaches, are much less likely to recover after such a reduction than if the same control agent applications are spread over a longer period.

Unless sufficient manpower is committed to achieve the reduction, the result will be the first in a long series of partial "harvests" of pests, with no real reduction in the pest population.

Prior to the initial treatments, ample notice should be given to all staff who are required to co-operate in preparing target areas or providing access. Such preparation might include disposing of all garbage, vacuuming the edge of all carpets, cleaning food stores, covering food and food preparation surfaces, mowing lawns and trimming shrubs and trees.

## **7. Implementation of Follow-up Treatments**

Follow-up inspections should be made of any treated nest sites. For ants, an inspection about a week later should indicate whether any ants have survived and started mound activity again. Where activity persists, the nests should be treated again.

For resilient pests such as German cockroaches, follow-up treatments can be scheduled two to four weeks later to deal with any missed harbourages.

Where pests are likely to periodically invade buildings, a program of bi-monthly outside perimeter treatments may be necessary depending on the pest pressure, to minimize reinfestation.

In hotels and resorts, because of the difficulty of treating occupied guest rooms, it is worthwhile to make preventive applications of residual insecticides in cracks, crevices and voids whenever the rooms become vacant. By using low-odour products, these rooms can be occupied soon after treatment. If pests are reported in guest rooms or public areas, inspection and any necessary treatments should be carried out within 24 hours.

## **8. Monitoring the Results**

Inspections for outdoor pests and pests in staff areas can be carried out routinely without disturbing visitors or guests. A reporting procedure should be implemented whereby staff are encouraged to report pests. Sticky traps can be routinely used in staff areas, such as kitchens and stores, to check for pests. In addition, pyrethrum

aerosols or dusts can be used monthly to check crevices in or on buildings which might harbour pests. Guest rooms should be inspected at least twice a year even where there has been no history of pests. This can be co-ordinated with room cleaning activities.