

## Chapter 6 - Attics and Crawlspace

Providing pest and termite services will often require a technician to inspect and treat in attics and crawlspaces. Technicians and inspectors face numerous safety hazards in both locations. Some of those hazards are obvious, and some are not.

### Attics

Ladders leading to attics are frequently broken, weakened, and dangerous and should be inspected for safety and stability before using them to gain access into the attic. In the attic of homes, nails often protrude down through the plywood roof decking and can cause dangerous puncture wounds or lacerations if accidental contact is made with the head and neck. Furthermore, most home attics are not floored; a misstep can drop you through the ceiling of the room below, or leave you with two legs straddling a ceiling joist. Fiberglass insulation can irritate your skin, eyes, and respiratory tract, and you face shock hazards from exposed electrical lines.

Attics rarely have good ventilation, so most pesticides you apply pose an inhalation risk. Attics can also be dangerously hot, and you can get cramps, pulled muscles, or a sore back from working and moving hunched over or in uncomfortable positions.

There may be wasps, bees, scorpions, and other stinging and biting pests in an attic, as well as rodents, bats, birds and their droppings, not to mention the occasional raccoon or opossum.

### Precautions in Attics

- Wear coveralls, gloves, **hard hat**, and any other personal protective equipment that you think may be necessary.
- Make sure the attic ladder is safe before using it.
- Always use your Massey ladder if a portable ladder is required, **DO NOT USE THE CUSTOMER'S LADDER!**
- Disturb insulation as little as possible, particularly blown-in and/or loose insulation in an attic (see chapter *Fiberglass Insulation*).
- Avoid disturbing bird or bat droppings.
- Use a respirator whenever power-spraying or power-dusting, or if you think that there might be any airborne substances that you do not want to breathe.
- Carry a good, bright flashlight with strong batteries.
- Shine your flashlight on each area of the attic before entering it.
- Move slowly and watch where you step. Do not get yourself into a tight space that you may have trouble getting out of.
- Always test attic flooring boards for stability before applying your full weight.
- Look out for loose or dangling electrical lines. Do not touch any cables.
- If the attic is hot, do not enter it without someone else around to check on you. Be alert of symptoms of heat illness (see chapter *Heat and Cold*).

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### Crawlspace

Crawlspace are usually dark, dirty, and confined. Working in a crawlspace can present safety hazards to some extent. Some hazards that might be present in a crawlspace are:

- You can bump your head on pipes, beams, nails, sub-flooring, etc.
- You can cut or scrape yourself on broken glass and other debris as you crawl on your belly or on your hands and knees.
- You can get cramps, pulled muscles, or a sore back from working and moving in a confined space.
- You might crawl through soil contaminated with old sewage spills from backups or broken pipes.
- You may be crawling through soil contaminated with disease organisms.
- You may face shock hazards from electrical lines, particularly in wet crawl spaces.
- There may be fleas, spiders, snakes, and other pests to bite or sting you.
- You could surprise a cornered animal such as a raccoon or skunk.
- You could inhale toxicants of various sorts such as pesticide vapors, asbestos, fungal spores, or allergens.

### Precautions in Crawlspace

Before you enter a crawlspace, assess the hazards you might face and take action to protect yourself from them. Many of these hazards are discussed elsewhere in this manual. Use common sense and your safety training.

- Wear coveralls, gloves, knee pads, and any other personal protective equipment you think might be necessary.
- Use a respirator if you suspect the crawl is dusty, or if you think there might be any airborne substances that you do not want to breathe.
- Carry a good, bright flashlight with strong batteries.
- Shine your flashlight on each area of the crawlspace before entering it.
- Use halogen lights to lighten large areas of the crawlspace if you will be working for an extended period.
- Move slowly. Do not get yourself in a tight space; you may have trouble getting out. You will not be the first technician to be stuck under a floor beam.
- Make sure someone knows that you are going to enter a crawlspace, particularly a tight one.
- Look out for loose or dangling electrical lines. Do not touch any cables, particularly in a wet crawlspace.
- After you leave a crawlspace, remove any potential contaminants by taking off your coveralls and gloves, and washing up.

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### Applying Pesticides in Attics and Crawlspace

Attics, crawlspaces, and other areas with restricted space and poor ventilation pose special hazards to technicians applying pesticides. The concentration of pesticide in the air during application is much higher than during application in the open, well-ventilated area. Working in a restricted space also increases the risk of skin exposure to pesticides from splashback of liquids and dusts, crawling through pesticide already applied, or accidentally touching treated surfaces.

Tight, poorly ventilated spaces are often hot, further increasing airborne residues through increased volatility. Additionally, perspiration and high temperature speed up skin absorption of many pesticides.

#### Safety Precautions When Applying Pesticides in Tight Spaces

To minimize your risk of pesticide exposures in poorly ventilated spaces follow these guidelines:

- Wear respirator, eye protection, gloves, and any other personal protective equipment specified by the product label or that you think is necessary.
- Increase the ventilation, if possible, by opening vents, or by using fans to bring in fresh air. Make sure that the increased ventilation does not make your pesticide drift into occupied areas, or get taken up by the ventilation system and circulated through the building.
- Begin your treatment at the point furthest away and work back to your exit point. Avoid walking or crawling through the pesticide you have applied.
- Avoid working inside a restricted space when the temperature is too high.
- Make sure others know where you are and what you are doing.

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### TEST

1. Which of the following precautions are taken when working in a crawlspace?
  - a. Do not get yourself into tight spaces
  - b. Wear coveralls, gloves, and other necessary PPE
  - c. Only work in crawlspaces in the morning or in the late afternoon
  - d. All of the above
  - e. A and B only
  
2. Which of the following are hazards that you face in a crawlspace?
  - a. You may be stung or bitten by fleas, snakes, or spiders
  - b. You may be shocked by electrical lines
  - c. You may crawl through contaminated soil
  - d. All of the above
  - e. A and B only
  
3. A hazard in a crawlspace is that you can get cramps, pulled muscles, or a sore back.
  - a. True
  - b. False
  
4. Perspiration and high temperature speed up skin absorption of many pesticides.
  - a. True
  - b. False
  
5. To minimize your risk of pesticide exposure in an attic or crawlspace
  - a. You should treat as quickly as possible
  - b. You should only treat in the mornings when it is cool
  - c. You should begin treatment at the point furthest away and work toward the exit point
  - d. You should apply pesticides at the lowest pressure possible while maintaining good coverage
  - e. All of the above