

The Household Toxic Tour: Garden Shed

Pesticides

Pesticides are not only poisonous to insects but are also poisonous to humans and animals. Overseas studies have shown that young children, have an increased risk of getting leukaemia if they live in a home where pesticides are often used, either in the home or garden. Childhood brain cancer has also been linked to the use of some pesticides.



Pesticides can affect us if we breathe them in or if we come into skin



contact with them. Pesticides can contain active ingredients including naphthalene (suspected cancer causing); phosphorus (irritates throat and lungs); heavy metals (such as mercury and lead affect brain development and causes lowered IQ deficiencies in children); lindane (can cause dizziness, tremors and convulsions); chlorocyclohexanes (permanent kidney damage, anaemia); and organophosphates (linked to neuromuscular blockage, headaches, fatigue, dizziness, profuse sweating, nausea, vomiting, cramps, diarrhoea, tightness in the chest, and muscle twitching).

Common pesticides used in gardens (for example, weed killers and aphid killers) include many harmful chemicals such as chlorpyrifos and methoxychlor. These chemicals can affect the brain and nerve development in children and can harm pets. Lawn sprays can cause an increase in cancer in children. Children growing up in gardens which are treated with pesticides have a greater risk of developing tumours called sarcomas. Most pesticides persist in the environment for a long time and can continue to have harmful health effects long after they have been applied.



BAYGON products, used to control cockroaches, flies, mosquitoes, and lawn insects, have been linked to child leukaemia in a couple of studies. BAYGON is harmful if swallowed or absorbed through the skin. Short-term exposure to some of the chemicals found in Baygon products can cause tightness in chest, sweating, small pupils, stomach pains, vomiting and diarrhea. Baygon products contain Propoxur, which can cause headaches, vomiting, and nausea, and Cyfluthrin, which can cause lung problems, convulsions, asthmatic attacks, pneumonia, muscle paralysis and possibly even death due to respiratory failure.

DOOM products contain Lindane, which has been banned in many other countries because of its health effects. Lindane may cause cancer and also been linked to hormonal and reproductive problems. DOOM products also contain petroleum distillates which can damage the nervous system, skin, kidneys and eyes, and may even cause cancer.

RAID contains cypermethrin, which is suspected to be cancer causing. Exposure to this chemical can lead to dizziness, headache, nausea, fatigue, vomiting and skin and eye irritation. Long-term exposure to this chemical can cause brain and locomotory disorders and weaken the immune system.

Flea powder contains chemicals which may cause skin, breathing, kidney, liver and heart problems. Flea collars have been linked to brain cancer.

Recommendations for use of insecticides

If using pesticides avoid contact with skin and eyes, use cotton or leather gloves, goggles, respirator mask, protective overalls and footwear. Keep children and pets away from areas being treated. In case of accidents, the following rules apply:

skin contact: remove contaminated clothes. Wash exposed areas with plenty of mild soap and water
eye contact: flush with clean water for 15 minutes and seek medical aid *inhalation:* keep subject under observation *ingestion:* when the patient is conscious, provoke vomiting (by pharyngeal stimulation). Seek medical aid.

Safe Substitutes for Pesticides in Home and Garden

Against pests in the home, the best offence is a good defence. The first step is to make the house, especially the kitchen, unattractive to insects by cleaning up food spills immediately, keeping hard-to-reach areas reasonably clean, and removing clutter that can hide pests. Store foods attractive to pests, such as flour, in the refrigerator.

Green up your yard and stop using pesticides--try to use natural products instead. Pull weeds by hand. Use traps, parasites, and natural predators such as ladybugs. Use disease and pest-resistant plants. Use compost and mulch to improve soil health and reduce the need for pesticides and fertilizers. Use plants that repel insects. Some herbs and flowers – including basil, chives, mint, garlic, marigolds, and chrysanthemums – mixed in with other plants, help keep pests away.



A number of non-toxic substances can be used to repel insects. Generally, they are herbs or spices that have a strong smell. Powdered chill pepper, garlic, peppermint, bay leaves, cloves, citrus oil, lavender, rosemary, tobacco, peppercorns, and cedar oil can repel various types of insects.

For specific house pests, try these solutions:

- **For ants:** sprinkle powdered red chilli pepper, paprika, dried peppermint, or borax where the ants are entering.
- **For beetles:** Kill manually when you see them.
- **For cockroaches:** Mix by stirring and sifting 1 ounce TSP, 6 ounces borax, 4 ounces sugar, and 8 ounces flour. Spread on floor of infested area. Repeat after 4 days and again after 2 weeks. Note: TSP stands for trisodium phosphate. It is a mixture of soda ash and phosphoric acid. TSP is toxic if swallowed, but it can be used on many jobs, such as cleaning drains or removing old paint, that would normally require much more caustic and poisonous chemicals and it does not create any fumes. You should ask your pharmacist to get it for you)
- **For fleas:** Feed pet brewer's yeast.
- **For fishmoths:** Air clothes well in the sun; store in airtight containers, scatter sachets of lavender, cedar chips, or dried tobacco in with clothing. Epsom salts also repels fishmoths.

- **For rats and mice:** Prevention is the best cure. Seal all entry points (openings/holes) and storage containers properly. Cover rubbish. Rescue a homeless cat!
- **For termites:** Any wooden parts of the house should be at least 18 inches off the ground, as subterranean termites cannot tolerate being exposed to air and light.
- **For slugs and snails:** pour half a cup of black caffeinated coffee on the pests
- **For weeds:** Spray vinegar on to the leaves of larger weeds. Make sure to coat the leaves evenly. This works best on hot, sunny days. The weeds should die within two weeks.
- An **easy all-purpose garlic spray** for repelling insects from plants in your garden, can be made by mixing $\frac{1}{2}$ cup of finely chopped garlic with 500ml water. Let this mixture sit for an hour. Strain out the garlic, pour into a spray bottle and spray your plants.