



What are Cockroaches

Cockroaches are a common domestic insect pest found in houses, apartments, stores and restaurants. The German cockroach is the species that is most commonly found in North America. Adult German cockroaches are $\frac{1}{2}$ to $\frac{5}{8}$ inches long, are tan to light brown in colour and have two dark brown bands on the head to the base of the wings. Cockroaches have fully developed wings but are unable to fly.

Life Cycle

Female German cockroaches can breed several times per year and can carry 30-48 eggs in an egg capsule. The egg capsule is usually deposited in crevices and around doorframes.

The immature cockroach or nymph that emerges from the egg capsule after a month is very small ($\frac{1}{8}$ inches in length) and light brown in color. The nymphs under the right conditions (availability of food and shelter) will grow and moult/shed skins a number of times before becoming an adult in about two to four months. With food and water, adult German cockroaches can live for about six months but in the absence of water they may die in approximately one week.

Habits

Cockroaches are nocturnal insects meaning they are active at nighttime. They inhabit warm, moist areas where a food and water source is readily available. Often you will find cockroaches living inside or behind kitchen appliances such as toasters and refrigerators and inside cabinets/cupboards of bathrooms. Cockroaches do not cause structural damage to property as they feed on food crumbs, not wood or paper products.

Cockroaches and their eggs can be brought into homes and businesses through furniture, clothing, luggage, grocery bags and other items. Therefore, an infestation is not always a sign of poor sanitation or housekeeping. However, good sanitation is crucial to minimizing the extent of an infestation.

Public Health Concerns

German cockroaches are not only a nuisance but also a public health pest because they can harbour pathogenic bacteria such as *Staphylococcus*, *Salmonella* and *Streptococcus*. These bacteria are usually picked up from the food debris and waste materials that cockroaches feed on. In turn, the cockroaches can contaminate other surfaces and food products with the bacteria from their bodies.

Studies have also shown that cockroach infestations can trigger asthma and allergic reactions in susceptible individuals.



Adult German Cockroach

How to Prevent an Infestation

- **Exclusion** - Ensure all window screens, door sweeps and weather stripping is intact to prevent the entry of cockroaches. Seal or caulk small cracks and crevices in walls, floors, around doors and windows. Seal holes around pipes in cabinets and around light and wall fixtures.
- **Sanitation** – Maintaining a clean home is important for preventing cockroach infestations. Clean up food spills immediately. Store garbage in receptacles with lids and dispose of daily. Dirty dishes should not be left to accumulate in the sink and should be washed immediately. Vacuum and sweep regularly to help remove food particles that can attract cockroaches.
- **Removing food and water sources** - Do not leave pet food or water in feeding dishes overnight. Dry food products should be stored in sealed containers.
- **Eliminate cockroach harbourages** – Seal or caulk all cracks and crevices and pipe openings to reduce hiding places for cockroaches. Insulate pipes that have excess condensation and repair leaky faucets and pipes.

Control

If you see cockroaches in the daytime, there is a high probability that there is an infestation with numerous cockroaches hiding in the walls, beneath flooring, underneath or inside cabinets/cupboards. Sticky traps can be placed in various locations of the home to monitor the population and habits of the cockroaches. However, sticky traps alone will not control the population. An integrated pest management approach is necessary to control the cockroach population, which includes:

- Intensive sanitation and cleaning measures
- Removing the availability of food and water
- Home improvement and repairs
- Heat or cold treatment of infested appliances
- Chemical treatment with insecticides/pesticides
- Cockroaches have become quite resistant to common chemical pesticides, therefore it is recommended that a certified Pest Control Operator be contacted to apply chemical insecticides and pesticides. Certified pest control operators can ensure that pest elimination is completed using the most effective yet safest treatment available.



Various lifestages of German Cockroaches

For more information about cockroaches, contact your local Environmental Health Officer.
Environmental Public Health Services
First Nations and Inuit Health Branch, Alberta Region
Edmonton Phone: (780) 495-2712
Calgary Phone: (403) 299-3939