

## Environmental Health Facts about Cockroaches



Cockroaches are commonly found in our homes and workplaces. Because cockroaches are so comfortable living with people, it is hard to control them unless you know some facts about them.

### **COCKROACH BIOLOGY**

The cockroach has three stages in its life cycle - egg, nymph, and adult. Eggs are grouped in a small bean-shaped capsule that is produced by the female. This capsule is usually left in a protected place or may be carried by some types of cockroaches until it hatches.

Depending upon the type of cockroach, 10-30 nymphs hatch from the egg capsule. Nymphs look like small, wingless adults. Over a period of weeks the nymphs grow larger and become sexually mature adults.

Cockroaches are active at night. When cockroaches are seen during the day, it is a sign that many more are hiding. Cockroaches prefer to hide in tight places, like cracks in walls, gaps in joints, or under piles of trash. They are attracted to dark, warm, humid places and are common in kitchens, bathrooms, or basements. They like to group together and will often produce a musty smell. Cockroaches will feed on almost anything.

There are three types of cockroaches often found in North Carolina homes.

The most common cockroach found in North Carolina homes is the **German cockroach** (*Blattella germanica*). It is about ½ inch long and brown in color with two dark stripes near the head. It usually takes 3-4 months to grow from egg to adult. Adults have wings but seldom fly. This cockroach can become very numerous in homes.

The **American cockroach** (*Periplaneta americana*), is the largest cockroach found in North Carolina homes. It is about ½ inch long and dark brown in color with some light brown coloring near the head. It prefers moist places, and is usually found in basements, under sinks, or in sewers. It has wings but usually does not fly. It takes a year from egg to adult.

The **Oriental cockroach** (*Blatta orientalis*) may sometimes be found in homes. It is brownish black and about ¾ inches long. Females have almost no wings and those of the male are very short. This cockroach may be found outdoors under woodpiles, in leaf litter, in animal waste, or sewers. This cockroach may take a year or longer from egg to adult.

Two other cockroaches are less common in North Carolina. The **brown banded** (*Supella longipalpa*), resembles the German cockroach, but has two light bands across the wings and a single dark patch near the head instead of two stripes. The **Smoky brown cockroach** (*Periplaneta fuliginosa*), is the same size and color as the American cockroach, but has no light brown color around the head. It breeds indoors or outdoors when the weather is warm. It will fly.

During the summertime, "**wood cockroaches**" may invade homes from nearby wooded areas. The males are very good fliers and are attracted to lights around the house. The male wood roach is about ½ inch long and light brown in color. This cockroach does not breed indoors.

## **COCKROACHES AND DISEASE**

Cockroaches can carry many bacteria and viruses on their bodies, but is not proven that they will transmit disease. When feeding, cockroaches will walk, spit, and defecate on the food. Large numbers of cockroaches can produce an odor. Allergies to cockroach droppings or the remains of dead cockroaches can occur.

## **CONTROLLING COCKROACHES**

A big part of cockroach control is cleanliness. When food is left for them, cockroaches will become numerous. Dinner scraps, unwashed dishes, uncovered trash or poorly wiped tables all provide food for cockroaches. Pet food left out over night may become a meal for cockroaches. Leaking pipes and faucets can provide moisture for cockroaches and should be repaired. To avoid bringing cockroaches into the home, check bags and boxes of groceries when unpacking.

Another important part of cockroach control is eliminating the cracks and crevices in which they can hide. Seal cracks between the walls and counters or cabinets, seal gaps around pipes, close spaces between woodwork. Places where cockroaches have been found hiding should be repaired whenever possible. A lot of cockroach control can be done with caulk and tools.

Finally, where there are many cockroaches, insecticides might be needed to help reduce their numbers. Several very good products are available. An insect growth regulator (IGR) has proven very effective for cockroach control. This chemical prevents the cockroach from becoming an adult and so stops their breeding. IGRs last for several months, work in very small amounts, and are very safe to people and pets. IGRs are available in most stores and may be sold as "birth control for cockroaches".

Boric acid also works well. This powder is placed in cracks where cockroaches hide or on surfaces where they walk. Boric acid for cockroach control is a fine powder made for this purpose. The type sold for medical use will not work.

"Bait stations" are also available. These are small plastic containers that have an insecticide inside. It lasts for several months and, because the insecticide is sealed inside, is relatively safe. They can be placed beneath sinks, behind appliances or other places where cockroaches are hiding.

Other insecticides may also be used. Some insecticides, like pyrethrin, are used to flush cockroaches from their hiding places, or to kill cockroaches when sprayed on them, but will not last long. Other insecticides last longer and can be applied to places where cockroaches will rest or walk.

**It is important to follow label directions carefully when using any insecticides.**

### **NEED MORE INFORMATION?**

Contact your Local Health Department at 336-597-1790  
or the Public Health Pest Management Section at (919)733-6407