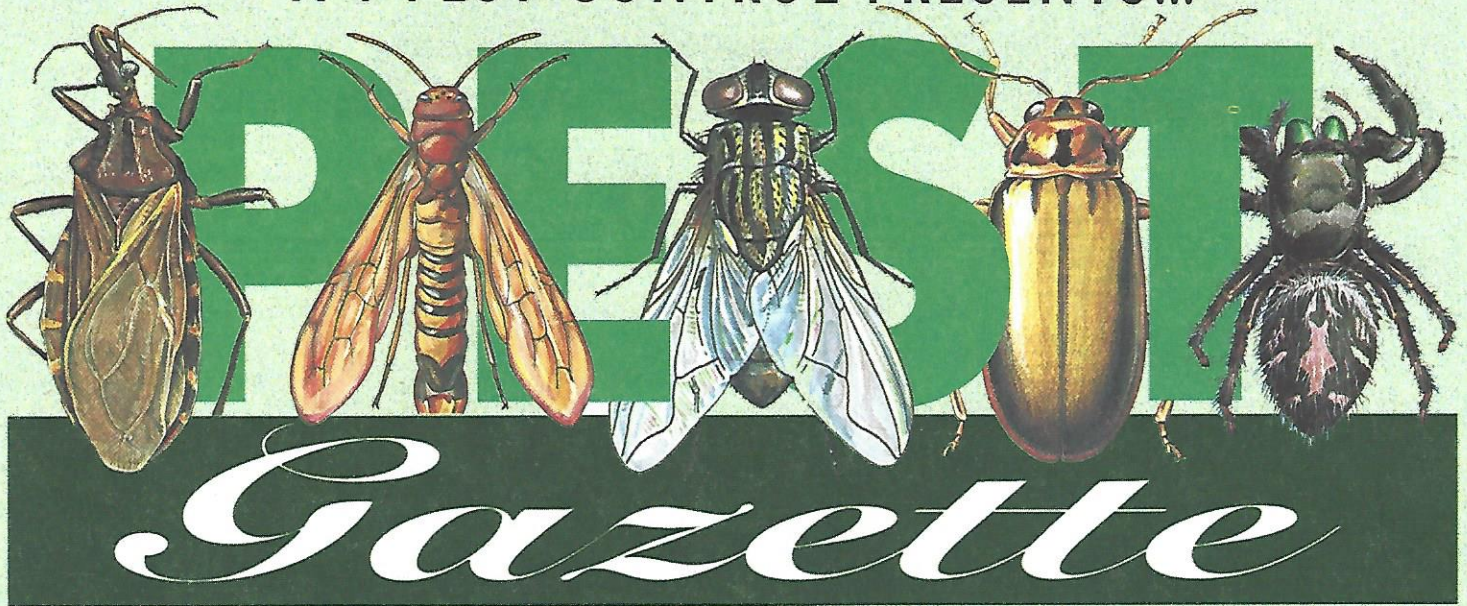


A-1 PEST CONTROL PRESENTS...



## PESTS POSE THREATS TO PEOPLE

Go to the science fiction section of any video store and you'll find horrifying creatures that will give you nightmares for weeks. And, often, they're insects. For as long as Hollywood has been making motion pictures, directors have used insects to illicit strong emotional reactions from audiences.

Of course, the real danger is the billions of dollars in food that insects destroy and the billions of dollars in property damage for which they're responsible. But, more terrifying than even the scariest horror movie is the impact pests can have on your health.

The housefly, for example, can carry more than 100 kinds of disease-causing organisms and may transmit more than 65 of them to humans and animals. Cockroaches can

transmit food poisoning, cholera, dysentery and typhoid. And the diseases carried by fleas have caused more human deaths than every war in human history combined!

That's where the pest control professionals at A-1 Pest Control come in. Like the knight in shining armor or the cowboy with the white hat in your favorite movie, we make our living by defeating the bad guys.

The professional pest management technicians at A-1 Pest

Control rely on training, expertise and sophisticated techniques to perform pest control in an environmentally responsible manner.

To learn more about the professional pest control services at A-1 Pest Control, call (417) 883-4611.

HAHN EXTERMINATORS, INC.



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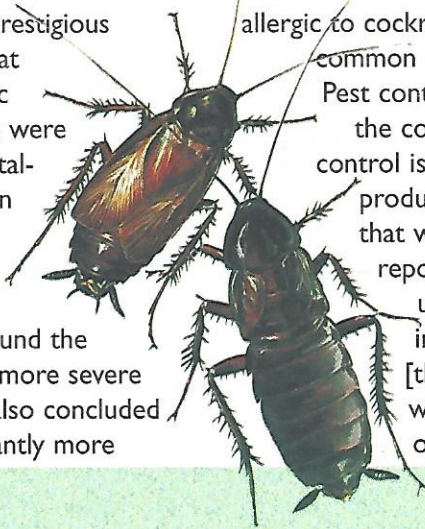
## Asthma Problems Among Children Linked to Cockroaches

**N**ew research recently published in the prestigious *New England Journal of Medicine* finds that asthmatic children who are both allergic and frequently exposed to cockroaches were three and a half times more likely to be hospitalized for asthma-related problems than children who are allergic to cockroaches, but not exposed to them on a frequent basis.

The study looked at hundreds of severely asthmatic young children from eight cities around the country. It found that the problem was much more severe among poor, inner-city children. Researchers also concluded that, in general, asthmatic children are significantly more

allergic to cockroach allergens than they are to more common allergens like cat dander and dust mites.

Pest control and medical professionals around the country emphasized that cockroach control is relatively inexpensive and could produce significant benefits. In an editorial that was published along with the research report, the *New England Journal of Medicine* urged that the public, "focus on reducing the population of cockroaches [through] control of sources of food and water, routine cleaning, and regular use of insecticides."



# PEST QUIZ

MATCH THE INSECT NAME TO THE PICTURE.

## 1. AMERICAN COCKROACH

**COLOR:**

Reddish brown, light border on the area behind head.

**Size:**

1 1/8" to 2 1/8" long.

**Location:**

Damp areas, steam tunnels, sewers.

**Food:**

Feeds on organic matter, sweets, glue.

**Life Stages:**

Eggs hatch in 50 days. About one year from egg to adult.

## 3. FLEA

**Color:**

Red-Brown.

**Size:**

1/8" to 1/4" long.

**Location:**

Anywhere man or animals are found.

**Food:**

Adults feed on blood; larva on organic matter.

**Damage:**

Bites animals, man. Carries disease-causing organisms.

**Comments:**

Under warm humid conditions, fleas can go from egg to adult in 12 days.

Read the description of each insect and then fill in the number from each insect in the box on the illustrations.

## 2. TICK

**Color:**

Red-Brown.

**Size:**

1/8" to 3/8" long.

**Location:**

On animals or humans—usually contacted in wooded areas.

**Food:**

Blood.

**Damage:**

Capable of transmitting disease, especially Lyme disease.

## 4. EASTERN SUBTERRANEAN TERMITE

**Color:**

Swarmer: dark brown to almost black; wings are pale and clear.

**Size:**

Approximately 3/8" long.

**Location:**

In subterranean colonies throughout the United States and Canada, but most active in the southern U.S.

**Food:**

Wood.

**Damage:**

Damages buildings and other structures.

# MOSQUITO FACTS

AN AVERAGE MOSQUITO (*Aedes Aegypti*) WEIGHS ROUGHLY 2-2.5 MG.

A MOSQUITO CAN DETECT A HOST FROM MORE THAN 120 METERS.

MOSQUITOES FLY APPROXIMATELY 1-1.5 MILES PER HOUR.

MOSQUITOES LIVE FOR ROUGHLY 15-65 DAYS.

MOSQUITO SALIVA CONTAINS ANTICOAGULANTS TO PREVENT THE HOST'S BLOOD FROM CLOTTING. THESE FOREIGN PROTEINS CAUSE THE ALLERGIC REACTION ASSOCIATED WITH MOSQUITO BITES.

SOME PEOPLE ARE MORE ATTRACTIVE TO MOSQUITOES THAN OTHERS (NO ONE KNOWS WHY!)

SOME MOSQUITOES (SALT MARSH MOSQUITOES) CAN FLY 20 MILES TO TAKE A BLOOD MEAL AND THEN FLY 20 MILES BACK TO THEIR BREEDING SITE IN ONE NIGHT.

DRAGONFLIES ARE PREDATORS OF MOSQUITOES.

THE AVERAGE "SERVING" OF BLOOD TAKEN BY A MOSQUITO (*Aedes Aegypti*) IS AROUND 15 MILLIONTHS OF A LITER, OR 15 MICRO LITERS.

# INSECTS TAKE A BITE OUT OF SUMMER PLANS

**F**or most people, summer means more time outside. But along with the fun comes the danger of insect bites and stings. Although most bites and stings are harmless, they can produce pain or discomfort. Here are some ways to treat insect bites:

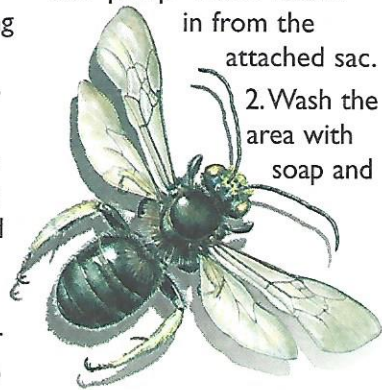
## BEE STING

In most cases, bee stings begin and end with the sting itself...a moment of sharp pain followed by mild soreness. But many people are particularly sensitive to bee stings. For them, symptoms may include swelling around the eyes, lips, tongue, or throat; coughing or wheezing; or numbness or cramping. In some extreme cases, speech may be slurred and the person stung may experience difficulty breathing, anxiety, mental confusion,

nausea, vomiting, or even loss of consciousness.

*To treat a bee sting:*

1. Remove the stinger as quickly as you can. The longer a bee's stinger is in your skin, the more likely it is that the area will become sore. Use a credit card or something with a stiff edge to scrape away the stinger. If tweezers are used, they can "pump" more venom in from the attached sac.



2. Wash the area with soap and

water. Then apply an ice pack for 15 minutes or so to minimize swelling and relieve pain.

3. See your doctor if you notice that you have developed symptoms away from the sting site.

## MOSQUITO BITE

Most people are well aware of what a mosquito bite looks and feels like.

*To treat a mosquito bite:*

1. Clean the area of the bite carefully with warm water and soap to prevent infection.

2. Apply calamine lotion or a cortisone cream to reduce the itching.

## TICK BITE

A tick bite may manifest itself as a circular skin eruption which occurs after you have been in areas where ticks live (mainly wooded areas or tall grasses). This bump or sore spot may develop even though you did not see the tick or feel a bite. The principal risk is not

from the tick bite itself, but from bacteria that the tick may carry that can cause Lyme disease or other human illnesses.

*To treat a tick bite:*

1. Remove the tick from your skin. If the tick has buried itself underneath your skin, try to remove it with tweezers.

2. Grasp the tick firmly as close to the attached point as possible and pull straight out.


3. Be careful not to squeeze the tick as you remove it because this may release bacteria into your bloodstream.


4. After you've removed the tick, apply a topical disinfectant such as alcohol to the spot.

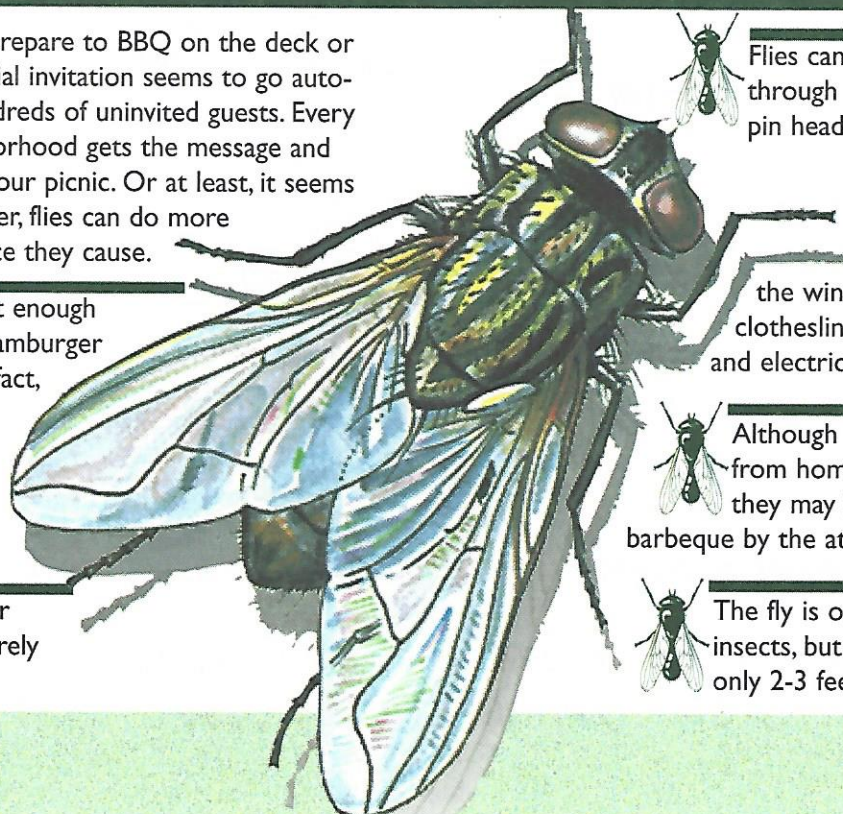
If you think that an insect bite has made you sick in any way, be sure to contact your physician immediately.


## Uninvited Guests Attend Picnics

**P**ack a picnic or prepare to BBQ on the deck or patio and a special invitation seems to go automatically to hundreds of uninvited guests. Every fly in the neighborhood gets the message and congregates at your picnic. Or at least, it seems that way. However, flies can do more damage than the annoyance they cause.


 One fly can deposit enough bacteria on your hamburger to cause illness. In fact, one fly can carry over 33 million disease-causing microorganisms on the inner and outer surfaces of its body.


 A fly can infect your potato salad by merely landing on it.



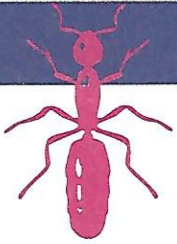
 Flies can enter your home through an opening the size of a pin head.

 A fly prefers to rest on areas protected from the wind and on edges of clotheslines, garbage can rims and electric wires.

 Although they don't travel far from home, like your neighbors, they may be lured to your barbeque by the attractive odors!

 The fly is one of nature's fastest insects, but it can see clearly for only 2-3 feet.

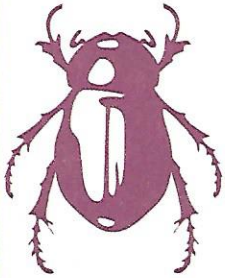
# BASIC INSECT INFORMATION



There are at least a million species of insects.



Spiders are not insects.



Insects can see ultraviolet light.



Insects are very adaptable and live in most environments on earth, including deserts and the Antarctic. The only place where insects are not commonly found is in the ocean.

Insects have a protective shell or exoskeleton. Their small size and speed permits escape from enemies and invasion into new environments. Insects produce silk, wax, honey, and other products. They pollinate crops. And they serve as food for other creatures and an important link in the food chain.

Did you know that less than one percent of insect species are pests, and only a few hundred of these are consistently a problem?

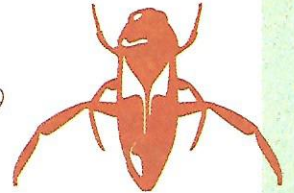
But, if they're in your house and you don't want them there, none of this matters.

Give us a call and we'll help restore a more natural balance.

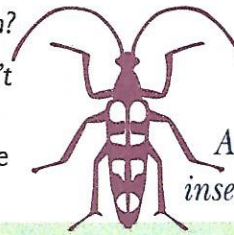


Some insects can swim and breathe underwater.

Many insects are beneficial.



Insects have 6 legs and 2 antennae.



About one third of insects are carnivorous.

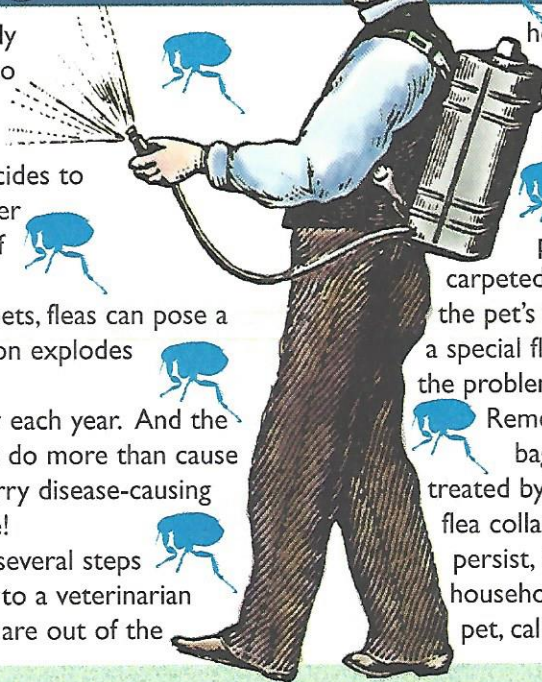
## Fleas can flee

**S**pot scratches incessantly and bites into his skin to rid himself of a small, elusive pest: the flea. Eventually, that flea decides to raise a family and it is the homeowner that begins to regret the presence of these unwanted house guests.

Carried into the home on pets, fleas can pose a severe problem when their population explodes inside a structure.

Flea infestations vary considerably each year. And the pesky little creatures can sometimes do more than cause itching. In isolated cases, they can carry disease-causing organisms, including the plague!

In cases of severe infestation, several steps must be taken. Pets should be taken to a veterinarian for a complete flea bath. While pets are out of the



home, an application of insecticides by a professional pest management specialist is necessary to eliminate the fleas.

You can flea-proof your home by paying particular attention to the pet's behavior, its resting area and carpeted areas. Frequent vacuuming, washing the pet's bedding and shampooing the pet with a special flea shampoo can often control the problem and prevent it from escalating. Remember to remove and seal the vacuum bag for immediate disposal. Have the pet treated by a veterinarian as often as needed. A flea collar alone may not be adequate. If fleas persist, begin bothering humans in the household or continue to bother the pet, call us right away.

**HAHN EXTERMINATORS, INC. DBA A-1 PEST CONTROL**  
**3636 S NETTLETON SPRINGFIELD, MO 65807 (417) 883-4611**