

SAFETY TALKS



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Mosquito bites and diseases: should I be worried?

Almost everyone has had the unpleasant experience of being bitten by a mosquito. Mosquito bites can cause severe skin irritation through an allergic reaction to the mosquito's saliva - this is what causes the red bump and itching. But a more serious consequence of some mosquito bites may be transmission of certain serious diseases such as malaria, dengue fever and several forms of encephalitis. Not only can mosquitoes carry diseases which afflict humans, but they also can transmit several diseases and parasites that dogs and horses are very susceptible to. These include dog heart worms and eastern equine encephalitis.

There are about 200 different species of mosquitoes in the United States, all of which live in specific habitats, exhibit unique behaviors and bite different types of animals. Despite these differences, all mosquitoes share some common traits, such as a four-stage life cycle. After the female mosquito obtains a blood meal (male mosquitoes do not bite), she lays her eggs directly on the surface of stagnant water, in a depression, or on the edge of a container where rainwater may collect and flood the eggs. The eggs hatch and a mosquito larva or "wiggler" emerges. The larva lives in the water, feeds and develops into the third stage of the life cycle called a pupa or "tumbler". The pupa also lives in the water, but no longer feeds. Finally, the mosquito emerges from the pupal case and the water as a fully developed adult, ready to bite.

Mosquito Life Cycle (about ten times actual size)



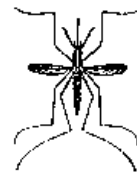
(Eggs)



(Larva)



(Pupa)



(Adult)

What You Can Do to Help Fight Mosquitoes

- Empty standing water in old tires, cemetery urns, buckets, plastic covers, toys, or any other container where "wigglers" and "tumblers" live.
- Empty and change the water in bird baths, fountains, wading pools, rain barrels, and potted plant trays at least once a week if not more often.
- Drain or fill temporary pools with dirt.
- Keep swimming pools treated and circulating and rain gutters unclogged.
- Use mosquito repellents when necessary and follow label directions and precautions closely.
- Use head nets, long sleeves and long pants if you venture into areas with high mosquito populations, such as salt marshes.
- If there is a mosquito-borne disease warning in effect, stay inside during the evening when mosquitoes are most active.
- Make sure window and door screens are "bug tight."
- Replace your outdoor lights with yellow "bug" lights.
- Contact your local mosquito control district or health department. Neighborhoods are occasionally sprayed to prevent disease and nuisance caused by large mosquito numbers. If you have any questions about mosquitoes and their control, call your local authorities.

(Source: <http://www.epa.gov/pesticides/factsheets/mosquito.htm>)

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We're also on the web:

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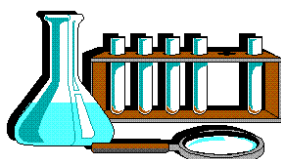
Safety Tips:

- Keep children away from any work area in which any type of walk behind, riding, or hand-held outdoor power equipment is being used.
- The best place for a child during the time that a piece of outdoor power equipment is being used is inside the house.
- If any child enters a work area, immediately turn off any outdoor power equipment that is in use.
- Do not allow a child to operate or play with any type of outdoor power equipment, even when it is not in use.
- Store the ignition keys to pieces of outdoor power equipment away from the piece of equipment itself when it is not in use.
- Always look down and behind for children before, and while, backing up.
- Clear the work area of any objects such as twigs, stones and toys that could be picked up and thrown by lawn mower blades or other apparatus.



Have you completed the Laboratory Safety Training Program?

If not, contact Doug Alexander at 3-4495 to reserve space in the next session or to schedule a session.



Sunscreens - What is SPF?

SPF stands for Sun Protection Factor. The number is determined experimentally indoors by exposing human subjects to a light spectrum meant to mimic noontime sun. Some subjects wear sunscreen and others do not. The amount of light that induces redness in sunscreen-protected skin, divided by the amount of light that induces redness in unprotected skin is the SPF. It is mainly a measure of UVB protection and ranges from 1 to 45 or above.

A sunscreen with an SPF of 15 filters 92% of the UVB. Put another way, a sunscreen with an SPF of 15 will delay the onset of a sunburn in a person who would otherwise burn in 10 minutes to burn in 150 minutes. The SPF 15 sunscreen allows a person to stay out in the sun 15 times longer. There is currently no uniform measure of UVA absorption. There are broad-spectrum sunscreens that protect against UVA and UVB radiation although it is important to remember that the SPF does not predict UVA protection.

The [UV Index](#) is a public health education tool reported by meteorologists in 58 U.S. cities. It offers a daily report of UV light levels on a scale from 1-10+.

The "protectiveness" of clothing can also be measured by SPF. The following are SPF's of various types of clothing:

- Nylon Stockings - SPF 2
- Hats - SPF 3-6
- Summer-weight clothing - SPF 6.5
- Sun-protective clothing - up to SPF 30

(Source: <http://dermatology.about.com/cs/skincareproducts/a/spf.htm>)

Summertime Injury Statistics:

Water Activities:

- Approximately 927 children ages 14 and under drowned in 1999; more than 60 percent of these children were under age 4.
- In 1999, more than 170 children ages 14 and under, suffered personal watercraft injuries.

Bike/Scooter/Skateboard:

- A total of 173 children ages 14 and under died in bicycle-related crashes in 1999.
- No more than 25 percent of child bicyclists use bicycle helmets, although statistics show the helmet can drastically reduce the risk of death and injury and the severity of injury.

Fire Safety:

- Fireworks-related injuries sent more than 3,800 children to hospital emergency rooms in 1997.

Sports:

- More than 3.5 million children ages 14 and under get hurt annually playing sports or participating in recreational activities.

Playground Safety:

- Between 1990 and 2000, 147 children ages 14 and younger died from playground-related injuries. Of them, 82 (56%) died from strangulation and 31 (20%) died from falls to the playground surface. Most of these deaths (70%) occurred on home playgrounds

(Source: University of Utah Health Sciences Center)

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