

Health

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MOSQUITO SEASON NJ HOME TO 63 SPECIES



By Susan Bloom :: For NJ Press Media

Ah, the hallmarks of summer — backyard barbecues, lazy days at the beach, pool parties ... and the annoying presence of mosquitoes and the itchy calling cards they leave behind.

Excessive amounts of rain this spring have created the breeding grounds for a bumper crop of mosquitoes in Monmouth and Ocean counties, but experts confirm that with a few simple precautions, these pesky predators don't have to ruin the summer.

"A lot of rain definitely creates the environment for more mosquitoes," Bill Reinert, superintendent of the Atlantic County Office of Mosquito Control, confirmed. "Mosquitoes need water to complete their larval stage, so the more water present, the more opportunity they have to complete that stage, and New Jersey has certainly experienced more than its average amount of rainfall this spring.

"However," he said, "the good news is that most mosquitoes only live for two to three weeks, so if rainfall scales back, the mosquito population should resume a normal level after this generation dies in a couple of weeks."

According to Joe Conlon, technical adviser for the American Mosquito Control Association (AMCA) in Mount Laurel, evidence suggests that mosquitoes have been present for 140 to 170 million years and have survived in part because of their great adaptability.

"They've been identified 4,000 feet down in the mines of India, 14,000 feet up in the Himalayas and in places where you'd never expect them, like in Alaska," he said.

But do they serve any purpose besides driving their human hosts crazy?

"In fact, their larvae serve as a food source for fish and other insects," Reinert said, "and they feed on nectar and help pollinate certain plants, so they do play a role in the ecosystem."

More likely, however, we know them for their bloodsucking ways and for the itchy and unpleasant bites that spoil our enjoyment of the season. According to the AMCA, mosquitoes mature from egg to adult in about five days, and only females require a blood meal from a warm or cold-blooded animal or bird.

According to Reinert, "there are 63 species of mosquito in New Jersey," with the aedes albopictus, or Asian tiger species, considered the state's most ubiquitous.

"They're small, dark, daytime feeders — not just in the early morning, at dusk, or overnight like many other breeds — and are vicious biters that target the lower extremities and legs," he said.

The salt marsh mosquito, or aedes sollicitans, is another concern for Shore residents, as "their habitat runs the full length of the Jersey shore and up the Delaware Bay shore," Reinert said. "They're an extremely aggressive breed, tend to emerge in very large numbers at one time, and can travel long distances, migrating up to 40 to 60 miles inland."

Happily, New Jersey is among the nation's most vigilant states in terms of conducting surveillance on and controlling its mosquito populations, and there are a number of things that individuals can do to minimize the threat posed by these pests. Experts offer the following tips to help prevent mosquitoes from spoiling your summer:

"The bottom line is, we want to try to keep mosquitoes away from our property and our body as much as possible."

LESLIE TERJESEN, Ocean County Health Department

» **Remove water** — "People need to be fastidious about removing standing water on and around their property to eliminate the places where mosquitoes can breed," Conlon said.

According to Conlon, these include obvious spots such as depressions in the lawn or driveway, flower pots or other containers and tree holes, as well as other sources not immediately thought of, such as soda bottles or cans and depressions created in the tarpaulin covering firewood.

"Other areas that can collect water include car tires and tire swings, kids toys and outdoor furniture that's concave. We've even seen mosquitoes breed in upturned bottle-caps," said Leslie Terjesen, public information officer for the Ocean County Health Department in Toms River.

Both Conlon and Terjesen advise emptying water troughs and bird baths every five days and also repairing holes in screens that could allow mosquitoes to invade the house.

» **Dress appropriately** — "Mosquitoes tend to like darker clothing, perhaps because the color contrast against skin helps them to see people better," Conlon said.

As a result, he advises people to wear light-colored clothing when outdoors, as well as loose-fitting items because mosquitoes can bite right through tight apparel.

"And, of course, keep as much of the body covered as possible or comfortable," he said.

» **Use repellants** — Conlon recommends using a repellant with DEET as its most active ingredient, but offers other options as well.

"Picaridin is a synthetic derivative of pepper plants," he said. "While not as effective as DEET, it certainly works, particularly in a 15 percent formulation, has no smell and is also repellant to ticks. Oil of lemon eucalyptus is also totally natural and is effective in a 40 percent formulation."

These should be applied to skin, not to clothing.

» **Treat bites** — "If you get bitten, wash with soap and water and apply an ice pack to control swelling, as well as anti-itch medication or calomine lotion if desired," Terjesen said. "It's unusual to have an allergic reaction from a mosquito bite, but if you feel dizzy or sick, contact a doctor."

"The bottom line is, we want to try to keep mosquitoes away from our property and our body as much as possible," Terjesen concluded. "We can absolutely co-exist with mosquitoes and continue to enjoy seasonal activities if we just take the time to look around us, remove standing water, fix broken screens, use repellant and otherwise minimize our exposure."

For more information, contact the American Mosquito Control Association at 856-439-9222 or www.mosquito.org or the Ocean County Health Department at 732 341-9700.

People's Pharmacy

By Joe Graedon & Teresa Graedon

Stopping meds could trigger attack

Q. I am a practicing emergency physician, and I must take issue with your statement that atenolol and other beta blockers should never be stopped abruptly. Stopping such a medicine suddenly is usually unwise, but if a patient is in complete heart block as a reaction to the medication, you bet we stop it immediately. Not to do so would be malpractice.

A. Thank you for the explanation. In an emergency room, under intensive supervision, ordinary guidelines don't apply. We do want to emphasize, though, that patients should not stop a beta blocker such as atenolol, metoprolol or propranolol suddenly on their own. Doing so might land them in the emergency department with chest pain, an irregular heart rhythm or even a heart attack.

Q. I am desperate for a good night's sleep, but I hate sleeping pills. They make me too groggy the next day. Benadryl makes me absolutely stupid if I take it in the daytime. If I took it at night, would it leave me feeling hung over? Do you have any other recommendations?

A. Millions of people take the compound in Benadryl, diphenhydramine (DPH), to get to sleep. It is the "PM" in many popular nighttime pain relievers such as Tylenol PM and Advil PM.

Some people find such OTC medicines helpful for occasional use, though the benefits may wear off over time. Not everyone gets a morning hangover from DPH, but some people experience confusion, drowsiness and impaired judgment.

Q. A few weeks ago, you wrote, "You as the patient have the ultimate responsibility for quality control" of your prescription.

That's so wrong! I can't read the doctor's scribble, and besides, it's usually in Latin. If we can't read it, we can hardly be responsible for knowing if the drug is correct.

A. If you don't want to take the wrong medication, you may need to step in at the very beginning of this process. Tell your doctor you want a prescription you can read, and that you need to know how to take it. Write his instructions down, so you can check them against what's written on the prescription bottle you get at the pharmacy.

Medical educators maintain that there's no excuse for illegible prescriptions and Latin abbreviations. It shouldn't take more than a minute for a doctor to print a prescription legibly in English. If it does, perhaps he or she should use a computer instead of a prescription pad.

Write to the Graedons via their website, PeoplesPharmacy.com.

STUDY: BREAST ISSUES

Early chemical exposure could affect breast health

By Kathleen Doheny :: HealthDay

Exposure to common chemicals during critical periods of breast development may affect breast growth, the ability to breast-feed and breast cancer risk, a new report contends.

Some of these chemicals are found in ordinary household products such as certain types of plastic water bottles, canned foods and laundry detergents, the researchers noted.

With this in mind, the study authors called for chemical test guidelines for industry requiring that scientists test the chemicals' effects on early mammary gland development.

Scientists from the U.S. National Institutes for Environmental Health Sciences, the Environmental Protection Agency and the Silent Spring Institute in Massachusetts collaborated on the report, published online June 22 in the journal *Environmental Health Perspectives*.

"If we try to figure out what causes breast cancer, we have to look at the breast when we do the chemical safety tests," said Ruthann Rudel, research director at Silent Spring.

Currently, protocols for testing don't require looking at mammary tissues, Rudel said, so it is rarely done.

"We could be missing a lot," she said.

Experts believe these early disturbances in mammary glands due to chemical exposure may boost the risk of harmful effects later in life. These could include impaired lactation

(secretion of breast milk), abnormal breast growth in men and breast cancer.

One impetus for the study was an increase in early breast development in girls, which is linked to an increased risk of breast cancer.

The report also noted that although experts recommend that all infants be breast-fed exclusively for six months, some 3 million to 6 million women in the United States are unable to produce milk or have difficulty breast-feeding each year.

The scientists interviewed 18 experts, reviewed research and discussed the issue at a workshop in late 2009. They are submitting a request to the Paris-based Organisation for Economic Co-Operation and Development (OECD), asking it to add mammary tissue testing to its guidelines. The international organization develops guidelines for testing of chemicals for safety, human health effects and environmental effects.

"It's a call for government agencies

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RUTHANN RUDEL, research director at Silent Spring Institute

that develop policy to make sure mammary gland assessment is required," Rudel said.

According to Rudel, the three main findings of the review were: Rodents are a reasonable test models and should be used to test for dangers to humans, the breast can be more sensitive to the chemical exposure than other tissues, and in some cases the male mammary tissue was most sensitive; and chemical exposure to the developing mammary gland can alter susceptibility to cancer-causing agents.

In the report, the experts concluded that early-life environmental exposures can alter milk gland development, disrupt the secretion of breast milk and increase susceptibility to breast cancer.

"Assessment of mammary gland development should be incorporated in chemical test guidelines and risk assessment," they added.

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