Facilities Fundamentals

Mosquito & Pest Control

Presented by the Facilities Services
Sanitation Safety Subunit
Zika Virus

VIDEO: Dr. Sanjay Gupta
“What is the Zika Virus?”
The symptoms of dengue are:

• Very high fever of the order of 105°F
• Severe headache
• Pain behind the eye (known as Retro-orbital pain)
• Severe to very severe pain in joints and muscles
• Continuous acute pain in the stomach; internal bleeding may occur due to hemorrhage
• Nausea and vomiting.
Hawaii's Big Island Declares Emergency Over Dengue Fever Infections

250 Cases Reported
02/09/16
Chikungunya

Symptoms of Chikungunya

- debilitating arthralgia (joint pain)
- swelling of joints
- stiffness of joints
- myalgia (muscular pain)
- headache
- fatigue (weakness)
- nausea
- vomiting and rash and fever.
The National Pest Management Association is monitoring the situation closely and is working to help educate the American public about ways in which they can avoid personal contact with mosquitoes and how to eliminate mosquito breeding grounds to reduce biting mosquito populations here at home. Mosquitoes are often considered the most dangerous animal in the world and the mosquito species that transmit Zika virus are the same mosquitoes that transmit chikungunya and dengue. We are urging the public to pay close attention to this matter and to learn more about how to protect themselves from coming into contact with mosquitoes and to help reduce mosquito populations by eliminating sources of stagnant water around the yard and in their communities.
February 2nd - 18th
New Vaccine Shows Promise
PREVENTION

PREVENTION

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How do you minimize risk?

• Travelers to areas where the virus is circulating can take precautions against mosquito bites. The mosquitoes carrying the virus can bite day or night, indoors or out. The CDC advises:
  • Cover up exposed skin by wearing long-sleeve shirts, long pants, and hats.
  • Use insect repellent that contains as an active ingredient DEET, picaridin, oil of lemon eucalyptus, PMD, or IR3535.
  • Consider treating clothing and gear such as boots and tents with the repellent permethrin.
  • Stay and sleep in rooms with screens or air conditioning.
  • Use bed nets if you are sleeping outdoors.

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Mechanical Controls

- Containers
- Bottles, caps, cups, a clogged gutter can become a container, planters, tree wells, rain barrels, old tires
- Tree holes, leaves, areas that frequently flood
- Know what is in your neighborhood; dumps, dumpsters, rain gardens, retention ponds
Sanitation

Remove standing water
Sanitation

Remove standing water
Chemical Controls

Oils
Peanut Oil

Brickets
Dunks

ULV FOGGERS
Vector Foggers
Chemical Controls

Space sprayers

Thermal Foggers

Larvacide and Adulticide
BED BUGS
BED BUGS
Lyme Disease: Second Bacteria Called Borrelia Mayonii Brings Awful Lyme Illness Symptoms

But unlike B. burgdorferi, B. mayonii can inflict nausea and vomiting, as well. It also may cause a diffuse rash, different from the telltale “bull’s-eye” rash doctors peg to the original Lyme disease infection.
Fire Ants
Brown Recluse Spiders
Black Widow & Wolfe Spider
Multi Colored Asian Lady Beetles Brown
Marmorated Stink Bug
Kudzu Bug
Megacopta cribraria
As a defense mechanism, they emit a foul-smelling pheromone that also acts as a congregation pheromone.

Aside from smelling foul, the liquid also creates a burning sensation and sometimes leaves a red welt on bare skin.
Questions
Thank You!

More information can be found on Communications & PR Page on the Facilities Services Web site fs.utk.edu.