Prevent Mosquito Bites

The best way to protect yourself, your family and your community from mosquito bites, is to follow the four D's:

DRAIN: Drain or empty standing water around your home and neighborhood, since that is where mosquitoes lay their eggs

DUSK/DAWN: Take extra care to use repellent and protective clothing during evening and early morning (dusk and dawn) or consider avoiding outdoor activities during these times when mosquitoes are most active

DRESS: Dress in long sleeves and pants during dusk and dawn or in areas where mosquitoes are active. Wearing light-colored clothing may also help prevent being bitten.

DEET, Picariden or Oil of Lemon Eucalyptus: Wear insect repellant containing either DEET, Picariden or oil of lemon eucalyptus.

- Follow label instructions
- Apply repellants to exposed skin and/or clothing.
- Never use repellants over cuts, wounds or irritated skin
- If using DEET, choose the concentration that best fits the amount of time spent outside. 25 percent DEET lasts up to 5 hours, 5 percent lasts 45-90 minutes. Use a concentration of 30 percent or less for children.
- DEET should not be used on children less than 6 months of age. Oil of lemon eucalyptus should not be used on children less than 3 years of age.

Public Health... Everyday, Everywhere, Everyone

Regional Partnerships

In addition to JCPH local efforts to track and respond to possible mosquito borne disease outbreaks, JCDHE shares information with other front range counties (Boulder, Broomfield, Adams, Denver, Arapahoe, Weld, Douglas, and Pueblo). Each county reports data on mosquito species and numbers, horse and bird WEE, WNV, and SLE cases and any human cases. If any mosquito borne illnesses were occurring in an adjacent county, our surveillance efforts would be increased.

Jefferson County
Public Health

Environmental Health Services
1801 19th Street
Golden, Colorado 80401
303-271-5700
www.jeffco.us/health

JCPH Main Switchboard (303) 232-6301

JMay 2011

Jefferson County Public Health

Protect Against Mosquitoes

Mosquito Control Begins at Home!

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Public Health...Everyday, Everywhere, Everyone

Diseases Spread by Mosquitoes in Colorado

The only way mosquitoes can spread disease is when they bite.

- Colorado mosquito season is May thru September, with peak activity usually occurring in late July through September.

- In Colorado, ***Western Equine Encephalitis (WEE), West Nile Virus (WNV), and St. Louis Encephalitis (SLE)*** are all diseases that can infect mosquitoes and be spread to humans via the familiar mosquito bite.

- All three of these diseases can cause encephalitis or inflammation of the brain and lining of the brain and spinal cord. Encephalitis can be life threatening for anyone, and is particularly serious in those whose ability to fight off infection is compromised such as young children and the elderly.

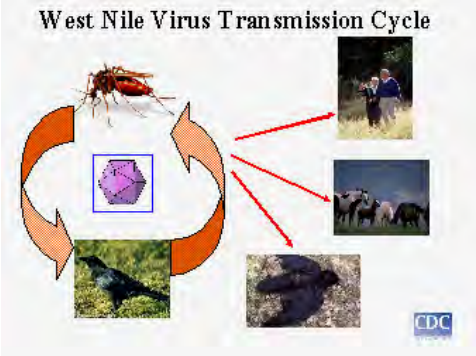
  ⇒ *Signs of illness usually appear 3 to 14 days after being bitten and may include fever, severe headaches, muscle aches and weakness. Call your medical provider immediately if you become ill after being bitten by a mosquito.*

- Only certain types of mosquitoes transmit or pass on WEE, WNV, or SLE. **The mosquitoes most responsible in Colorado are the *Culex tarsalis* and *Culex pipien*.** Both of these mosquitoes like stagnant water to lay their eggs.

- Most mosquitoes, and there are over 2,700 species in the world, are not infected with disease. **Still, one bite from an infected mosquito can change a lifetime. Protect yourself and your family.**

Surveillance for Mosquitoes and Their Larvae

The mosquitoes most responsible for infecting humans with disease in Colorado (WEE, WNV, and SLE) are *Culex tarsalis* and *Culex pipiens*. The Culex species breed in quiet standing water. *Pipiens* lay eggs in small containers or anywhere water collects, while *tarsalis* prefers larger bodies of stagnant water to lay its eggs.



Mosquitoes become infected by feeding on infected birds, then carry the disease in their saliva and pass it on to humans and horses when they bite.

JCPH Integrated Mosquito Control Program tracks WEE, WNV and SLE by testing dead birds and mosquitoes and by monitoring human and horse cases.

- Streams, creeks and irrigation canals are monitored for mosquito larvae. Larvae are destroyed before they can turn into mosquitoes.
- Mosquito traps are strategically placed. *Culex* species are identified, counted and their locations tracked.
- Mosquitoes are submitted to the Colorado Department of Public Health & Environment laboratory for testing.
- Citizens can help in mosquito control by reporting dead bird locations to **303-239-7075.** Dead bird locations are tracked. Only certain dead birds will be tested for disease.

Control Mosquitoes at Home

The best form of control is prevention. Mosquitoes need water to breed and grow, but not very much water. So, getting rid of areas where water collects around your home twice a week, will cut down on the amount of mosquitoes that hatch around your home.

- Drain standing water (rain barrels, flowerpots, kiddie pools, bird baths) around the home weekly.
- Treat livestock water tanks with BTI, a bacteria that kills larvae but is safe for animals. BTI can be found at most home and garden stores and is often called mosquito "dunks" or pellets.
- If possible, stock garden or ornamental ponds and fountains with fish that eat mosquito larvae or treat water with BTI.
- Large in ground pools should be drained when not in use
- Make sure window and door screens are bug tight
- Improve yard drainage, making sure that there are no low spots to trap and retain water.
- Clean clogged gutters in the spring and fall; make sure they drain properly
- Keep water in animal troughs and watering dishes fresh. Drain water from around stock troughs.