

Public Health **FACT** *Sheet*

Insect Bites & Insect Repellents

KNOX COUNTY HEALTH DEPARTMENT
140 DAMERON AVENUE - KNOXVILLE, TN 37917-6413 - (865) 215-5200

What problems can be caused by insect bites?

Ordinarily, insect bites are just a nuisance. Most people become very uncomfortable when insects are found crawling on them or flying around them. Outdoor activities can be disrupted. Some bites may actually cause pain. In rare situations, an insect bite can serve to transmit certain diseases. In Tennessee some mosquitoes can transmit LaCrosse encephalitis, and some ticks can transmit Ehrlichiosis and Rocky Mountain spotted fever (RMSF). More recently, there has been concern about the transmission of West Nile Virus encephalitis by mosquitoes.

How can tick bites be prevented?

- Wear light-colored, long-sleeved shirts and pants. It's easier to see dark ticks crawling on light backgrounds.
- Tuck pant legs into socks to reduce contact with low-lying brush that ticks inhabit.
- Check for ticks once a day. Their favorite places are in the armpits, along the hairline, in or behind the ears, on the legs, thighs and groin.
- To remove a tick, use tweezers to grasp the tick firmly as close to its mouthparts as possible. Pull straight out. If you use your fingers, protect your fingertips with a plastic bag or tissue and wash your hands afterwards.
- Use repellents containing DEET and follow directions on the label.

How can mosquito bites be prevented?

- Wear long-sleeved shirts and long pants. Take care to cover up the arms and legs of children playing outdoors.
- Stay indoors at dawn and dusk when mosquitoes are most active.
- Use mosquito netting on baby carriages or playpens when the baby is outdoors.
- If you camp, use a tent with mosquito netting.
- Avoid shaded locations and locations with overgrown vegetation where mosquitoes may be waiting for a meal.
- Avoid wearing perfume, cologne, fragrant shampoo, soaps or hair spray, because they may attract mosquitoes.
- Use mosquito repellents containing DEET and follow directions on label.

What is WNV?

West Nile Virus is one of several mosquito-borne viruses in the US that can infect people. The principle carriers of WNV are numerous species of wild birds. Humans are infected with WNV when they are bitten by a certain species of mosquitoes, which have recently bitten an infected bird. Humans can not be infected with WNV from birds. West Nile Virus is capable of causing fatal neurological disease, such as encephalitis, in humans and horses and also can cause death in certain wild birds.

What are the symptoms of WNV?

- Many people have no illness
- Some may experience mild flu-like illness that includes fever, headache and body aches that only last a few days

Note: Less than one percent of those infected may develop meningitis or encephalitis, the most severe forms of the disease requiring medical care. This occurs primarily in persons over 50 years of age. Symptoms of encephalitis or meningitis may include:

- **Severe headache**
- **High fever**
- **Neck stiffness**
- **Stupor**
- **Disorientation**
- **Convulsions**
- **Paralysis**
- **Coma**
- **Sometimes death**



How is WNV spread?

West Nile virus is spread to humans by the bite of an infected mosquito. Mosquitoes acquire WNV by biting a bird that has the virus. The virus is NOT spread by person-to-person contact and cannot be spread directly from birds to people. (Note: dead birds should still not be handled with bare hands).

What can I do around my home to help reduce exposure to mosquitoes?

- Dispose of, regularly empty, or turn over any water holding containers on your property such as tires, cans, flowerpots, or trashcans.
- Drill holes in the bottom of recycling containers that are left outdoors.
- Make sure roof gutters drain properly and water doesn't stand in them.
- Change the water in birdbaths at least once a week.
- Turn over plastic wading pools and wheelbarrows when not in use.
- Keep swimming pools, outdoor saunas and hot tubs clean and properly chlorinated; remove standing water from pool covers.