

## Mosquito Borne Disease Prevention

There are over 60 different types (species) of mosquitoes in Oklahoma and 230 species in the United States. Each species looks and acts different, such as how aggressive they are when they bite, where they breed, and when they are most active. Mosquitos are known carriers of infectious diseases like West Nile virus and Zika virus. Controlling mosquitos is key to reducing your risk of getting one of these diseases.

### How can I prevent mosquito bites?

Use Environmental Protection Agency (EPA)-registered insect repellents with one of the active ingredients below. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.

- DEET
- Picaridin (known as KBR 3023 and icaridin outside the US)
- IR3535
- Oil of lemon eucalyptus (OLE)
- Para-menthane-diol (PMD)
- 2-undecanone

### Tips for everyone

- Always follow the product label instructions
- Avoid doing outdoor activities when mosquitoes are most active in the early morning and early evening.
- Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen first and insect repellent second.

### Tips for babies and children

- Dress your child in clothing that covers arms and legs.
- Cover strollers and baby carriers with mosquito netting.
- When using insect repellent on your child:
  - Always follow label instructions.
  - Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under 3 years old.
  - Do not apply insect repellent to a child's hands, eyes, mouth, cuts, or irritated skin. Adults should spray insect repellent onto their hands and then apply to a child's face.

### Natural insect repellents (repellents not registered with EPA)

- We do not know the effectiveness of non-EPA registered insect repellents, including some natural repellents. To protect yourself against diseases spread by mosquitoes, CDC and EPA recommend using an EPA-registered repellent ensures the EPA has evaluated the product for effectiveness.

### **Treat clothing and gear**

- Use 0.5% permethrin to treat clothing and gear (such as boots, pants, socks, and tents) or buy permethrin-treated clothing and gear. Watch the video, What You Need to Know About Permethrin.
  - Permethrin is an insecticide that kills or repels mosquitoes.
  - Permethrin-treated clothing provides protection after multiple washings.
  - Read product information to find out how long the protection will last.
  - Do not use permethrin products directly on skin.

### **Take steps to control mosquitoes indoors and outdoors**

- Use screens on windows and doors. Repair holes in screens to keep mosquitoes outdoors.
- Stop mosquitoes from laying eggs in or near water.
  - Once a week, empty and scrub, turn over, cover, or throw out items that hold water, such as tires, buckets, planters, toys, pools, birdbaths, flowerpots, or trash containers.
  - Check for water-holding containers both indoors and outdoors.
- Mosquito breeding sites can be anywhere. Neighborhood clean-up days can encourage people to keep their yards free of standing water. Mosquitoes don't care about fences, so it's important to control breeding sites throughout the neighborhood.