# Repellent

Fact Sheet





Repellents can help reduce mosquito and tick bites. Mosquito and tick bites can lead to serious illnesses like West Nile virus and Lyme disease. Using repellent allows individuals to spend time outside with a lower risk of mosquito and tick bites.

## **General Considerations**

Always follow label instructions.



Do not apply repellent to cuts, wounds, or irritated skin



Do not spray directly on the face



Do not spray in enclosed areas or near food



After returning indoors, wash treated skin with soap and water

- Use only enough repellent to cover exposed skin or clothing.
- Only apply repellent to exposed skin.
- Heavy application is not necessary.
- Do not spray repellents directly on to pets.

## Which Repellents Work Best On Skin?



CDC recommends using products that are shown to work in scientific trials and contain active ingredients which are registered with the US Environmental Protection Agency (EPA). The following are active ingredients registered with the EPA for use on skin:

- DEET (N, N-diethly-m-tolumide)
- Picaridin (KBR 3023 or "Bayrepel")
- IR3535 (Merck 3535 or 3-(N-Butyl-N-acetyl)-aminoproprionic acid)
- Oil of Lemon Eucalyptus (p-Menthane 3,8-diol or PMD)

Products with DEET and Picaridin typically provide longer-lasting protection than others. Repellents with at least 20% active ingredient work best.

#### Permethrin



Permethrin is registered with the EPA for use as an insecticide and a repellent. **Permethrin should NOT be applied directly to your skin or pets.** Permethrin can be applied to clothing and is effective through several washings. Clothing should be treated according to the label instructions. Spray clothes while they are on the ground and be sure that clothes are dry before you wear them. Some clothing and gear are available pretreated with permethrin. Permethrin kills mosquitoes and ticks on contact.

#### **Guidelines For Pregnant and Nursing Women**



The EPA does not recommend any additional precautions for the use of registered repellents on pregnant or nursing women. Talk to your healthcare provider if you have questions.

## **Guidelines For Children**



- Apply repellent to your own hands and then rub it on your child.
- Avoid children's eyes and mouth. Use sparingly around the ears.
- Do not allow children to apply repellent themselves.
- Keep repellent out of reach of children.
- Do not apply repellent under clothing.
- Oil of lemon eucalyptus products should not be used on children under the age of three. Other ingredients, including DEET, do not have age restrictions.

### For More Information, Visit:



- Frequently asked tick and mosquito questions: www.maine.gov/dhhs/tickfaq
- EPA website: www.epa.gov
- American Academy of Pediatrics website: www.aap.org
- Maine Board of Pesticide Control: www.maine.gov/agriculture/pesticides
- Find the repellent that is right for you: epa.gov/insect-repellents/find-repellent-right-you

You can also call Maine CDC at 1-800-821-5821.