Mosquito Bite Prevention (United States)

Not all mosquitoes are the same. Different mosquitoes spread different viruses and bite at different times of the day.

**Type of Mosquito**
- *Aedes aegypti, Aedes albopictus*
- *Culex species*

**Viruses spread**
- Chikungunya, Dengue, Zika
- West Nile

**Biting habits**
- Daytime
- Dusk (evening) to dawn (morning)

Protect yourself and your family from mosquito bites

**Use insect repellent**

Use an Environmental Protection Agency (EPA)-registered insect repellent with one of the following active ingredients. All EPA-registered insect repellents are evaluated for safety and effectiveness.

<table>
<thead>
<tr>
<th>Active ingredient</th>
<th>Some brand name examples*</th>
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<tbody>
<tr>
<td>Higher percentages of active ingredient provide longer protection</td>
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<tr>
<td><strong>DEET</strong></td>
<td>Off!, Cutter, Sawyer, Ultrathon</td>
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<tr>
<td><strong>Picaridin</strong>, also known as <strong>KBR 3023</strong>, <strong>Bayrepel</strong>, and <strong>icardin</strong></td>
<td>Cutter Advanced, Skin So Soft Bug Guard Plus, Autan (outside the United States)</td>
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<tr>
<td><strong>Oil of lemon eucalyptus (OLE)</strong> or <strong>para-menthane-diol (PMD)</strong></td>
<td>Repel</td>
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<tr>
<td><strong>IR3535</strong></td>
<td>Skin So Soft Bug Guard Plus Expedition, SkinSmart</td>
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</table>

* Insect repellent brand names are provided for your information only. The Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services cannot recommend or endorse any name brand products.
Always follow the product label instructions.
- Reapply insect repellent every few hours, depending on which product and strength you choose.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen first and insect repellent second.

**Natural insect repellents (repellents not registered with EPA)**
- EPA has not evaluated natural insect repellents for effectiveness.
  - Examples of ingredients used in unregistered insect repellents include: citronella oil, cedar oil, geranium oil, peppermint oil, or soybean oil.

**If you have a baby or child**
- Always follow instructions when applying insect repellent to children.
- Do not use insect repellent on babies younger than 2 months of age.
- Dress your child in clothing that covers arms and legs, or
- Cover crib, stroller, and baby carrier with mosquito netting.
- Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
  - Adults: Spray insect repellent onto your hands and then apply to a child's face.

**Treat clothing and gear**
- Treat items such as boots, pants, socks, and tents with permethrin or purchase permethrin-treated clothing and gear.
  - Permethrin-treated clothing will protect you after multiple washings. See product information to find out how long the protection will last.
  - If treating items yourself, follow the product instructions.
  - Do not use permethrin products directly on skin.

**Mosquito-proof your home**
- Use screens on windows and doors. Repair holes in screens to keep mosquitoes outside.
- Use air conditioning when available.
- Keep mosquitoes from laying eggs in and near standing 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 inside and outside your home.