Aside from being itchy and annoying, the bite of an infected female mosquito (Aedes aegypti or Aedes albopictus) can spread dengue, chikungunya, or Zika viruses. People become infected with dengue, chikungunya, or Zika after being bitten by an infected mosquito.

• Female mosquitoes lay several hundred eggs on the walls of water-filled containers. Eggs stick to containers like glue and remain attached until they are scrubbed off. When water covers the eggs, they hatch and become adults in about a week.
• Adult mosquitoes live inside and outside.
• They prefer to bite during the day.
• A few infected mosquitoes can produce large outbreaks in a community and put your family at risk of becoming sick.

Protect Yourself, Your Family, and Community from Mosquitoes

1. **Eliminate standing water in and around your home:**
   - **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.
   - Tightly cover water storage containers (buckets, cisterns, rain barrels) so that mosquitoes cannot get inside to lay eggs.
   - For containers without lids, use wire mesh with holes smaller than an adult mosquito.

2. **If you have a septic tank, follow these steps:**
   - Repair cracks or gaps.
   - Cover open vent or plumbing pipes. Use wire mesh with holes smaller than an adult mosquito.

3. **Keep mosquitoes out of your home:**
   - Use screens on windows and doors.
   - Repair holes in screens.
   - Use air conditioning when available.
Prevent mosquito bites:

- Use an Environmental Protection Agency (EPA)-registered insect repellent with one of the following active ingredients. All EPA-registered insect repellents are evaluated to make sure they are safe and effective.

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

- Treat clothing and gear (such as boots, pants, socks, and tents) with permethrin or purchase permethrin-treated clothing and gear.
  - Treated clothing remains protective after multiple washings. See product information to find out how long the protection will last.
  - If treating items yourself, follow the product instructions carefully.
  - Do not use permethrin products, intended to treat clothing, directly on skin.

- Wear long-sleeved shirts and long pants.

Mosquito Bite Prevention (United States)

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

<table>
<thead>
<tr>
<th>Type of Mosquito</th>
<th>Viruses spread</th>
<th>Biting habits</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Aedes aegypti</em>, <em>Aedes albopictus</em></td>
<td>Chikungunya, Dengue, Zika</td>
<td>Primarily daytime, but can also bite at night</td>
</tr>
<tr>
<td><em>Culex species</em></td>
<td>West Nile</td>
<td>Evening to morning</td>
</tr>
</tbody>
</table>

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. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.

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Protect yourself and your family from mosquito bites (continued)

- 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)**
- The effectiveness of non-EPA registered insect repellents, including some natural repellents, is not known.
- To protect yourself against diseases like chikungunya, dengue, and Zika, CDC and EPA recommend using an EPA-registered insect repellent.
- When used as directed, EPA-registered insect repellents are proven safe and effective.
- For more information: [www2.epa.gov/insect-repellents](http://www2.epa.gov/insect-repellents)

**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.
- Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under 3 years of age.

**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.

[www.cdc.gov/features/StopMosquitoes](http://www.cdc.gov/features/StopMosquitoes)