

Prevent Mosquito Bites

Cover exposed skin by wearing long-sleeved shirts and long pants. Use an insect repellent with any of the following active ingredients:

- DEET
- Picaridin (also known as KBR 3023, Bayrepel, and icaridin)
- Oil of lemon eucalyptus (OLE) or PMD (also known as para-menthane-3,8-diol)
- IR3535 (Avon Skin So Soft Bug Guard Plus)

Higher percentages of active ingredient provide longer protection. Always use insect repellent as directed. If you are also using sunscreen, apply sunscreen first and insect repellent second. Reapply as directed.



You can buy products containing permethrin to put on clothing and gear (tents, sleeping bags) to repel mosquitoes. Protection from permethrin will last through several washings. Do not use permethrin directly on skin.

Stay and sleep in screened or air-conditioned rooms. Consider sleeping under a bed net, especially if the area where you are sleeping is exposed to the outdoors.

If You Think You Have Dengue

Talk to your doctor as soon as possible if you get sick with a fever within 2 weeks of being in a dengue risk area. Get lots of rest and drink plenty of liquids. Take acetaminophen (Tylenol or Panadol) as needed for fever and pain. Do not take aspirin, ibuprofen (Advil), or naproxen (Aleve), since these may increase bleeding.



Protect Yourself from Dengue When You Travel

- Use an insect repellent with an approved active ingredient.
- Treat clothing and gear with permethrin for additional protection.
- Cover exposed skin with long sleeves and pants.
- Stay in a screened or air-conditioned room.
- Consider sleeping under a bed net.
- Use area repellents if there are mosquitoes in your room.
- Empty standing water to keep mosquitoes from laying eggs.
- Get medical care if you get sick with fever within two weeks of returning from the tropics or subtropics.

Learn more about dengue at www.cdc.gov/dengue and www.cdc.gov/travel.
For more information, please call 1-800-CDC-INFO (800-232-4636) or visit www.cdc.gov/info.

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Travelers Can Prevent Dengue



What Is Dengue?

Dengue is a viral illness spread through mosquito bites. Though most infected people don't get sick or have mild symptoms, dengue can also be a severe and sometimes fatal illness. Symptoms can take up to 2 weeks to develop. Mild dengue symptoms include fever, headache, pain in the eyes, muscle and joint pain, nausea and vomiting, or rash.

Some people develop severe dengue just as they think they are getting better. Severe dengue symptoms may include intense stomach pain, repeated vomiting, abnormal bleeding from the nose or gums, vomiting blood or blood in the stool, drowsiness or irritability, clammy skin, or difficulty breathing. If you develop any of these warning signs, go to the emergency room right away. Severe dengue generally requires hospitalization.

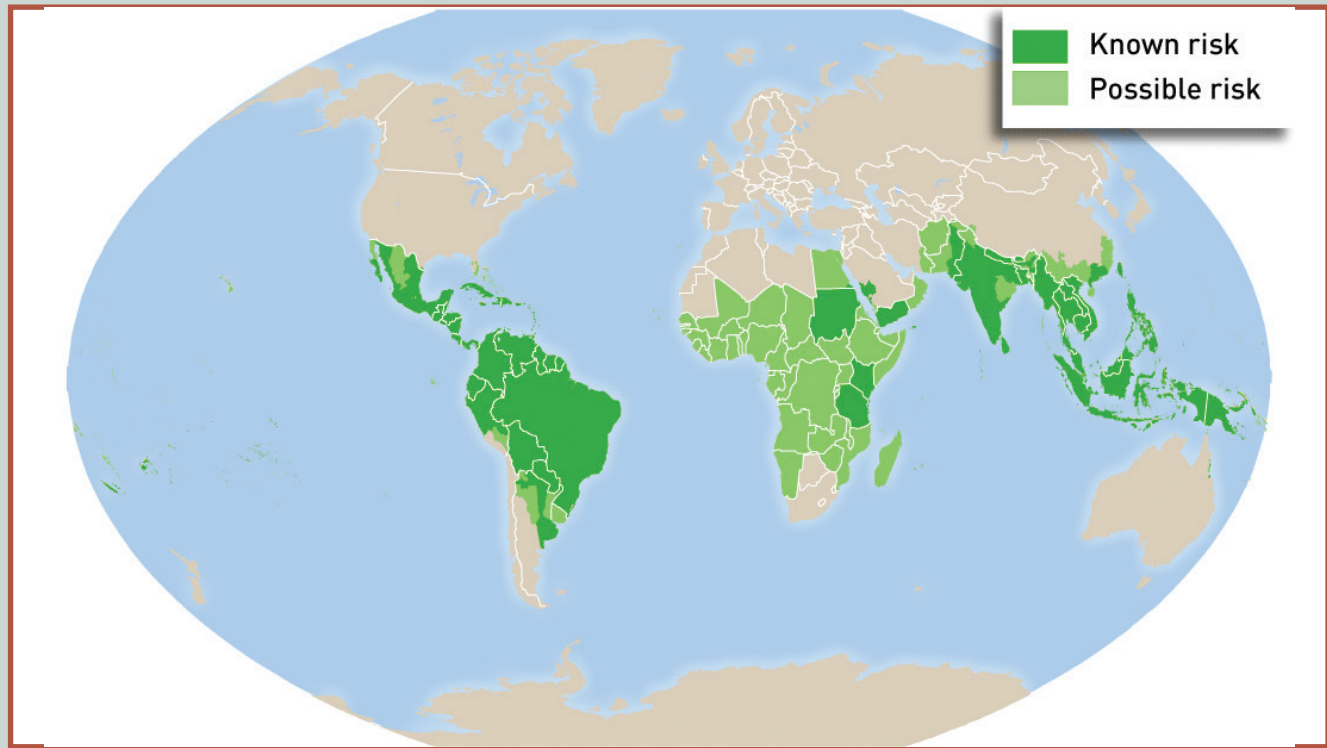


Who Is at Risk?

Anyone who travels to an area where there is dengue is at risk. The mosquitoes that spread dengue live in tropical and subtropical regions and live inside or around homes or hotels. They can bite during the day as well as at night. You can get dengue more than one time.

You Can Prevent Dengue

There is no vaccine or medicine to prevent dengue. Protect yourself from dengue by preventing mosquito bites.



Areas where dengue is a risk are highlighted. Travelers to these areas should take steps to prevent mosquito bites.

Protect Your Children

If you are traveling with a baby, dress him or her in loose clothing that covers arms and legs. Cover crib, stroller, and baby carrier with mosquito netting.

Do not use insect repellent on babies younger than 2 months. Always follow package directions when using repellent on older children.

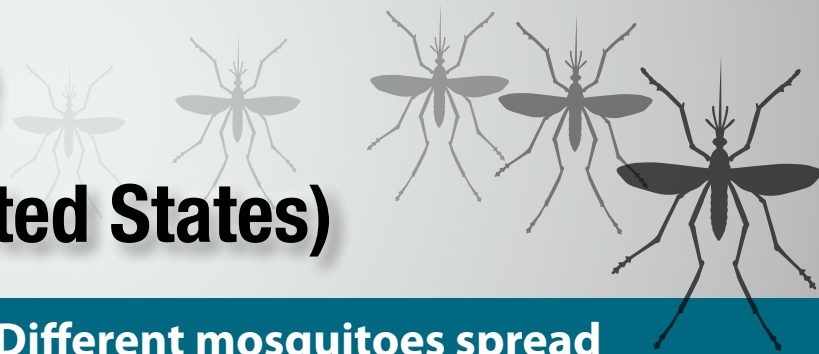


Protect the Area Where You Are Staying



Use insecticides or area repellents, such as mosquito coils or candles, containing the active ingredients metofluthrin or allethrin indoors if there are mosquitoes.

If you will be staying longer than a week in an area where there is a risk of dengue, prevent mosquitoes from laying eggs by emptying any containers of standing water, such as flower vases, rain barrels, or discarded tires.

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	Viruses spread	Biting habits
 <p><i>Aedes aegypti</i>, <i>Aedes albopictus</i></p>	<p>Chikungunya, Dengue, Zika</p>	<p>Primarily daytime, but can also bite at night</p>
 <p><i>Culex</i> species</p>	<p>West Nile</p>	<p>Evening to morning</p>

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.

Active ingredient	
Higher percentages of active ingredient provide longer protection	 <p>Find the insect repellent that's right for you by using EPA's search tool*.</p>
DEET	
Picaridin (known as KBR 3023 and icaridin outside the US)	
IR3535	
Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD)	
2-undecanone	

* The EPA's search tool is available at: www.epa.gov/insect-repellents/find-insect-repellent-right-you



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

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

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.

Keep mosquitoes out of your septic tank

Mosquitoes can get inside broken or unsealed septic tanks and lay eggs. Each day thousands of mosquitoes fly out of cracked or broken septic tanks. Mosquitoes can spread viruses like Zika, dengue, West Nile, and chikungunya.

Mosquitoes may be laying eggs inside your septic tank if it is:

- Open or unsealed
- Broken with cracks or spaces between the blocks
- Missing a ventilation pipe screen cover



Mosquitoes in a septic tank



Repair broken septic tank covers



Cover ventilation pipes

Inspect and repair your septic tank to keep mosquitoes out

Here's how:

- Seal the septic tank.
- Repair cracks or gaps in the exterior walls of the septic tank using cement.
- Cover ventilation pipes with a screen mesh, repair broken pipes, and seal at the joints.
- Fill abandoned or unused septic tanks with dirt or gravel.



Septic tank ventilation pipe with screen mesh



Septic tank with concrete cover



Septic tank sealed with PVC cap