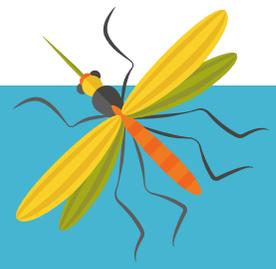




# EWG'S ADVICE FOR AVOIDING BUG BITES



If you spend time outdoors, you face some tough choices. Bug-borne diseases should not be taken lightly. Mosquito and tick bites can transmit life-changing illnesses like West Nile virus and Lyme disease.

As your first line of defense, cover up with pants and long sleeves. If you want or need a bug repellent, here are EWG's top picks for active ingredients, based on time spent outdoors:

## SHORT PROTECTION TIME



**10%**

- Picaridin
- DEET



## Other Options

- IR3535
- Oil of Lemon Eucalyptus/PMD
- 2-undecanone
- Botanical repellents (likely to contain more allergens)

## LONG PROTECTION TIME



**20%**

- Picaridin
- IR3535



**20-30%**

**DEET**  
(time-release products generally work over longer periods)

**30-40%**

**Oil of Lemon Eucalyptus**



### CONCERNED ABOUT LYME DISEASE?

Opt for a product with any of our recommended long-protection-time ingredients, and check for ticks once indoors. Avoid using Oil of Lemon Eucalyptus or PMD on kids under 3 years old. Note: Health agencies offer conflicting advice about DEET concentrations that are safe for children. Visit our website for more details.

### WANT TO AVOID MOSQUITOES THAT CARRY WEST NILE VIRUS?

Picaridin, DEET or IR3535 should work well. You may also consider Oil of Lemon Eucalyptus, PMD or 2-undecanone. Choose a concentration based on the amount of time you expect to spend outdoors. Avoid using Oil of Lemon Eucalyptus or PMD on kids under 3 years old.

### LOOKING TO PROTECT YOUR KIDS FROM BUG BITES?

Looking to protect your kids from bug bites? Don't use bug repellents on infants under 6 months old. Putting fine netting over strollers and baby carriers is the best solution. Visit our website for recommendations for older children.

### WHAT ABOUT BOTANICALS?

If bug-borne diseases are not prevalent where you live or travel, you can try some botanical repellents. Be aware that many contain highly concentrated allergens. Effectiveness varies widely.



## DO

## EWG'S DO'S & DON'T'S FOR AVOIDING BUG BITES



### COVER UP!

Wear pants, socks and long sleeves, especially when venturing into heavy brush with likely bug infestations.

Take extra precautions to avoid bug bites if you are in a high-risk area for Lyme disease, West Nile virus, or other mosquito- and tick-borne diseases.

Use nets and/or fans over outdoor eating areas, and nets over strollers and baby carriers.

### READ LABELS!

Labels help ensure safe usage of repellents and protection from bugs.

Choose a repellent concentration rated for the timespan you'll be outdoors, but not longer.

Use products with the lowest effective concentration of repellent chemicals, particularly on children.

### TAKE EXTRA CARE WITH KIDS!

Keep repellents away from young children to reduce risk of accidental swallowing.

Send kids to camp with netting for bunks.

## DON'T USE

Oil of Lemon Eucalyptus/PMD on children younger than 3 years old.

More than 30 percent DEET on anyone.

Any bug repellents on children under 6 months.

Outdoor "fogger" insecticides. They contain more toxic ingredients than repellents applied to skin.

Repellent candles. They may not be effective. They emit fumes that could trigger respiratory problems.

Aerosol sprays in pressurized containers. You'll inhale chemicals, and you could get sprayed in the eyes.

Repellent mixed with sunscreen. If you reapply the sunscreen every two hours, as advised, you will overexpose yourself to repellent.

Bug zappers and treated wristbands. They're ineffective. Save your money.

## ALSO CONSIDER THESE ADDITIONAL TIPS

1.

Use products in lotion, pump or towelette form. Wash your hands after applying. Try repellents on a small patch of exposed skin before you slather it all over.

2.

Consult a physician if you are traveling out of the U.S. or need to use bug repellent daily for prolonged periods.

3.

Check for ticks thoroughly after returning indoors and remove ticks properly.

4.

Wash clothing and repellent-coated skin when you come indoors.

