

Division of Disease Control and Forensic Pathology

Insect Repellent Use and Safety: What Do I Need to Know?

Why should I use insect repellent?

Repellents help prevent mosquito bites that may carry viruses such as West Nile virus that can cause serious illness. Using insect repellent allows you to continue to play and work outdoors with a reduced risk of mosquito bites.

Are all insect repellents the same?

No. There are many types of repellent with different concentrations of active ingredient. The CDC recommends the use of products registered with the US Environmental Protection Agency (EPA). Repellent containing the active ingredients DEET, picaridin, IR3535 or oil of lemon eucalyptus offer protection from mosquito bites and can be used on skin and clothing. Permethrin is another type of repellent which is only for use on clothing and gear, not the skin. A general rule when using insect repellents is to always follow the manufacturer's directions.

What is the proper way to use repellents?

Always follow the directions on the product label. Choose a repellent that will provide sufficient protection for the time being spent outdoors and use over exposed skin and clothing. Do not apply repellent to skin under clothing or if the skin is broken or irritated. Do not spray repellent directly to face, instead, spray on hands first then apply to the face.

When should I wear mosquito repellent?

Repellent should be applied whenever you are going to be outdoors, even if you do not see any mosquitoes. Many of the mosquitoes that carry the West Nile virus are likely to bite between dusk and dawn. If you are outdoors during that time, it is especially important to apply repellent.

How often should repellent be re-applied?

Follow the directions on the product you are using in order to determine how frequently you need to re-apply repellent. You may need to re-apply more frequently if sweating or after getting wet. Repellents containing a higher concentration of active ingredient typically provide longer-lasting protection.

Can I use an insect repellent containing DEET and apply sunscreen at the same time?

Yes. People can and should use both sunscreen and insect repellent when they are outdoors to protect their health. Follow the directions on the product label. In general, apply sunscreen first, followed by repellent. Though, the use of combination sunscreen/insect repellent products containing DEET is not recommended due to different instructions on how frequently the products should be applied. Typically, insect repellent

containing DEET does not need to be applied as frequently as sunscreen. At this time, there are no recommendations on using sunscreen in combination with other repellent active ingredients.

Are insect repellents safe to use on children?

The product label will state if there are any age restrictions for the use of the repellent. The American Academy of Pediatrics (AAP) offers advice for the use of DEET containing repellent in children. Because DEET is so widely used, a great deal of testing has been done. Repellent with DEET can be used for both adults and children, according to directions. However, children under the age of 2 months should not use DEET at any concentration. Oil of lemon eucalyptus products specify on the label that they should NOT be used on children under 3 years of age. Never allow children to apply repellent to themselves and be careful not to apply repellent on the child's hands to prevent the indirect ingestion of repellent.

Can I use insect repellents if pregnant or nursing?

Yes. There are not any additional precautions for the use of EPA registered repellents in pregnant or nursing women. Ask your doctor if you have additional questions.

Are there any risks due to using insect repellents?

Use of these products may cause skin reactions in rare cases. Always follow the instructions on the product label. If you suspect a reaction to a product, discontinue use, wash the treated skin and call your physician or local poison control center. The number to reach Poison Control is 800.222.1222.

Where can I get more information about repellents?

For more information about using repellents, please consult the EPA website at www.epa.gov/insect-repellents or by visiting the AAP website at AAP.org.

Additional Information:

Is available at www.hhs.nd.gov/wnv/resources or by calling the North Dakota Department of Health and Human Services at 800.472.2180.

Source: Thanks to the Centers for Disease Control and Prevention