

Personal repellents protect you from ticks, mosquitoes, fleas and other biting pests. Repellents reduce your chances of getting sick from diseases spread through pest bites.



Some repellents are EPA registered pesticides. Some do not need to be EPA registered because they are based on natural oils from plants and considered safe.

Repellents are available in different forms for different purposes.

They vary in strength and ability to keep biting pests away for different lengths of time.

Most repellents will not repel stinging pests such as wasps or bees.



Choose a repellent that best meets your needs.

What should you look for on the product?

Look for these ingredients on the label.

- DEET
- Picaridin
- IR3535
- OLE (Oil of Lemon Eucalyptus)
- Para-menthane-diol (PMD)
- 2-undecanone
- Nootkatone



Table 1. \*Examples of repellent products suitable for different purposes.

Activity examples →	Walking in the park, gardening	Outdoor sports, cycling, lawn mowing	Hiking, camping, construction work
Duration of activity	1-2 hours	3-6 hours	7-10 hours
Apply on exposed skin	OFF! Familycare® Cutter Unscented® Avon Skin-So-Soft®	Champion Spray On® Repel Sportsman Max® Coleman 25 Spray®	OFF! Deep Woods® Cutter Advanced® Ben's 100®
Apply on clothing or equipment	--	InsectGuard® Permethrin Treated sleeves	Sawyer® Premium Permethrin Spray for clothing, gear & tents

\*Source: EPA Repellent Finder <https://www.epa.gov/insect-repellents/find-repellent-right-you>.

What pests do you want to keep away?

See which pests are listed on the label →



How long will you be outdoors?

Products with higher percentage of the active chemical usually work longer to protect you. Read the label for more information.

What do you plan to do outdoors?

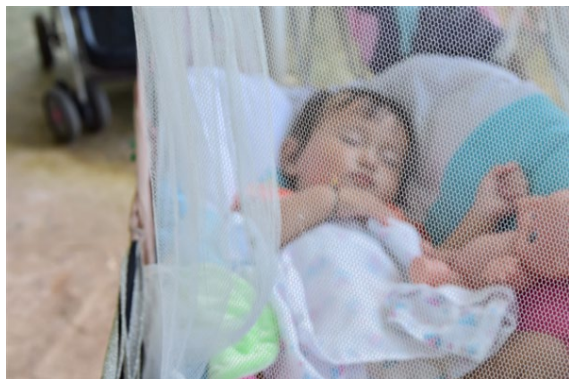
Extreme heat, sweating and water may reduce how effective a repellent is or how long it protects a person for. You may have to reapply a repellent more often.

Who will use the repellent?

Not all products can be used on children.

## Repellents and children

Do not use repellents on babies younger than 2 months. Very young children in carriers and strollers can be protected using mosquito netting.



Avoid using products containing OLE or PMD on children under 3 years of age.

Do not let children handle repellents. Apply repellent to your own hands first and then apply it on the child, avoiding their hands.

**NEVER** apply insect repellent to a child's hands, mouth, ears, cuts, or irritated skin.

Always store repellents out of reach of children.



## Repellent safety: Do's

- Apply repellents over clothing, or on exposed skin only.
- Use only the required amount.
- Once you return indoors, wash treated skin with soap and water rinsing off the repellent completely.
- If a repellent is causing a reaction, stop using it immediately.
- Always read and follow label instructions.

## Repellent safety: Don'ts

- Do not apply repellents on skin under clothing.
- Do not apply repellents over cuts, wounds or irritated skin.
- Do not spray repellent directly on your face—spray on your hands and then apply to face.
- Do not apply repellent sprays in closed spaces.
- Do not apply repellents near food and drink.

**If a child or pet eats or drinks a repellent call Poison Control immediately.**



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## Mosquito and Tick Repellents

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