



Permethrin Treated Clothing *What You Need to Know*

Deployment Medication Information Sheets (DMIS) are provided by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). Written for soldiers and their families, they provide basic information on deployment medications that are intended as guidance only; consult your health care provider for more information.

What is permethrin?

- Permethrin is an insecticide used to kill a variety of insects that cause disease in humans.
- Permethrin is applied on clothing as a protective measure against blood-feeding arthropods such as mosquitoes, chigger mites, ticks, and sand flies.
- Unlike conventional agents, permethrin does not repel biting insects—it has a toxic effect on them.
- Permethrin is not greasy, is nearly odorless, and does not cause skin irritation in most humans.
- Permethrin is long lasting as a clothing treatment and resists washing and wear.
- It is available commercially as a 0.5% spray formulation.
- Standard military clothing repellent formulations include the 0.5% permethrin aerosol spray (one application lasts through five to six washes) and the 40% permethrin impregnation kit (one application lasts the life of the uniform).

Who should use permethrin and how is it used?

- Numerous studies have confirmed the effectiveness of permethrin treated uniforms in reducing the occurrence of malaria and other diseases.
- It is most effective when used in combination with DEET application on the skin.
- For added protection, permethrin may also be used on tents and bed nets.
- Permethrin should only be used on clothing, bed nets, and tents—never on skin. There are several methods for applying permethrin. Follow the manufacturer's instructions.

What does the military require?

Permethrin is required for use when on duty or deployed to environments with biting insects, especially if the insects are known to carry human diseases.

Are there any side effects?

- You may experience itching, tingling, numbness, redness, or irritation. If these effects continue, inform your health care provider.
- Notify your health care provider if you develop a skin rash or burning or swelling of the skin.

Is there any reason I shouldn't use permethrin?

While permethrin is highly toxic to insects and other arthropods, it is among the least toxic insecticides to humans. Tell your health care provider if you have any pre-existing illness or allergies, or if skin irritation is persistent.

What if I'm pregnant or breast-feeding?

- Discuss the risks and benefits with your health care provider.
- Although less than 2% of permethrin is absorbed after topical administration, it is not known whether the drug is excreted into breast milk. Consult your health care provider before breast-feeding.

You can avoid insect bites with permethrin!

- Eliminate mosquito-breeding sites by emptying water collected in outdoor containers or debris.
- Remain in well-screened areas, particularly at dawn, dusk, and early evening when mosquitoes are most active.
- Use mosquito nets.
- Wear loose clothing that covers most of the body.
- Bed nets and tents can also be soaked in or sprayed with permethrin.
- For optimum protection, permethrin treated clothing should be worn with DEET (N,N-diethylmetatoluamide) repellents on

Where can I get more information?

- Health care provider at your military treatment facility.

DMIS Provided by:

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