



LEISHMANIASIS

Information for Service Members

A Collaborative Effort of DHCC, AFIOH/RSR, DHSD, USACHPPM, & WRAMC



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Leishmaniasis is a disease caused by a parasite and spread by the bite of infected sand flies. There are several different forms of leishmaniasis. Most common is the skin form (cutaneous leishmaniasis), which causes scarring skin sores. The internal form (visceral leishmaniasis) affects internal organs and is the most serious form. Leishmaniasis exists in Iraq, Kuwait, Afghanistan, and other places in the Middle East and poses a health risk to service members deployed there. Sand fly season in Iraq runs from April through November and peaks in September or October. While effective treatment is available, prevention remains the best option. Leishmaniasis is not the same disease as Sandfly Fever which is also carried by sand flies.

WHAT ARE THE SIGNS AND SYMPTOMS OF LEISHMANIASIS?

People with the skin form have one or more lasting skin sores where infected sand flies have fed. These sores can last for weeks or months and usually do not respond to common treatments like antibiotics or creams. The sores can change in size and appearance over time. They often end up looking a bit like a tiny volcano, with a raised edge and central crater. Scabs may develop and some have silvery scales around the outside. Some sores will heal by themselves. The sores can be painless or painful. Some people have swollen glands near the sores (for example, under the arm if sores are on the hand or arm).

People who have the internal form of leishmaniasis usually have long-term fever, weight loss, and a big spleen or liver. The doctor may also notice abnormal lab results.

IN WHAT PARTS OF THE WORLD IS LEISHMANIASIS FOUND?

Leishmaniasis is found in about 88 countries including the Middle East and poses a possible health threat to service members deployed to that region. Both the skin and internal forms are found in Iraq. The skin form is most common.

HOW IS LEISHMANIASIS SPREAD?

Leishmaniasis is not spread from person to person. It is spread by the bite of infected sand flies. Sand flies get infected by biting an infected animal (for example, a rat, dog or person). Sand flies do not make noise when they fly or jump, so people may not realize they are being bitten. Sand flies are very small and may be hard to see; they are only about one-fourth the size of mosquitoes. Sand flies are most active from dusk to dawn. They are less active during the hottest times of the day. Rarely, leishmaniasis is spread from a pregnant woman to her unborn baby. Leishmaniasis can also be spread

by blood transfusions or infected needles. If you suspect that you have leishmaniasis, you should delay making blood donations until your doctor says you can donate safely.

HOW SOON MIGHT LEISHMANIASIS SYMPTOMS APPEAR AFTER A BITE?

People with the skin form usually get skin sores within a few weeks of a bite but sometimes as long as months. People with the internal form usually get sick within months (rarely as long as a few years) of the bite.

WHAT WILL HAPPEN IF LEISHMANIASIS IS LEFT UNTREATED?

Skin sores may heal on their own but this can take months or even years. The sores can leave ugly scars. If not treated, infection that started in the skin can rarely spread to the nose or mouth and can cause sores there (mucocutaneous leishmaniasis). These sores can also leave ugly scars. This happens sometimes in the types of leishmaniasis found in Central and South America.

Internal Leishmaniasis can cause serious problems or hospitalization but does not usually cause death in people with healthy immune systems and good nutrition. In some, internal leishmaniasis can cause a milder illness. Internal leishmaniasis can be life-threatening in people with other serious diseases or immune system problems.

WHAT SHOULD I DO IF I THINK I MIGHT HAVE LEISHMANIASIS?

See your health provider and ask to be evaluated. You should tell the provider about recent travel. Your provider will ask you about any signs or symptoms of leishmaniasis you may have, such as skin sores that have not healed. If you have skin sores, your provider will likely want to take samples from the sores and test them in a lab. These samples can be checked

for the parasite in various ways like under a microscope. There are no easy ways to test for the internal form. A blood test for antibodies (immune response) to the parasite can be helpful. Tests to look for the parasite in the bone marrow may also be done.

HOW IS LEISHMANIASIS TREATED?

Leishmaniasis is curable. The skin form may heal on its own. Treatment often takes a medication that is only available in a few places. The drug called liposomal amphotericin (AmBisome®) is used to treat the internal form but it does not seem to work as well for the skin forms. A drug called sodium stibogluconate (Pentostam®) has been used by doctors for over sixty years now to treat both skin and internal forms of leishmaniasis. It works well but is not approved by the U.S. Government (it is made and licensed in Great Britain) and can only be used at Walter Reed Army Medical Center, Brooke Army Medical Center, and the Centers for Disease Control and Prevention. Sometimes other treatments such as pills and creams are tried but are either untested or less effective than the other medicines described above. The smallest sores (under 0.4 inches) may not require treatment. Your doctor may just watch and wait for them to heal on their own.

IF I ALREADY HAD LEISHMANIASIS, COULD I GET IT AGAIN?

Yes. Some people have had leishmaniasis more than once. Therefore, you should always use preventive measures when deploying or traveling to a high risk place.

BLOOD DONATION

If you have been in an area such as Southwest Asia where leishmaniasis is common, you may not donate blood for one year after redeployment. If you have been diagnosed with leishmaniasis, you may not donate blood for the rest of your

PREVENTING LEISHMANIASIS

The best way to prevent leishmaniasis is to prevent sand fly bites. There are no vaccines or pills you can take to prevent it. To decrease your risk of being bitten, you should:

- Stay in air conditioned tents from dusk to dawn when possible
- Stay in well-screened tents if air conditioned tents are not available
- Wear long-sleeved shirts, long pants and socks when going outside. Tuck undershirts into pants and pants into boots.
- Insect repellent should be applied liberally on uncovered skin and under the ends of sleeves and pant legs. The military controlled-release lotion containing 33% DEET is effective for 4 to 12 hours. Repeat as directed.
- Clothing should be treated with permethrin-containing insecticides. The military IDA kit treats one uniform and lasts through approximately 50 washings. Uniforms treated with permethrin in an aerosol spray can must be retreated every 5 to 6 washings.
- If sleeping in an area without air-conditioned tents or proper screens, use a fine mesh bed net (at least 18 holes per inch) and tuck it under the mattress. The bed net should be soaked or sprayed with permethrin because the sand flies are small enough to pass through even fine mesh bed nets.
- Avoid dogs or rodents near sleeping areas.

Where can I get more information?

DoD Deployment Health Clinical Center at Walter Reed Army Medical Center

Phone: 866.559.1627 European Toll-Free Phone 00800.8666.8666 Internet URL: <http://www.pdhealth.mil/>

Centers for Disease Control and Prevention's Leishmaniasis web page at:
<http://www.cdc.gov/ncidod/dpd/parasites/leishmania/default/htm>

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