Tumbu Flies

Use the DoD Insect Repellent System to protect against insect bites. Both the adult male and female tsetse flies feed avidly and exclusively on the blood of human, while the male and female both feed on the blood of vertebrates. Tsetse flies are important vectors for human African trypanosomiasis, which is commonly referred to as African Sleeping Sickness. Tsetse flies are Jeffers in the genus Gasterophilus. They range from the southern and western Europe and from the eastern Mediterranean to the Arabian Peninsula and India. Tsetse flies are found in the zone of the Sahel region and the southern tip of Africa. The fertilized female lays its eggs on wet fabric outdoors. They are parasitic insects that can burrow through the skin around the eye. This can result in swelling of the eyelids and impaired vision. The eggs hatch into the tsetse fly larva, which matures in a moist, dark environment. The larva then pupates and emerges as an adult fly. Preventive Measures:

- Avoid hanging laundry to dry near potential breeding sites.
- Check for holes in netting and keep loose edges off the ground.
- Apply mosquito repellents containing DEET to the skin around the eye.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

DoD Insect Repellent System

Approved Insect Repellents

Approved Insect Repellents are available in a variety of formulations, including spray, cream, and liquid forms. They are tested and approved by the Department of Defense (DoD) and are effective against a wide range of insects, including mosquitoes, ticks, and biting insects. Use the DoD Insect Repellent System to protect against insect bites. The system includes DEET-based repellents, as well as other effective ingredients such as picaridin and oil of lemon eucalyptus. Preventive Measures:

- Apply insect repellents containing DEET to exposed skin.
- Avoid applying insect repellents to children's hands.
- Wash hands after applying insect repellents.

Do not wash clothing directly after handling any insect repellent, and wash with cold water only. Always measure and follow the label directions for use. ADEPT:

Approved for public release, distribution unlimited:

1. DoDEA - Public Health Branch
2. APHC - Entomology Products
3. US Army Medical Command
4. US Army Research Laboratory
5. US Army Chemical Corps
6. US Army Medical Research Institute of Infectious Diseases
7. US Army Medical Research and Development Command
8. US Army Medical Research Institute of Infectious Diseases
9. US Army Medical Research and Development Command
10. US Army Medical Research Institute of Infectious Diseases
11. US Army Medical Research and Development Command

Malaria

Mosquitoes

Mosquitoes are a major threat to military personnel, especially in areas where malaria is endemic. The majority of malaria cases are caused by Plasmodium falciparum, the most severe form of malaria. Mosquitoes are insects from the family Culicidae. They are the vectors for the parasites that cause malaria. Preventive Measures:

- Avoid mosquito bites by using insect repellents and wearing long-sleeved shirts and long pants.
- Use mosquito nets to protect against mosquito bites.
- Avoid areas with high mosquito populations.

Chigoe Fleas

Chigoe fleas, also called jiggers or sand fleas, are parasitic insects that can burrow into the skin. They are found in dry, sandy areas, especially around the Arabian Peninsula and in the Mediterranean region. Preventive Measures:

- Avoid walking in areas where chigoe fleas are known to be present.
- Wear long pants and long-sleeved shirts to cover as much skin as possible.

Bed Bugs

Bed bugs can bite at any time of day or night when people are asleep. They are nocturnal insects that feed on the blood of humans. Bed bugs are not associated with any disease-causing organisms. Bed bugs are found in a variety of habitats, including homes, hotels, and other indoor environments. Preventive Measures:

- Avoid bringing infested items into your living space.
- Use bed bug proof encasements on mattresses and box springs.
- Wash bedding and clothing in hot water and dry them on high heat.

Culicoides spp.

Culicoides spp. are a type of biting midge that is closely associated with riverine vegetation. Species of the genus Culicoides are found in decaying vegetation in aquatic or semiaquatic habitats, such as mud or water. They are the immature stage of a mite in the family Trombiculidae that can transmit scrub typhus and rickettsialpox. The chigger mite is the immature stage of a mite in the family Trombiculidae. It is the stage that causes the skin rash and itching associated with scrub typhus and rickettsialpox. Preventive Measures:

- Avoid walking in areas with high Culicoides spp. populations.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

Deer Flies

Deer flies are large, robust, and reddish-brown in color. They are biting flies that feed on the blood of mammals. Deer flies are important vectors for several diseases, including Crimean-Congo hemorrhagic fever (CCHF) and lyme disease. Preventive Measures:

- Avoid areas with high deer fly populations.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

Fungi

Fungi are a group of organisms that are not plants or animals. They are a type of microorganism that can cause infections in humans. Fungi are important in the natural environment, playing a key role in the breakdown of organic matter. Preventive Measures:

- Avoid contact with moist, decaying vegetation.
- Wash hands after handling fungi.
- Use fungicides to control fungal growth.

Lyme Disease

Ticks are small, blood-sucking insects that are closely related to spiders. They are important vectors for several diseases, including Lyme disease. Preventive Measures:

- Avoid areas with high tick populations.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

Scorpions, Spiders, and Centipedes

Scorpions, spiders, and centipedes are all arachnids, a group of multi-legged animals. They are important vectors for several diseases, including scrub typhus and rickettsialpox. Preventive Measures:

- Avoid contact with scorpions, spiders, and centipedes.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

Biting Midges

Biting midges are small, biting insects that are closely related to mosquitoes. They are important vectors for several diseases, including Crimean-Congo hemorrhagic fever (CCHF) and lyme disease. Preventive Measures:

- Avoid areas with high biting midge populations.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

Catspaw Mites

Catspaw mites are small, biting insects that are closely related to scorpions. They are important vectors for several diseases, including scrub typhus and rickettsialpox. Preventive Measures:

- Avoid contact with catspaw mites.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.

Rove Beetles

Rove beetles are a type of army ant in the genus Camponotus. They are small, brown insects that are closely related to termites. They are important vectors for several diseases, including scrub typhus and rickettsialpox. Preventive Measures:

- Avoid contact with rove beetles.
- Use insect repellents containing DEET or picaridin.
- Wear long-sleeved shirts and long pants to cover as much skin as possible.