University of Delaware Student Health Services Phone: 302-831-2226

INSECT PROTECTION – TRAVELING ABROAD

There are vaccines against some mosquito-borne diseases (i.e. yellow fever, Japanese encephalitis) and you can take medication to help prevent malaria. But YOU should also take precautions to avoid getting bitten in the first place. Your first line of defense against mosquitoes and insects is known as "personal protective measures" (PPM):

- Malaria-carrying mosquitoes bite between dusk and dawn. Avoid outdoor activities at night.
 Retreat to a well screened-in area.
- Yellow fever and dengue-carrying mosquitoes bite during daytime and are in urban and rural areas
- Wear tightly woven clothes that cover most of the body, especially after dark.
- DEET and permethrin can damage synthetic materials, plastic on eyeglass frames and watch crystals.
- Lighter colors don't attract mosquito's as much as darker clothing. Tuck your pants into your socks
- Avoid drying clothes on the ground
- Don't sit on sand or on the ground without using a ground cover such as a towel or blanket
- Stay in a screened accommodation far away from mosquito breeding sites
- Re-apply repellent if starting to get bitten.
- No perfume/after shave, jewelry, or bright colors
- Take only unscented toiletries
- Wear boots or sneakers, not sandals

INSECT REPELLENTS:

- Applying the correct insect repellent may be most effective and easiest way to protect you from getting an insect bite. Not all insect repellents are the same, and careful consideration is needed depending on your planned exposure.
- Use an insect repellant containing DEET, or Picaridin, in a concentration of 20-35% for most activities.
- Apply repellents only to exposed skin.
- Depending on product choice and application, DEET can lasts up to 12 hours.
- Space repellents, i.e. coils, sprays may be helpful
- No repellent effective against stinging insects (bees, and wasps).
- Always follow the recommendations on the product label. Remember to reapply as directed on the label.
- Apply sunscreen at least 30 minutes before applying a DEET-based insect repellent
- Oil of Lemon Eucalyptus Non chemical, similar to low concentration DEET

PROTECTIVE CLOTHING:

- Proper clothing does provide a physical barrier to biting insects. However using a chemical to treat that clothing will dramatically increase its ability to protect.
- The use of Permethrin, an insecticide, to spray or impregnate clothing is highly recommended for protection against mosquitoes and other insects. Permetherin will kill or stun insects touching the treated fabric.
- Treat clothes or mosquito nets according to manufacturer's instructions
- Treated fabric will last through multiple washings.
- The combined use of DEET on the skin and Permethrin on clothing is highly effective in protection against insects.



MOSQUITO NETS:

- Research shows that sleeping under a mosquito net, especially one impregnated with permethrin, is highly effective against night-biting insects.
- Mosquito nets should be thoroughly inspected for holes
- After you get under the netting, tuck the netting under the mattress, ensuring that no mosquitoes can get inside.

WHEN USING DEET:

- DEET and permethrin can damage synthetic materials, plastic on eyeglass frames and watch crystals.
- Always follow the recommendations on the product label.
- Use enough repellent to cover exposed skin or clothing. Heavy application is not necessary to achieve protection.
- Do not apply repellent to cuts, wounds or irritated skin.
- After returning indoors, wash treated skin with soap and water.
- Do not spray aerosol or pump products in enclosed areas. Do not spray such products directly to your face. Spray your hands and then rub them carefully over the face, avoiding eyes and mouth.

SEEK MEDICAL ATTENTION A.S.A.P. FOR FEVER AND FLU-LIKE SYMPTOMS DURING THE TRIP AND DURING FIRST YEAR AFTER RETURN (ESPECIALLY THE FIRST 2 MONTHS). TELL THE MEDICAL PROVIDER WHERE YOU TRAVELLED.