

## PROPER USE OF INSECT REPELLENTS

### **How to choose insect repellents in the market?**

Public can choose insect repellents containing active ingredient **diethyltoluamide** (DEET). World Health Organization also recommends insect repellents with IR3535 and Icaridin (also known as Picaridin) for preventing mosquito bites.

### **Does formulation with higher concentration provide better protection?**

Formulation with concentration of 20% or more of DEET can provide the best and longer protection against *Aedes* mosquitoes. Products with higher concentration mainly provide longer-lasting protection but do not offer other additional protection against mosquito bites. The protection from plant-derived repellents, in general, is shorter.

### **Are there any side effects of using insect repellents containing DEET?**

Using insect repellents containing DEET should not be harmful if label instructions are followed and the product is used safely. Some persons who used products containing a high concentration of DEET or who were exposed to excessive amounts of DEET have experienced skin rashes, blisters, and skin and mucous membrane irritation.

### **Are there any special precautions when using insect repellents?**

Read and follow the label instructions strictly before use.

Apply only to exposed skin and clothing.

Do not apply near eyes and mouth, and apply sparingly around ears.

Do not spray directly to face; spray on hands and then apply to face by hand.

Apply in a thin and even layer, just enough to cover clothing and exposed skin.

When used with a sunscreen, apply sunscreen first, followed by insect repellent.

Reapply only whenever needed and follow the instructions of the products.

### **Is it safe for children, pregnant and nursing women to use insect repellents?**

Yes. Pregnant or nursing women and children of 6 months or older can use DEET-containing insect repellents.

### **Children**

Use lower concentration of DEET of up to 10%

Do not allow children to apply repellents by themselves. Adults should apply it to their own hands and then put it on children.

Limit application to the skin and reinforce application to clothing.  
Roll-on preparations are preferable to sprays.

### **Pregnant and nursing women**

Use concentration of DEET of up to 30% for pregnant women  
Nursing mothers have to wash insect repellent off their hands and body before breastfeeding their infants.

### **When is the appropriate time to apply the insect repellents?**

DEET-containing insect repellents take immediate effect upon application, therefore it should be applied right before entering an area with risk of mosquito bites.

### **DO's**

Read and follow the label instructions strictly before use.  
After returning indoors, wash treated skin with soap and water, change and wash the clothes which have been treated with insect repellent.  
For the first time of application, apply to a small area of skin, if any reaction is found, stop using the insect repellent, wash it off with mild soap and water, and seek medical advice if needed.  
Store insect repellents safely out of the reach of children.

### **DON'Ts**

Do not apply insect repellent over cuts, wounds, sun burned or irritated skin.  
Do not apply insect repellent near food or spraying in enclosed areas.  
Do not apply insect repellent near naked flames or lit cigarettes.

### **Public should also take other preventive measures when engaging in outdoor activities to avoid mosquito bites:**

Wear loose, light-coloured, long-sleeve tops and trousers.  
Avoid using fragrant cosmetics or skin care products.  
Avoid taking rest in the close proximity of densely vegetated areas.