

## **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

\* For children who travel to countries or areas where mosquito-borne diseases are endemic or epidemic and where exposure is likely, children aged 2 months or above can use DEET-containing insect repellents with a concentration of DEET up to 30%.

#### **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