Repelling mosquitoes

With all the different mosquito-repelling products on the market, how can the average person tell which ones are best? The Straits Times speaks with experts to find out more about the pros and cons of the repellents.

Chemical repellents

- Most effective active ingredients:

 Deet or picaridin
- Concentration of 6% = 2 hours' protection
- Concentration of 20% = 4 hours' protection



- For children, use concentration of 10% and below
- May trigger allergic reactions

Mosquito patches and wristbands

 Scented with citronella or similar oils, which helps to prevent mosquitoes from smelling humans



- Unclear how long such patches last, or how many patches a person needs
- Different brands come in different strengths

Carbon dioxide traps

Attract mosquitoes



 People generally emit more carbon dioxide than a small trap, and mosquitoes may still be drawn towards them instead

Mosquito coils

• Emit repellents when burnt



- A fire hazard
- Could produce the same amount of PM2.5 pollutants as burning 75 to 137 cigarettes





Citronella and other oils

- Not as effective as Deet-containing repellents
- Repel mosquitoes by masking body chemicals
- Include plant-based oils such as lemon eucalyptus, cedar, peppermint and lemongrass



May irritate the skin



Ultrasonic mosquito repellents

 Repel mosquitoes by emitting a high-pitched sound that humans cannot hear



 At least 10 field studies have shown that these do not have any discernible effect

