Mosquito repellents that emit high-pitched sounds don't prevent bites

April 18 2007

A Cochrane Systematic Review of the use of electronic mosquito repellents (EMRs) failed to find any evidence that they work. The researchers therefore say that there is no reason for recommending their use, and that there is no reason for even trying to do more research with the devices.

Malaria is transmitted when a person is bitten by an infected female mosquito. Manufacturers of electronic mosquito repellents (EMRs) claim that the high pitch sound they emit repels female mosquitoes, and therefore protects people in the vicinity from bites and disease.

To test these claims a team of Cochrane Researchers conducted a systematic review looking for trials conducted with EMRs. They located ten field trials that had been carried out in various parts of the world. None of these trials showed any evidence that EMRs work.

"All ten studies found that there was no difference in the number of mosquitoes found on the bare body parts of the human participants with or without an EMR," says lead author Dr Ahmadali Enayati, who works at the Mazandaran University of Medical Sciences in Iran.

Although the researchers found no direct evidence on whether EMRs prevent malaria, the fact that they failed to reduce bites means that they could not reduce infection rates.

Source: John Wiley & Sons, Inc.