

By **Fiona MacRae**  
Science Reporter

# Danger of the 'toxic' holiday bug sprays

INSECT repellents used by millions of holidaymakers each year are potentially toxic and should not be used by children and pregnant women, scientists have warned.

French researchers sounded the alarm over DEET - a powerful chemical that forms the nub of many mosquito sprays - after studies showed it to be neurotoxic.

Although the experiments were on animals and insects, the researchers said they also carried potential implications for human health.

They warned that the damage DEET can cause to the nervous system could potentially lead to fits in children. Pregnant women may also be more vulnerable and should avoid using repellents.

DEET, or diethyltoluamide, has been the gold standard of insect repellents for decades, and is found in some Autan and Jungle Formula preparations, as well as many own-brand sprays.

Tropical strength repellents contain up to 50 per cent DEET and the chemical can also be bought neat to treat mosquito nets, wrist bands and clothes ahead of travel to the tropics.

Judged to be the most effective insect repellent, it is used by more than 200million people worldwide each year, including millions of Britons.

The researchers, from the University of Angers, showed that DEET blocks the action of an enzyme called acetylcholinesterase in cockroaches and rats.

The enzyme is key to the health of the nervous system and interfering with its work could potentially cause fits.

Although DEET has been linked to seizures in children, this study is the first to pinpoint the damage done by the chemical to the nervous system, the journal

BMC Biology reports. Researcher Dr Vincent Corbel said urgent studies were now needed on DEET's safety for people.

In the meantime, he recommends that adults do not use preparations containing more than 50 per cent DEET and do

## 'Could lead to fits'

not apply them more than three times a day.

Children aged under six and pregnant women should avoid the chemical all together.

He said: 'I am not saying that DEET in normal use kills people but to be very careful as to the concentration, time of application and the target people.' The

American Academy of Pediatrics recommends the chemical is not used in babies under two months. France also has guidelines.

In Britain, some sprays containing DEET are already labelled as not being suitable for the under-sixes. But others say they can be used on babies from the age of six months.

SC Johnson, which makes the Autan range of repellents, said DEET has been used billions of times in the past 50 years.

A spokesman said: 'As a family company, nothing is more important to us than the health and wellbeing of the families who use SC Johnson products.'

Boots, which labels its tropical strength sprays as being suitable for children over six months, said they were developed in accordance with professional guidance.

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Concerns: Jungle Formula spray

## Mandy's back in Corfu (but giving tycoons a wide berth)

LORD MANDELSON has again jetted off to the holiday island of Corfu - pledging to avoid 'Russians, yachts and George Osborne'.

The Business Secretary's spokesman revealed that he had taken an Easyjet flight on Monday.

He said Lord Mandelson would be staying with friends, but refused to confirm whether he was visiting the villa of financier friend Nat Rothschild as he did last year.

During his holiday on the Greek island last summer, Lord Mandelson, who was then an EU commissioner, stayed on the yacht of Russian tycoon Oleg Deripaska, raising questions about a conflict of interest.

He got into further difficulties after Shadow Chancellor George Osborne, who was also staying on the island, leaked details of private discussions.

The peer's spokesman said: 'Peter is not going to allow what happened last year to put him off Corfu. He is there for a week but this time without Russians, yachts or George Osborne.'

Mr Osborne is not going to Corfu this year.