

## Bee sting venom could prevent the spread of HIV, doctors claim

- **Gel could be developed from chemical to destroy deadly virus**

By Daily Mail Reporter

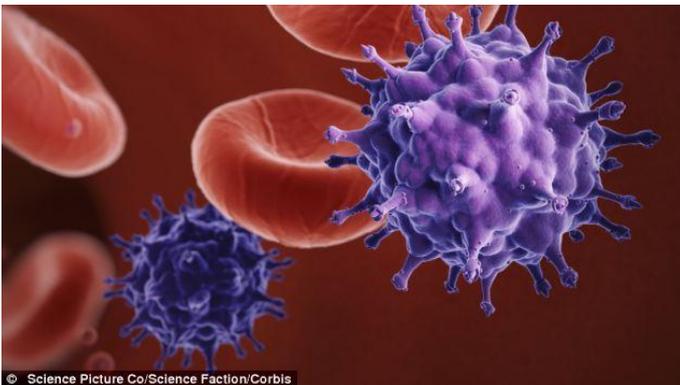
Doctors have sensationally claimed chemicals found in bee stings could help prevent the spread of HIV. Toxins in the insects' venom can destroy the virus and leave surrounding cells unharmed, it has been found. Scientists are excited by the find and believe it could be an important step towards developing a gel to stem the rampant spread of HIV, which causes Aids.



Researchers have discovered a chemical found in bee stings could attack and destroy HIV virus cells

The bees' chemical, melittin, destroys the HIV virus by puncturing its protective outer layer. Scientists inserted the toxin into tiny nanoparticles, which are fitted with special 'bumpers' so they can bounce off normal cells.

But when the smaller HIV virus makes contact with them, it slips between the bumpers and is attacked by the toxin. Study expert Dr Joshua L Hood, of Washington University School of Medicine in the US, said the toxin could be used in a vaginal gel to prevent HIV spreading.



What HIV looks like in the blood stream? Doctors hope to develop a gel featuring toxins from be stings which could prevent the spread of the virus

He said: 'Our hope is that in places where HIV is running rampant, people could use this gel as a preventative measure to stop the initial infection.'

Most drugs slow the growth of the virus, but the bee venom attacks and kills it to prevent infection in the first place. Dr Hood, who co-authored the study which appeared in journal Antiviral Therapy, added: 'We are attacking a physical property of HIV. Theoretically, there isn't any way for the virus to adapt to that.' Doctors also believe nanoparticles may be able to be developed as a way to kill tumours.