

VX nerve agent

It was used in the assassination of the North Korean leader's half-brother – traces of it has been swabbed from Mr Kim Jong Nam's eye and face.



What is it?

- Created in a British laboratory researching pesticides in 1950s
- Classified as a weapon of mass destruction by the United Nations
- Deadliest nerve agent ever created – 10 times as powerful as the sarin toxin

A person can be exposed through skin contact, eye contact, vapour inhalation or ingestion.

These are the symptoms:

Head

- Confusion
- Drowsiness
- Headache

Eyes

- Blurred vision
- Eye pain
- Contraction of pupils
- Watery eyes

Chest

- Tightness
- Rapid breathing
- Bronchoconstriction
- Abnormal heart rate and blood pressure

Abdomen

- Nausea
- Gastrointestinal pain
- Vomiting
- Spasms
- Loss of bowel control

Nose and mouth

- Excessive mucus, saliva and cough

Skin

- Excessive sweating
- Muscle twitching

Smell and appearance

- An oily amber liquid that can be mixed with water.
- It is odourless and tasteless.

How it works

- Prevents the proper operation of an enzyme that acts as the body's "off switch" for glands and muscles. If constantly stimulated, it may tire and result in respiratory failure.

Is there an antidote?

- A cocktail of drugs can serve as an antidote, but treatment must be immediate. US soldiers carried kits to inject themselves with this antidote during the first Iraq War.

Previous attacks involving VX

- Iraqi dictator Saddam Hussein reportedly used it against Iranian forces in the 1980-88 Iran-Iraq War, and then again in a 1988 chemical attack on Iraqi Kurds in the town of Halabja.
- Japan's doomsday cult Aum Shinrikyo used VX injections in assassination attempts on its enemies in 1994 and 1995; one person died.

Who has it?

- The only countries that have admitted to having VX or a closely related agent are the United States and Russia.
- VX can be produced at small laboratories or facilities producing pesticides.
- North Korea has up to 5,000 tonnes of chemical weapons, including a large stockpile of VX and sarin.
- Pyongyang is also believed to have biological weapons such as anthrax and bubonic plague.