

# Nerve agent VX

## What is it?

• First created in a British laboratory researching pesticides in the early 1950s.

• Code-named by the US scientists who honed its potency and mass produced it during the Cold War.

• Classified as a weapon of mass destruction by the United Nations.

• Deadliest nerve agent ever created, 10 times more powerful than sarin.



VX nerve agent stored in a container.



## What does it look like?

• Odourless and tasteless with the consistency of motor oil.



## How does it work?

• Like other nerve agents, VX strikes the nervous system.

• Nerve agents overstimulate glands and muscles, leading them to quickly fatigue and become unable to sustain breathing.

• Nerve agents work faster if in contact with mucous membranes such as those found in the human eye.

• VX can be delivered in two compounds that are mixed at the last moment to create a lethal dose.



## What are the symptoms?

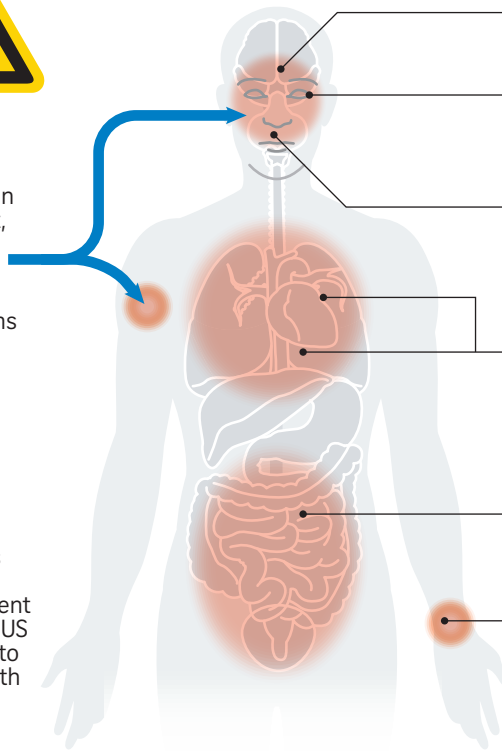
### Exposure

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

• If exposed to the liquid form, symptoms may appear within a few minutes, or in a matter of seconds if inhaled in vapour form.

### 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 antidote during the first Iraq War.



Confusion, drowsiness, headache

Blurred vision, eye pain, small, pinpoint pupils, watery eyes

Runny nose, drooling, cough

Tightness, rapid breathing, slow or fast heart rate, abnormally low or high blood pressure

Nausea, vomiting, abdominal pain, diarrhoea, increased urination

Excessive sweating, muscle twitching

## Previous attacks involving VX

• Iraqi dictator Saddam Hussein reportedly used VX against Iranian forces in the 1980-88 Iran-Iraq War, and again in a 1988 attack on Iraqi Kurds in the town of Halabja.

• Japan's doomsday cult Aum Shinrikyo used VX injections in assassination attempts on enemies in 1994 and 1995; one person died. It used another nerve agent – sarin – in a March 1995 attack on the Tokyo subway, killing 12 people.



A UN chemical weapons expert with samples retrieved from one of the sites of an alleged chemical weapons attack in Damascus, Syria, in August 2013.

## Who has it?

• The only countries that have admitted to having VX or a closely related agent are the US 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.