

# Novichok nerve agent

Germany's government said that traces of the nerve agent Novichok have been found in samples taken from Kremlin critic Alexei Navalny, who is being treated in a Berlin hospital

■ **Origin:** Created in Soviet Union in 1970s and 1980s. Made with agrochemicals so that nerve agent could be hidden from *Organisation for the Prohibition of Chemical Weapons*

■ **Toxicity:** Believed to be five to 10 times more lethal than VX and sarin nerve agents, and harder to identify

■ **Variants:** Exists in liquid or solid form, including ultra-fine powder. Can be stored or carried as two less toxic ingredients, which become lethal when mixed

■ **Effect:** Occurs within as little as 30 seconds to two minutes if agent is inhaled or touches skin. Fine powder can take 18 hours to act

■ **Exposure:** Victim's clothing should be removed and their skin washed with soap and water. Antidotes such as oximes can be effective if administered quickly. **Some Novichok variants specifically designed to resist standard antidotes**



**SYMPTOMS:** Messages between nerves and muscles are blocked – causing bodily functions to collapse

**Brain:** Reduced oxygen in body can lead to coma and brain damage

**Eyes:** Pupils constricted

**Skin:** Profuse sweating

**Lungs:** Breathing inhibited, extreme fluid secretion

**Heart:** Abnormal blood pressure and heart rate

**Digestive system**  
Nausea, vomiting and diarrhoea

**Typically, muscle spasms and seizures occur, leading to death by asphyxiation or cardiac arrest**

