WHAT ARE NOVICHOK NERVE AGENTS?

Novichok agents are organophosphate nerve agents. They were reportedly developed in Russia from the 1970s onwards. Novichok agents are supposedly 5 to 8 times more deadly than VX, another deadly nerve agent.

1970s–1990s

ACh

Stop breakdown of acetylcholine

VX

median lethal dose

10 milligrams per person (skin exposure)

Exact structures of Novichok agents are unknown. The structures above are those suggested by Vil Mirzayanov, the Russian chemical weapons scientist who exposed their development. Nerve agent exposure is usually treated with atropine and pralidoxime.

POTENTIAL STRUCTURES OF NOVICHOK AGENTS

Novichok agents can be delivered as a liquid, fine powder, or gas. It has been claimed that safer precursors can be mixed to make them on demand, though this has been refuted by other sources.

EFFECTS OF NOVICHOK AGENTS

ACH

Cause contraction of the pupils

Excessive mucus, tears, saliva & sweat

Nausea, gastrointestinal pain & vomiting

Bronchoconstriction & chest tightness

Spasms, convulsions & loss of bowel control

Coma & eventual death

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