

FACT SHEET

Office of the Assistant Secretary of Defense (Health Affairs) **Deployment Health Support Directorate**

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Deseret Test Center

Elk Hunt, Phase II

Shortly after President Kennedy's inauguration in 1961, the Secretary of Defense, Robert McNamara, directed that a total review of the U.S. military be undertaken. The study consisted of 150 separate projects. The chemical and biological warfare review was known as Project 112. As part of the Project 112 review, the Joint Chiefs of Staff convened a working committee that recommended a research, testing, and development program for chemical and biological weapons. To oversee this program, the Deseret Test Center was established at Fort Douglas, Utah, in 1962. Both land-based and ship-based tests were conducted during the period 1962 – 1973. The Deseret Test Center closed in 1973.

The Elk Hunt, Phase II tests were designed to determine the amount of VX nerve agent picked up on the clothing of personnel traversing breached paths through contaminated areas and M23 minefields; the amount of VX nerve agent deposited on the surface of vehicles traversing VX-contaminated areas or under which an M23 mine had been detonated; the amount of VX nerve agent deposited on the clothing of personnel actively or passively contacting contaminated vehicles; vehicle decontamination by wet steam, high-pressure cold water hosing, and wallow pit; and, the amount of VX vapor rising from VX-contaminated areas.

Thirty-five trials were conducted near Fort Greely, Alaska, between June 7 and July 27, 1965. Five trials were conducted by the Canadian government in conjunction with the Deseret Test Center trials. Chemical Research and Development Laboratories, Edgewood Arsenal, Maryland, performed 11 additional vehicle decontamination trials from October 27 to December 17, 1965.

Personnel who participated in Elk Hunt, Phase II wore complete, impermeable butyl-rubber outfits and M9A1 masks.

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Test Name	Elk Hunt, Phase II (DTC Test 65-14)
Testing Organization	US Army Deseret Test Center
Test Dates	June 7 – July 27, 1965 October 27 – December 17, 1965
Test Location	Fort Greely, Alaska Edgewood Arsenal, Maryland Canada
Test Operations	To determine the amount of standard VX nerve agent picked up on the clothing of personnel traversing paths formed by the breaching of minefields and areas contaminated by detonated M23 mines. Tests were made to determine the amount of VX nerve agent picked up by personnel contacting contaminated vehicles.
Participating Services	US Army, Deseret test personnel
Units and Ships Involved	Selected personnel assigned to HHC, 171st Infantry Brigade, 15th Artillery Battalion, 40th Armor Battalion, 4th Battalion, 9th Infantry1st Battalion, 47th Infantry, 538th Ordnance Company (Direct Support)
Dissemination Procedures	Standard VX was disseminated from M23 mines buried with pressure plates flush with the ground.
Agents, Simulants, Tracers	VX Nerve Agent
Ancillary Testing	Not identified
Decontamination	Wet steam, high-pressure cold water hosing, and wallow pit for decontaminating vehicles

Potential Health Risks	VX Nerve Agent – Lethal Nerve Agent (Synonyms:
Associated with Agents,	Phosphonothioic acid, VX):
Simulants, Tracers	VX nerve agent is extremely lethal. It is an oily liquid that is clear, odorless, and tasteless. Death usually occurs within 10-15 minutes after absorption of a fatal dosage. VX nerve agent is one of the most toxic substances ever synthesized. Symptoms of overexposure may occur within minutes or hours, depending upon the dose. They include: miosis (constriction of pupils) and visual effects, headaches and pressure sensation, runny nose and nasal con- gestion, salivation, tightness in the chest, nausea, vomiting, giddiness, anxiety, difficulty in thinking, difficulty sleeping, nightmares, muscle twitches, tremors, weakness, abdominal cramps, diarrhea, involuntary urination and defecation. With severe exposure symptoms progress to convulsions and respiratory failure. The permissible airborne exposure concentration for VX nerve agent in any 8-hour work shift can be found in Department of the Army Pamphlet 40-8. To date, however, the Occupational Safety and Health Administration has not promulgated a permissible exposure concentration for VX nerve agent.
	(Sources: Centers for Disease Control and Prevention <u>http://www.bt.cdc.gov/Agent/Nerve/VX/</u> <u>ctc0006.asp</u> [as of January 25, 2002].SBCCOM Online, Edgewood Chemical Biological Center <u>http://in1.apgea.army.mil:80/RDA/msds/vx.htm</u> [as of April 2, 2002].World Health Organization, Department of Sustainable Development & Environmental Protection, <u>http://209.61.192.180/</u> <u>phe/factsheet_5.htm</u> [as of April 2, 2002]. Department of the Army Pamphlet 40-8: Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Nerve

Agents GA, GB, GD, and VX, http://books.army.mil:80/cgi-bin/bookmgr/BOOKS/ P40_8/CCONTENTS [as of February 5, 2002]).