



FACT SHEET

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

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Version 10-09-2002

Deseret Test Center

Devil Hole, 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.

Devil Hole, Phase II was conducted in temperate aspen and spruce forested terrain to provide weapons effects information for artillery delivered VX nerve agent-filled shells. The munitions used were M121A1 (155m) and M426 (8-inch) artillery shells filled with VX nerve agent.

Munitions were statically detonated and M-109 self-propelled howitzers were also used to dynamically fire shells on the target. Manikins dressed in undyed cotton overgarments were used to estimate direct contamination of standing personnel in the area of a munition detonation. A three-quarter ton truck and an eight-by-ten foot tent wall were used to measure deposition on equipment.

Devil Hole, Phase II trials were conducted at the Gerstle River test site near Fort Greely, Alaska, from July through September 1966.

The Department of Defense (DoD) is providing this information, at the request of the Department of Veterans Affairs (VA), to assist the VA in providing healthcare services to qualified veterans and to assist veterans in establishing service connection for disability claims. The Deployment Health Support Directorate (DHSD) collected this information from multiple sources and requested that the military services declassify it to allow its public distribution. The VA accepts this information provided on location, dates, units and/or ships, and substances involved in this exercise, which DHSD extracted from classified DoD records, and will provide it to individual veterans as necessary, but the VA cannot verify its accuracy.

Test Name	Devil Hole, Phase II (DTC Test 66-1)
Testing Organization	US Army Deseret Test Center
Test Dates	July – September 1966
Test Location	Gerstle River test site, near Fort Greely, Alaska
Test Operations	To provide weapons effects information for artillery delivered VX nerve agent-filled shells detonated in temperate, forested terrain.
Participating Services	US Army, Deseret Test Center personnel
Units and Ships Involved	Not identified
Dissemination Procedures	Munitions were statically detonated and M-109 self-propelled howitzers were used to dynamically fire shells on the target.
Agents, Simulants, Tracers	VX Nerve Agent
Ancillary Testing	Not identified
Decontamination	Not identified
Potential Health Risks Associated with Agents, Simulants, Tracers	<p><u>VX Nerve Agent</u> – (Synonyms: Phosphonothioic acid, VX)</p> <p>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: constriction of pupils, headaches, runny nose, salivation, tightness in the chest, nausea, vomiting, anxiety, difficulty in thinking, muscle twitches, tremors, and weakness. With severe exposure, symptoms progress to convulsions and respiratory failure. There is little information available regard-</p>

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	<p>ing the long-term human health effects of exposure to low doses of VX.</p> <p>(Sources: Centers for Disease Control and Prevention http://www.bt.cdc.gov/Agent/Nerve/VX/ctc0006.asp [as of January 25, 2002]Zajtchuk R (ed.), Textbook of Military Medicine (part 1, Medical Aspects of Chemical and Biological Warfare, 1997), Office of the Army Surgeon General, Washington DC, 1997. SBCCOM Online, Edgewood Chemical Biological Center http://in1.apgea.army.mil:80/RDA/msds/vx.htm [as of April 2, 2002]World Health Organization, Department of Sustainable Development & Environmental Protection, http://209.61.192.180/phe/factsheet_5.htm [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]) [as of February 5, 2002])</p>
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