

FACT SHEET

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

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Deseret Test Center

Watch Dog

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 main purpose of Watch Dog was to obtain viability decay rates of *Francisella tularensis* (wet and dry forms), *Serratia marcesens*, and *Escherichia coli*. and stabilized *Francisella tularensis* animal infectivity data in a summer temperate environment. Six trials were conducted to measure the infectivity to monkeys in temperate environments using wet *Francisella tularensis*. The remaining trials determined biological decay rates for *Francisella tularensis* (wet and dry), *Serratia marcesens* and *Escherichia coli* in an environment considered analogous to the temperate humid areas of the northern hemisphere during the summer.

All of the Watch Dog trials were conducted in the area of Delta Creek in central Alaska near Fort Greely. The test was conducted in the summer of 1967.

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Test Name	Watch Dog (DTC Test 67-8)
Testing Organization	US Army Deseret Test Center
Test Dates	Summer 1967
Test Location	Delta Creek area of central Alaska, near Fort Greely
Test Operations	To obtain biological decay rates on <i>Francisella</i> <i>tularensis</i> (wet and dry form), <i>Escherichia coli</i> , and <i>Serratia marcesens</i> in a summer temperate environment.
Participating Services	US Army, Deseret Test Center personnel
Units and Ships Involved	Not identified
Dissemination Procedures	Not Identified
Agents, Simulants, Tracers	Bacillus globigii Serratia marcescens Escherichia coli Francisella tularensis (wet) (TT) Francisella tularensis (dry) (ZZ)
Ancillary Testing	Not identified
Decontamination	Not identified
Potential Health Risks Associated with Agents, Simulants, Tracers	Bacillus globigii (BG) Now considered to be Bacillus subtilis var. niger, a close relative of Bacillus subtilis, this bacterial species was used as a simulant and considered harmless to healthy individuals. Bacillus subtilis and similar Bacillus species are common in the environment, and are uncommon causes of disease. They have been associated with acute infections of the ear, meninges (brain lining), urinary tract, lung, heart valve, bloodstream, and other body sites, but always or nearly always in individuals whose health has already been compromised. Long-term or late-

developing health effects would be very unlikely (except perhaps as a complication of the acute infection).
(Sources: Tuazon CU, Other Bacillus Species (chap. 197), in Principles and Practice of Infectious Diseases, 5th edition (vol. 2), ed., Mandell GL, Bennett JE, Dolin R, Churchill Livingstone, Philadelphia, 2000, p. 2220-6; US Environmental Protection Agency, Bacillus subtilis Final Risk Assessment, February 1997, available at <u>http://www.epa.gov</u> as of October 4, 2002.)
<u>Serratia marcescens (SM)</u> This bacterial species can cause acute infections of the urinary tract, lung, bloodstream, and other body sites. These infections commonly occur in individu- als whose health has already been compromised, and often in patients who are already hospitalized. Long- term or late-developing health effects would be very unlikely.
(Source: Eisenstein, Barry I., Zaleznik, Dori F., Enterobacteriaceae (chap. 206), in Principles and Practice of Infectious Diseases, 5th edition (vol. 2), ed., Mandell GL, Bennett JE, Dolin R, Churchill Livingstone, Philadelphia, 2000, p. 2303.)
<u>Escherichia coli</u> , or <u>E. Coli</u> (EC) This bacterial species is a common inhabitant of the digestive tract but can also cause acute infection, especially when it gains access to other body sites, like the urinary tract, lung, and bloodstream. Long-term or late-developing health effects of E. coli infection would be unlikely.

(Source: Eisenstein, Barry I., Zaleznik, Dori F., Enterobacteriaceae (chap. 206), in Principles and Practice of Infectious Diseases, 5th edition (vol. 2), ed., Mandell GL, Bennett JE, Dolin R, Churchill Livingstone, Philadelphia, 2000, p. 2299-301.) <i>Francisella tularensis</i> (TT and ZZ)
Formerly identified as Pasteurella tularensis, this bacterial species can cause acute infection of the lung, bloodstream, and other body sites (tularemia), and is considered a potential biological warfare agent. While complications of the acute infection may be serious, even life threatening, long-term or late-developing health effects would be very un- likely.
(Sources: Cross, J. Thomas Jr., Penn, Robert L., Francisella tularensis (Tularemia) (chap. 216), in Principles and Practice of Infectious Diseases, 5th edition (vol. 2), ed., Mandell GL, Bennett JE, Dolin R, Churchill Livingstone, Philadelphia, 2000, p. 2393-2402; and Dennis DT, Inglesby TV, Henderson DA, et al. Tularemia as a biological weapon; medical and public health management. JAMA 2001;285(21):2763-73.)