FACT SHEET

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

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Deseret Test Center

DTC Test 70-74

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 (DTC) 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 purpose of DTC Test 70-74 was to determine the viability decay, and variability thereof, of microbiological organisms impacted on microfilaments in the Controlled Environmental Mobile Facility (a closed system) at Dugway Proving Ground, Utah, under a variety of environmental conditions.

A mixed slurry of *Serratia marcescens* and *Bacillus globigii* was used in each of 38 trials. The mixture was disseminated from a collison atomizer and the resulting aerosol was passed over stainless steel microfilaments wound on a series of 40 individual frames. In the viability decay study the frames were removed at selected intervals and exposed to one of six test conditions. Biological assay was conducted to determine the number of *Serratia marcescens-Bacillus globigii* organisms per time period. The biological decay-variability information was produced from those data.

DTC Test 70-74 was conducted between August 1972 and January 1973 at Dugway Proving Ground, Utah.

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	DTC Test 70-74
Testing Organization	US Army Deseret Test Center
Test Dates	August 1972 – January 1973
Test Location	Dugway Proving Ground, Utah
Test Operations	A mixed slurry of *Serratia marcescens* and *Bacillus globigii* was used in each of 38 trials. The mixture was disseminated from a collison atomizer and the resulting aerosol was passed over stainless steel microfilaments wound on a series of 40 individual frames. In the viability decay study the frames were removed at selected intervals and exposed to one of six test conditions. Biological assay was conducted to determine the number of *Serratia marcescens-Bacillus globigii* organisms per time period. The biological decay-variability information was produced from those data.
Participating Services	Deseret Test Center personnel
Units and Ships Involved	None identified
Dissemination Procedures	The mixture was disseminated from a collison atomizer in the Controlled Environmental Mobile Facility (a closed system) at Dugway Proving Ground, Utah.
Agents, Simulants, Tracers	*Bacillus globigii* (BG) *Serratia marcescens* (SM)
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 http://www.epa.gov as of October 4, 2002.) *Serratia marcescens* (SM) This bacterial species can cause acute infections of the urinary tract, lung, bloodstream, and other body sites. These infections commonly occur in individuals 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.)