

Cold War Exposures

Background

In order to understand the rationale for chemical and biological research from World War II until 1975, it is necessary to examine the history of the use of chemical and biological agents in warfare and to understand the perceived threat to the Free World during the Cold War.

In 1915, during World War I, the Germans released chlorine gas at Ypres. Gas warfare quickly proliferated on the battlefield. Both sides introduced Phosgene (choking gas) and a vomiting gas in late 1915, followed by blood agents in 1916 and mustard agent (a blistering agent) in 1917. By the end of the war, chemical agents caused more than one million casualties and 90,000 deaths. Neither side used biological agents during the war although they did investigate plant and animal diseases.

At the outset of World War II, the United States moved to protect its food supply from biological pathogens by setting up an extensive surveillance program. The Army established Fort Detrick, Maryland in 1942 as their primary research and development center for biological agents. Edgewood Arsenal, Maryland was the Army's principal research and development center for chemical agents. Dugway Proving Ground, Utah was the main testing area for both chemical and biological weapons.

At the conclusion of World War II, the United States was surprised to discover that the Germans had developed a new class of chemical agents – nerve agents. The Russians captured a German tabun (nerve agent GA) production plant, moved it to Russia and made GA their standard nerve gas. The United States adopted sarin (nerve agent GB), also discovered by the Germans, as our standard nerve agent. By the early 1950s, the United States believed it lagged behind the Soviet Union in the development of chemical agents. It was in this context that the United States accelerated its chemical warfare research and development efforts. As part of this accelerated program, experimenters used Service members as human volunteers to determine the effects of chemical agents, as well as to develop therapeutics and prophylactics.

After World War II, the United States sent teams to Germany and Japan to determine the status of their biological warfare programs. While Germany's program was not very advanced, Japan had an extensive program. During the war, Japan's principal biological research element, UNIT 731, released biological agents in China and performed experiments on prisoners of war. After the war, pressures of the Cold War and fear of the Russian program led the United States to expand its biological warfare program. This program examined the effective prevention and treatment of biological warfare casualties, determination of minimal effective doses of pathogens, and the effectiveness of vaccines and drugs. Fort Detrick established Project Whitecoat, a human volunteer program to support its efforts.

While the Medical Research Volunteer Program conducted at Edgewood Arsenal collected information on the effects of psychochemicals (hallucinogenic drugs) on individuals, there was no information on how these drugs would affect groups of people. Specifically, would they produce disorganizing and disruptive effects on military units? In order to gather the required information, personnel from Edgewood Arsenal conducted field testing of LSD at Fort Bragg (1958) and Fort Benning (1960). All personnel involved in the testing were volunteers and medical personnel closely monitored their condition.

Human Volunteer Identification and Notification

Precise information on the number of tests, experiments, and participants is not available and the exact number of veterans exposed will probably never be known.

DoD's current effort to identify Cold War exposures began in 2004 and is endeavoring to identify all non-Project 112/SHAD veterans exposed to chemical and biological substances due to testing and accidents from World War II through 1975.

As information on specific tests and testing programs is identified by the Office of the Special Assistant, Chemical and Biological Defense and Chemical Demilitarization Programs, along with the names of military participants, the information is provided to Force Health Protection & Readiness (FHP&R) to validate. It is then provided to the Department of Veterans Affairs www.va.gov who notifies the veteran of his exposure. As of June 30, 2008, FHP&R had identified approximately 10,500 veterans involved in Cold War testing or other events that may have resulted in an exposure.

Testing did not necessarily involve exposure to a harmful substance. Many veterans participated in performance or equipment tests that did not involve biological or chemical substances. Others received medicines (e.g., Benadryl). For completeness and to be able to respond to veteran's questions, FHP&R decided to include all veterans associated with testing in their database whether these veterans were exposed to chemical or biological warfare agents or not. Completion of the investigation is scheduled for 2014. DoD will then continue to pursue any leads or information that is provided from any source.