

Biological Weapon Events in History

Year	Event
1400 BC	The Hittites (Turkey) used tularemia infected rams to target their foes (Barras & Greub, 2014; Chue, 2008; Gürcan, 2014; Trevisanato, 2007).
600 BC	Solon of Athens utilized hellebore (a purgative plant) to besiege Karissa (Gubler, 2001; Kearney & Pettit, 2016; Salem et al., 2019; Smart, 1997).
600 BC	The Assyrians (Iraq) resorted to poisoning their enemies water sources with rye ergot (Olson, 2012).
400 BC	Scythian archers (Athens, Greece) would contaminate their arrows by soaking them in decaying corpses (McLendon et al., 2006).
1155	The Holy Roman Emperor Frederick I had corpses thrown into his enemy's water wells in Tortona, Italy (Frischknecht, 2003)
1340	Jean, Duke of Normandy, casted corpses of horses into the castle walls of Thun l'eveque, which had been captured by the English (Geissler & van Courtland Moon, 1999).
1346	Tartar Mongols hurled bodies of plague victims over the walls of the besieged city of Caffa (Crimea) (Dols, 1977; Wheelis, 2002).
1422	After his failed siege of Carolstein in 1422, Corbut had Lithuanian soldiers catapult the remains of the slain soldiers and human excrement into the ranks of the defenders (Barras & Greub, 2014).
1495	During their occupation of Naples (Italy) the Spanish crafted a mix of wine and the blood of leprosy patients to sell to the French, their adversaries (Frischknecht, 2003).
1650	Polish artillery general Siemienowicz filled hollow spheres with saliva taken from rabies-infected canines and used them as projectiles against his adversaries (Metcalf, 2002).
1710	The Russian military launched corpses infected with plague over the stationed Swedish forces in Reval, Estonia (Flora, 2020).
1763	Captain Ecuyer, of the British forces, provided Native Americans with blankets from a hospital where smallpox patients were being treated (Christopher et al., 1997).
1797	The Napoleonic forces, stricken by malaria, descended upon the plains near Mantua (Italy) with an intent to spread the disease amongst the enemy (Oliveira et al., 2020)
1863	The Confederates sold garments from individuals infected with yellow fever and smallpox to soldiers in the Union Army during the American Civil War (Frischknecht, 2003).
1892	Unit 731, the Japanese program, conducted under the direction of Captain Shiro Ishii (Cenciarelli et al., 2013).
1899	The first measures against the use of biological weapons were taken in the 19th century during the Hague Conference in 1899, and then confirmed in the same place in 1907: with the document "Laws and Customs of War on Land." (Mero, 2000).
1913	German agents also tried to infect horses with glanders and cattle with anthrax in Bucharest (Sidell et al., 1997).
1915	The Germans initiated covert biological warfare attacks against the

	Allies' horses and cattle on both the western and the eastern fronts (Sidell et al., 1997).
1921	The French had a small B.W. program active from 1921 to 1927 and then went dormant, but efforts resumed in 1935 (Carus, 2015).
1925	The "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare", also referred as the "Geneva Protocol," was signed (Schindler & Toman, 2004).
1928	Japan began testing <i>Yersinia pestis</i> , <i>Vibrio cholera</i> , <i>Neisseria meningitidis</i> and <i>Bacillus anthracis</i> were conducted on Koreans, Chinese and Russian soldiers (Leitenberg, 2001).
1935	Japanese Army poisoned water wells in Chinese villages to study cholera and typhus outbreaks (Frischknecht, 2003).
1939	The Japanese legally, and then illegally, attempted to obtain yellow fever virus from the Rockefeller Institute in New York (Harris, 1803).
1942	While assaulting China, Japan killed 1,700 Japanese soldiers because of their B.W. program being out of control (Sokolski & Ludes, 2001).
1942	British Army tested anthrax dirty bombs on the Island of Gruinard, off the Scotland coast (Manchee et al., 1981).
1941	During the war, the Canadians investigated several biological warfare agents, including the pathogens responsible for anthrax, brucellosis, and tularemia, and they produced small quantities of <i>B. anthracis</i> for munitions testing (Roffey et al., 2002).
1948	Israel employed biological agents to contaminate water supplies (Carus, 2015).
1950	U.S. Navy experimented on civilians to assess the vulnerability of a large American coastal town to a biological attack (Pal et al., 2017).
1966	The Army tested the <i>Bacillus subtilis</i> variant <i>niger</i> in the New York subway (Martino-Taylor, 2008).
1970	The Rhodesian government employed biological and chemical agents during its struggle against African nationalists (Martinez, 2002).
1972	The "Conventions on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and Their Destruction" was signed by over 100 nations; the Convention became effective in 1975 (Bassiouni, 2001).
1973	The U.S.S.R., between 1973 and 1974, formed an organization called "Chief Directorate for Biological Preparation" (Biopreparat), to develop and produce biological weapons (Pal et al., 2017)
1974	Iraq started its research and development program in biological warfare (Leitenberg, 2001).
1984	The Dalles, Oregon group of extremist followers of Bhagwan Shree Rajneesh (also known as Osho) contaminated the salad in 10 different salad bars with the pathogen of salmonellosis (Török et al., 1997).
1990	The Japanese cult of Aum Shinrikyo conducted experiments with various biological agents, such as botulin toxin, anthrax, cholera, and Q fever (Olson, 1999).
2001	A series of letters were mailed to both the press and governmental

	personnel containing Bacillus anthracis spores in their envelopes (McCarthy, 2001).
2002	In Manchester, England, police arrested six individuals on suspicion of having ricin in their possession (Segell, 2007).
2004	Evidence of ricin was discovered in the Dirksen Senate Office Building located in Washington, DC (Musshoff & Madea, 2009).

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