

Germany has to deal with unexploded ammunition and polluted lands resulting from the explosion of an ammunition train in 1919.^[69]

Aside from unexploded shells, there have been claims that poison residues have remained in the local environment for an extended period, though this is unconfirmed; well known but unverified anecdotes claim that as late as the 1960s trees in the area retained enough mustard gas residue to injure farmers or construction workers who were clearing them.^[70]

Gases used [\[edit \]](#)

Name	First use	Type	Used by
Xylyl bromide ^[71]	1914	Lachrymatory, toxic	Both
Chlorine ^[72]	1915	Corrosive. LungIrritant	Both
Phosgene ^[72]	1915	Irritant - Skin andmucous membranes. Corrosive, toxic	Both
Benzyl bromide ^[71]	1915	Lachrymatory	Central Powers
Chloromethyl chloroformate ^[71]	1915	Irritant - Eyes, skin, lungs	Both
Trichloromethyl chloroformate ^[71]	1916	Severe irritant, causes burns	Both
Chloropicrin ^[72]	1916	Irritant, lachrymatory, toxic	Both
Stannic chloride ^[71]	1916	Severe irritant, causes asphyxiating	Allies
Ethyl iodoacetate ^[71]	1916	Lachrymatory, toxic	Allies
Bromoacetone ^[71]	1916	Lachrymatory, irritant	Both
Monobromomethyl ethyl ketone ^[71]	1916	Lachrymatory, irritant	Central Powers
Acrolein ^[71]	1916	Lachrymatory, toxic	Central Powers
Hydrogen cyanide ^[71] (Prussic acid)	1916	Toxic, ChemicalAsphyxiant	Allies
Hydrogen sulfide ^[71] (Sulphuretted hydrogen)	1916	Irritant, toxic	Allies
Diphenylchloroarsine ^[72] (Diphenyl chlorasine)	1917	Irritant/Sternutatory(causes sneezing)	Central Powers
α -chlorotoluene (Benzyl chloride)	1917	Irritant, lachrymatory	Central Powers
Mustard gas ^[72] (Bis(2-chloroethyl) sulfide)	1917	Vesicant (blistering agent), lung irritant	Both

Bis(chloromethyl) ether (Dichloromethyl ether)	1918	Irritant, can blur vision	Central Powers
Ethylchloroarsine ^[72]	1918	Vesicant	Central Powers
N-Ethylcarbazole	1918	Irritant	Central Powers

Long-term health effects [[edit](#)]

Soldiers who claimed to have been exposed to chemical warfare have often presented with unusual medical conditions which has led to much controversy. The lack of information has left doctors, patients, and their families in the dark in terms of prognosis and treatment. Nerve agents such as sarin, tabun, and soman are believed to have the most significant long-term health effects.^[73] Chronic fatigue and memory loss have been reported to last up to three years after exposure. In the years following World War One, there were many conferences held in attempts to abolish the use of chemical weapons all together, such as [The Washington Conference](#) (1921–22), [Geneva Conference](#) (1923–25) and the [World Disarmament Conference](#) (1933). Although the United States was an original signatory of the [Geneva Protocol](#) in 1925, the [US Senate](#) did not formally ratify it until 1975.

Although the health effects are generally chronic in nature, the exposures were generally acute. A positive correlation has been proven between exposure to mustard agents and skin cancers, other respiratory and skin conditions, leukemia, several eye conditions, bone marrow depression and subsequent immunosuppression, psychological disorders and sexual dysfunction.^[74] Chemicals used in the production of chemical weapons have also left residues in the soil where the weapons were used. The chemicals that have been detected can cause cancer and can affect the brain, blood, liver, kidneys and skin.^[75]

Despite the evidence in support of long-term health effects, there are studies that show just the opposite. Some US veterans who were closely affected by chemical weapons showed no neurological evidence in the following years. These same studies showed that one single contact with chemical weapons would be enough to cause long-term health effects.^[76]

See also [[edit](#)]

- [Environmental impact of war](#)



Notes [[edit](#)]

- [^] The U.S. reportedly had about 135,000 tons of chemical warfare agents during WW II; Germany had 70,000 tons, Britain 40,000 and Japan 7,500 tons. The German [nerve gases](#) were deadlier than the old-style suffocants (chlorine, phosgene) and blistering agents (mustard gas) in Allied stockpiles. [Churchill](#), and several American Generals reportedly called for their use against Germany and Japan, respectively (Weber, 1985).
- [^] See the [Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft](#) and the [Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter](#).