**HISTORY OF THE CHEMICAL WARFARE**

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The Greeks first used sulfur mixtures with pitch resin for producing suffocating fumes in 431 BC during the Trojan War. Attempts to control chemical weapons date back to a 1675 Franco-German accord signed in Strasbourg. Then came the Brussels Convention in 1874 to prohibit the use of poison or poisoned weapons. During the First Hague Peace Appeal in 1899, the Hague Convention elaborated on the Brussels accord by prohibiting the use of projectiles that would diffuse “asphyxiating or deleterious” gases (Laws and Customs of Wars on Land). This Convention was reinforced during the second Hague conference in 1907, but prohibitions were largely ignored during World War I. At the battle of Ypres/Belgium, canisters of chlorine gas were exploded in April 1915 by Germany, which killed 5,000 French troops and injured 15,000. Fritz Haber, a Nobel price winner in 1919 for invention of ammonium fixation, had convinced the German Kaiser to use chlorine gas to end the war quickly. History taught us about a different outcome. During World War I all parties used an estimated 124,000 tons of chemicals in warfare. Mustard gas – “the king of battle gases” – then used on both sides in 1917 killed 91,000 and injured 1.2 million, accounting for 80% of the chemical casualties (death or injury). Chemical weapons caused about 3 percent of the estimated 15 million casualties on the Western Front. To put these numbers into perspective, the total loss of Allied lives was ³ 5 million, of the Central Powers 3.4 million, and the total of all wounded soldiers 21 million. Despite of its intensive use, gas was a military failure in WW I. The inhuman aspect and suffering was soon recognized and the year 1922 saw the establishment of the Washington Treaty, signed by the United States, Japan, France, Italy and Britain. In 1925 the Geneva Protocol for the Prohibition of the use in war of Asphyxiating, Poisonous or Other Gases and Bacteriological Methods of Warfare was signed, and it had been a cornerstone of chemical and biological arms control since then. The Geneva Protocol did neither forbid the stockpiling or the research on chemical weapons. Despite the conventions, banning chemical weapons, Italians used them during the war 1935-36 in Ethiopia, the Japanese in China during World War II (1938-42), and they were used also in Yemen (1966-67). Various new chemicals were developed for use in weapons. Sarin, Soman, and VX followed Tabun, the first nerve gas, discovered in 1936. During the Vietnam War (1961-1973), the US was accused of using lachrymatory agents and heavy doses of herbicides (defoliants) in much the same manner as chemical weapons. Some international organizations consider Napalm, its trade name, to be a chemical weapon, others put it on equal level with flame throwers, and consequently not falling under any of the articles of the CWC. Saddam Hussein used chemical weapons against Iraqi civilians as well as against Iran soldiers between 1980 and 1988. It is estimated that of the approximately 27,000 Iranians exposed to Iraqi mustard gas in that war through March 1987, only 265 died. Over the entire war, Iraqi chemical weapons killed 5,000 Iranians. This constituted less than one percent of the 600,000 Iranians who died from all causes during the war. The Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons And on Their Destruction(CWC), entered into force in 1997 after deposit of 65 ratification documents, and is signed as of May 1999 by 122 states-parties. There are 46 non-ratifying signatories, and 22 non-states parties.

The Inventory of Chemical Weapons Chemical weapons have been produced during the twentieth century by many countries and in large quantities. They are still kept in the military arsenals as weapons of in kind or flexible response. Old ammunition is partially discarded in an environmental irresponsible way.