

**Committee:** DISARMAMENT



**Issue:** Chemical and biological Warfare

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**I) Chemical and Biological Weapons** are means of mass destruction, which are able to kill thousands of people in a few seconds.

The use of materials of chemical or biological origin as weapons and for homicide has been documented since ancient times. Since the 1000 bc, when arsenic smoke was used by Chinese, chemical weapons have been used over the centuries, until the World War I; on April 22, 1915 large amounts of chlorine were released by German military forces at Ypres, Belgium. Furthermore, around the 1970s of the 20th century, the awareness of the threat by chemical and biological agents has been mainly confined to the military sector. Finally, their proliferation to the terrorist field during the 1990s with the expanding scale and globalisation of terrorist attacks suggested that these agents are becoming an increasing threat to the whole world community.

Until a treaty banned it in 1972, it was legal to dump chemical weapons into the ocean. The United States, the former Soviet Union, Germany and other nations have sunk hundreds of thousands of tons of weapons. The weapons are still killing: fisherman have died off the coast of Italy, and as recently as 2005, fish there had hazardous levels of arsenic.

**II) What are Chemical weapons?** Many of us tend to imagine a chemical weapon as a bomb or missile that releases highly toxic chemicals over a city. But in 1995, the group Aum Shinrikyo released sarin gas, a nerve gas, in the Tokyo subway. Thousands were wounded and 12 people were killed. No giant bombs or missiles were involved -- the terrorists used small exploding canisters to release the gas in the subway. Noticeable is that nerve agents can fatally target the central nervous system, causing muscle spasms, chest pain, seizures, and vomiting.

Other examples of chemical agents are blister, blood, and choking agents.

**III) What are biological weapons?** A biological weapon uses a bacteria or virus, or in some cases toxins that come directly from bacteria, to kill people. In the 19th century, American Indians were infected with smallpox through donated blankets.

#### **IV) Conventions:**

The *Biological Weapons Convention (BWC)*, the first multilateral disarmament treaty banning the development, production and stockpiling of an entire category of weapons of mass destruction, was opened for signature on 10 April 1972. The BWC entered into force on 26 March 1975. There are [180 states parties](#) to the BWC, including Palestine, and six signatories (Central African Republic, Egypt, Haiti, Somalia, Syria, and Tanzania). Eleven states have neither signed nor ratified the BWC (Chad, Comoros, Djibouti, Eritrea, Israel, Kiribati, Micronesia, Namibia, Niue, South Sudan and Tuvalu).

The *Second Review Conference (1986)* agreed that the States Parties were to implement a number of confidence-building measures (CBM) in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions and in order to improve international co-operation in the field of peaceful biological activities. The CBMs were expanded by the Third Review Conference (1991). Recognizing the need to further strengthen the BWC, a group of governmental experts (VEREX) was established at the Third Review Conference (1991) to identify and examine potential verification measures from a scientific and technical standpoint. At a Special Conference in September 1994, the States parties agreed to establish the Ad Hoc Group of the States parties to the BWC in order to negotiate and develop a legally-binding verification regime for the Convention.

The *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction* belongs to the category of instruments of international law that prohibit weapons deemed particularly abhorrent. As soon as the First World War was over, chemical and bacteriological methods of warfare were condemned by public opinion, and their use was prohibited by the 1925 Geneva Protocol. The adoption of the Convention reinforces a basic principle of the law relating to the conduct of hostilities, that is that the right of parties to an armed conflict to choose methods and means of warfare is not unlimited. The Convention, which was negotiated as part of the Conference on Disarmament, was opened for signature in Paris on 13 January 1993. It entered into force on 29 April 1997, and is now binding on the vast majority of States.

#### **V) NOWADAYS:**

Despite years of progress under the 1997 Chemical Weapons Convention (CWC), which resulted in the destruction of 96 percent of the world's stockpile of chemical weapons, the list of groups who could use chemical weapons still remains long.

The Organisation for the Prohibition of Chemical Weapons (OPCW)—which oversees the weapons' destruction under the CWC—announced in recent months that Libya and Iraq had successfully destroyed their stockpiles, for instance. Russia claims to have—though U.S. authorities are skeptical—and the United States itself will take through 2023 to complete the destruction of its remaining stores.

That leaves Syria, which had joined the CWC in 2013. However, it has been shown to still possess and use chemical weapons, adding to the list all the countries that never agreed to the Convention . Those include Egypt, Israel, North Korea, and South Sudan, and independent terrorist organizations such as Al Qaeda and the Islamic State.

“The threat of chemical weapons use, although greatly diminished now, continues with both a few recalcitrant countries and with non-state actors,” notes chemical weapons specialist Paul Walker, who is director of environmental security and sustainability at the Geneva-based Green Cross International, an independent global security and advocacy group. “The United Nations Joint Investigative Mechanism (JIM) has shown that Syria is guilty of both sarin and chlorine attacks five or more times [since 2012], while Islamic State is guilty of at least two mustard agent attacks.”

#### NEW POSSIBLE DANGERS EMERGING:

Chemicals used for cloud seeding could generate a climate change in certain areas of a country. In the future, this could represent a weapon against an enemy nation. Rainfalls can lead to floods and landslides. The lack of rainfall can generate droughts. Civilians would be the victims of hunger and diseases.

[https://www.independent.co.uk/news/long\\_reads/cloud-seeding-weather-control-manipulate-effects-chemicals-climate-change-a8160146.html](https://www.independent.co.uk/news/long_reads/cloud-seeding-weather-control-manipulate-effects-chemicals-climate-change-a8160146.html)

**[An interesting article about a new bioweapon system:](#)**

“Agricultural genetic technologies typically achieve their agronomic aims by introducing laboratory-generated modifications into target species' chromosomes. However, the speed and flexibility of this approach are limited, because modified chromosomes must be vertically inherited from one generation to the next. In an effort to remove this limitation, an ongoing research program funded by the U.S. Defense Advanced Research Projects Agency (DARPA) aims to disperse infectious genetically modified viruses that have been engineered to edit crop chromosomes directly in fields. This is genetic engineering through horizontal transfer, as opposed to vertical inheritance. The regulatory, biological, economic, and societal implications of dispersing such horizontal environmental genetic alteration agents (HEGAAs) into ecosystems are profound. Further, this program stipulates that the means of delivery of these viral HEGAAs into the environment should be insect-based dispersion (*I*). In the context of the stated aims of the DARPA program, it is our opinion that the knowledge to be gained from this program appears very limited in its capacity to enhance U.S. agriculture or respond to national emergencies (in either the short or long term). Furthermore, there has been an absence of adequate discussion regarding the major practical and regulatory impediments toward realizing the projected agricultural benefits. As a result, the program may be widely perceived as an effort to develop biological agents for hostile purposes and their means of delivery, which—if true—would constitute a breach of the Biological Weapons Convention (BWC).”

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#### **VI) Key terms or useful links (if necessary)**

DECLARATIONS                      AND                      POSITIONS                      PER                      COUNTRY

<https://www.armscontrol.org/factsheets/cbwprolif>

AN INTERESTING VIDEO

<https://www.icrc.org/en/document/how-real-threat-biological-weapons-today>

## **Bibliography**

<https://www.un.org/disarmament/wmd/bio/>

<https://www.un.org/disarmament/wmd/chemical/>

## TREATIES

<https://www.armscontrol.org/treaties>