



## Biological weapons and chemical weapons: International law

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### Abstract

Biological and Chemical weapons have been a major threat to the human kind since the day these were invented and brought into use as a form of destruction. Only after countries forming Diplomatic relations with one another, and after entering into various organizations and treaties, the usage of these weapons have been curbed. This article aims to study the laws governing the usage of these weapons in the global context or simply under the International Law. Further this article also aims to analyze, how far these laws are being followed by the countries therefore giving us a clear view as to whether these laws need to be made more stringent, for more efficient application of the same. This article also gives us a brief on how far these weapons are dangerous and destructive in nature to the human kind.

**Keywords:** Biological weapons, chemical weapons, international law, human kind, organization, treaties

### Introduction

Biological weapons and Chemical weapons, as we all know is a threat to the human kind. These weapons are different from the Nuclear weapons, because firstly these can be accessed easily, secondly these are feasible to be made. With the increase in globalization, the production of biological and chemical weapons have become easier as the raw materials are easily accessible. This embarked the need to bring laws and conventions that curb the production and usage of such weapons. These laws were much needed back then and when they were enforced on the countries they proved to be helpful in reducing these devastating activities to a very large extent.

Use of chemical and biological weapons are banned under International law, this was after the World War I. the entire world community decided to impose a ban on the usage of such weapons. To have a basic understanding on biological and chemical warfare we can say, usage of living organisms or their respective harmful compounds to cause damage is said to be biological warfare and usage of chemicals to cause damage is known as chemical warfare. By the term chemicals we mean man made or naturally available elements mixed in certain ratios, or in its natural form that causes widespread damage.

Therefore it is understood that the ban on these weapons and warfare is due to their devastating effects. These weapons destroy and have extremely terrible effects on the mankind especially. Apart from humans these weapons destroys the livelihood as well, by affecting the livestock and agricultural produce.

World War I has a major impact on the development of these biological weapons and chemical weapons. It had a huge influence on their production and improvements. It was a significant reason to have influenced production of such weapons in a sophisticated way. Provided this stands as a major reason to why international law needed to ban usage of this type of warfare.

The first large scale usage of chemical weapons in World War I <sup>[1]</sup> was, Poisonous gases. It was used by both the sides. This increased battlefield casualties to a very large

extent. Moving a step further, these apart from causing just deaths, caused them very brutally by agonizing suffering. However, the use of Biological Weapons were limited but there are records that indicate there were extensive research conducted worldwide to use these biological agents in the war. There were huge developments in this field as well. Both the invention and usage of chemical and biological weapons led to the development of international law banning these weapons.

### Biological weapons

Biological weapons spread disease-causing organisms or toxins, causing harm or death to humans, animals, or plants. Biological weapons can be used to carry out political killings, contamination of farm animals or agricultural produce to cause scarcity of food and monetary damages, the creation of environmental disasters, and the spread of illness, fear, and mistrust among the general public, in addition to their strategic or tactical military applications. Biological weapons cannot be produced on a small scale, because firstly they are of natural origin and secondly they are difficult to extract.

They are typically made up of two components: a weaponized agent and a delivery mechanism.

### Weaponized Agent

There are two kinds of biological weapons:

1. Living Organisms: bacteria, viruses, fungi etc.,
2. Toxins: these are poisons usually derived from animals, plants or microorganisms.

These are usually developed further or enhanced from their original state, in a way to make them suitable for mass production. There has to be technical advancements as well, in a way to improvise storage and delivery of the same in the intended manner.

### Delivery Mechanism

Delivery systems can be of various forms, like in the past it was delivered using missiles, bombs, hand grenades, rockets etc., and these delivery systems are nothing but the ways in

which the created weapons are made to reach the target population.

Later on, a number of new methods were resorted, like attaching spray tanks to aircrafts, cars, trucks, boats etc., there were also ways that were followed that mainly intended to contaminate the food and water.

Long term exposure to biological weapons can have devastating effects on the individuals, which includes, cancer, reproductive issues, adverse effects on the fetus, genetical alterations etc.,

Biological weapons are banned, the BWC (Biological Weapons Convention) <sup>[2]</sup> effectively bans them. The convention was signed in 1972, as on date there are 183 states as parties to the convention. This convention prohibits the development, production and stocking of such weapons. It also levies an active ban on acquisition of biological agents and their toxins. Under this convention, usage of biological weapons is war crimes and also crimes against humanity under the international law, these offences are under the jurisdiction of International Criminal Court (ICC).

### Consequences of violating the convention

Breaking the Biological Weapons Convention (BWC) can have serious and far-reaching repercussions. Intentional releases of biological agents or chemicals by state or non-state actors have the potential to cause catastrophic losses in human life, food shortages, environmental disasters, severe economic losses, and public fear and mistrust. Furthermore, unlawful possession of biological weapons that are prohibited may lead to investigations and possible international implications. The research, manufacturing, acquiring it, transfer, storage, and use of biological and toxic weapons are prohibited by the BWC, and breaking this rule can have major repercussions on a diplomatic, financial, and legal level.

### Chemical Weapons

Chemical weapons are specially developed weapons that employ substances designed to cause harm or death to humans. Any chemical molecule designed for use as a weapon or its precursor that has the potential to inflict death, injury, temporary impairment, or sensory irritation by its chemical action is considered a chemical weapon, according to the Organization for the Prohibition of Chemical Weapons (OPCW). Chemical weapons are easily distributed in gas, liquid, and solid forms, and they can harm anybody besides the ones they are designed to harm. Their classification is as WMDs, which sets them apart from other types of weapons including nuclear, biological, and radioactive ones. Depending on how they impact the human body, poisonous substances, blister agents, suffocating agents, and blood agents are the main types of chemical weapons.

International law forbids the use of chemical weapons; the Chemical Weapons Convention forbids the development, manufacture, purchase, accumulation, transfer, and use of chemical weapons and requires those governments that possess them to properly destroy their stockpiles. The 1997 Chemical Weapons Convention does not forbid the use of several common industrial chemicals, including chlorine, but it does forbid their use as weapons. Tear gas and other riot suppressants are classified as chemical weapons if they are employed in combat.

Chemical weapons of mass destruction include, for instance:

**Chlorine:** During World War I, chlorine gas was employed as a chemical weapon. At high concentrations, chlorine gas can be lethal and cause respiratory issues.

**Phosgene:** A choking agent that harms the respiratory system, phosgene is another chemical weapon from World War I.

**Mustard gas:** Another weapon used in World War I, mustard gas burns skin painfully and can result in serious injuries and long-term health problems.

**Agents nervous:** These include materials that can quickly cause death because to their effects on the neurological system, such as sarin and tabun.

**Agents of blood:** Examples of blood agents that prevent the body from using oxygen are hydrogen cyanide and cyanogen, which can cause asphyxiation.

### Consequences of violating convention:

There are serious repercussions for breaking the Chemical Weapons Convention (CWC) <sup>[3]</sup>, including jail time and fines. Penalties for illegal activity falling under US jurisdiction are outlined in the Chemical Weapons Convention Implementation Act of 1998. These include fines, jail time, and the death penalty in situations when the violation causes the death of another individual. The President of the USA may also issue an order suspending or revoking the individual's ability to export products or technology from the country.

International law views a violation of the CWC as a major transgression. The Chemical Weapons Convention forbids the use of chemical weapons, and those found guilty will likely face legal consequences. To prevent others from using such weapons with impunity, the OPCW, the CWC's implementing body, is entrusted with conducting exhaustive, unbiased, and independent investigations to find those who violate the ban.

### Conclusion

International law must regulate biological and chemical weapons for a number of reasons. First off, using these weapons can have a serious negative impact on people's lives and communities, leading to fatalities, serious injuries, and long-term health consequences.

Second, the employment of these weapons may have far-reaching effects on the economy, society, and environment.

Third, the creation and application of these weapons have the potential to compromise global stability and security while also going against international agreements and norms.

International law forbids the development, manufacture, procurement, stockpiling, transfer, and use of biological and chemical weapons in order to allay these worries. It also mandates that states take action to stop and forbid these activities. Two important international agreements that control these weapons and offer a framework for observing and enforcing compliance are the Chemical Weapons Convention and the Biological Weapons Convention. Among the tactics that can be employed to encourage adherence to these agreements are penalties, diplomatic isolation, and the use of force.

All things considered, regulating chemical and biological weapons is crucial to upholding international security, defending human rights, and averting the use of WMDs.

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