

United Nations Security Council (UNSC)

STUDY GUIDE

MUNARJÍ
XIX 2026



TOPIC:

**Strengthening International Mechanisms to
Prevent the Use of Chemical and Biological
Weapons and Ensure Accountability in
Contemporary Armed Conflicts**



Table of Contents

1. Introduction to the Committee.....	3
2. Background to the Topic.....	5
3. Key Stakeholders and Positions.....	9
4. Previous UN Actions and Resolutions.....	20
5. Current Challenges and Debates.....	22
6. Case Studies.....	25
7. Possible Solutions and Future Perspectives.....	27
8. Guiding Question.....	30
9. Suggested Readings and Resources.....	31
10. References.....	33

Introduction to the Committee

The United Nations Security Council (UNSC) bears the primary responsibility for maintaining international peace and security under the Charter of the United Nations. Composed of fifteen Member States—including five permanent members with veto power and ten elected members—the Council has the authority to investigate threats to international peace, adopt binding resolutions, impose sanctions, authorize peacekeeping operations, and, when necessary, approve the use of force under Chapter VII of the UN Charter. Because of its unique mandate, the Security Council plays a central role in responding to the proliferation and use of weapons of mass destruction, including chemical and biological weapons (United Nations, 1945).

The use of chemical and biological weapons represents one of the most serious violations of international humanitarian law and poses a direct threat to international peace and security. These weapons are capable of causing indiscriminate and long-lasting harm to civilians, military personnel, and the environment. Their potential use by both states and non-state actors—including terrorist organizations—has reinforced the need for robust international mechanisms that prevent proliferation, ensure compliance with international treaties, investigate alleged attacks, and hold perpetrators accountable. Despite longstanding international prohibitions, allegations involving chemical weapons continue to emerge in contemporary armed conflicts, while rapid advances in biotechnology and synthetic biology have generated new concerns regarding the possible misuse of biological agents (Organisation for the Prohibition of Chemical Weapons [OPCW], 2024; United Nations Office for Disarmament Affairs [UNODA], 2024).

The international legal framework governing these weapons has developed over the past century through instruments such as the 1925 Geneva Protocol, the 1972 Biological Weapons Convention (BWC), and the 1993 Chemical Weapons Convention (CWC). Together, these treaties establish the international norm prohibiting the development, production, stockpiling, transfer, and use of chemical and biological weapons. Institutions such as the Organisation for the Prohibition of Chemical Weapons (OPCW), the Biological Weapons Convention Implementation Support Unit (BWC ISU), and the United Nations Secretary-General's Mechanism for Investigation of Alleged Use of Chemical and Biological Weapons contribute to monitoring compliance and supporting international cooperation. Nevertheless, significant challenges remain, including verification limitations under the BWC, political divisions within the Security Council, attribution of responsibility, and the enforcement of accountability measures against violators (OPCW, 2024; UNODA, 2024).

Recent conflicts have demonstrated that the threat posed by chemical and biological weapons remains far from theoretical. Alleged chemical attacks in Syria, concerns regarding the use of toxic industrial chemicals and riot control agents in armed conflicts, and growing fears over the malicious use of emerging biotechnologies have renewed international attention to the effectiveness of existing non-proliferation and accountability mechanisms. At the same time, geopolitical tensions among major

powers have complicated collective responses, often limiting the Security Council's ability to reach consensus on investigations, sanctions, and judicial action.

As delegates of the United Nations Security Council, participants will confront one of the most complex challenges facing the international community: strengthening global mechanisms that prevent the use of chemical and biological weapons while ensuring credible investigation, effective enforcement, and accountability for violations of international law. Delegates must balance national security interests, state sovereignty, humanitarian principles, scientific and technological developments, and the collective responsibility to protect international peace and security. Through negotiation and diplomacy, they will be expected to develop realistic and actionable solutions that reinforce the international norm against weapons of mass destruction and strengthen the global architecture for non-proliferation and accountability.

Background to the Topic

The prohibition of chemical and biological weapons represents one of the strongest international norms in modern international law. Due to their indiscriminate nature and devastating humanitarian consequences, these weapons have long been considered incompatible with the principles of distinction, proportionality, and unnecessary suffering established under international humanitarian law. While significant progress has been achieved through international treaties and disarmament efforts, recent conflicts and advances in science and technology continue to challenge existing mechanisms for prevention, verification, and accountability. Understanding the evolution of these weapons and the legal framework governing them is essential for developing effective Security Council responses.

Key Terminology

Term	Definition
Chemical Weapons	Chemical weapons are toxic chemicals and their precursors that are intended to cause death, temporary incapacitation, or permanent harm through their chemical action. They include toxic agents such as nerve agents, blister agents, choking agents, blood agents, and the munitions or delivery systems designed to disperse them. Their development, production, stockpiling, transfer, and use are prohibited under the Chemical Weapons Convention (CWC) (Organisation for the Prohibition of Chemical Weapons [OPCW], 1993).
Biological Weapons	Biological weapons consist of microorganisms, pathogens, toxins, or other biological agents intentionally used to cause disease or death in humans, animals, or plants. Because many biological agents naturally occur in the environment and can also be used for legitimate medical or scientific research, distinguishing peaceful activities from prohibited weapons programs presents significant verification challenges. Their development, production, and stockpiling are prohibited under the Biological Weapons Convention (BWC) (United Nations Office for Disarmament Affairs [UNODA], 1972).
Weapons of Mass Destruction (WMDs)	Weapons of mass destruction are weapons capable of causing widespread loss of life and extensive damage through nuclear, chemical, radiological, or biological means. Chemical and biological weapons constitute two major categories of WMDs addressed by international disarmament treaties and United Nations Security Council resolutions.
Dual-Use Materials	Dual-use materials, equipment, technologies, and scientific research are those that have legitimate civilian applications but may also be used to develop chemical or biological weapons. Monitoring and regulating dual-use materials remains one of the greatest challenges facing international non-proliferation efforts.

Verification	Verification refers to the procedures used to determine whether states comply with their international obligations under disarmament agreements. These measures may include declarations, inspections, laboratory analysis, monitoring activities, and investigations into alleged violations. While the CWC established one of the world's most comprehensive verification systems through the OPCW, the BWC currently lacks a comparable verification regime.
Accountability	Accountability refers to the legal, political, and diplomatic mechanisms used to investigate violations of international law, identify responsible actors, and impose appropriate consequences. These mechanisms may include international investigations, sanctions, criminal prosecutions, or Security Council action.

Historical Evolution

Although toxic substances have been employed in warfare for thousands of years, the industrialization of warfare during the twentieth century transformed chemical weapons into one of history's most destructive military technologies. During the First World War, large-scale use of chlorine, phosgene, and mustard gas caused more than one million casualties and demonstrated the catastrophic humanitarian consequences of chemical warfare. The widespread suffering experienced during the conflict prompted the international community to negotiate the 1925 Geneva Protocol, which prohibited the use of chemical and biological weapons in war but did not ban their development or stockpiling (Science History Institute, 2015).

Despite the Geneva Protocol, many states continued developing chemical and biological weapons throughout the Second World War and the Cold War. The use of chemical weapons during the Iran-Iraq War, particularly against Iranian forces and Kurdish civilians in Halabja in 1988, reinforced international concerns regarding the continued threat posed by these weapons. At the same time, rapid advances in microbiology increased awareness of the dangers associated with biological warfare.

Recognizing these risks, the international community adopted the Biological Weapons Convention (1972), which became the first multilateral treaty prohibiting an entire category of weapons of mass destruction. Two decades later, negotiations concluded with the adoption of the Chemical Weapons Convention (1993), which entered into force in 1997 and established one of the most comprehensive disarmament and verification regimes ever created. Since then, the OPCW has overseen the verified destruction of all declared chemical weapons stockpiles worldwide, marking one of the greatest achievements in modern arms control (OPCW, 2023).

Despite these accomplishments, allegations of chemical weapons use in the Syrian Arab Republic since 2013, concerns regarding chemical agents in the Russia-Ukraine conflict, and the growing accessibility of advanced biotechnology have demonstrated that the threat has evolved rather than disappeared. Today, preventing the re-emergence of chemical and biological weapons requires

addressing both traditional state-based weapons programs and emerging risks posed by non-state actors, terrorist organizations, and rapidly advancing scientific capabilities.

International Legal and Institutional Framework

The international prohibition against chemical and biological weapons is built upon a series of complementary legal instruments and international institutions.

The 1925 Geneva Protocol established the first international prohibition on the use of chemical and biological weapons during armed conflict. Although limited in scope, it laid the foundation for subsequent disarmament efforts.

The Biological Weapons Convention (1972) prohibits the development, production, acquisition, transfer, and stockpiling of biological and toxin weapons. However, unlike the Chemical Weapons Convention, it does not include a legally binding verification mechanism, making compliance monitoring particularly difficult.

The Chemical Weapons Convention (1993) represents the most comprehensive international agreement governing chemical weapons. It prohibits the development, production, acquisition, stockpiling, transfer, and use of chemical weapons while establishing a rigorous international verification system administered by the Organisation for the Prohibition of Chemical Weapons (OPCW).

Within the United Nations system, the Security Council plays a central role in responding to violations involving chemical and biological weapons. Through binding resolutions—including Resolution 1540 (2004) and Resolution 2118 (2013)—the Council has strengthened international efforts to prevent proliferation, address the use of chemical weapons in armed conflict, and support international investigations and accountability mechanisms.

Other important institutions include the United Nations Office for Disarmament Affairs (UNODA), the Biological Weapons Convention Implementation Support Unit (BWC ISU), and the United Nations Secretary-General's Mechanism for Investigation of Alleged Use of Chemical and Biological Weapons, all of which contribute to international cooperation, technical assistance, and investigations into alleged violations.

Why the Issue Matters Today

Chemical and biological weapons remain among the most serious threats to international peace and security despite decades of international prohibition. Contemporary armed conflicts have demonstrated that these weapons continue to be used or allegedly employed against both military personnel and civilian populations, undermining long-standing international norms and increasing humanitarian suffering. At the same time, scientific advances in biotechnology, synthetic biology, artificial

intelligence, and genetic engineering have lowered barriers to acquiring knowledge that could potentially be misused for hostile purposes.

Another significant challenge is the growing involvement of non-state actors. Terrorist organizations and other armed groups have demonstrated interest in acquiring chemical agents or exploiting industrial toxic chemicals to carry out attacks. Preventing such actors from obtaining hazardous materials requires stronger export controls, intelligence cooperation, and implementation of Security Council Resolution 1540.

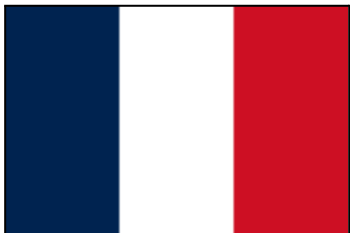
Finally, geopolitical divisions among major powers have complicated international responses to alleged violations. Disagreements over attribution, investigations, sanctions, and accountability have often limited the Security Council's ability to adopt unified responses, highlighting the need to strengthen international mechanisms capable of preventing future attacks while ensuring credible, impartial, and effective accountability. These challenges underscore why the issue remains a central concern for the United Nations Security Council and why delegates must seek balanced, practical, and internationally acceptable solutions.



Key Stakeholders and Positions

COUNTRY	POSITION
United States of America 	The United States has long been a leading advocate for eliminating chemical weapons and strengthening international non-proliferation efforts. As one of the original architects of the Chemical Weapons Convention (CWC), it completed the verified destruction of its declared chemical weapons stockpile in 2023 under OPCW supervision. The United States supports strong verification mechanisms, international investigations, sanctions, and accountability for chemical weapons use, while maintaining that certain riot control agents may be used under limited circumstances consistent with its interpretation of international law (Organisation for the Prohibition of Chemical Weapons [OPCW], 2023; U.S. Department of State, 2024).
Russian Federation 	The Russian Federation is a State Party to both the Chemical Weapons Convention and the Biological Weapons Convention and declared the destruction of its chemical weapons stockpile under OPCW verification in 2017. Russia consistently emphasizes state sovereignty, strict adherence to international law, and the need for impartial investigations into alleged chemical weapons incidents. At the same time, it has opposed several attribution mechanisms and Security Council initiatives that it argues are politically motivated or exceed existing treaty mandates. Russia remains a central actor in discussions concerning verification, accountability, and Security Council decision-making, particularly regarding allegations arising from the conflicts in Syria and Ukraine (OPCW, 2017; United Nations Security Council, 2024).
People's Republic of China 	China supports the global prohibition of chemical and biological weapons while emphasizing state sovereignty, non-interference, and multilateral cooperation. It cooperates with the OPCW in eliminating chemical weapons abandoned by Japan after the Second World War and advocates objective, impartial investigations free from political influence. China also promotes peaceful scientific cooperation, responsible management of dual-use technologies, and international non-proliferation efforts consistent with international law (Ministry of Foreign Affairs of the People's Republic of China, 2023; Organisation for the Prohibition of Chemical Weapons [OPCW], 2024).

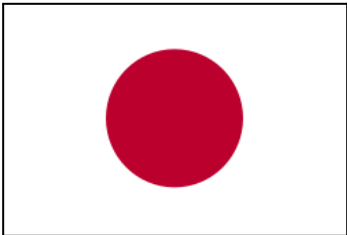


French Republic 	France places particular emphasis on strengthening international accountability mechanisms for violations involving chemical weapons. It launched the International Partnership Against Impunity for the Use of Chemical Weapons, promoting cooperation among states to identify perpetrators and support criminal accountability. France consistently advocates for full implementation of the Chemical Weapons Convention, stronger international investigations, and coordinated diplomatic responses to violations. It also supports enhancing international cooperation to address emerging risks associated with advances in biotechnology and the possible misuse of dual-use scientific research (Ministry for Europe and Foreign Affairs of France, 2024).
United Kingdom of Great Britain and Northern Ireland 	The United Kingdom is among the strongest supporters of international accountability for the use of chemical weapons. Following the 2018 Salisbury poisoning, the United Kingdom played a leading role in expanding the OPCW's attribution capabilities and has consistently advocated for identifying perpetrators of chemical weapons attacks. The United Kingdom supports strong verification mechanisms, international sanctions against violators, and close cooperation between the United Nations, the OPCW, and national authorities. It also emphasizes strengthening global preparedness against emerging chemical and biological threats through international cooperation and scientific oversight (UK Foreign, Commonwealth & Development Office, 2024; OPCW, 2024).
Syrian Arab Republic 	The Syrian Arab Republic became a State Party to the Chemical Weapons Convention in 2013 and officially declared the dismantlement of its chemical weapons programme under international supervision. However, investigations conducted by the OPCW's Investigation and Identification Team have attributed responsibility for several chemical weapons incidents to Syrian government forces, findings that Syria has consistently rejected. The Syrian government argues that many allegations are politically motivated or based on unreliable evidence and maintains that it has fulfilled its treaty obligations. Syria therefore remains at the center of international debates concerning verification, attribution, compliance, and accountability (OPCW, 2023; United Nations Security Council, 2023).



Ukraine 	Ukraine strongly supports international investigations into alleged chemical weapons use and advocates strengthening mechanisms for verification and accountability. Since the beginning of Russia's full-scale invasion, Ukraine has reported numerous allegations involving chemical agents and has requested continued involvement from the OPCW and the international community. Ukraine emphasizes that effective investigations, transparent attribution, and accountability are essential to preserving international law and deterring future violations. It also supports closer international cooperation to prevent both chemical and biological threats arising during armed conflicts (OPCW, 2024; Permanent Mission of Ukraine to the International Organizations in Vienna, 2024).
Islamic Republic of Iran 	The Islamic Republic of Iran remains one of the principal historical victims of chemical weapons, having suffered extensive attacks during the Iran-Iraq War. Consequently, Iran strongly supports the universal prohibition of chemical weapons and frequently calls for stronger international accountability and assistance for victims. At the same time, Iran emphasizes the peaceful use of chemical technologies and argues that export controls on dual-use materials should not unnecessarily restrict scientific development or economic progress in developing countries. Iran also advocates establishing a Middle East free of weapons of mass destruction (OPCW, 2024; Arms Control Association, 2024).
Türkiye 	Türkiye supports the objectives of the Chemical Weapons Convention and the Biological Weapons Convention while emphasizing regional stability, counterterrorism, and international cooperation. As a NATO member located at the crossroads of Europe and the Middle East, Türkiye considers preventing the trafficking of hazardous materials and weapons of mass destruction an important national security priority. It supports strengthening export controls, border security, and international intelligence cooperation while rejecting allegations concerning the unlawful use of chemical agents by its armed forces, describing such claims as unfounded (Ministry of Foreign Affairs of the Republic of Türkiye, 2024).



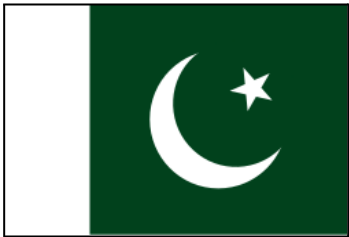
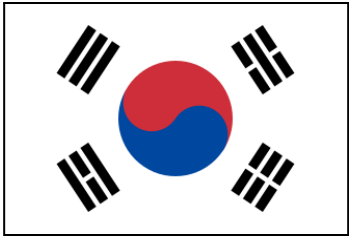
Federative Republic of Brazil 	Brazil consistently supports the complete prohibition of chemical and biological weapons and advocates strengthening multilateral disarmament institutions through international cooperation and diplomacy. As an active member of the OPCW, Brazil promotes universal implementation of the Chemical Weapons Convention, peaceful conflict resolution, and equal application of international law. Brazil emphasizes that chemical weapons should never be used under any circumstances and supports improving international verification, technical assistance, and capacity-building while encouraging dialogue among states to strengthen global non-proliferation and accountability mechanisms (OPCW, 2018; Ministry of Foreign Affairs of Brazil, 2024).
Federal Republic of Germany 	Germany is a leading financial and technical supporter of the OPCW and international chemical weapons verification efforts. It actively promotes scientific cooperation, laboratory capacity-building, inspector training, and international assistance for implementing the Chemical Weapons Convention. Germany consistently advocates strengthening multilateral institutions, improving forensic capabilities, and ensuring accountability for violations through international law. It also encourages greater international cooperation to address emerging risks associated with synthetic biology, biotechnology, and dual-use research (Federal Foreign Office of Germany, 2024; OPCW, 2024).
State of Japan 	Japan maintains one of the world's strongest commitments to disarmament and non-proliferation, shaped by its experiences during the Second World War and the 1995 Tokyo subway sarin attack. Japan cooperates closely with China and the OPCW in eliminating abandoned chemical weapons remaining from the Second World War and supports international education on the humanitarian consequences of weapons of mass destruction. It also promotes strengthening international legal frameworks, emergency preparedness, and peaceful scientific cooperation in the field of chemical and biological security (Ministry of Foreign Affairs of Japan, 2024; OPCW, 2024).



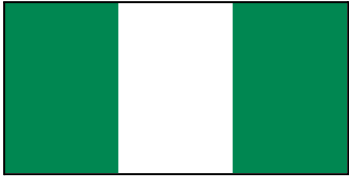
Egypt 	Egypt supports the objective of establishing a Middle East free of weapons of mass destruction and links progress on chemical disarmament to broader regional security arrangements. Although Egypt is a party to the Geneva Protocol, it has neither ratified the Chemical Weapons Convention nor joined the Biological Weapons Convention, arguing that comprehensive regional disarmament should include nuclear weapons as well. Egypt therefore advocates a balanced approach that addresses all categories of weapons of mass destruction within a broader regional security framework (Nuclear Threat Initiative, 2024; United Nations Office for Disarmament Affairs, 2024).
Republic of India 	India is a State Party to the Chemical Weapons Convention and successfully completed the verified destruction of its declared chemical weapons stockpile under OPCW supervision. India supports universal adherence to international disarmament treaties while emphasizing the peaceful use of chemistry and biotechnology for economic development. It advocates balanced export controls that prevent proliferation without restricting legitimate scientific research, industrial development, or technology transfer to developing countries. India also supports strengthening international cooperation to combat chemical and biological terrorism while respecting national sovereignty (OPCW, 2024; Permanent Mission of India to the OPCW, 2024).
Israel 	Israel has signed but not ratified the Chemical Weapons Convention and is not a State Party to the Biological Weapons Convention. Its national security policy places strong emphasis on regional deterrence, strategic ambiguity, and maintaining a qualitative security advantage in a volatile regional environment. Israel supports preventing the proliferation of weapons of mass destruction while expressing concerns regarding regional security threats posed by state and non-state actors. At the same time, allegations regarding the use of white phosphorus in armed conflicts have generated international debate concerning compliance with international humanitarian law, although Israel maintains that its military operations are conducted in accordance with applicable legal standards (International Committee of the Red Cross, 2023; Ministry of Foreign Affairs of Israel, 2024).



Commonwealth of Australia 	Australia strongly supports the global prohibition of chemical and biological weapons and the full implementation of the Chemical Weapons Convention. It advocates independent and impartial OPCW investigations, supports attribution and accountability when credible evidence identifies perpetrators, and places particular emphasis on preventing chemical weapons use by both state and non-state actors. As permanent chair of the Australia Group, Australia also promotes coordinated export controls on sensitive chemicals, biological agents, and dual-use technologies while protecting legitimate scientific and commercial activity. Australia has additionally emphasized the need to address emerging technologies, including artificial intelligence, and to expand chemical-security capacity-building, particularly in the Indo-Pacific region (Permanent Representation of Australia to the OPCW, 2024).
Canada 	Canada is a strong supporter of international verification, attribution, and accountability mechanisms concerning chemical and biological weapons. It supports the independence of the OPCW Technical Secretariat and has provided financial and technical assistance for investigations, chemical detection, and protective capabilities. Canada has also emphasized the danger posed by disinformation surrounding chemical and biological incidents, arguing that misleading narratives can undermine confidence in international non-proliferation institutions. More broadly, Canada favors close cooperation among the United Nations, the OPCW, national authorities, and international partnerships to prevent weapons of mass destruction proliferation and to hold violators accountable under international law (Permanent Representation of Canada to the OPCW, 2024).
United Mexican States 	Mexico strongly supports the complete prohibition of chemical weapons and maintains that their use by anyone, anywhere, and under any circumstances is unacceptable. It favors multilateralism, international law, and independent OPCW investigations, while calling for cooperation with international mechanisms to identify those responsible for violations. Mexico also emphasizes adapting existing frameworks to emerging technologies, including artificial intelligence, while ensuring that scientific development remains consistent with disarmament and international security objectives (Permanent Representation of Mexico to the OPCW, 2024).

Republic of South Africa 	South Africa strongly supports the elimination of chemical and biological weapons through multilateral institutions and the consistent application of international law. It condemns chemical weapons use by anyone under any circumstances but places particular emphasis on impartial, professional, and fact-based investigations. South Africa cautions against politicizing technical disarmament institutions and favors non-discriminatory implementation of treaty obligations, dialogue, and consensus-building. It also considers universality, technical assistance, and capacity-building for developing countries essential components of an effective non-proliferation regime. South Africa increasingly emphasizes the need to address risks associated with artificial intelligence and emerging technologies while preserving peaceful scientific development (Permanent Representation of South Africa to the OPCW, 2024).
Islamic Republic of Pakistan 	Pakistan regards the Chemical Weapons Convention as a major achievement of multilateral arms control and supports its full implementation. It emphasizes universality, dialogue, consensus-based decision-making, and international cooperation while advocating technical assistance and capacity-building for developing countries. Pakistan also supports addressing risks from artificial intelligence and other emerging technologies while preserving equitable access to peaceful chemical and biological technologies (Permanent Representation of Pakistan to the OPCW, 2024).
Republic of Korea 	The Republic of Korea strongly supports the international prohibition of chemical weapons, robust verification mechanisms, and accountability for confirmed violations. It supports OPCW investigative and attribution mechanisms and emphasizes preventing chemical terrorism, strengthening chemical security, and expanding regional capacity-building. Korea also advocates greater attention to artificial intelligence and emerging technologies while promoting universal adherence to the Chemical Weapons Convention (Permanent Representation of the Republic of Korea to the OPCW, 2024).

People's Democratic Republic of Algeria 	Algeria strongly supports the Chemical Weapons Convention, treaty universality, and international cooperation to prevent the re-emergence of chemical weapons and chemical terrorism. It has expressed particular concern regarding the possibility that non-state actors could acquire toxic chemicals and emphasizes the importance of strengthening national and regional technical capacities. Algeria also supports expanding verification expertise in developing regions; its National Institute of Criminalistics and Criminology became an OPCW-designated laboratory in 2024, strengthening African forensic capabilities. Algeria generally favors multilateral approaches, international law, and broader regional security arrangements while advocating greater participation by developing countries in international disarmament institutions (Permanent Representation of Algeria to the OPCW, 2024; OPCW, 2024).
Kingdom of Saudi Arabia 	Saudi Arabia supports the international prohibition of chemical and biological weapons and the implementation of multilateral non-proliferation agreements. As a State Party to the Chemical Weapons Convention, it maintains a national authority responsible for implementation and has supported international capacity-building initiatives through the OPCW. Saudi Arabia approaches chemical and biological disarmament within the broader context of Middle Eastern security and consistently supports the establishment of a region free of nuclear weapons and other weapons of mass destruction. It emphasizes dialogue, international cooperation, treaty universality, and regional security while maintaining that sustainable disarmament requires balanced arrangements applicable to all states in the region (OPCW, 2024; United Nations, 2025).
Republic of Iraq 	Iraq holds a particularly significant position due to its experience with chemical warfare and the legacy of the 1988 Halabja attack. Since joining the Chemical Weapons Convention in 2009, it has supported treaty implementation, cooperation with the OPCW, stronger chemical security, and measures to prevent the misuse of dual-use materials. Iraq also emphasizes assistance for victims, regional cooperation, and preventing any future normalization of chemical weapons in armed conflict (OPCW, 2024, 2025).

Federal Republic of Nigeria 	Nigeria supports universal implementation of the Chemical Weapons Convention while placing particular emphasis on technical assistance and capacity-building for developing countries. It advocates strengthening national authorities, border and chemical-security controls, emergency-response capabilities, and regional cooperation against chemical terrorism. Nigeria has specifically encouraged greater cooperation between the OPCW and mechanisms implementing Security Council Resolution 1540 to improve the capabilities of police, military, and public-health institutions. It also supports expanding African participation in international chemical-security programs and recognizes the importance of addressing emerging technologies such as artificial intelligence through cooperation among governments, industry, and the scientific community (Permanent Representation of Nigeria to the OPCW, 2024).
---	--

Regional Organizations and International Stakeholders

Preventing the use of chemical and biological weapons requires cooperation among specialized international organizations, treaty bodies, humanitarian institutions, and regional organizations. These actors contribute to international security through verification, inspections, technical assistance, humanitarian protection, scientific cooperation, export controls, and the investigation of alleged violations. Their expertise and recommendations frequently inform the work of the United Nations Security Council and influence the development of international policies aimed at strengthening non-proliferation, compliance, and accountability.

United Nations Office for Disarmament Affairs (UNODA)

The United Nations Office for Disarmament Affairs (UNODA) serves as the principal United Nations body responsible for promoting global disarmament and preventing the proliferation of weapons of mass destruction. It supports the implementation of the Biological Weapons Convention, coordinates the United Nations Secretary-General's Mechanism for investigating alleged uses of chemical and biological weapons, and provides technical assistance and capacity-building to Member States. UNODA also promotes international cooperation and dialogue on emerging security threats related to chemical and biological weapons (United Nations Office for Disarmament Affairs [UNODA], 2024).

Organisation for the Prohibition of Chemical Weapons (OPCW)

The Organisation for the Prohibition of Chemical Weapons (OPCW) is the implementing body of the Chemical Weapons Convention and the world's leading organization for preventing the use of chemical weapons. It conducts inspections, verifies the destruction of declared chemical weapons

stockpiles, investigates allegations of chemical weapons use, and assists Member States in implementing the Convention. The OPCW also promotes international cooperation in the peaceful use of chemistry and was awarded the Nobel Peace Prize in 2013 for its efforts to eliminate chemical weapons worldwide (Organisation for the Prohibition of Chemical Weapons [OPCW], 2024).

Biological Weapons Convention Implementation Support Unit (BWC ISU)

The Biological Weapons Convention Implementation Support Unit (BWC ISU) supports the implementation of the Biological Weapons Convention by assisting States Parties, facilitating confidence-building measures, organizing review conferences, and promoting international cooperation on biosafety and biosecurity. Although the Convention lacks a legally binding verification mechanism, the ISU plays an important role in strengthening transparency, information sharing, and confidence among Member States (United Nations Office for Disarmament Affairs, 2024).

International Committee of the Red Cross (ICRC)

The International Committee of the Red Cross (ICRC) advocates universal compliance with international humanitarian law and has consistently supported the complete prohibition of chemical and biological weapons. The organization documents the humanitarian consequences of these weapons, assists victims of armed conflict, and promotes stronger legal protections for civilians. It also works with governments and international organizations to reinforce respect for international humanitarian law during armed conflicts (International Committee of the Red Cross, 2024).

World Health Organization (WHO)

The World Health Organization (WHO) contributes to global biological security by strengthening disease surveillance, laboratory safety, emergency preparedness, and international public health cooperation. Although its mandate focuses on public health rather than disarmament, the WHO plays an essential role in detecting, responding to, and mitigating biological incidents that could result from either natural outbreaks or the deliberate use of biological agents (World Health Organization, 2024).

INTERPOL

INTERPOL supports international efforts to prevent chemical and biological terrorism by facilitating intelligence sharing, criminal investigations, and law enforcement cooperation among Member States. The organization assists national authorities in identifying illicit trafficking networks, preventing the acquisition of hazardous materials by terrorist organizations, and strengthening global preparedness against chemical and biological threats (INTERPOL, 2024).

Australia Group

The Australia Group is an informal multilateral export control regime composed of countries committed to preventing the proliferation of chemical and biological weapons. Through the coordination

of export controls on dual-use chemicals, biological agents, equipment, and technologies, the Australia Group seeks to reduce the risk that sensitive materials may be diverted to weapons programs while allowing legitimate scientific and industrial activities to continue (Australia Group, 2024).

International Atomic Energy Agency (IAEA)

The International Atomic Energy Agency (IAEA) primarily focuses on nuclear safety, security, and non-proliferation, but its internationally recognized verification and inspection system is frequently cited as a model for strengthening verification mechanisms in other disarmament regimes. The Agency also cooperates with the United Nations and other international organizations on broader issues related to weapons of mass destruction and international security (International Atomic Energy Agency, 2024).

European Union (EU)

The European Union (EU) strongly supports the global prohibition of chemical and biological weapons through diplomatic initiatives, financial assistance, and technical cooperation with the OPCW and the Biological Weapons Convention. The EU promotes stronger verification mechanisms, export controls, sanctions against violators, and international accountability while encouraging scientific cooperation consistent with international law (European Union, 2024).

African Union (AU)

The African Union (AU) supports universal adherence to international disarmament treaties and emphasizes strengthening regional capacity to prevent chemical and biological terrorism. The organization promotes international cooperation, public health preparedness, border security, and technical assistance to help African states implement their obligations under international non-proliferation agreements while enhancing regional peace and security (African Union, 2024).

North Atlantic Treaty Organization (NATO)

NATO considers chemical, biological, radiological, and nuclear (CBRN) threats among the principal challenges to Allied security. The Alliance supports collective preparedness through joint training, intelligence sharing, civil emergency planning, and defensive capabilities designed to detect, respond to, and mitigate the effects of chemical and biological incidents. NATO also cooperates with international organizations to strengthen resilience against emerging CBRN threats while reinforcing international non-proliferation efforts (North Atlantic Treaty Organization, 2024).

Previous United Nations Actions and Resolutions

The international prohibition of chemical and biological weapons has developed over the course of a century through treaties, Security Council resolutions, and specialized international organizations. Together, these legal instruments form the foundation of the global non-proliferation regime and guide international efforts to prevent the use of weapons of mass destruction, investigate alleged violations, and ensure accountability.

The **Geneva Protocol (1925)** marked the first international agreement prohibiting the use of chemical and biological weapons in armed conflict. Adopted in response to the widespread use of poison gas during the First World War, the Protocol established an important legal norm against chemical and biological warfare. However, it prohibited only the use of these weapons and did not prevent their development, production, or stockpiling, leading many states to continue maintaining chemical and biological weapons programs during the twentieth century (United Nations Office for Disarmament Affairs [UNODA], 1925).

The **Biological Weapons Convention (BWC)**, adopted in 1972 and entering into force in 1975, became the first multilateral treaty to prohibit an entire category of weapons of mass destruction. States Parties agreed never to develop, produce, acquire, stockpile, or retain biological agents or toxins intended for hostile purposes. Although the Convention represents a major achievement in international disarmament, it does not include a legally binding verification system, which remains one of its greatest limitations and an important subject of international debate (UNODA, 1972).

The **Chemical Weapons Convention (CWC)** was adopted in 1993 and entered into force in 1997, establishing one of the most comprehensive disarmament agreements ever negotiated. The Convention prohibits the development, production, acquisition, stockpiling, transfer, and use of chemical weapons while creating a rigorous international verification regime administered by the **Organisation for the Prohibition of Chemical Weapons (OPCW)**. Through inspections, declarations, and destruction verification, the OPCW has overseen the elimination of all declared chemical weapons stockpiles worldwide, representing one of the greatest successes of multilateral arms control (Organisation for the Prohibition of Chemical Weapons [OPCW], 2023).

Recognizing the growing threat posed by non-state actors, the **United Nations Security Council adopted Resolution 1540 (2004)** under Chapter VII of the UN Charter. The resolution requires all Member States to establish domestic legislation and effective export controls to prevent terrorist organizations and other non-state actors from acquiring nuclear, chemical, or biological weapons and related materials. It remains one of the cornerstone Security Council measures addressing the proliferation of weapons of mass destruction beyond state actors (United Nations Security Council, 2004).

Following the confirmed use of chemical weapons during the Syrian conflict, the **Security Council unanimously adopted Resolution 2118 (2013)**, requiring Syria to eliminate its chemical weapons programme under international supervision. The resolution endorsed the OPCW framework for the verified

destruction of Syria's declared stockpiles and reaffirmed that the use of chemical weapons constitutes a threat to international peace and security. Although significant progress was achieved in dismantling declared stockpiles, continued allegations of chemical weapons use demonstrated the challenges of verification, enforcement, and accountability during active armed conflict (United Nations Security Council, 2013).

To strengthen accountability, the **Organisation for the Prohibition of Chemical Weapons** expanded its investigative role through the establishment of the **Investigation and Identification Team (IIT)**, which is responsible for identifying the perpetrators of confirmed chemical weapons attacks in the Syrian Arab Republic. Unlike previous fact-finding missions that determined only whether chemical weapons had been used, the IIT contributes to international accountability by attributing responsibility where sufficient evidence exists (OPCW, 2024).

The **United Nations Secretary-General's Mechanism (UNSGM)** also remains an important international tool for investigating allegations involving the use of chemical and biological weapons. Established in 1987, the Mechanism enables the Secretary-General to dispatch independent expert teams to investigate alleged incidents at the request of Member States, providing impartial scientific assessments that support international decision-making and reinforce confidence in the international prohibition regime (United Nations Office for Disarmament Affairs, 2024).

Together, these treaties, resolutions, and institutions demonstrate the progressive evolution of the international community's response to chemical and biological weapons. While considerable progress has been achieved in eliminating declared chemical stockpiles and strengthening international norms, significant challenges remain regarding biological verification, non-state actors, emerging technologies, political divisions within the Security Council, and the effective enforcement of accountability measures. These unresolved issues continue to shape contemporary debates within the United Nations Security Council.

Current Challenges and Debates

Despite nearly a century of international efforts to prohibit chemical and biological weapons, preventing their use and ensuring accountability remain significant challenges for the international community. While important legal frameworks such as the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC) have strengthened global norms against weapons of mass destruction, evolving security threats, scientific advances, geopolitical rivalries, and limitations in existing verification mechanisms continue to test the effectiveness of the international non-proliferation regime. The following issues represent the principal debates currently facing the United Nations Security Council.

Verification and Compliance

One of the greatest challenges is ensuring that states fully comply with their international obligations. The Chemical Weapons Convention established one of the world's most comprehensive verification systems through inspections conducted by the Organisation for the Prohibition of Chemical Weapons (OPCW). However, the Biological Weapons Convention lacks a legally binding verification mechanism, making it considerably more difficult to determine whether biological research programs are exclusively peaceful or have military applications. Because biological agents can often be produced using technologies with legitimate medical, agricultural, or scientific purposes, distinguishing peaceful activities from prohibited weapons programs remains a major international concern (United Nations Office for Disarmament Affairs [UNODA], 2024).

Political Divisions within the Security Council

Although the Security Council bears primary responsibility for maintaining international peace and security, political disagreements among its permanent members have frequently complicated collective responses to alleged chemical weapons incidents. Differing interpretations of evidence, competing geopolitical interests, and the use of the veto have at times prevented consensus on investigations, sanctions, or accountability measures. These divisions have generated ongoing debate regarding how the Council can respond effectively to violations involving weapons of mass destruction while preserving its credibility and maintaining respect for international law (United Nations Security Council, 2024).

Accountability and Attribution

Holding perpetrators accountable remains one of the most complex aspects of responding to chemical and biological weapons use. Establishing responsibility requires credible scientific evidence, impartial investigations, and broad international acceptance of investigative findings. While organizations such as the OPCW have strengthened their capacity to investigate and attribute responsibility for chemical weapons attacks, disagreements among Member States regarding investigative mandates and legal authority continue to complicate efforts to impose sanctions or pursue criminal accountability.

Delegates must therefore consider how international mechanisms can strengthen both the credibility and effectiveness of accountability processes (Organisation for the Prohibition of Chemical Weapons [OPCW], 2024).

Non-State Actors and Terrorism

The possibility that terrorist organizations or other non-state actors could acquire or develop chemical or biological weapons represents a growing security concern. Advances in technology, increased access to scientific information, and the availability of dual-use materials have raised fears that extremist groups could exploit toxic chemicals or biological agents to carry out attacks. Preventing these threats requires stronger export controls, intelligence sharing, border security, and international cooperation, consistent with the objectives of Security Council Resolution 1540 (2004) (United Nations Security Council, 2004).

Emerging Technologies and Dual-Use Research

Rapid advances in biotechnology, synthetic biology, artificial intelligence, and gene-editing technologies have created new opportunities for scientific and medical progress while also increasing concerns about their potential misuse. Research conducted for peaceful purposes may inadvertently generate knowledge or technologies that could be adapted for hostile applications. This dual-use dilemma has intensified discussions regarding scientific responsibility, biosecurity, research oversight, and international cooperation to ensure that technological innovation remains consistent with international humanitarian law and disarmament objectives (World Health Organization, 2024; UNODA, 2024).

Universal Participation and Treaty Implementation

Although the Chemical Weapons Convention enjoys near-universal membership, not all states have joined or fully implemented the major international agreements governing chemical and biological weapons. Differences in national legislation, technical capacity, and political priorities continue to affect treaty implementation and compliance. Some regions also link chemical and biological disarmament to broader security concerns involving nuclear weapons and regional arms control, making universal adherence more politically complex. Strengthening technical assistance, capacity-building, and confidence-building measures therefore remains an important priority for the international community (OPCW, 2024).

Looking Ahead

The continued threat posed by chemical and biological weapons demonstrates that international disarmament requires constant adaptation to evolving political, technological, and security environments. Delegates must consider how to strengthen verification mechanisms, improve international cooperation,

enhance accountability, address emerging scientific challenges, and reinforce the global norm against the use of weapons of mass destruction. Successfully balancing state sovereignty, scientific innovation, humanitarian protection, and international security will remain one of the Security Council's greatest challenges in the years ahead.

Case Studies

The following case studies illustrate the evolution of international responses to chemical and biological weapons and demonstrate the legal, humanitarian, and political challenges associated with preventing their use and ensuring accountability. Together, they highlight the importance of international cooperation, effective verification, and credible enforcement mechanisms in preserving global peace and security.

Halabja Chemical Attack (1988)

On 16 March 1988, during the final stages of the Iran-Iraq War, Iraqi forces launched a chemical weapons attack against the Kurdish city of Halabja using a combination of nerve and blister agents. The attack killed an estimated 5,000 civilians and injured thousands more, becoming one of the deadliest chemical weapons attacks against a civilian population in modern history. The tragedy exposed serious weaknesses in the international community's ability to respond effectively to chemical weapons use and reinforced global support for stronger international legal frameworks. Halabja became one of the principal events that accelerated international negotiations leading to the adoption of the Chemical Weapons Convention, demonstrating the devastating humanitarian consequences of chemical warfare and the importance of universal prohibition and accountability (Organisation for the Prohibition of Chemical Weapons [OPCW], 2024; United Nations Office for Disarmament Affairs [UNODA], 2024).

Tokyo Subway Sarin Attack (1995)

In March 1995, members of the Japanese cult Aum Shinrikyo released sarin gas in the Tokyo subway system, killing 13 people and injuring thousands. The attack demonstrated that chemical weapons were no longer exclusively a threat posed by states but could also be employed by terrorist organizations and other non-state actors. The incident significantly influenced international discussions on chemical terrorism, emergency preparedness, intelligence cooperation, and export controls. It also highlighted the need for stronger national legislation and international coordination to prevent extremist groups from acquiring hazardous materials or exploiting scientific knowledge for hostile purposes (Organisation for the Prohibition of Chemical Weapons, 2024; Ministry of Foreign Affairs of Japan, 2024).

Syrian Civil War (2013–Present)

Since 2013, numerous investigations conducted by the OPCW and United Nations mechanisms have confirmed the repeated use of chemical weapons during the Syrian Civil War. The conflict prompted the adoption of United Nations Security Council Resolution 2118, leading to the declared destruction of Syria's chemical weapons programme under international supervision. Despite these efforts, subsequent investigations attributed responsibility for several attacks involving sarin and chlorine, demonstrating the difficulties of ensuring compliance during ongoing armed conflicts. The Syrian case remains one of the

clearest examples of the challenges associated with verification, attribution, political divisions within the Security Council, and enforcing accountability for violations of international law (United Nations Security Council, 2013; OPCW, 2024).

Salisbury Novichok Poisoning (2018)

In March 2018, former Russian intelligence officer Sergei Skripal and his daughter Yulia Skripal were poisoned in Salisbury, United Kingdom, with a Novichok nerve agent. The incident generated widespread international condemnation and renewed concerns regarding the use of highly sophisticated chemical agents outside traditional battlefields. The case strengthened international support for expanding the OPCW's investigative and attribution capabilities while highlighting the importance of international cooperation in forensic investigations, sanctions, and diplomatic responses to violations of the Chemical Weapons Convention. It also demonstrated that chemical weapons continue to pose security threats beyond conventional armed conflicts (Organisation for the Prohibition of Chemical Weapons, 2018; United Kingdom Foreign, Commonwealth & Development Office, 2024).

Looking Ahead

These case studies demonstrate that the threat posed by chemical and biological weapons has evolved considerably over time. While early concerns focused primarily on state arsenals, contemporary challenges increasingly involve non-state actors, sophisticated chemical agents, emerging technologies, and difficulties in verification and accountability. They also show that international treaties alone are insufficient without effective implementation, scientific cooperation, impartial investigations, and sustained political commitment. Delegates should consider how lessons learned from these cases can strengthen future international mechanisms for preventing the use of chemical and biological weapons while ensuring accountability for those responsible.

Possible Solutions and Future Perspectives

Preventing the use of chemical and biological weapons requires a comprehensive approach that combines effective international law, scientific cooperation, strong verification mechanisms, and political commitment. While existing treaties have significantly reduced the threat posed by these weapons, evolving technologies, geopolitical tensions, and the emergence of non-state actors demonstrate that the international non-proliferation regime must continue to adapt. The following approaches represent some of the principal policy options currently discussed within the international community.

Strengthening Verification and Compliance Mechanisms

One of the most widely supported proposals is strengthening international verification systems. While the Chemical Weapons Convention benefits from an extensive inspection regime administered by the Organisation for the Prohibition of Chemical Weapons (OPCW), the Biological Weapons Convention (BWC) lacks a comparable verification mechanism. Many experts and Member States support expanding confidence-building measures, improving information sharing, increasing voluntary transparency, and exploring practical mechanisms that strengthen compliance while respecting national sovereignty. Enhanced scientific cooperation and greater technical assistance could also improve states' ability to implement treaty obligations effectively (United Nations Office for Disarmament Affairs [UNODA], 2024; Organisation for the Prohibition of Chemical Weapons [OPCW], 2024).

Improving Accountability for Violations

Ensuring accountability remains essential for maintaining the credibility of international law. Strengthening international investigative mechanisms, supporting independent scientific investigations, improving evidence collection, and reinforcing cooperation between the United Nations, the OPCW, and national judicial authorities could contribute to more effective responses when violations occur. Delegates may also consider ways to improve the implementation of targeted sanctions, international cooperation in criminal investigations, and support for existing accountability mechanisms while ensuring due process and impartiality (United Nations Security Council, 2024).

Preventing Chemical and Biological Terrorism

Preventing non-state actors from acquiring chemical or biological weapons remains a major international priority. Many proposals focus on strengthening national export controls, improving border security, enhancing intelligence sharing, and expanding international law enforcement cooperation under the framework established by Security Council Resolution 1540 (2004). Increased assistance for states with limited technical capacity could also improve global implementation of measures designed to prevent terrorist organizations from obtaining hazardous materials, dual-use technologies, or sensitive scientific expertise (United Nations Security Council, 2004).

Addressing Emerging Technologies and Biosecurity

Rapid developments in synthetic biology, genetic engineering, artificial intelligence, and biotechnology present both significant opportunities and new security risks. Many experts advocate strengthening international biosecurity standards, promoting responsible scientific research, improving oversight of dual-use technologies, and expanding cooperation between governments, scientific institutions, and international organizations. These measures seek to ensure that scientific innovation continues to benefit society while reducing the risk that emerging technologies could be exploited for hostile purposes (World Health Organization, 2024; UNODA, 2024).

Expanding International Cooperation and Capacity-Building

Many developing countries continue to face challenges in implementing international obligations because of limited technical resources, laboratory capacity, and specialized expertise. Expanding international technical assistance, scientific cooperation, emergency preparedness, and training programs can strengthen national implementation of both the Chemical Weapons Convention and the Biological Weapons Convention. Greater cooperation among governments, regional organizations, and specialized international agencies can also improve global preparedness for responding to chemical and biological incidents (OPCW, 2024; UNODA, 2024).

Promoting Universal Participation in International Treaties

Although the Chemical Weapons Convention enjoys near-universal membership, universal adherence has not yet been achieved, and participation in other disarmament instruments remains incomplete. Encouraging additional states to ratify and fully implement the Chemical Weapons Convention, the Biological Weapons Convention, and related international agreements would strengthen the global norm against chemical and biological weapons. Confidence-building measures, diplomatic dialogue, and technical assistance can help increase participation while promoting greater consistency in national implementation (UNODA, 2024).

Future Perspectives

Scientific and technological advances will continue to transform both the opportunities and the risks associated with chemical and biological materials. Emerging technologies may improve disease prevention, industrial production, agriculture, and scientific research, but they also require stronger international safeguards to prevent misuse. At the same time, geopolitical tensions and evolving forms of armed conflict demonstrate that maintaining international peace and security depends upon effective multilateral cooperation and respect for international law.

For the United Nations Security Council, future efforts will likely focus on improving verification, strengthening accountability, enhancing preparedness against chemical and biological threats, and reinforcing cooperation among Member States and specialized international organizations. Delegates should therefore seek balanced and realistic solutions that strengthen existing international mechanisms while adapting them to contemporary scientific, political, and security challenges. By combining prevention, effective verification, international cooperation, and credible accountability, the international community can reinforce the longstanding global norm against the use of chemical and biological weapons and contribute to a more secure international order.

Guiding Questions for Delegates

1. How can the United Nations Security Council strengthen international mechanisms to prevent the use of chemical and biological weapons while maintaining international peace and security?
2. What improvements can be made to existing verification systems, particularly regarding the Biological Weapons Convention, to increase transparency and confidence among Member States?
3. How can the international community ensure impartial investigations and effective accountability when chemical or biological weapons are allegedly used during armed conflicts?
4. What role should the Security Council play when political disagreements or the use of the veto prevent collective action in response to violations of international law?
5. How can governments reduce the risk that non-state actors, including terrorist organizations, acquire chemical or biological weapons, dual-use materials, or sensitive technologies?
6. What measures can strengthen international cooperation on export controls, intelligence sharing, scientific research, and biosecurity without unnecessarily restricting the peaceful development of chemistry and biotechnology?
7. How should the international community address emerging challenges posed by synthetic biology, genetic engineering, artificial intelligence, and other rapidly developing technologies that could be misused for hostile purposes?
8. What policies can encourage universal adherence to the Chemical Weapons Convention, the Biological Weapons Convention, and other international non-proliferation agreements?
9. How can humanitarian considerations, international humanitarian law, and the protection of civilians remain central to Security Council responses involving chemical and biological weapons?
10. What practical and realistic actions can Member States, international organizations, and regional organizations take to strengthen prevention, improve verification, and ensure accountability while respecting international law and state sovereignty?

Suggested Readings and Resources

Official United Nations and Treaty Resources

United Nations Office for Disarmament Affairs (UNODA)

The official United Nations portal for disarmament affairs, providing information on chemical and biological weapons, Security Council resolutions, treaties, and international non-proliferation initiatives.

<https://disarmament.unoda.org>

Organisation for the Prohibition of Chemical Weapons (OPCW)

Official website of the organization responsible for implementing the Chemical Weapons Convention, including information on inspections, investigations, verification activities, and Member States.

<https://www.opcw.org>

Biological Weapons Convention (BWC) Implementation Support Unit

Provides official information on the Biological Weapons Convention, review conferences, confidence-building measures, implementation assistance, and international cooperation.

<https://disarmament.unoda.org/biological-weapons>

United Nations Security Council Resolutions Database

Official database containing all Security Council resolutions, including those related to chemical and biological weapons, non-proliferation, sanctions, and international peace and security.

<https://main.un.org/securitycouncil/en/content/resolutions>

Chemical Weapons Convention (CWC)

Official text of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction.

<https://www.opcw.org/chemical-weapons-convention>

Biological Weapons Convention (BWC) (1972)

Official text of the Convention prohibiting the development, production, and stockpiling of biological and toxin weapons.

<https://disarmament.unoda.org/biological-weapons>

International Research and Policy Resources

Stockholm International Peace Research Institute (SIPRI)

Provides independent research on weapons of mass destruction, arms control, non-proliferation, emerging technologies, and international security.

<https://www.sipri.org>

Arms Control Association

Offers accessible analysis of chemical and biological weapons, non-proliferation agreements, and current developments in international arms control.

<https://www.armscontrol.org>

International Committee of the Red Cross (ICRC) - Chemical and Biological Weapons

Explains the humanitarian consequences of chemical and biological weapons and the legal obligations established under international humanitarian law.

<https://www.icrc.org>

United Nations Institute for Disarmament Research (UNIDIR)

Publishes research on disarmament, emerging technologies, biosecurity, weapons of mass destruction, and international security policy.

<https://unidir.org>

Open-Access Academic Resources

Organisation for the Prohibition of Chemical Weapons. (2024). OPCW Annual Report

Summarizes the Organization's verification activities, inspections, investigations, international cooperation, and implementation of the Chemical Weapons Convention.

<https://www.opcw.org/resources>

United Nations Office for Disarmament Affairs. (2024). Weapons of Mass Destruction

Provides educational resources, official documents, and policy information regarding chemical, biological, nuclear, and radiological weapons.

<https://disarmament.unoda.org/wmd>

World Health Organization. Health Security and Preparedness

Provides information on global preparedness, laboratory biosafety, disease surveillance, and emergency response relevant to biological threats.

<https://www.who.int/emergencies>

Science History Institute - A Brief History of Chemical Warfare

An accessible historical overview of the development and international prohibition of chemical weapons, including major historical case studies.

<https://www.sciencehistory.org/stories/magazine/a-brief-history-of-chemical-war/>

References

- African Union. (2024). *African Union policy framework on chemical, biological, radiological and nuclear (CBRN) risk mitigation*. <https://au.int>
- Arms Control Association. (2024). *Chemical and biological weapons resource collection*. <https://www.armscontrol.org>
- Australia Group. (2024). *The Australia Group: An informal forum of countries working to prevent chemical and biological weapons proliferation*. <https://www.dfat.gov.au/publications/minisite/theaustraliagroupnetsite/en/index.html>
- European Union. (2024). *EU strategy against the proliferation of weapons of mass destruction*. <https://www.consilium.europa.eu>
- Federal Foreign Office of Germany. (2024). *Chemical weapons and disarmament*. <https://www.auswaertiges-amt.de>
- International Atomic Energy Agency. (2024). *IAEA safeguards and verification*. <https://www.iaea.org>
- International Committee of the Red Cross. (2024). *Chemical and biological weapons*. <https://www.icrc.org>
- INTERPOL. (2024). *CBRN terrorism prevention*. <https://www.interpol.int>
- Ministry for Europe and Foreign Affairs of France. (2024). *International Partnership Against Impunity for the Use of Chemical Weapons*. <https://www.diplomatie.gouv.fr>
- Ministry of Foreign Affairs of Israel. (2024). *Israel's foreign and security policy*. <https://www.gov.il>
- Ministry of Foreign Affairs of Japan. (2024). *Abandoned chemical weapons in China*. <https://www.mofa.go.jp>
- Ministry of Foreign Affairs of the People's Republic of China. (2023). *China's position on chemical weapons and disarmament*. <https://www.fmprc.gov.cn>
- Ministry of Foreign Affairs of the Republic of Türkiye. (2024). *Arms control and disarmament*. <https://www.mfa.gov.tr>
- Ministry of Foreign Affairs of Brazil. (2024). *Brazil and multilateral disarmament*. <https://www.gov.br/mre>
- North Atlantic Treaty Organization. (2024). *Chemical, biological, radiological and nuclear defence*. <https://www.nato.int>

Nuclear Threat Initiative. (2024). Egypt. <https://www.nti.org>

Organisation for the Prohibition of Chemical Weapons. (1993). *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction*. <https://www.opcw.org/chemical-weapons-convention>

Organisation for the Prohibition of Chemical Weapons. (2017). *OPCW verifies completion of Russia's chemical weapons destruction*. <https://www.opcw.org>

Organisation for the Prohibition of Chemical Weapons. (2018). *Novichok incident and OPCW technical assistance*. <https://www.opcw.org>

Organisation for the Prohibition of Chemical Weapons. (2023). *OPCW annual report 2023*. <https://www.opcw.org/resources>

Organisation for the Prohibition of Chemical Weapons. (2024). *Official website*. <https://www.opcw.org>

Permanent Mission of India to the OPCW. (2024). *Statement to the Organisation for the Prohibition of Chemical Weapons*. <https://www.opcw.org>

Permanent Mission of Ukraine to the International Organizations in Vienna. (2024). *Statements on chemical weapons allegations*. <https://vienna.mfa.gov.ua>

Science History Institute. (2015). *A brief history of chemical war*. <https://www.sciencehistory.org/stories/magazine/a-brief-history-of-chemical-war/>

U.K. Foreign, Commonwealth & Development Office. (2024). *Chemical weapons sanctions*. <https://www.gov.uk>

United Nations. (1945). *Charter of the United Nations*. <https://www.un.org/en/about-us/un-charter>

United Nations Office for Disarmament Affairs. (1925). *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (Geneva Protocol)*. <https://disarmament.unoda.org>

United Nations Office for Disarmament Affairs. (1972). *Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction*. <https://disarmament.unoda.org/biological-weapons>

United Nations Office for Disarmament Affairs. (2024). *Biological weapons*. <https://disarmament.unoda.org/biological-weapons>

United Nations Office for Disarmament Affairs. (2024). *United Nations Secretary-General's Mechanism for Investigation of Alleged Use of Chemical and Biological Weapons*. <https://disarmament.unoda.org>

United Nations Office for Disarmament Affairs. (2024). *Weapons of mass destruction*.

<https://disarmament.unoda.org/wmd>

United Nations Security Council. (2004). *Resolution 1540 (2004) (S/RES/1540)*.

[https://undocs.org/S/RES/1540\(2004\)](https://undocs.org/S/RES/1540(2004))

United Nations Security Council. (2013). *Resolution 2118 (2013) (S/RES/2118)*.

[https://undocs.org/S/RES/2118\(2013\)](https://undocs.org/S/RES/2118(2013))

United Nations Security Council. (2023). *Implementation of Security Council Resolution 2118 (2013): Report of the Director-General of the OPCW*. <https://undocs.org>

United Nations Security Council. (2024). *Security Council reports and meetings on chemical and biological weapons*. <https://www.un.org/securitycouncil>

U.S. Department of State. (2024). *Adherence to and compliance with arms control, nonproliferation, and disarmament agreements and commitments*. <https://www.state.gov>

World Health Organization. (2024). *Health emergency preparedness and response*.

<https://www.who.int/emergencies>