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The international community celebrates a world free of active chemical arsenals. Yet, the controversy surrounding chemical and biological weapons persists. The use of chemical weapons in Syria remains a divisive issue, impacting the functionality of international organizations tasked with addressing these concerns.

The Western bloc asserts that the Syrian government is violating the Chemical Weapons Convention (CWC), while Syria and its allies reject these claims. Additionally, Israel has faced accusations of deploying white phosphorus munitions, allegedly supplied by the US, during its conflicts in Gaza.

Despite persistent divisions, the Chemical Weapons Convention (CWC) remains resilient, with member nations actively bolstering its implementation through the Organisation for the Prohibition of Chemical Weapons (OPCW). Since the May 2023 Review Conference, the Twenty-Fifth Annual Meeting of National Authorities, the Conference of State Parties, and various other gatherings have convened, fostering platforms for information exchange and discussions on critical issues.

Likewise, the Biological Weapons Convention continues to host regular meetings following its 2022 Review Conference. Technological advancements present challenges to treaty member states, prompting the US, Indo-Pacific nations, and others to voice their concerns and readiness to address emerging biological threats. At a regional level, organizations are engaging in discussions on the universalization and effective implementation of global treaties like the Biological Weapons Convention as well.

In his article, Animesh Roul examines the widespread ethical and legal debates globally surrounding the deployment and use of white phosphorus in contemporary conflicts, including instances in Ukraine, Gaza, Lebanon, and Nagorno-Karabakh. Niranjan Oak has analyzed the bill introduced for the Project Precursor Act in the US Congress by the Congressman, Michael McCaul On May 11, 2023 to address this pressing concern of Fentanyl-related deaths in the United States.

Mrinmayee Bhushan's article outlines the recent discussions held in the Biological Weapons Convention

working group meetings, which center on ensuring compliance, establishing verification methods, and implementing confidence-building measures aimed at thwarting the spread of biological weapons. James Revill has, in his paper, reckons ways to ensure compliance with the Biological Weapons Convention.

This issue of the CBW Magazine also comprises other features like Chemical-Biological News. With our readers' feedback, we wish to publish issues in the future that focuses on a subject of particular concern. Kindly address contributions and feedback to: cbwmagazineeditor@gmail.com.

White Phosphorus Munition Use in Contemporary Conflicts: A Brief Analysis Within the Context of International Law

Animesh Roul

Mr Animesh Roul is the Executive Director of the Society for the Study of Peace and Conflict, New Delhi.

Summary

The paper discusses the use of white phosphorus (WP) munitions in recent conflict zones such as Ukraine, Gaza, and Nagorno-Karabakh, highlighting the significant legal, ethical, and humanitarian issues it raises. It argues for critically reassessing white phosphorus use in warfare to ensure it aligns with humanitarian values and public ethics. To mitigate the concerns surrounding WP munitions, the paper proposes a few measures, including tightening international laws governing the use of incendiary weapons, improving mechanisms for monitoring and verifying WP usage, and bolstering global efforts to educate and advocate for the curtailment or prohibition of the incendiary munitions. These recommendations aim to enhance compliance with international humanitarian standards and protect human rights in conflict zones.

White phosphorus (WP) in modern conflicts has ignited significant ethical and legal debates globally. Notably, its use in Ukraine, Gaza, Lebanon, and Nagorno-Karabakh have underscored the complex interplay between military tactics and international legal standards, particularly concerning humanitarian law and the conduct of war. White phosphorus, which combusts upon contact with oxygen to produce intense heat, light, and smoke, serves multiple military functions, including smoke screening, illuminating targets, and marking.¹ Despite these applications, its deployment as an incendiary weapon to target military personnel or equipment has drawn scrutiny due to the potential for indiscriminate harm and lasting damage, particularly in the civilian context.

The discourse around white phosphorus in conflict zones reflects broader concerns over the ethics of warfare, the protection of civilians, and the need for comprehensive adherence to international legal standards. Despite not being classified as a chemical weapon under the Chemical Weapons Convention (CWC) due to its action as an incendiary rather than through chemical interaction with biological processes, the nature of white phosphorus has prompted calls for tighter regulation under international humanitarian law. The critical legal frameworks pertinent to white phosphorus are the 1980 Convention on Certain Conventional Weapons (CCCW) and its Protocol III, alongside the 1949 Geneva Conventions. Protocol III explicitly restricts the employment of incendiary devices, including white phosphorus, in civilian settings, though its military use remains permissible under specific conditions.²

The legality of white phosphorus as an anti-personnel weapon is debated in relation to

the laws of warfare and CCCW. While some argue that its use in civilian areas constitutes a clear legal violation, others note that non-incendiary applications remain within the bounds of legality. As such, understanding and addressing the implications of white phosphorus munitions in contemporary conflicts is crucial for advancing the principles of humanitarian law and ensuring the responsible conduct of hostilities.

Russia-Ukraine war

The use of white phosphorus munitions in the conflict in Eastern Ukraine, particularly by Russian forces, has sparked considerable controversy and debate, raising serious questions about adherence to international legal standards, specifically Protocol III of CCCW. Several reports emerged of Russian forces employing white phosphorus bombs during the Battle of Kyiv and against Kramatorsk in March 2022.³ These allegations were significant because white phosphorus causes severe burns and is capable of igniting structures, posing a grave threat to civilians and combatants alike. The use in densely populated urban environments like Kyiv and Kramatorsk drew criticism from international observers and human rights organizations, who raised concerns about potential violations of the CCCW, which explicitly restricts the use of incendiary weapons against or near civilian populations due to their indiscriminate nature.

Again, in May 2022, another notable instance was reported at the Azovstal steel plant in Mariupol.⁴ The use of white phosphorus in this heavily industrial area, which had become a focal point of the conflict, was particularly alarming due to the risk of causing widespread fires and civilian casualties. The dense urban setting of Mariupol and the presence of civilians in the vicinity of the steel plant underscored the potential violation of international

humanitarian law principles, which mandate the protection of civilians during armed conflicts. After seven months, in December 2022, the conflict in Marinka further exemplified the ongoing controversy surrounding white phosphorus. Reports of white phosphorus resurfaced, highlighting a continued pattern in the conflict. Over time, such repeated use in different locations suggested a systematic employment of such munitions, intensifying the legal and ethical implications under the framework of international humanitarian law. In May 2023, the Ukrainian Defence Ministry accused Russia of attacking the besieged city of Bakhmut with phosphorus munitions. The attack on Bakhmut, a city enduring prolonged siege conditions, again raised the spectre of indiscriminate harm to both combatants and civilians, spotlighting the ongoing humanitarian crisis in the region.⁵

In each of the above instances, the use of white phosphorus munitions by Russian forces against both military targets and civilian areas demonstrated a troubling trend: disregard for the principles of distinction and proportionality, which are cornerstones of international humanitarian law.⁶ The incidents in Kyiv, Kramatorsk, Mariupol, Marinka, and Bakhmut exemplified potential breaches of Protocol III of the CCCW. They highlighted the broader issue of compliance with international norms in modern warfare. These events have necessitated a robust international response, emphasizing the need for thorough investigations, accountability for violations of international law, and renewed discussions on the ethical and legal frameworks governing the use of incendiary weapons in armed conflicts.

Israel and Palestine conflict

The use of white phosphorus in Gaza by Israeli forces, particularly during the 2008-

2009 conflict, has been widely documented and criticized. Israel also admitted using munitions containing white phosphorus during its offensive.⁷ The densely populated nature of Gaza and the resultant civilian injuries highlighted concerns about the indiscriminate effects of these weapons. In Gaza, Israel's use of white phosphorus in military operations puts civilians at risk of severe and long-term injuries, violating international humanitarian law.

Following the Hamas terror attack on 7 October 2023 in Southern Israel, which resulted in casualties, Israel launched retaliatory strikes targeting Hamas in Gaza and Hezbollah in Lebanon. In a specific operation in southern Lebanon, Israel is reported to have used US-supplied white phosphorus munitions, according to a *Washington Post* investigation. This attack, which occurred in the village of Dheira near the Israeli border—a location previously utilized by Hezbollah for launching attacks against Israel—resulted in at least nine civilian injuries and the destruction of four homes.⁸

The Israel Defense Forces have denied using white phosphorus shells to target civilians or ignite fires. They claim that the shells were used to create smokescreens for operational purposes and that their use adheres to international law standards, even exceeding them. However, this incident has drawn international criticism, with the United States launching an investigation into whether the deployment of white phosphorus in Lebanon constitutes a misuse of US-supplied arms by Israel, explicitly concerning the targeting of civilians. The State Department's inquiry aims to assess compliance with the conditions under which such military aid and munitions are provided, reflecting the complex interplay of military tactics, international law, and diplomatic relations in conflict zones.⁹

Nagorno-Karabakh conflict

The conflict in the Nagorno-Karabakh region has also seen allegations of the use of white phosphorus. The mountainous terrain and the involvement of civilian settlements in the conflict zone present a complex scenario for applying international humanitarian law. Between September and November 2020, Azerbaijani forces utilized white phosphorus ammunition along with other weapon systems against Armenian military personnel on the Nagorno-Karabakh front. In Nagorno-Karabakh (or self-claimed Republic of Artsakh), Armenia accused Azerbaijan of using white phosphorus bombs during the conflict, an accusation that Baku denied.¹⁰ Multiple incidents were recorded of white phosphorus ammunition use, underscoring the environmental and potential humanitarian impact. For instance, a late October 2020 strike targeting a forested civilian area near the Martuni region led to significant fires and ecological damage.¹¹

In November 2020, Azerbaijan also levelled accusations and initiated legal actions concerning Armenia's use of white phosphorus munitions multiple times between 8 October and 8 November. These munitions were reportedly deployed in Azerbaijani territories, including the Terter region and near civilian populations. The attacks aimed to cause environmental damage and civilian casualties, particularly in Fizuli and Terter and near the city of Shusha.¹²

The use of white phosphorus is restricted under international humanitarian law, and its indiscriminate use in populated areas without distinguishing between civilians and military objectives is prohibited and constitutes a war crime. According to a *Human Rights Watch* report, white phosphorus munitions were used in at least seven armed conflict zones between 2000

and 2016 in Afghanistan, Ukraine, Somalia, Iraq, Gaza and Lebanon. Besides the discussed conflict zones, which recently witnessed the use of white phosphorous, the conflict in Yemen had witnessed the alleged use of white phosphorus by Saudi Arabia-led coalition forces in 2016. The dense civilian population and the catastrophic humanitarian situation in Yemen exacerbated the implications of such use under international humanitarian law. Like in the Lebanon case, in Yemen too, Saudi Arabia was suspected to have used US-supplied white phosphorus munitions.

Conclusion and Recommendations

The use of white phosphorus munitions in recent conflicts, as discussed here, raises legal, ethical, and humanitarian concerns. Such weapons violate international standards and cause severe, lasting harm to people and the environment. The narrative surrounding these munitions serves as a stark reminder of their destructive impact on human life and the environment, highlighting the urgent need for compliance with international humanitarian principles. The critical examination of the use of white phosphorus emphasizes the necessity for a comprehensive re-evaluation that aligns with these principles, stressing the need to reduce their deployment in warfare.

It is important to address the complexities and challenges posed by the use of white phosphorus munitions in conflict zones. The following strategic recommendations are proposed to try to lessen the humanitarian impact of white phosphorus munitions, safeguard human rights, and reinforce the foundations of international humanitarian law.

International Regulations

Implement more transparent and rigorous guidelines and enforcement protocols for

regulating incendiary weapons. This includes revising existing international treaties (e.g. CWC or CCCW) or developing new frameworks to close loopholes that permit the use of white phosphorus under certain conditions, ensuring stricter compliance with international humanitarian laws.

Verification and Reporting

Develop and implement comprehensive mechanisms for accurately verifying and reporting the usage of white phosphorus during conflict. This should include the creation of independent international bodies equipped with the necessary authority and resources to investigate allegations of misuse, thereby facilitating accountability and transparency in conflict zones.

Awareness and Advocacy

Intensify efforts to educate the global community about the dire humanitarian consequences of white phosphorus munitions. This includes launching awareness campaigns and advocacy initiatives (e.g. through CWC Coalition, a civil society conglomerate within OPCW) aimed at policymakers and the general public to foster a collective understanding of the need for restrictions or a complete ban on such weapons. Engaging in diplomatic dialogue and leveraging international forums could also amplify the call for action, encouraging states to commit to the ethical conduct of warfare.

Endnotes:

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Analysing the Project Precursor Bill

Niranjan Chandrashekhar Oak

Mr. Niranjan Chandrashekhar Oak is a Research Analyst at MP-IDSA.

Summary

To address the issue of Fentanyl-related deaths in the United States (US), the US House of Representative Michael McCaul introduced a bill for the Project Precursor Act on 11 May 2023 in the US Congress. The objective of the bill is to disrupt the international fentanyl supply chain. Interestingly, one of the provisions in the bill proposes to amend the Chemical Weapons Convention (CWC) to include each covered fentanyl substance on Schedules 1, 2, or 3 of the Annexure on Chemicals to the CWC. However, amending the CWC is a difficult process, given the current polarised geopolitical scenario. The article looks at the provisions of the Project Precursor bill and explains the procedure to amend the CWC, pointing to the challenges of doing so.

Introduction

The issue of Fentanyl deaths is reverberating in the US, with more than a million people dead since 2000 due to the overdose of the synthetic opioid.¹ To address the issue through legislation, Michael McCaul introduced the Project Precursor Bill on 11 May 2023 in the US Congress. The objective of the Bill is “to disrupt the international fentanyl supply chain and for other purposes.”² Interestingly, one of the provisions in the Bill proposes “to amend the Chemical Weapons Convention (CWC) to include each covered fentanyl substance on Schedule 1, 2, or 3 of the Annexure on Chemicals to the Chemical Weapons Convention.”³ What are the provisions of the Bill? What are the procedures for amendment of the CWC to include any chemical in the schedules of the Annexure on Chemicals to the CWC?

Bill for a Project Precursor Act

Title 1 of the bill, termed as “Department of State Bureau of International Narcotics And Law Enforcement Affairs, Bureau of Global Public Affairs, And Bureau of Intelligence And Research”, talks about a programme to be carried out by the Secretary of State, acting through the Assistant Secretary of the Bureau of International Narcotics and Law Enforcement Affairs, to build the capacity of Mexican law enforcement agencies to prevent transit, trafficking, and distribution of fentanyl and its precursor chemicals and analogues from Mexico to the US. The capacity-building programme covers a number of areas, such as a canine unit for drug detection, forensic chemist information exchanges, equipment, and drug profiling. It thus increases the number of hand-held synthetic drug detection devices, the

provision of equipment and training related to identifying and dismantling clandestine laboratories that produce synthetic drugs, chemical information-sharing between governments and among various agencies, maritime interdiction of synthetic drugs, and cargo container control and inspection, among others.⁴ Thus, the Bill proposes to train, educate and make the Mexican authorities better equipped to combat the trafficking of Fentanyl and other synthetic drugs.

Going further, the Bill seeks unclassified reports containing classified annexures, to check whether the capacity building programme ran as expected and whether the steps taken by the Mexican government to restrict Fentanyl trafficking yielded any positive results vis-à-vis the Fentanyl menace in the US. The Bill also proposes to launch a public relations campaign “*to delegitimise and humiliate, in the Mexican and the United States social consciousness, Mexican transnational criminal organisations involved in illicit fentanyl trafficking, as well as to permanently disrupt and cripple such organisations’ ability to recruit new members*” within six months of the date of enactment of the Act.⁵ Section 103 of the Bill aims to find out Chinese State and non-State actors’ connections in Mexico that are involved in the illegal import, production and transport of Fentanyl and its precursors. Title III, termed “Sanctions and Other Penalties”, of the Bill deals with the process of determining and reporting on the additional foreign opioid traffickers, imposition of penalties, sanctions on the perpetrators and waivers and exceptions, if any.

Title II, termed “Chemical Weapons Convention”, deals with actions for seeking to amend the CWC to include Fentanyl, including its isomers, esters, ethers, salts, and

salts of isomers, esters, and ethers into Schedule 1, 2, or 3 of the Annexure on Chemicals to the CWC. The Bill asks the Secretary of State to use the voice, vote and influence of the US to carry out the necessary amendment. The Bill stipulates that the Secretary of State submit the Report to Congress regarding the implementation of this section of the Bill within six months after the enactment. If this proposed Bill becomes a Law after being passed by both Congress and the Senate and after receiving the Presidential seal, what is the procedure to amend the CWC to add Fentanyl in the Schedules to the Annexures of the CWC?

Amendment Procedure of the CWC

Article 15 of the CWC⁶ deals with the amendments to the Convention. The text of the amendment is to be submitted to the Director-General for circulation to all States Parties and to the Depositary. However, only an Amendment Conference looks after the proposed amendment. If one-third of the State Parties notify the Director-General within a month of getting the amendment text that they support the amendment, an Amendment Conference is convened. The Amendment Conference is held immediately following the regular session of the Conference of the State Parties. It can also be convened earlier if member states demand it. However, it cannot be held within two months after the circulation of the proposed amendment. If an Amendment Conference adopts it by a positive vote of the majority with no negative vote, and when it is ratified by the members who had earlier cast a positive vote, then the amendment comes into force for all State Parties a month after the deposit of the instruments of ratification or acceptance by all the States Parties that had cast a positive vote. Thus, complete consensus is the key criterion for amendment of the CWC.

However, amending the CWC is a difficult process. It is very difficult to forge a consensus regarding the proposed amendment. Various countries have various interests in amending the CWC. The larger geopolitical interests also come into play when an Amendment Conference votes for the proposed amendment. The consensus becomes most difficult when the world is politically polarised and partisan divisions exist. The ongoing Ukraine conflict, Gaza conflict, Taiwan crisis, and Chinese belligerence towards its neighbours, to name a few, are dividing the world. They impact voting patterns of the State Parties in multilateral initiatives such as the CWC. In the recent incident at Salisbury, United Kingdom (UK), where the Novichok agent was used to neutralise a person, a blame game ensued between the UK and Russia.⁷ After much back and forth between the State Parties – especially between the West and Russia– the said chemical was added to Schedule 1 of the CWC. The cumbersome amendment procedure makes amendment even more tedious.

Conclusion

The Project Precursor Bill has a long way to go before the US will be able to propose an amendment to the CWC to add Fentanyl and its precursors into the Schedules. In the current geopolitical scenario, the US is on the opposite side of Russia due to the Ukraine War, and China is the US' long-term challenge. Therefore, any attempt to get the Fentanyl into the CWC Schedules is going to be a challenge for Washington. However, the CWC should strive to devise a mechanism by which they can insulate the amendment process from the larger geopolitical rivalries of the day, to face tomorrow's challenges.

Endnotes:

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How the Biological Weapons Convention could verify treaty compliance

James Revill

James Revill is the Head of the WMD and Space Security Programmes at UNIDIR.

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While significant chemical and nuclear weapons agreements contain verification provisions, the 1972 Biological Weapons Convention (BWC) does not. World governments have not discussed this topic within the treaty framework for two decades, after several years of work to develop a verification system failed in 2001.

Much has changed in science and security since then: Artificial intelligence (AI), genome editing, and other capabilities continue to accelerate and converge, resulting in ever more powerful technologies in the hands of a growing number of actors. In parallel, the international security environment has become more complex and competitive. Under these circumstances, it was remarkable that at the Ninth BWC Review Conference in late 2022, 185 countries agreed on a report¹ with a forward-looking strategy to form a working group to discuss the long-standing issues of compliance and verification of the BWC, among several other matters.

Despite the challenging geostrategic context, the group engaged in a constructive dialogue over three days in December 2023, managing to move beyond the impasse around the failed verification protocol negotiations decades ago that stymied discussion on verification and compliance ever since. Moreover, the group recognized significant scientific and technological developments, including new open source verification opportunities and microbial forensic² techniques that weren't available in the late 1990s and early 2000s, but may be now. But there remains a gap between what is technically possible in terms of verifying that countries are in compliance with the treaty, and what BWC member states view

as politically feasible and financially acceptable.

A path to verification? Before any new methods of treaty verification, whatever their merit, can be deployed, BWC members must overcome several hurdles to develop a verification system.

Conceptual clarity. During the December working group session, it was apparent that many countries were in the “early stages of conceptual thinking”³ about verification, with differing visions on the definition, objectives, and scope of any BWC verification mechanism. To progress, states will have to develop a shared understanding of the scope and purposes of BWC verification ahead of a working group meeting later this year.

Defining biological weapons. Several BWC member states also indicated the need for clarity around the definition of biological weapons. Article I of the convention⁴ includes an intent-based definition of biological weapons. This approach has future-proofed the prohibition on biological weapons against changes in science and technology. However, other treaties using a similar intent-based definition, such as the Chemical Weapons Convention, have supplemented this comprehensive approach with lists of chemicals⁵ and threshold quantities for the application of verification measures. Furthermore, the draft text⁶ under negotiation in the protocol process included a non-exhaustive list of agents that could be used in biological weapons.

Agreement around a list of agents for verification purposes—potentially building on earlier work during the protocol talks—may be possible. Moreover, such a list could help focus any verification mechanism, particularly if negotiators envisage some system of declarations and routine inspections. However, negotiating a list or

lists of agents will take considerable time, and any list will remain vulnerable to gaps generated by new or novel agents excluded from it.

In terms of setting limits to the permitted amount of listed agents, methods of calculating threshold quantities have been studied and discussed in the past⁷. However, developing threshold quantities is likely to be difficult and of limited value in building confidence in compliance with the BWC because, as discussed during the protocol negotiations, “the self-replicating nature of microorganisms means that an agent amount at or below a threshold could be exceeded within a matter of hours.”⁸

Verification methods. As illustrated in presentations by the International Atomic Energy Agency (IAEA)⁹ and Organization for the Prohibition of Chemical Weapons (OPCW) during the December working group meeting, routine industry inspections are possible as part of a disarmament verification system. The IAEA conducted 2975 verification missions in 2022¹⁰, and before the pandemic, the OPCW undertook 241 facility inspections¹¹ a year. A number of countries, including the Russian Federation and China, indicated support for some sort of routine on-site industry inspections, which are often seen as a core component of traditional disarmament verification regimes.

But others, including the United States, have expressed doubts over the value of routine on-site inspections in the BWC context. This is in part because of the sheer number of life science research facilities operating around the world; in 2022 alone some 17,000 institutions around the world published papers on the topic of “biology” (broadly understood), and more than 15,000 unique applicants submitted biotechnology-related patents. Also, some observers note the

difficulties in reliably assessing compliance in a diverse range of dual-use facilities around the globe and the limitations of material accounting-type verification methodologies¹²—as applied in other weapons of mass destruction treaties—in the biological weapons context.

Some form of routine inspection system may be technically possible. But this area will require considerable additional work to determine the extent to which routine inspections can build greater confidence in compliance, and, if so, how much BWC members are really willing to pay for such a system.

Resources. The BWC budget for 2023 was \$2.1 million (€1.9 million).¹³ This covers the costs of BWC meetings and a four-person Implementation Support Unit, which works on the implementation and universalization of the BWC, as well as organizing and staffing BWC meetings and administering confidence building measures¹⁴. If governments are serious about developing a verification regime, considerable additional resources will be required. For example, in 2022 the OPCW spent more than \$32 million (€30.3 million) on verification and inspections¹⁵, and the IAEA allocated more than \$166 million (€153.7 million) to nuclear verification¹⁶.

Expectations for the BWC working group. In addition to political challenges, the working group is also up against very real practical limitations. It has only seven days through the end of 2025 booked for discussion on compliance and verification. This is insufficient on its own to generate a blueprint for biological verification that is “politically palatable, technologically feasible and financially viable and sustainable¹⁷.” However, this doesn’t preclude the working group developing what its chair, Brazilian Ambassador Flávio Soares Damico, has

termed a “roadmap” for strengthening the BWC.

In developing such a roadmap, BWC member states may want to explore additional parallel tracks of activity to lock in work on verification and generate new insights to inform and advance the ongoing discussion of the working group.

One obvious track could involve the establishment of a group to further consider the scientific and technical aspects of verification and how they have changed since 2001. The BWC established a group of verification experts (VEREX) in 1991 to explore verification measures. This group met on four occasions in the early 1990s, generating findings that informed the protocol negotiations in the following years. A new group could be mandated to identify and evaluate biological verification technologies (both old and new), effectively initiating a form of VEREX 2.0.

Trial inspections¹⁸ to determine the efficacy of on-site inspections were important in developing the verification mechanism for the Chemical Weapons Convention. Such exploratory exercises could be undertaken transparently through a geographically representative “collective of the interested,” with the findings subsequently feeding into the working group. Such experiences could help in assessing the benefits and limitations of routine on-site or challenge inspections.

Segments of the pharmaceutical industry were critical of the 2001 protocol efforts and expressed concern over the impacts of an intrusive verification system. A constructive industry relationship—along the lines of the partnership¹⁹ forged between the OPCW and the chemical industry—will be important to achieving any sustainable BWC verification regime. Such a relationship needs to be carefully nurtured to avoid

alienating or alarming a trillion-dollar global industry.

Such external initiatives should augment, not distract or detract, from the activities of the working group itself, which will also need sustained attention to stimulate thinking around verification and other agenda items, including international cooperation, science and technology review mechanisms²⁰, confidence building measures, transparency, and national implementation.

It will also be important over the course of the working group process to manage expectations. No politically palatable, technologically feasible, and financially sustainable system is going to be able to guarantee the detection of any form of biological weapon. However, there are measures that in combination could generate considerably greater confidence in compliance by BWC states parties and provide a route to robust investigation of credible allegations of non-compliance. In this sense, the challenge for the working group is not to develop a roadmap to a perfect system, but to chart a route towards a system in which the security benefits of being on the inside are greater than the overall benefits of remaining on the outside. Even an imperfect multilateral verification mechanism would provide a valuable defence against a class of weapons rightly deemed "repugnant to the conscience of [hu]mankind."²¹

Endnotes:

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Proceedings of Biological Weapons Convention Working Group Meetings- 2023: A Snapshot

Mrinmayee Bhushan

*Dr. Mrinmayee Bhushan is the
Director, Mindfarm Novatech Pvt
Ltd, Pune*

Summary

The article provides an overview of recent proceedings within the Biological Weapons Convention (BWC) working group meetings as of December 2023. Deliberations focused on compliance, verification mechanisms, and confidence-building measures to prevent the proliferation of biological weapons. While achievements such as reaffirmed commitments and agreements on cooperation were notable, challenges persist, particularly regarding the establishment of robust verification protocols. The Meeting of States Parties (MSP) reports offer detailed insights into the discussions and diverse international perspectives. The outcomes underscore both progress and complexities in global efforts to strengthen the BWC framework against biological weapons, emphasizing the need for continued cooperation and dialogue.

Introduction

The Biological Weapons Convention (BWC) stands as a cornerstone in international efforts to prevent the development, production, and use of biological weapons. However, the Convention's effectiveness has been limited due to insufficient institutional support and the absence of any formal verification regime to monitor compliance. The recent deliberations, as of December 2023, within the BWC working group meetings have shed light on critical issues and potential pathways forward.

Background

The end of the Cold War led to renewed negotiations for drafting the Chemical Weapons Convention (CWC) along with the negotiations to include a verification mechanism to the BWC. A Group of Experts created a list of verification mechanisms from a scientific and technical standpoint during the Third Review Conference of the BWC in 1991. Over the course of four meetings, the Group created a set of 21 verification measures and presented them to a Special Conference of BWC State Parties in 1994. As a direct result of the work done by VEREX as well as the CWC being completed and being opened for signatures in 1993, an ad hoc group was created to negotiate a draft of an updated BWC.

Genesis of the BWC Working Group

Over the decades, the global initiatives such as the Ad Hoc Group Recommendations or the Draft Verification Protocol of 2001, aimed at averting the intentional deployment of biological pathogens, seemed to be losing momentum due to lack of consensus.

However, in view of the growing biological threats due to dual use emerging technologies, the suggestion made during the 2021 BWC Meeting of States Parties that the 9th BWC Review Conference (BWC RevCon) “should establish a new expert working group to examine possible measures to strengthen implementation of the Convention, increase transparency, and enhance assurance of compliance”¹ paved the way to refresh the discussions on Verification Protocol. One of the most prominent achievements of the 9th BWC RevCon was the successful establishment of the Working Group for strengthening the Convention.

In the most recent working group meetings leading up to December 2023, participating nations engaged in extensive discussions surrounding compliance, verification mechanisms, and confidence-building measures. The three-day sessions provided a platform for open dialogue on the challenges and opportunities associated with biological weapons prevention.

Working Group (WG) discussions

The WG discussions included panel discussions and working papers by State parties on various topics,

The Working Group (WG) discussions broadly included three topics:

1. Compliance and verification
2. Other international bodies with verification arrangements
3. Scientific and technical issues related to verification

The WG discussions held at the early conceptual level included healthy discussions amongst the State parties involving a variety

of perspectives regarding the purpose and definitions of Compliance and Verification, Conceptual Scope, and Verification Elements. Though the lessons from other verification regimes would be insightful, the discussions regarding the peculiar nature of biological threat involving living organisms emphasized the need to appreciate its distinctive nature. The unique challenges associated with handling living organisms were emphasized, pointing out that biological controls necessitate distinct characteristics compared to their counterparts in chemical or nuclear contexts. Consequently, it was deemed impractical to simply transfer measures from other regimes through a ‘cut and paste’ approach. Detailed discussions for the roadmap of WG involved drawing some elements the historical lessons included those from the VEREX process and Ad Hoc Group recommendations.² Rapid scientific advancements in life sciences and the recent Covid-19 pandemic inspired the discussions around the need to incorporate the Contextual Changes required. The discussions also included a variety of views on the legally binding measures, also highlighting the risk of them being perceived as binary option as legally binding or non-binding. It was widely acknowledged that a subject that had proved challenging to address over the course of two decades, could only achieve limited progress in the span of three days.

A separate Session of the Working Group (WG) on the strengthening of the 1972 Biological and Toxin Weapons Convention (BWC/BTWC), was devoted to the topic, ‘Measures on organizational, institutional and financial arrangements’, including a presentation by the Implementation Support Unit (ISU), substantive discussions and other routine BWC matters, along with wide support for the ISU and the need to make it a permanent structure.

Achievements

During these meetings, several notable achievements were observed. Participating nations reaffirmed their commitment to the principles of the BWC and acknowledged the importance of transparency in preventing the proliferation of biological weapons. Agreements on specific measures to enhance international cooperation and information exchange were among the positive outcomes.

BWC MSP Reports

The Meeting of States Parties (MSP) Reports from the BWC further underscored the discussions held during the working group meetings. These Reports provide a detailed account of the proceedings, highlighting the nuanced positions of different nations and offering insights into the challenges faced in advancing the goals of the Convention.

Lost Opportunities

Despite the achievements, certain areas revealed missed opportunities for more comprehensive agreements. Some nations expressed reservations, resulting in a lack of a unified approach in certain areas such as programme of work and the rules of procedure of the MSP.

International Perspectives

International perspectives on the outcomes of the meetings were diverse. While some nations praised the progress made, others called for more ambitious measures to address emerging threats. The diversity of opinions reflected the complex nature of negotiations within the BWC framework and emphasized the need for continued diplomatic efforts. There were apprehensions about the potential establishment of risky precedents during these proceedings. A total of 49 working papers were presented to the MSP, with many being duplicates of statements that

delegations had planned to deliver during the general debate. The approval of the Report was somewhat unclear, as a technical amendment was accepted immediately after it had been officially forced through.

Future Implications

The welcome beginning and the outcomes of the working group meetings hold significant implications for the future of the Biological Weapons Convention. The healthy discussions and positive strides signal a collective commitment to strengthening the global framework against biological weapons. However, challenges remain, and addressing them will require sustained international cooperation and dialogue.

Conclusion

In conclusion, the proceedings of the Biological Weapons Convention Working Group meetings reflect both progress and challenges in the global effort to prevent the proliferation of biological weapons. The achievements underscore the commitment of nations to the principles of the BWC, while the troubled past and missed opportunities highlight the complexities of navigating international consensus. As the world continues to grapple with evolving security threats, the importance of ongoing discussions and diplomatic efforts within the BWC cannot be overstated.

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Chemical and Biological News

Remarks at a UN Security Council Briefing on Chemical Weapons in Syria

December 22, 2023

The United States continues to be appalled by Syria's flagrant non-compliance with the Chemical Weapons Convention and defiance of various Security Council resolutions, including Resolution 2118. For ten years, the United States, alongside most of the international community, has called out the Syrian authorities' repeated and ongoing violations of the Chemical Weapons Convention and Resolution 2118. We have condemned Assad's multiple confirmed uses of chemical weapons against his own people and his government's failure to fully declare and destroy its chemical weapons and production facilities.

To that end, we welcomed the OPCW Technical Secretariat's report in September, which detailed the work of the Declaration and Assessment Team to identify the shortcomings of Syria's initial declaration of data and its subsequent amendments. These shortcomings include unverified quantities of chemical weapons, undeclared production facilities for chemical weapons, and undeclared chemical weapons.

The report concludes definitively: "these matters give rise to continued concerns regarding the potential existence of undeclared stockpiles of chemical weapons, undeclared activities or facilities, and the possibility of the further use of chemical weapons." These conclusions are stark reminders the Assad regime continues to pose a serious threat to the protection of its civilians and international peace and security as it flouts its commitments under the CWC and defies this Council's resolutions. This

assessment comes directly from professional, impartial experts.

<https://usun.usmission.gov/remarks-at-a-un-security-council-briefing-on-chemical-weapons-in-syria-14/>

Syria's chemical weapons remain a threat to international peace and security: UK statement at the UN Security Council

December 22 2023

Contrary to the expectations of the Representative of the Russian delegation, the UK welcomes the 25th round of consultations between the OPCW and the Syrian regime that took place last month in Damascus. We commend the OPCW Declaration and Assessment Team for their hard work to reconcile discrepancies in Syria's declaration.

However, it is nonetheless important that we are clear: this limited concession does not redress Syria's long-standing non-compliance with the Chemical Weapons Convention. The Syrian regime has consistently blocked the OPCW's work, refusing visas and insisting on unacceptable conditions.

<https://www.gov.uk/government/speeches/syrias-chemical-weapons-remain-a-threat-to-international-peace-and-security-uk-statement-at-the-un-security-council>

European Union contributes €5.35M to strengthen OPCW activities

December 21, 2023

The European Union (EU) has contributed €5.35M to support the work of the

Organisation for the Prohibition of Chemical Weapons (OPCW) over the course of three years.

The contribution will bolster the OPCW's capabilities to facilitate and advance the implementation of the Chemical Weapons Convention by supporting key areas of the Organisation's work, including:

- verifying the elimination of chemical weapons stockpiles and production facilities;
- preventing re-emergence and reducing the threat of chemical weapons use;
- responding effectively and credibly to chemical weapons use;
- ensuring preparedness by providing assistance and protection trainings;
- promoting peaceful uses of chemistry;
- working towards universal adherence to the Convention;
- strengthening capacity building efforts; and
- ensuring the Organisation can address challenges and opportunities arising from rapid advancements in science and technology.

The voluntary contribution was formalised on 19 December 2023 in a signing ceremony held between the European Union Liaison Officer to The Hague, H.E. Ambassador Mika-Markus Leinonen, and the OPCW Director-General, Ambassador Fernando Arias, at the OPCW's Headquarters in The Hague.

“This new EU voluntary contribution has been designed to support OPCW key workstrands in the post-destruction era,

notably capacity building and countering re-emergence of chemical weapons,” said Ambassador Leinonen.

The Director-General stated: “I express my sincere appreciation to the European Union for this generous contribution and for its strong political and financial support to the OPCW in achieving our common goal of ridding the world free of chemical weapons and advancing peace and global security. This contribution will bolster the Organisation's activities in key areas of work and will help ensure that we can address current and future challenges related to the implementation of the Convention.”

<https://www.opcw.org/media-centre/news/2023/12/european-union-contributes-eu535m-strengthen-opcw-activities>

OPCW Director-General attends celebratory ceremony on end of destruction of U.S. chemical weapons stockpile

December 20, 2023

The Director-General of the Organisation for the Prohibition of Chemical Weapons (OPCW), Ambassador Fernando Arias, participated in and addressed the Assembled Chemical Weapons Alternatives (ACWA) End of Destruction Operations celebratory event, which was held on 13 December at the U.S. Institute of Peace in Washington, D.C.

The ceremony commemorated the destruction of the U.S. chemical weapons stockpile which concluded on 7 July 2023.

The end of the US destruction also marks the destruction of all chemical weapons stockpiles declared by all States Parties to the Chemical Weapons Convention.

The event was hosted by Hon. William LaPlante, U.S. Under Secretary of Defense for Acquisition and Sustainment, and attended by high-level U.S. officials, including Ambassador Bonnie Jenkins, U.S. Under Secretary for Arms Control and International Security, as well as Ms Izumi Nakamitsu, United Nations Under-Secretary-General and High Representative for Disarmament Affairs.

“As we mark this significant milestone here today, we must also renew our commitment to forging a future free from chemical weapons,” said Under Secretary LaPlante at the opening of the event.

“We will continue to stand with the Organisation for the Prohibition of Chemical Weapons to prevent the stockpiling, production, and use of chemical weapons around the world. Congratulations to all who made destruction of the chemical weapons stockpile possible. And make no mistake, we will not stop until we can finally and forever rid the world of this threat,” he highlighted.

During the ceremony, the Director-General received a commemorative U.S. flag for OPCW’s extensive efforts in verifying the destruction of all declared chemical weapons stockpiles around the world.

“I am honoured to be part of today’s commemoration of the completion of the destruction of all chemical weapon stockpiles declared by the United States of America,” he stated.

“I wish to wholeheartedly congratulate you for this historic achievement. It marks the destruction of all declared stockpiles worldwide, by all former possessor states, fulfilling one of the main goals of the Chemical Weapons Convention,” the Director-General emphasised.

“In the contemporary degraded international security environment, this monumental accomplishment we commemorate today should serve as a strong message for peace,” he added.

In conclusion, the Director-General underlined that further challenges lie ahead of the Organisation and its Member States, including preventing re-emergence and achieving universality of the Convention.

During his official visit to the U.S. from 12 to 14 December, the Director-General also met with the Director of the Defense Threat Reduction Agency of the United States of America, Ms Rebecca Hersman. The two high-level officials discussed further cooperation between the OPCW and the U.S. in relation to the implementation of the Chemical Weapons Convention.

<https://www.opcw.org/media-centre/news/2023/12/opcw-director-general-attends-celebratory-ceremony-end-destruction-us>

Austria contributes €20,000 to support victims of chemical incidents

December 18, 2023

The Government of the Republic of Austria contributed €20,000 to the Trust Fund for the International Support Network for Victims of Chemical Weapons of the Organisation for the Prohibition of Chemical Weapons (OPCW).

The amount of €15,000 will support the implementation of a hospital preparedness training course for African countries in 2024, with the remainder of the contribution being earmarked for developing and updating guidelines for medical diagnosis and treatment of people who have been exposed to a chemical emergency.

The voluntary contribution was formalised on 5 December 2023 in a signing ceremony held between the Ambassador, Permanent Representative of the Republic of Austria to the OPCW, H.E. Ms Astrid Harz, and the OPCW Director-General, Ambassador Fernando Arias, at the Organisation's Headquarters in The Hague.

"This contribution underlines Austria's commitment to disarmament, victims' assistance, and the OPCW. I would like to commend the OPCW for its professionalism and crucial work in achieving a world free of chemical weapons," said Ambassador Harz.

The Director-General stated: "I express my sincere appreciation to the Government of Austria for its support to these important projects. The OPCW's work in strengthening medical emergency response is vital to minimising any short- and long-term health consequences resulting from exposure to toxic chemicals and chemical warfare agents."

National Authorities foster global cooperation to advance implementation of Chemical Weapons Convention

December 18, 2023

The Organisation for the Prohibition of Chemical Weapons (OPCW) held its Twenty-Fifth Annual Meeting of National Authorities from 22 to 24 November 2023 at its Headquarters in The Hague, Netherlands. The main objective of the meeting was to foster international cooperation and strengthen regional networks to bolster the implementation of the Chemical Weapons Convention (CWC).

The annual meeting serves as a platform to establish interactive communication and cooperation mechanisms among National Authorities and between National

Authorities and the OPCW. It promotes cooperation at both national and regional levels and offers an opportunity to discuss capacity building support, including needs assessment, best practices, and ways to improve the design of programmatic activities.

This year's meeting was attended by 200 participants, including 166 experts from National Authorities of 121 Member States. This diverse gathering facilitated in-depth discussions on how to enhance capabilities in Member States to strengthen compliance with the Convention. Participants discussed key topics, such as:

- the role of customs authorities as essential national stakeholders in the CWC implementation;
- the significance of the Convention in addressing the re-emergence of chemical weapons, including through non-State actors;
- regional cooperation in countering the threat of chemical terrorism;
- the CWC National Implementation Framework;
- the Mentorship/Partnership Programme.

<https://www.opcw.org/media-centre/news/2023/12/national-authorities-foster-global-cooperation-advance-implementation>

Reflections on Review Conferences: the Non-Proliferation Treaty, the Biological Weapons Convention and the Chemical Weapons Convention

December 12, 2023

Over the course of less than a year between August 2022 and May 2023, three major

treaties focused on weapons of mass destruction (WMD) have undergone a Review Conference process: the tenth Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in August 2022; the ninth Review Conference of the Biological Weapons Convention (BWC), in November and December 2022; and the fifth Review Conference of the Chemical Weapons Convention (CWC), in May 2023.

Although these treaties and their respective Review Conference processes vary, the experiences over 12 months between August 2022 and May 2023 provide an important snapshot of the state of the WMD treaty regime. As such, there is merit in reflecting on these three processes jointly and exploring the commonalities and differences across three agreements dealing with the world's most destructive weapons, as well as gathering lessons learned for future work in these fields.

To this end, UNIDIR invited the Presidents of the three Review Conferences to provide their reflections on their respective Review Conference processes. This publication brings together insights from Ambassador Gustavo Zlauvinen (Argentina), President of the tenth NPT Review Conference; Ambassador Leonardo Bencini (Italy), President of the ninth BWC Review Conference; and Ambassador Henk Cor Van der Kwast (the Kingdom of the Netherlands) who presided over the fifth CWC Review Conference. The Ambassadors take stock of the preparatory processes and the events that unfolded, and provide reflections for moving forward in the NPT, the BWC and the CWC respectively. Izumi Nakamitsu, High Representative for Disarmament Affairs, provides a foreword. The publication also includes a short summary of findings by the editors.

<https://unidir.org/publication/reflections-on-review-conferences-the-non->

[proliferation-treaty-the-biological-weapons-convention-and-the-chemical-weapons-convention/](https://unidir.org/publication/reflections-on-review-conferences-the-non-proliferation-treaty-the-biological-weapons-convention-and-the-chemical-weapons-convention/)

Israel used U.S.-supplied white phosphorus in Lebanon attack

December 11, 2023

Israel used U.S.-supplied white phosphorus munitions in an October attack in southern Lebanon that injured at least nine civilians in what a rights group says should be investigated as a war crime, according to a Washington Post analysis of shell fragments found in a small village.

A journalist working for The Post found remnants of three 155mm artillery rounds fired into Dheira, near the border of Israel, which incinerated at least four homes, residents said. The rounds eject felt wedges saturated with white phosphorus, which burns at high temperatures, producing billowing smoke that obscures troop movements as the substance falls haphazardly over a wide area. It can stick to skin, causing potentially fatal burns and respiratory damage, and its use near civilian areas is generally prohibited under international humanitarian law.

Of the nine injured in Israel's attack on Dheira, at least three were hospitalized, one for days.

Lot production codes found on the shells match the nomenclature used by the U.S. military to categorize domestically produced munitions, which show they were made by ammunition depots in Louisiana and Arkansas in 1989 and 1992. The light-green color and other markings — like “WP” printed on one of the remnants — are consistent with white phosphorus rounds, according to arms experts.

<https://www.washingtonpost.com/investigations/2023/12/11/israel-us-white-phosphorus-lebanon/>

Iraq: UN team issues latest report on terrorist atrocities

December 4, 2023

Christian Ritscher, head of the UN Investigative Team to Promote Accountability for Crimes Committed by Da'esh – otherwise known as the Islamic State group or ISIL – outlined to ambassadors in the Security Council on Monday a comprehensive assessment detailing heinous crimes of sexual violence perpetrated by ISIL fighters during their reign. The report was published at the weekend.

The assessment follows a detailed report, based on the findings from three years of dedicated fieldwork, into the development and use of chemical weapons by the terrorist group against the Shia Turkmen minority in Taza Khurmatu, northern Iraq.

“It is important to underline that when these assessments are shared, they are delivered in line with our mandate and Terms of Reference,” Mr. Ritscher said.

<https://news.un.org/en/story/2023/12/1144367>

Exclusive: Syrians lead push to create global chemical weapons tribunal

December 1, 2023

Illegal chemical weapons attacks killed and injured thousands during Syria's civil war, many of them children, but more than a decade later, the perpetrators go unpunished.

That could change under an initiative to create a new tribunal for such atrocities launched in The Hague on Thursday.

A dozen Syrian rights groups, international legal experts and others have quietly spent

two years laying the groundwork for a new treaty-based court which could put on trial alleged users of banned toxic agents worldwide.

“The tribunal for us Syrians is hope,” said Safaa Kamel, 35, a teacher from the Jobar suburb of Syria's capital Damascus, recalling the Aug. 21, 2013, sarin gas attack in the Ghouta district which killed more than 1,000 people, many in their sleep.

“The symptoms that we had were nausea, vomiting, yellowing of the face, some fainting. Even among the little ones. There was so much fear,” she told Reuters from Afrin, a northwest Syrian town where she sought refuge. “We'll never be able to erase from our memories how they were all lined up.”

Many diplomatic and expert meetings between states have been held to discuss the proposal, including the political, legal and funding feasibility, documents seen by Reuters showed.

Diplomats from at least 44 countries across all continents have been engaged in the discussions, some of them at ministerial level, said Ibrahim Olabi, a British-Syrian barrister, a key figure behind the initiative.

“While it's Syrians that are calling for it, for the use of chemical weapons in Syria, if states so wish, it could be far beyond Syria,” Olabi told Reuters.

The Exceptional Chemical Weapons Tribunal, opens new tab proposal was launched on Nov. 30, the day victims of chemical attacks are remembered worldwide. The next step will be for states to agree on the wording of a treaty.

Three diplomats from countries in the global north and south told Reuters their governments were discussing the tribunal.

They declined to be named as they were not authorized to speak on the matter.

“There is serious interest, deep interest, and recognition of the need for something like this – the need to address basically what is an impunity gap,” one source said.

<https://www.reuters.com/world/syrians-lead-push-create-global-chemical-weapons-tribunal-2023-11-30/>

Henry Kissinger supported wars and coups. He also played a little-known role in eliminating bioweapons

December 1, 2023

Observers of Henry Kissinger, the former national security advisor and secretary of state who died Wednesday at 100, seem to agree on at least one point: He was a towering figure in US foreign policy thinking during the Cold War and ensuing decades. Beyond that, assessments of his legacy vary widely. While in 1973 Kissinger won the Nobel Peace Prize, a later recipient of the same award summed up his life’s work as “tragic and ugly.

Decades before, when he was one of President Richard Nixon’s closest advisors, Kissinger also played a central if little publicized role in biological disarmament.

Through the late 1960s, the United States maintained a vast offensive biological weapons enterprise. Scientists at Fort Detrick in Maryland researched and produced pathogens for the military. At Pine Bluff Arsenal in Arkansas, employees filled weapons with germs. The latter facility had anthrax and tularemia bacteria, Venezuelan equine encephalitis virus, and other pathogens. In the Utah desert, the military held open-air tests of viruses, bacteria, and chemical weapons. These efforts mirrored bioweapons development in

the Soviet Union. But despite the large US program, many experts believed bioweapons to have little military utility, according to a comprehensive 2009 case study by Jonathan Tucker and Erin R. Mahan. The weapons had unpredictable effects. They sickened or killed people only after a delay. They might mutate or establish themselves in animal hosts, posing a public health threat. The US arsenal was intended to deter or retaliate against biological attacks, but presumably nuclear and other weapons could more efficiently fulfill that goal.

By the late 1960s, incidents with chemical weapons—including an accident with VX nerve agent in Utah that killed some 6,000 sheep—had focused Congress’s attention on the US chemical and biological warfare operation. Internationally, there were efforts to begin arms control negotiations around these weapons of mass destruction. And Kissinger led internal government deliberations over what to do with the US program. At one point, according to Tucker and Mahan, Kissinger, unhappy with a policy paper that contained both arguments in favor and against retaining biological weapons, produced his own paper that cut the points in favor of the offensive program. He included his personal recommendation to restrict the US program to biological defense, which involves the development of countermeasures such as vaccines.

Nixon ended up choosing to completely shutter the US offensive program. “Mankind,” he said at a press conference in November 1969, “already carries in its own hands too many of the seeds of its own destruction. By the example we set today, we hope to contribute to an atmosphere of peace and understanding between nations and among men.”

But later there turned out to be an issue with the new policy.

The administration had neglected to address an important component of the country's bioweapons arsenal, toxins. Toxins are confusing because they're produced by living organisms but are essentially chemicals. They can also be produced by chemical synthesis. For military officials at the time, toxins had some appeal. They can be more potent than even chemical weapons. The US arsenal included both incapacitating and lethal toxins, including 23,000 bullets loaded with deadly botulinum toxin.

After Nixon ended the US offensive bioweapons program, a reporter asked Kissinger about the toxin issue, prompting the presidential advisor to admit that the omission "was a slip up."

It was a significant one. According to a 2002 paper by Tucker, back at Fort Detrick, scientists, "uncertain whether the omission of toxins from the president's speech had been unintended or deliberate, saw it as a loophole through which they could continue their work." They refocused research proposals on toxins instead of pathogens. Meanwhile, the Joint Chiefs of Staff saw an opportunity to re-start toxin production.

Kissinger led another round of deliberations culminating in three options for Nixon to consider, Tucker and Mahan wrote in their case study: Nixon could keep the toxin program; allow chemically synthesized but not biologically produced toxins; or scrap toxins and maintain a defensive research program. Some military officials wanted to maintain the ability to use toxins, others only if they could be chemically produced. Diplomats, meanwhile, favored banning the poisons all together. Approving toxin production, whether through biological processes or chemical synthesis, could, they reasoned, undermine Nixon's denunciation of bioweapons. It might encourage other countries to develop them or raise obstacles

to future negotiations over an international ban on biological weapons.

A *Washington Post* editorial in January 1970 pointed out the hypocrisy of keeping a toxin arsenal: "Surely the President did not mean that, while a disease induced by living bacteria is out of bounds, a disease induced by a toxin is acceptable. He can scarcely have renounced typhoid only to embrace botulism."

As is the case with much of his legacy, Kissinger's decision-making on the toxin issue is shrouded in ambiguity. He'd supported doing away with biological weapons but didn't want to stop chemically synthesized toxin weapon development; doing so might undermine the US chemical weapons program. "If we are willing to renounce one chemical weapon produced by chemical means, the argument will run, why should we not renounce all chemical weapons," Kissinger wrote in a memo for Nixon. Before making a final decision, in the winter of 1970, Nixon, Kissinger and others decamped to Key Biscayne, Florida. There, Kissinger reversed himself and endorsed a halt to toxin weapons development, whether chemically synthesized or biologically produced. The master of "realpolitik"—known in policy circles for pursuing practicality instead of morality—had apparently had a change of heart.

<https://thebulletin.org/2023/12/henry-kissinger-supported-wars-and-coups-he-also-played-a-little-known-role-in-eliminating-bioweapons/>

DOD Chemical, Biological Defense Program Adapts to Emerging Threats as it Marks 30-Year Anniversary

November 30, 2023

Deputy Assistant Secretary of Defense for Chemical and Biological Defense Ian Watson

said that threat landscape has evolved significantly since the creation of the Pentagon's program responsible for arming the joint force against chemical and biological risks in the wake of the Gulf War./

Technological advances have enabled near peer competitors to potentially engineer a broad range of agents at a speed and scale unlike decades before, he said. And those threats are now less detectable./

“The capabilities across high-performance computing, [artificial intelligence], material science and near peer competition far exceed anything that we were dealing with [in prior conflicts],” Watson said. “We are dealing with very sophisticated capabilities that we are concerned about,” he said. “And we’re talking about if there’s ever a conflict with one of those near peer competitions, unlike in Desert Storm, it will bring the entirety of the joint force into, and possibly susceptible to, chemical or biological attack. So, we have to protect everyone.”

<https://www.defense.gov/News/Feature-Stories/Story/Article/3603047/dod-chemical-biological-defense-program-adapts-to-emerging-threats-as-it-marks/>

OPCW adopts measures to ensure compliance with chemical weapons ban in Syria and elsewhere

November 30, 2023

The Twenty-Eighth Session of the Conference of the States Parties to the Chemical Weapons Convention (CWC) adopted a decision titled “Addressing the Threat from Chemical Weapons Use and the Threat of Future Use”, brought forward by 48 countries.

The Conference decided that the continued possession and use of chemical weapons by the Syrian Arab Republic, and its failures to

submit an accurate and complete declaration and to destroy all its undeclared chemical weapons and production facilities, have caused serious damage to the object and purpose of the Chemical Weapons Convention.

In adopting the decision, States Parties condemned “in the strongest possible terms the use of chemical weapons by anyone, under any circumstances, emphasizing that any use of chemical weapons anywhere, at any time, by anyone, and under any circumstances is unacceptable and contravenes international norms and standards”. States Parties reaffirmed their determination to continue to take action to address threats related to chemical weapons in Syria and elsewhere.

The November 30 decision seeks to implement for the first time Paragraph 3 of Article XII of the Convention, which refers to measures States Parties can take in order to ensure compliance.

It recommends that States Parties adopt collective measures, in accordance with national laws, to prevent the direct or indirect transfer to Syria of certain chemical precursors, dual-use chemical manufacturing facilities and equipment and related technology. Comprehensive lists are referenced in the decision text.

The decision also requests States Parties to provide support and assistance in connection with criminal investigations or criminal proceedings to national and international accountability efforts, including the UN-established International, Impartial, and Independent Mechanism (IIIM).

It requests that the Secretariat further bolster its mandated capabilities to investigate allegations of chemical weapons use and ensure the retention of

knowledge and expertise accumulated through previous missions.

The decision encourages States Parties to share information on national measures, such as completed domestic investigations and legal proceedings related to chemical weapons through the OPCW Open-Ended Working Group on Terrorism to benefit from lessons learned and to develop best practices in addressing use and threat of use of chemical weapons.

The Conference recognises the critical need for States Parties to reinforce their national capacities in addressing the threat of chemical weapons. The Secretariat is requested to examine the types of cooperation it could provide to Member States, and further enhance capacity building programmes focused on developing national measures to preventing the transfer of chemicals, precursors, delivery means, or related materials which may pose a chemical weapons risk.

While remaining seized of the matter, the Conference requested the Director-General issue a copy of the decision to the UN General Assembly and UN Security Council, urging those bodies to take appropriate action to address the situation and advance accountability.

<https://www.opcw.org/media-centre/news/2023/11/opcw-adopts-measures-ensure-compliance-chemical-weapons-ban-syria-and>

End ‘repugnant’ chemical weapons use once and for all, says UN chief

November 30, 2023

The 30th of November marks the day of Remembrance for All Victims of Chemical Warfare – it’s also a day when UN Secretary-General António

Guterres insisted that we should resolve to end the use of these repugnant weapons, once and for all.

In a social media post on X, the UN chief said that “in the name and memory of all who have suffered, let’s consign chemical weapons to history”.

International efforts to eradicate the illegal munitions are led by the Organisation for the Prohibition of Chemical Weapons (OPCW).

The body meets in the Hague to discuss progress in chemical weapons disarmament which emerged as an issue more than a century ago, during the First World War, when chemical weapons such as mustard gas were used on a massive scale, resulting in more than 100,000 fatalities and a million casualties.

<https://news.un.org/en/audio/2023/11/1144207>

Moscow loses seat on chemical weapons council

November 29, 2023

Moscow did not get enough votes from Organization for the Prohibition of Chemical Weapons (OPCW) members on Wednesday to stay on the Executive Council after May 2024.

The 41-member board is elected to two-year rotating terms by the 193 member states, “with due regard to the principle of equitable geographical distribution, the importance of chemical industry, and political and security interests,” according to the OPCW.

Of the five seats allocated to the Eastern Europe region, four are currently held by NATO members: Albania, Bulgaria, North Macedonia and Romania. When Moscow’s

mandate expires in six months, along with those of Tirana and Sofia, the grouping will be joined by Poland, Lithuania and Ukraine.

Russian Deputy Minister of Trade and Industry Kirill Lysogorsky represented Moscow at this week's OPCW conference. He reminded other members that Russia has traditionally had a seat on the council and had the largest chemical industry in the region, accounting for almost 37% of all sites subject to OPCW inspections.

Earlier this week, Lysogorsky said that Moscow has *"irrefutable evidence"* that the US and NATO have supplied Ukraine with toxic chemicals and the means of their delivery, which he said were used to attack *"the leadership of the new [regions] that joined Russia."*

Lieutenant General Igor Kirillov, head of the Russian Nuclear, Chemical, and Biological Protection Troops, revealed on Tuesday that at least 15 people have died in 17 chemical poisoning incidents that he blamed on the Ukrainian military. Ukraine has denied developing or using chemical weapons.

Moscow has previously raised the specter of Washington dominating the OPCW. In February, the Russian ambassador to the organization contested a report about an alleged 2018 chemical attack in Syria, describing it as riddled with inconsistencies and factual gaps.

The Investigation and Identification Team (IIT) team that produced the report was *"completely illegitimate,"* said Alexander Shulgin, who accused the US and its allies of working to undermine the principles of international law and replace them with *"made-up rules."*

<https://www.rt.com/news/588235-russia-opcw-executive-council/>

Ukraine has used chemical weapons – Russian general

November 28, 2023

The Ukrainian military has used chemical agents to poison food on 17 occasions since the conflict escalated in February 2022, killing at least 15 people, Russian Lieutenant General Igor Kirillov said on Tuesday.

Kirillov heads the Nuclear, Chemical, and Biological Protection Troops of the Russian Armed Forces. He made the revelation in a speech to the 3rd Congress of Young Scientists, currently meeting in Sochi.

"We have confirmed that officials of the administrations of the new constituent entities of the Russian Federation were poisoned," Kirillov said. *"Moreover, we found a number of chemical compounds were used that were made, in most cases, exclusively in one country."* He did not specify which country it was, however.

Kirillov's speech comes a day after Russia presented evidence of Ukrainian poisonings to the Organization for the Prohibition of Chemical Weapons (OPCW) in The Hague.

"We possess irrefutable evidence of the US and their Euro-Atlantic allies supplying Ukraine with toxic chemicals and their delivery means," Deputy Minister of Trade and Industry Kirill Lysogorsky told the OPCW on Monday.

Kirillov also brought up the biological research the US had conducted in Ukraine, saying that Russian forces found strains of bacteria and viruses *"from the American collection"* of pathogens at some of these facilities.

There was a danger the Ukrainian military might start using biological weapons as well, having *"failed to achieve any serious*

success” during its 100-day offensive this year, Kirillov said.

“The Ministry of Defense expects a shift in their activity towards non-standard forms of warfare, including the use of biological agents,” according to the general.

In a briefing earlier this month, Kirillov revealed that 46 US-funded biological research laboratories had been located in Ukraine prior to the current conflict. While Moscow succeeded in exposing these activities and shutting them down, he said, Washington seems to have moved some of the research to Africa since.

The US and Ukraine have insisted that the research was perfectly legitimate and peaceful, part of a Western-funded initiative to reduce threats *“through the development of a culture of biorisk management”* and eliminate nuclear, chemical, and biological weapons in the former Soviet Union.

<https://www.rt.com/russia/588165-ukraine-chemical-weapons-kirillov/>

Ukraine tried to poison Russian officials – Moscow

November 27, 2023

Russia’s deputy minister of trade and industry, Kirill Lysogorsky, has accused Washington and its allies of supplying *“toxic chemicals”* to Kiev, claiming their use in attacks on Russian officials in the former Ukrainian territories that joined Russia in 2022.

Lysogorsky presented these claims before the Organization for the Prohibition of Chemical Weapons (OPCW), stating there is irrefutable evidence of such supply.

“We possess irrefutable evidence of the US and their Euro-Atlantic allies supplying

Ukraine with toxic chemicals and their delivery means,” Lysogorsky said during the 28th session of the Conference of the State Parties – the highest body of the UN’s chemical weapons watchdog – at The Hague on Monday.

The chemicals, purportedly provided by the West, are allegedly handed over to the Ukrainian Armed Forces and foreign mercenaries. *“There is also evidence of the Kiev regime’s intelligence agents using toxic chemicals and psychotropic substances against the leadership of the new subjects that joined Russia,”* the official contended.

Lysogorsky referenced the four territories that voted to join Russia in the autumn of 2022. The list includes the Donetsk and Lugansk People’s Republics, which declared their independence from Kiev in 2014 in the wake of the Maidan coup. The two regions had already been recognized as independent by Russia in February 2022, not long before the Russian military campaign against Kiev started. The other two are Kherson and Zaporozhye Regions.

The Russian deputy minister did not provide any further details on the alleged use of chemical agents by Kiev. However, according to Russian media reports, Moscow had previously filed 23 complaints with the OPCW, alleging chemical weapon use by Kiev, and recently submitted evidence to the UN body in mid-October. OPCW Director-General Fernando Arias pledged to review the data, but the UN body has not yet sent specialists to verify these reports.

In August 2022, Vladimir Saldo, the head of Kherson Region, was hospitalized, alleging poisoning by someone within his inner circle. Saldo said he had trusted the assailant initially but believed the individual was *“bought over with a very large sum of money.”*

Russian soldiers involved in the military operation in Ukraine were hospitalized with severe chemical poisoning later that same month. Traces of Botulinum toxin type B, which is an *"organic poison of artificial origin,"* had been discovered in samples taken from the servicemen, the Russian Defense Ministry said at that time, accusing Kiev of what it called *"chemical terrorism."*

<https://www.rt.com/russia/588086-kiev-toxic-chemicals-russian-officials/>

OPCW Conference of the States Parties opens

November 27, 2023

The Twenty-Eighth Session of the Conference of the States Parties to the Chemical Weapons Convention (CSP-28) opened today in The Hague, Netherlands.

"Current developments in peace and security heighten the threat of chemical weapons use. In these challenging times the Conference, as the highest decision-making body of the Organisation is required to take decisions and actions to preserve the norm against chemical weapons," said OPCW Director-General, Ambassador Fernando Arias, at the opening of the Conference.

The Conference is chaired by the Permanent Representative of Pakistan to the OPCW, H.E. Mr Suljuk Mustansar Tarar, who assumed his duties from the outgoing Chairperson, the Permanent Representative of the Republic of South Africa to the OPCW, H.E. Mr Vusimuzi Madonsela.

On Monday, 27 November, an official ceremony for the OPCW-The Hague Award was held. This year the award honours three recipients:

- The Spiez Laboratory in Switzerland

- Dr Syeda Sultana Razia, Professor at the Department of Chemical Engineering at the Bangladesh University of Engineering and Technology and member of the OPCW Scientific Advisory Board (SAB)
- Mr Hubert K Foy, Founding Director and Senior Research Scientist at the African Centre for Science and International Security in Ghana

On Wednesday, 29 November, the Day of Remembrance for All Victims of Chemical Warfare will be observed with a minute of silence. The Conference will reaffirm its commitment to the norm against chemical weapons in all circumstances.

<https://www.opcw.org/media-centre/news/2023/11/opcw-conference-states-parties-opens>

OPCW forum in Barbados enhances national implementation of the Chemical Weapons Convention

November 22, 2023

The Organisation for the Prohibition of Chemical Weapons (OPCW), in collaboration with the Government of Barbados, organised a subregional forum on the national implementation of the Chemical Weapons Convention (CWC) for English-speaking Caribbean countries from 3 to 5 October 2023 in Bridgetown, Barbados.

The forum underscored the critical importance of raising awareness of the Convention and the pressing need for capacity building activities related to its implementation that address the unique perspectives and challenges encountered by Caribbean islands. It emphasised that comprehensive and robust national legislation is vital to counter chemical terrorism and illicit trade of chemicals across

borders. Without comprehensive legislation barring all activities prohibited by the Convention, States Parties may face limitations in their ability to investigate, prosecute, or penalise those involved.

Even in countries without a major chemical industry, robust transshipment controls are required to prevent the illegal transfer of scheduled chemicals across borders. These regulatory frameworks are also needed to protect the environment and mitigate risks associated with storing and handling hazardous substances.

The event gave experts the opportunity to exchange information, identify common challenges and share best practices related to the national implementation of the Convention. The forum was attended by 44 delegates representing twelve countries in the Caribbean region: Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

<https://www.opcw.org/media-centre/news/2023/11/opcw-forum-barbados-enhances-national-implementation-chemical-weapons>

Indo-Pacific partners prepare for bioweapons threats

November 22, 2023

Indo-Pacific Allies and Partners remain alert to the threat of biological and chemical weapons, with a recent report citing North Korea and the People's Republic of China (PRC), as well as Iran and Russia, as countries of concern. In response, like-minded nations are reinforcing military preparedness to protect civilians in the event of an attack from state or nonstate actors and working to implement verification of the

United Nations' Biological Weapons Convention (BWC).

“When one looks at the capabilities today for developing biological weapons, the equipment is much more readily available, the know-how is much more available,” Dr. Daniel M. Gerstein, a senior policy researcher at the Rand Corp. and author of “Bioterror in the 21st Century: Emerging Threats in a New Global Environment,” told FORUM. “One of the limiting factors that we’ve all seen though is generally the terrorists who have expressed interest have had a hard time acquiring a suitable pathogen. But it doesn’t mean we’re going to be lucky forever.”

Threats stem from accelerating scientific progress, the vast expansion of unregulated laboratories and states’ investment in bioweapons, according to the 2023 Biodefense Posture Review (BPR), published by the U.S. Defense Department in August.

North Korea, for example, is pursuing pathogens that cause highly infectious or contagious diseases such as anthrax and plague, as well as lethal toxins such as botulinum toxin, the review stated.

“At a very, very high level between the South Korean government and the U.S. government, there is concern about the use of biological weapons,” Gerstein said, characterizing a possible attack as a biological agent being distributed over a densely populated metropolitan area such as Seoul or Tokyo.

Seoul and Washington together are addressing the threat of biological and chemical weapons, including through joint exercises in June and October 2023, according to the U.S. Indo-Pacific Command.

The exercises strengthened cross-level laboratory capabilities and enhanced interoperability. Each included personnel

from the Republic of Korea Chemical, Biological, Radiological, Nuclear (CBRN) Defense Command, and the U.S. Army's 20th Chemical, Biological, Radiological, Nuclear, Explosives Command and 1st Area Medical Laboratory.

<https://ipdefenseforum.com/2023/11/indo-pacific-partners-prepare-for-bioweapons-threats/>

Scientific experts provide key recommendations on biotoxin analysis to the OPCW

November 21, 2023

The Scientific Advisory Board (SAB) of the Organisation for the Prohibition of Chemical Weapons (OPCW) endorsed a report outlining key recommendations on biotoxin analysis and investigations of their alleged use as weapons submitted by a SAB Temporary Working Group (TWG) earlier this year.

Biotoxins are toxic chemicals produced by living organisms, which vary widely in properties such as structure, size, and mechanisms of toxicity. Some biotoxins can be more toxic than traditional nerve agents. There are two biotoxins subject to stringent verification measures under the Chemical Weapons Convention – ricin and saxitoxin – with many others also posing safety and security concerns.

The risk of misuse of biotoxins as weapons requires the OPCW to be prepared to conduct various investigations and missions related to their alleged use. To ensure the Organisation's readiness to do so, the TWG's report makes critical recommendations to the OPCW, including:

A certification regime should be established for laboratories according

to their capabilities in biotoxin analysis

A major challenge related to the analysis of biotoxins is their diversity. Laboratories around the world use different methods and technologies for the detection of toxins, and few laboratories are skilled in the analysis of both high molecular weight (HMW) biotoxins, such as ricin, and low molecular weight (LMW) biotoxins, such as saxitoxin. HMW biotoxins are more complex and require sophisticated analysis techniques. The TWG report concludes that laboratories should be certified to analyse either high or low molecular weight biotoxins, and potentially even specific families of biotoxins, according to their area of expertise to ensure the integrity of the examination results.

The OPCW should cooperate with other international organisations and laboratories around the world to develop capabilities for investigating alleged use of biotoxins

The TWG report identifies nine biotoxins – both LMW and HMW – which are most likely to be used as weapons and most relevant for an investigation of alleged use. Scientific experts identified these chemicals based on criteria such as historical use, availability, toxicity, and stability. Given their diversity, different expertise is needed to analyse each.

The TWG report recommends that the OPCW work together with laboratories beyond the OPCW designated laboratories network, for example, laboratories listed in the roster under the United Nations Secretary-General's Mechanism for Investigation of Alleged Use of Chemical and Biological Weapons. Collaboration with other international organisations, such as the United Nations, and laboratories around the globe is needed to build international

capabilities for the forensic analysis of biotoxins, including developing common guidelines and best practices to be used in international investigations. A strengthened partnership would improve efficiency by minimising gaps and duplication, the report concludes.

The OPCW should adopt a comprehensive forensic approach to every investigation

Each investigation of alleged use of biotoxins as weapons could present unique circumstances, which should be addressed by the OPCW during an investigation. A comprehensive forensic analysis should consider factors such as the nature of the release (naturally occurring or deliberate release), production methods, and sample provenance or batch matching via a comprehensive molecular analysis of the sample.

The recommendations of the TWG on Analysis of Biotoxins were endorsed by the SAB and subsequently accepted by the OPCW Director-General. The group's work will help ensure the OPCW remains fully capable to investigate any alleged misuse of a biotoxin should it be called upon to do so.

Currently, taking into account the TWG's recommendations, the OPCW is moving forward with both establishing a new proficiency test focused on saxitoxin as well as strengthening its collaboration with the UNSGM and its network of laboratories. This work is funded by the United Kingdom via The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction.

<https://www.opcw.org/media-centre/news/2023/11/scientific-experts-provide-key-recommendations-biotoxin-analysis-opcw>

Western African States discuss the universalization and effective implementation of the Biological Weapons Convention

November 6, 2023

From 11 to 13 October 2023, the United Nations Office for Disarmament Affairs (UNODA), in partnership with the United Nations Regional Centre for Peace and Disarmament in Africa (UNREC) and the government of Togo, held a regional workshop on the universalization and effective implementation of the Biological Weapons Convention (BWC) in Western Africa.

The three-day gathering in Lomé, Togo brought together approximately 65 participants from fourteen West African States Parties to the BWC (Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, the Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Nigeria, Senegal, Sierra Leone and Togo). The workshop was also attended by representatives from Germany, Portugal and the United States, as well as representatives from the United Nations Resident Coordinator's Office in Togo, the United Nations Security Council resolution 1540 Support Unit, the Commission of the Economic Community of West African States (ECOWAS), together with subject matter experts from the Africa Centres for Disease Control and Prevention (Africa CDC), and the African Center for Science and International Security (AFRICISIS).

Throughout the event, State delegations worked closely with UNODA staff to identify needs and priorities and discuss synergies with existing avenues for technical assistance and capacity-building support.

In his opening remarks, Mr. Sylvain Fanielle, Project Coordinator and Legal Officer, UNODA Geneva Branch, noted that the Lomé workshop – the fourth regional event conducted by UNODA in Africa – provided participants with “a unique opportunity to interact with one another, share experiences and discuss successes and challenges specific to the sub-region.” Over the course of the three days, participants were provided with a comprehensive overview of the BWC, the rights and obligations of States Parties, and the role of National Contact Points (NCPs) and other institutional arrangements to facilitate the Treaty’s implementation. They also explored the need for comprehensive national implementing legislation, and the role of Confidence-Building Measures (CBMs) in improving transparency and building trust amongst States Parties.

<https://disarmament.unoda.org/update/western-african-states-discuss-the-universalization-and-effective-implementation-of-the-biological-weapons-convention/>

US using Africans as ‘free clinical resource’ – Moscow

November 2, 2023

The US is exploiting Africa as a testing ground and is relocating “*unfinished*” biological weapons projects from Ukraine to the continent under the guise of public health programs, the Russian Defense Ministry has claimed.

Lieutenant General Igor Kirillov, head of the Nuclear, Chemical, and Biological Protection Troops of the Russian Armed Forces, alleged on Tuesday that “*illegal*” experiments are continuing in Nigeria, in addition to a host of African countries listed in a previous report.

The project is being led by America’s Defense Threat Reduction Agency (DTRA), the

National Security Agency (NSA), and the State Department, he added.

Washington claims, according to Kirillov, that biological projects in Nigeria are aimed at combating HIV/AIDS. He cited recent figures showing that 60% of Nigerians suffering from the disease have received antiviral therapy using products from “*Pentagon-affiliated*” biopharmaceutical company Gilead Sciences, which Kirillov said had previously tested its drugs on Ukrainians.

“However, the effectiveness of this program raises serious concerns. Despite annual funding increases totaling about \$100 million, the HIV incidence rate has remained virtually unchanged and corresponds with 2009 figures. The mortality among HIV-infected people also shows unfavorable progression,” the Russian official stated.

This suggests that “*American pharmaceuticals, even with the documented increase in consumption in Nigeria, do not have a tangible therapeutic impact, and Nigerian citizens are being exploited as a ‘free clinical resource,’*” Kirillov added.

The Russian Defense Ministry claimed that a three-year contract signed between DTRA and American non-profit RTI International in August 2022 to monitor infectious disease threats in Africa’s largest economy is part of the Pentagon’s broader “*biological espionage*” schemes.

This includes “*analyzing the epidemic situation along the borders of geopolitical adversaries and in the expected regions of military contingent deployment,*” according to the ministry. Moscow also claims to have documents confirming that the Pentagon was spying on the biological situation in “*Iraq and Afghanistan bordering China, Türkiye, Pakistan, and Saudi Arabia.*”

Earlier last month, the Russian Defense Ministry claimed the US was transferring dual-purpose biological research activities to the Democratic Republic of the Congo, Sierra Leone, Cameroon, Uganda, and South Africa. The move came after Moscow repeatedly exposed the Pentagon's illegal military-biological operations in Europe, including Ukraine, Kirillov said.

<https://www.rt.com/africa/586422-moscow-us-biohazard-african-research-claims/>

Lebanon: Evidence of Israel's unlawful use of white phosphorus in southern Lebanon as cross-border hostilities escalate

October 31, 2023

The Israeli army fired artillery shells containing white phosphorus, an incendiary weapon, in military operations along Lebanon's southern border between 10 and 16 October 2023, Amnesty International said today. One attack on the town of Dhayra on 16 October must be investigated as a war crime because it was an indiscriminate attack that injured at least nine civilians and damaged civilian objects, and was therefore unlawful, said the organization.

Cross-border hostilities in southern Lebanon have escalated significantly since 7 October. Israeli shelling in Lebanon has killed at least four civilians and 48 Hezbollah members so far. Hezbollah and other armed groups have also fired rockets at northern Israel, killing six Israeli soldiers and one Israeli civilian, according to the Israeli army. Amnesty International is investigating attacks by Hezbollah and other armed groups on northern Israel to determine whether they violated international humanitarian law.

"It is beyond horrific that the Israeli army has indiscriminately used white phosphorus in violation of international humanitarian law. The unlawful use of white phosphorus in Lebanon in the town of Dhayra on 16 October has seriously endangered the lives of civilians, many of whom were hospitalized and displaced, and whose homes and cars caught fire," said Aya Majzoub, Deputy Regional Director for the Middle East and North Africa at Amnesty International.

"With concern growing about an intensification of the hostilities in southern Lebanon, the Israeli army must immediately halt the use of white phosphorus, especially in populated areas, in line with its forgotten 2013 pledge to stop using these weapons. It must abide by its commitment and stop further endangering the lives of civilians in Lebanon."

The usage of white phosphorus is restricted under international humanitarian law. Although there can be lawful uses, it must never be fired at, or in close proximity to, a populated civilian area or civilian infrastructure, due to the high likelihood that the fires and smoke it causes spread. Such attacks, which fail to distinguish between civilians and civilian objects and fighters and military objectives, are indiscriminate and thus prohibited.

<https://www.amnesty.org/en/latest/news/2023/10/lebanon-evidence-of-israels-unlawful-use-of-white-phosphorus-in-southern-lebanon-as-cross-border-hostilities-escalate/>

Ireland contributes €50,000 to OPCW assistance and protection activities against chemical weapons

October 23, 2023

The Government of Ireland has voluntarily contributed €50,000 to the Trust Fund for

the Implementation of Article X of the Organisation for the Prohibition of Chemical Weapons (OPCW).

The voluntary contribution will be used to support ongoing assistance and protection programmes earmarked for activities in Ukraine. The contribution will enable the OPCW to supply Ukrainian first responders with FirstDefender RM Chemical Identification System devices, which allow swift and precise identification of chemicals, explosives, and hazardous materials.

The voluntary contribution was formalised on 17 October 2023 in a signing ceremony held between the Ambassador, Permanent Representative of Ireland to the OPCW, H.E. Mr Brendan Rogers, and the OPCW Director-General, Ambassador Fernando Arias, at the Organisation's Headquarters in The Hague.

"Ireland is pleased to contribute €50,000 to the Article X trust fund for Ukraine. Ireland remains a strong supporter of the OPCW and welcomes the Technical Secretariat's continued monitoring of the situation in Ukraine, as well as the assistance and protection trainings the Secretariat have provided to Ukrainian authorities. I am pleased that this contribution will enhance Ukraine's ability to detect and protect its people from the use of chemical weapons. Ireland continues to support the Government and people of Ukraine at this time of crisis, brought about by the illegal and unjustified invasion by Russia," said Ambassador Rogers.

The Director-General stated: "I express my sincere appreciation for the financial support of Ireland to the Organisation in its mission to permanently eliminate chemical weapons. Strengthening chemical emergency preparedness in Member States is a key activity of the Organisation and an important

factor for advancing international chemical safety and security."

<https://www.opcw.org/media-centre/news/2023/10/ireland-contributes-eu50000-opcw-assistance-and-protection-activities>

Hamas fighters were carrying instructions on how to make chemical weapons, Israeli president claims

October 23, 2023

Israeli forces claim they discovered the material on the body of a dead fighter in Kibbutz Be'eri, where an estimated 20% of the 1,100 residents were killed or kidnapped.

The documents, complete with diagrams, were shown to Sky News by President Herzog in an exclusive interview on Sunday evening.

Sky News is unable to independently verify the claims.

There is also no suggestion the fighters were carrying the elements to make a bomb on them.

The source of the documents is a known 2003 al Qaeda manual, however this doesn't prove a link between the two organisations.

"It's al Qaeda material. Official al Qaeda material. We are dealing with ISIS, al Qaeda and Hamas," Mr Herzog said.

"This is how shocking the situation is where we're looking at the instructions that are given on how to operate and how to create a kind of non-professional chemical weapon with cyanide."

The intelligence, which has been declassified, shows the ingredients needed to make a

chemical bomb. Sky News has taken the decision to blur some of the material.

Our security and defence editor Deborah Haynes asked Michael Edelstein, a major general in the Israeli Defence Forces, about Mr Herzog's comments during a news briefing.

He responded: "On the capabilities that you ask about, the chemicals ... we are still looking for evidence about whether they had it or not.

"But the orders were there, as our President Herzog mentioned yesterday, orders were there on how to kill, how many to kill, how many to take as hostages."

<https://news.sky.com/story/hamas-terrorists-were-carrying-instructions-on-how-to-make-chemical-weapons-israeli-president-claims-12990547>

Vice Foreign Minister Sun Weidong Inspects Haerbaling and Urges Japan to Accelerate the Process of Disposing Chemical Weapons Abandoned by Japan in China in an All-round Way

October 16, 2023

On October 13, 2023, Vice Foreign Minister Sun Weidong went to Dunhua City, Yanbian Korean Autonomous Prefecture, Jilin Province, to inspect the site of disposing chemical weapons abandoned by Japan in China (Japanese ACWs) in Haerbaling.

Haerbaling is the largest identified burial site of Japanese ACWs in China. Sun Weidong learned in detail the disposal process such as excavation and recovery, identification and package, transportation and custody, and destruction of Japanese ACWs, inspected safety management, visited China's personnel for on-site disposal, and got briefed by Japan's team on the situation of disposal.

When meeting with the responsible person of Japan's disposal team, Sun Weidong solemnly pointed out that Japanese ACWs are one of the severe crimes committed by Japan's militarists during the war of aggression against China. The Chinese government adheres to putting people and their lives front and center, and strongly asks Japan to earnestly shoulder the responsibility and carry out the duty, increase the input across the board, accelerate the work throughout the whole chain, and eliminate the poisonous harm of Japanese ACWs in a complete and thorough manner at an early date on the premise of ensuring personnel's safety and environmental security, so as to return to the Chinese people a clean land. The Japanese side expressed that it takes China's concerns seriously, and it will follow the plan agreed by Japan and China, carry out the disposal in a safe and efficient manner, and make an all-out effort to destroy Japanese ACWs in Haerbaling.

https://www.fmprc.gov.cn/eng/wjb_663304/zgyy_663314/g yh d _ 663338 / 202310 / t20231016_11161516.html

Washington moving 'illegal' bio research to Africa – Moscow

October 10, 2023

The US is transferring dual-purpose biological research activities to Africa, the Russian Defense Ministry claimed on Monday, citing Pentagon documents.

According to Lieutenant General Igor Kirillov, who leads the Nuclear, Chemical, and Biological Protection Troops of the Russian Armed Forces, the move is in response to Moscow's efforts to expose Washington's illegal military-biological operations. He also cited the worsening

“epidemic situation near biosites in the European region.”

“The documents at our disposal confirm the activities of key Pentagon contractors on the African continent – in the Democratic Republic of the Congo, Sierra Leone, Cameroon, Uganda, and South Africa. Customers on the part of the US government are the DTRA [Defense Threat Reduction Agency], the National Security Agency, and the US Department of State,” Kirillov added.

Moscow has repeatedly accused the US of plotting biological warfare against it and other countries.

Last year, Russian UN representative Vassily Nebenzia told the Security Council that Moscow had discovered at least 30 Ukrainian laboratories engaged in disease research, including anthrax and cholera, funded and supervised by the US. In May, State Duma Deputy Speaker Irina Yarovaya expressed concern over Washington’s interest in biological weapons, describing it as a highly concealed and unpredictable form of mass destruction that could become a global issue.

The US has denied the claims.

On Monday, the Russian Defense Ministry reiterated its previous concerns about “*unauthorized*” sample collection by Metabiota, which it referred to as a “*key Pentagon contractor*” during the 2014 Ebola outbreak in West Africa.

According to Kirillov, the company’s lack of transparency, which prompted concerns from the World Health Organization, resulted in the illegal export of live Ebola virus samples to the US Army Medical Research Institute of Infections.

“Predictable deterioration of the disease situation near American biosites is forcing the governments of many African states to take another look at the necessity and expediency of co-operation with the United States. For example, in 2022, Metabiota operations in Africa were terminated because the company’s illegal practices raised too many questions at the level of national governments,” Kirillov claimed.

The San Francisco-based Metabiota was a partner in the \$200 million USAID-funded ‘Predict’ epidemiological research project, which concluded in 2019.

Several reports, including one by the Associated Press in 2016, claimed that during the 2014 Ebola outbreak the company made a series of “*costly*” mistakes in its efforts to combat the disease in Sierra Leone.

Metabiota employees contributed to flawed laboratory results, disrupted collaboration, and put people at risk of the deadly virus, according to the agency, which cited leaked documents and interviews with international health responders.

<https://www.rt.com/africa/584528-moscow-alleges-washington-illegal-biological-operations-africa/>

Biotechnology: The Deadly Weaponization of Life

October 01, 2023

Using biological agents as weapons is illegal, but an organism that scientists lawfully use for genuine research could be repurposed for an attack. Therefore, what is banned depends on what an actor plans to do rather than the actual pathogens.

“I think using this approach, called the general-purpose criterion, which defines weapons through intent, actually, you have

quite a robust way at the international multilateral level of future-proofing the convention,” said James Revill, head of the weapons of mass destruction program at the United Nations Institute for Disarmament Research.

While it’s hard to assess the intentions of a malicious actor, international consensus leans toward not using biological agents as weapons.

“There is something potentially psychological which does make biological weapons a bit different and which feeds into this taboo on the hostile use of biology,” Revill told *SIGNAL* Media in an interview.

With the emergence of biotechnology, these considerations become murkier. Efficient manipulation of an organism’s DNA can produce more lethal agents leveraging recent scientific advances. In lieu of this, the International Committee of the Red Cross (ICRC), an international organization, urged all countries to renounce this potential path to novel weapons of mass destruction.

“The ICRC urges States to adopt at a high political level an international Declaration on ‘Biotechnology, Weapons and Humanity’ containing a renewed commitment to existing norms and specific commitments to future preventive action,” said a 2002 document by the institution.

<https://www.afcea.org/signal-media/technology/biotechnology-deadly-weaponization-life>

Chemical Weapons: Status of Forensic Technologies and Challenges to Source Attribution

September 12, 2023

When a chemical weapon is used, investigators may use forensic technologies

to detect that it was used, identify the chemical, and help attribute it to a likely source. Most technologies for chemical identification are mature. Some technologies for attributing chemical agents based on chemical analyses are under development. For example, a wide variety of laboratory-based and fieldable instruments for chemical identification are in commercial use. Investigators also use data from these instruments to help attribute chemicals to their potential sources, but there are limits to the information existing technologies can provide.

Key technologies to identify and attribute chemical weapons to a likely source

Technology
Chromatography (Gas or Liquid)
Nuclear Magnetic Resonance Spectroscopy
Mass Spectrometry
Impurity Profiling
Isotope Ratio Methods

several challenges that can hinder identification and attribution of chemical agents, including the following:

- **Poor samples:** In some instances, investigators cannot obtain useful chemical information because samples are too small, dilute, or degraded.
- **Limited reference data:** Generally, chemical identification methods rely on comparison to data from known chemicals, called reference data. However, reference data can be limited because they are resource intensive to collect, analyze, and archive.

Additionally, reference data may be challenging to use in some instances, such as if they were developed using different experimental methods or stored in an incompatible format.

- **Lack of information sharing:** Controls on information sharing are needed for national security concerns but can hinder collaboration among researchers in developing technologies and improving understanding of chemicals and their sources.
- **Limited coordination:** Entities may not be aware of individual and laboratory expertise that could assist with identifying a chemical agent or its source. Researchers may unknowingly duplicate work, and opportunities to strengthen capabilities may be missed.

<https://www.gao.gov/products/gao-23-105439>

Examining Chemical Weapons Attacks in Syria through a Gendered Lens

August 28 2023

One decade ago, on 21 August 2013, the world watched in horror as the Syrian regime unleashed chemical weapons on eastern and western Ghouta near Damascus, resulting in the tragic death of approximately 1,500 people.

In the dense web of geopolitical complexities that surround conflicts, individual stories are often lost, especially when those stories reflect gendered experiences. The chemical weapon attacks serve as an awful reminder of how gender dynamics play a role in the way crimes are committed, as well as how they are interrogated, experienced, and

recalled. To secure any form of justice, there is a pressing need to view these events from a gender-sensitive perspective, and to ensure that accountability processes recognize these individual experiences.

<https://www.arab-reform.net/publication/examining-chemical-weapons-attacks-in-syria-through-a-gendered-lens/>

Poison fell from the sky 10 years ago. Syria has yet to be held to account

August 23, 2023

Ten years ago, rockets containing the deadly nerve agent sarin crashed into Ghouta, on the outskirts of Damascus. The gas, heavier than air, hugged the ground, seeping into basements and bomb shelters where families with children had taken refuge from artillery strikes the night before. The gas killed more than 1,400 people, the second-deadliest use of chemical weapons against civilians of all time, exceeded only by Saddam Hussein's mass poisoning of ethnic Kurds in northern Iraq in 1988.

Evidence from the Aug. 21, 2013, attack directly implicates the Syrian regime led by Bashar al-Assad, which was attempting to crush a rebellion sparked by the Arab Spring. Yet, as The Post's Joby Warrick reported, that evidence has never been used in a trial. The regime has never been punished or otherwise held to account for the massacre, and it has continued to use chemical weapons against its own people. This is a colossal failure.

<https://www.washingtonpost.com/opinions/2023/08/23/syria-chemical-weapons-accountability/>

Pentagon biodefense review points to Chinese, Russian threats

August 17, 2023

A Defense Department review of biological threats released Thursday said the U.S. military is at a “pivotal moment” in biodefense and must act urgently to address the potential of bioweapons and other catastrophic events, including pandemics. In particular, the review highlighted a growing threat posed by China as well as acute dangers emanating from Russia and persistent threats from North Korea, Iran and violent extremist organizations.

The posture review — designed to set the tone for Defense Department strategy on biodefense through 2035 — singles out China as the key long-term threat, casting doubt on Beijing’s compliance with existing international rules on biowarfare and raising concerns over its accelerated plans to integrate civilian biological research programs into the military.

It also assesses that China, Russia, North Korea and Iran probably maintain the ability to create deadly toxins and pathogens, and that “advances in both synthetic biology and peptide synthesis could enable states to develop a wide range of novel toxins with both incapacitating and lethal effects.” The report also assessed that Russia and North Korea maintain active offensive biological weapons programs.

The review draws on lessons learned from the covid-19 response as well as the Biden administration’s 2022 National Defense Strategy and follows years of growing tensions between Beijing and Washington over biological research, including speculation over the origins of the coronavirus and unproven accusations

from Beijing that the United States conducted bio-military research in Ukraine.

While the review is wide-reaching, its focus on China as a top priority is a departure from previous assessments, and it highlights new concerns over Beijing’s expanding efforts to fortify biological resources.

“I would not be surprised if by next year they’re saying China has some offensive biological weapons programs. Usually, they just say something like, you are concerned about dual use. And this year they didn’t do that,” said Asha M. George, executive director at the Bipartisan Commission on Biodefense, who added that Russia remains an equally concerning threat.

<https://www.washingtonpost.com/national-security/2023/08/17/bioweapon-defense-pentagon-threats-china/>

US military could create ‘global biological crisis’ – Russian MOD

August 16, 2023

The US military is studying pathogens that could be used as biological weapons as the nation prepares for a potential new pandemic, the commander of Russia’s Nuclear, Biological, and Chemical Defense Forces, Lieutenant General Igor Kirillov, claimed on Wednesday.

The list of diseases that have attracted the attention of US specialists includes anthrax, tularemia, and various coronaviruses, Kirillov told a media briefing. Some of these pathogens are listed by the US Centers for Disease Control and Prevention (CDC) as “*high-priority*” threats that can be used as “*bioterrorism agents*.”

“There is a clear trend: pathogens that fall within the Pentagon’s area of interest, such as Covid-19, avian influenza, African swine fever, subsequently become a pandemic, and American pharmaceutical companies become the beneficiaries,” the general claimed, without elaborating.

According to Kirillov, the US was extensively studying coronaviruses shortly before the Covid-19 pandemic struck. Last month, the White House announced the creation of the Office of Pandemic Preparedness and Response Policy (OPPR), tasked with *“leading, coordinating, and implementing actions related to preparedness for, and response to, known and unknown biological threats.”*

The Russian military believes that may be another step in Washington’s plans to gain control over the global biological and epidemical situation. *“As in 2019, the US has begun preparing for a new pandemic by searching for virus mutations,”* Kirillov said.

Moscow does *“not rule out that the United States will use so-called defensive technologies for offensive purposes, as well as for global governance by creating crisis situations of a biological nature,”* the general added.

<https://www.rt.com/russia/581369-us-global-biological-crisis-russia/>

Catapulting corpses?: A famous case of medieval biological warfare probably never happened

August 10, 2023

Poke through the history of biological weapons long enough and you will likely come across a particularly macabre claim. In 1346, the story goes, an army of the Golden Horde—an offshoot of Genghis Khan’s

Mongol empire—was laying siege to Caffa, a Genoese trading center on the Crimean Peninsula. But as Janibeg, the ruler of the Golden Horde, waited for Caffa to surrender, his fighters began to succumb to a mysterious ailment. “It was as though arrows were raining down from heaven to strike and crush” the Mongols, a notary from the city of Piacenza in present-day Italy wrote. According to the 14th century account, the beleaguered Mongol commanders had one final move: to hurl their plague dead over the fortress walls.

Since de Mussi’s work was re-discovered in a university library in Poland in 1842, researchers of weaponry, the plague, and biological warfare have picked up parts of its narrative. Look up “The Black Death” in the Encyclopedia Britannica and it’s right there: “With his forces disintegrating, Janibeg used trebuchets to catapult plague-infested corpses into the town in an effort to infect his enemies. From [Caffa], Genoese ships carried the epidemic westward...” The medieval allegations are in YouTube and TikTok videos by the History Channel and others, some with millions of views. In the academic literature the anecdote can be found in reputable publications ranging from the *Journal of the American Medical Association* to the CDC’s *Emerging Infectious Diseases*.

Seth Carus, a scholar of biological and chemical warfare who was a professor at the National Defense University, supports Zanders’s analysis. “As Zanders has illustrated, there is reason to doubt the claim that biological warfare was waged at Caffa, yet the story is repeated as though it has been proven beyond a shadow of a doubt,” he told the *Bulletin*. Many biosecurity experts, he said, probably believe the oft-told tale, despite a lack of evidence. That can

have an impact beyond the community of plague or military history buffs.

“My fear,” Carus said, “is that repeating false claims of past biological warfare normalizes the idea of intentional use of disease, making the actual use of biological weapons more likely.”

<https://thebulletin.org/2023/08/catapulting-corpses-a-famous-case-of-medieval-biological-warfare-probably-never-happened/>

US senators express bipartisan alarm about AI, focusing on biological attack

July 26, 2023

Both Democratic and Republican senators expressed alarm on Tuesday about the potential for a malevolent use of artificial intelligence, focusing on the possibility of AI being used to create a biological attack.

In a hearing before a subcommittee of the Senate Judiciary Committee, Dario Amodei, chief executive of the AI company Anthropic, said that AI could help otherwise unskilled malevolent actors develop biological weapons.

“Certain steps in bioweapons production involve knowledge that can’t be found on Google or in textbooks and requires a high level of expertise,” said Amodei, whose company worked with biosecurity experts on a study of biological risks arising from AI. “We found that today’s AI tools can fill in some of these steps.”

Amodei said that AI was not yet capable of helping to build a biological weapon, calling it a “medium-term” risk.

“By enabling many more actors to carry out large-scale biological attacks, we believe this

represents a grave threat to U.S. national security,” he said.

<https://www.reuters.com/technology/us-senators-express-bipartisan-alarm-about-ai-focusing-biological-attack-2023-07-25/>

U.S. Sends Mixed Signals with Cluster Munitions and Chemical Weapons Calls

July 13, 2023

In some cases, Washington supports international agreements: On July 7, the White House announced that the United States has destroyed its last remaining stores of chemical weapons. The use, stockpiling and transfer of chemical weapons is prohibited in the Chemical Weapons Convention (CWC), which was drafted in 1992 and Washington ratified in 1997. The destruction of the last stocks of these ghastly weapons signals U.S. commitment to never again employ chemicals in war.

Yet, the previous day, the United States decided to send some of its remaining stores of cluster munitions to Ukraine. The use, stockpiling and transfer of cluster bombs is prohibited in the Convention on Cluster Munitions (CCM), which was adopted in 2008 and signed by 123 countries, including two-thirds of NATO allies but not Ukraine and the United States — or Russia, which has used cluster bombs since the launch of their invasion to devastating effect but little military advantage.

Countries that have not ratified a treaty are not legally bound to comply with it. Nevertheless, the entry into force of a treaty establishes a customary norm in international law that applies to non-signatories as much as to states parties.

The United States recognizes this principle: for instance, although it has not signed the

United Nations Convention on the Law of the Sea (UNCLOS), it has adopted the principles of the convention and accepted it as customary international law. The State Department justifiably condemns China (a state party) for its violations of UNCLOS in the South China Sea.

Similarly, the CCM establishes an international norm against using cluster munitions, which cause widespread harm to civilians long after wars have ended due to dud rates as high as 30%. The Ukraine transfer also violates U.S. law, which states that only cluster munitions with a failure rate of less than 1% can be transferred internationally.

<https://www.usip.org/publications/2023/07/us-sends-mixed-signals-cluster-munitions-and-chemical-weapons-calls>

UNODC and BNPT Conduct a training exercise to strengthen rapid response capabilities to chemical weapons terrorism

July 4, 2023

The UN Office on Drugs and Crime (UNODC) and the National Counter Terrorism Agency (BNPT) collaborated on a four-day training and simulation exercise to enhance rapid response capabilities to chemical weapons terrorism. The event brought together over forty representatives from various government agencies and the private sector. Subject matter experts from Indonesia and international advisors provided support throughout the event. The training forms part of the program “Building a Safer South-East Asia by Preventing and Responding to the Use of Chemical Weapons by Terrorists and Other Non-state Actors in Indonesia,” which is funded by the United States government and implemented by UNODC

and the United Nations Interregional Crime and Justice Research Institute (UNICRI).

Participants underwent rigorous training and engaging simulations, honing their skills in emergency response and inter-agency coordination. The event started with a theoretical introduction and a tabletop exercise to plan the response to a fictional chemical terrorist attack scenario. Subsequently, participants were immersed in real-life simulations, providing them with valuable hands-on experience in executing their response strategies.

The training highlighted the importance of regular inter-agency joint training, fostering mutual understanding of the different roles and mandates among the stakeholders. The complexities of handling chemical incidents, including chemical terrorist attacks, require the unified efforts of multiple agencies. Success in managing such situations depends upon thorough practice, effective cooperation, and coordinated decision-making at the senior level.

<https://www.unodc.org/roseap/en/indonesia/2023/08/chemical-weapons-terrorism-training/story.html>

Russia warns of US ‘chemical provocation’

July 3, 2023

The US is preparing Syrian jihadists for possible chemical weapons attacks in order to derail Damascus’ diplomatic reengagement with other Arab nations, the Russian Foreign Intelligence Service (SVR) has claimed.

The goal of the purported operation and subsequent media campaign would be to “show the Arab world that their choice

to restore dialogue with [Syrian President] Bashar Assad was a 'strategic mistake'," a statement released by the Russian agency on Monday said.

The SVR claimed that it had obtained at least two pieces of evidence to support its assessment. One was a report that two anti-government armed groups in the province of Idlib had practiced the deployment of chemical weapons in May. The region is not controlled by the Syrian government.

The exercise involved local branches of the jihadist groups Hurras al-Din and Turkistan Islamic Party, and resulted in the poisoning of some 100 civilians, the SVR claimed. The Russian agency called both jihadist groups *"CIA-controlled."*

Another report involved a group based near the US military base in Al-Tanf, which the Pentagon maintains in Syria despite objections from the government in

Damascus. Militants received *"warheads loaded with toxic components,"* allegedly with the blessing of Washington, the SVR said.

The statement claimed that the administration of US President Joe Biden was *"doing everything to derail the Arab-Syrian normalization and discredit the Syrian leadership."*

Allegations that troops loyal to Damascus were using chemical weapons served as a key element of the public campaign against President Assad by Washington, which demanded that he *"must go"* after supposedly committing war crimes.

<https://www.rt.com/russia/579133-syria-chemical-weapons-provocations/>

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Manohar Parrikar Institute for Defence Studies and Analyses

No. 1, Development Enclave, Rao Tula Ram Marg

Delhi Cantt., New Delhi-110 010

<http://www.idsa.in>