

*Working together to strengthen the norms
against chemical and biological weapons.*



CBW Challenges Radar no. 7

Working Paper: Biosafety and Biosecurity - The Need for a Coherent Approach

Hitherto, the concepts of biosecurity and biosafety have been treated as separate frameworks with each having a different object and a different purpose. Recent events however have shown that biosafety and biosecurity should rather be seen as inextricably intertwined. By combining both concepts it will be easier for States and other stakeholders, to address the various challenges lying ahead. The working paper by Mónica Chinchilla, Elisabeth Hoffberger-Pippan, Sannimari Veini, and Barry de Vries analyzes the two concepts with a view to finding out how and to what extent they should be addressed coherently. The WHO One Health approach serves as source of inspiration, but also the recently published Tianjin Guidelines show how both biosecurity and biosafety can be addressed together.

[Click here to read our latest publication](#)

What's new at CBWNet

[Veronika Klymova](#) joined the CBWNet team at PRIF in March in the Research Department "International Security". Her research focuses on the nonproliferation and disarmament of biological and chemical weapons.

CBWNet member ZNF (University of Hamburg) organized an [international expert workshop](#) on current trends in science and technology relevant to the treaty regimes banning chemical and biological weapons in Hamburg on June 17 and 18. In four panels, the participants discussed the political framework for the

institutionalization of S&T advice in the context of disarmament treaties (presentations by Dr. John Walker and Dr. Una Jakob), presented current developments in the life sciences and the SynBio industry (Daniel Sabatelli, Sophie Reiners, Dr. Anna Krin), examined the issue of verification from a technical perspective (Ines Mergler, Dr. Gunnar Jeremias and Dr. Ralf Trapp) and spoke about governance aspects in national implementation and in the industry (Barry de Vries, Dr. Marc-Michael Blum).



CBWNet Workshop

S&T relevant to the
CWC and BWC

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At the annual convention of the International Studies Association in San Francisco on April 3 to 6, CBWNet contributed the only [panel focusing on the global norms prohibiting the possession and use of chemical and biological weapons \(CBW\)](#). Bringing together different perspectives on the challenges to and robustness of CBW norms, the panel addressed a gap in international studies research concerning relevant norm dynamics, their implications for the CBW prohibitions, and the impact of actor relationships within the respective regimes.

News

- On May 1, the US Department of State explained a new set of sanctions against Russia for using chemical weapons against Ukraine in this [fact sheet](#)
- The White House released the [“Framework for Nucleic Acid Synthesis Screening”](#) on April 29 and the [“US government policy for oversight of dual](#)

[use research of concern and pathogens with enhanced pandemic potential](#)” on May 6

- The OPCW published a [statement on Ukraine](#) from the OPCW Spokesperson on May 7

Publications of interest

Publications by CBWNet researchers

- CBWNet researcher Una Jakob and her co-authors published an [article on Germany’s approach to handling dual-use research](#) in the journal *Research Ethics*
- Barry de Vries contributed a piece on bioterrorism in national counter-terrorism legislation as part of the first issue of the [UNSCR 1540 compass](#), a new UNICRI publication to commemorate the 20th anniversary of the resolution’s adoption
- He also just published [this article](#) in the Journal of Conflict and Security Law, conducting a comparative analysis of provisions prohibiting the use of biological weapons

Synthetic biology and DNA synthesis screening

- The Journal of Applied Biosafety released a [special issue on synthetic genomics](#), featuring an article [developing a common baseline for DNA synthesis screening](#) by Nicole Wheeler and co-authors, another [on how to safeguard mail-order DNA in the age of AI](#) by Stephanie Batalis and co-authors and one on [biosecurity practices of synthetic DNA providers](#) by Arianne Kane and Michael T. Parker
- Sarah R Carter published a [report on developing a customer screening framework for the life sciences](#) in partnership with Blueprint Biosecurity

Alleged use of chemical weapons in Ukraine

- The CWC Coalition released its [statement on alleged CWC violations in Ukraine](#)
- Jean Pascal Zanders addresses the allegations of chloropicrin use in Ukraine in a comprehensive four-part series on The Trench. Part 1 explores the [broader chemical warfare accusations in the Ukrainian conflict](#), and Part 2 delves into the specifics of [chloropicrin and its purported](#)

[deployment in Ukraine](#). Part 3 examines the [U.S. assessment of Russian chloropicrin use](#), while the upcoming final installment will discuss the implications of these allegations for the CWC.

- Former OPCW Director-General Ahmet Üzümcü authored [this piece](#) for the European Leadership Network on how the international community could investigate the alleged use of chemical weapons in Ukraine

AI

- The National Security Commission on Emerging Biotechnology (NSCEB) published an [interim report](#) and multiple whitepapers on the intersection of AI and biosecurity, most recently no. 4 on [policy options for AIxBio](#)
- The Johns Hopkins Center for Health Security, Federation of American Scientists, NTI Bio, and Scowcroft Institute of International Affairs at the Bush School of Government and Public Service provided comments and additional recommendations to these NSCEB papers in a [response letter](#)
- The US Department of Homeland Security published a [report on advancing efforts to reduce the risks at the intersection of AI and CBRN threats](#)

Biodefense and biosafety

- The Bipartisan Commission on Biodefense released its [National Blueprint on Biodefense](#)
- NTI Bio published a [Whitepaper](#) proposing a Joint Assessment Mechanism to rapidly and credibly determine the origins of high-consequence biological events
- Talha Burki released an [article in the Lancet](#), addressing the inadequacy of current biosafety regulations for pathogen research
- Baylee Ballais discusses the threat of biowarfare from recent genome editing advancements in [this paper](#) in the *Journal of Biosecurity, Biosafety, and Biodefense Law*
- A new book called [Biosafety and Biosecurity](#), edited by Jonathan Jaime G. Guerrero et. al., discusses practical insights and applications for low- and middle-income countries
- Max Kozlov discusses the [new US regulation of gain of function research](#) in *Nature*

- Dallas Hughes and his co-authors published a [preprint on a resistance-avoiding antibiotic to treat anthrax](#)

Miscellaneous

- Eva Siegmann discusses [how false Russian claims hijacked the biological weapons treaty](#) in her piece for the *Bulletin of the Atomic Scientists*
- The [UNSCR 1540 compass](#) features a chapter on UNSCR 1540 lessons learned from the ‘tending’ of the biological weapons regime by Louison Mazeaud and James Revill, as well as a chapter on challenges, complementarities and synergies between UNSCR 1540 and the chemical weapons convention by Rene Betancourt and Victor Calero
- Jean Pascal Zanders and his co-authors discuss the Australia Group and the prevention of the re-emergence of chemical and biological weapons in [this publication](#)
- The latest volume of the *Rutgers Law Record* contained an [article on the case for amending the BWC to enhance international law and legitimacy](#) by Ryan Houser
- The Interacademy Partnership published a [report on the proof-of-concept exercise for a Scientific Advisory Body for the BWC](#) conducted earlier this year
- Ian Anthony authored a [SIPRI policy research paper](#) on the Centre for Chemistry and Technology and the future of the OPCW

Multimedia

- The German Foreign Office published recordings from the Rethinking Arms Control Conference on [AI and Weapons of Mass Destruction](#), which took place in Berlin on June 28, 2024
- The [Poison and Pestilence podcast](#) released a number of new episodes, including episode 24 reviewing the movies *Outbreak* and *Contagion* with Saskia Popescu, and episode 27 examining 19th century chemical warfare plans
- There are two new podcasts of [the BWC Global Forum](#), episode 12 on Fermentation Science and episode 13 on gene therapy delivery
- A new [interview with Matthew Meselson](#) appeared on the Statecraft podcast, discussing Meselson’s role in convincing President Nixon to end U.S. bioweapons research

Coming up!

- [4th session of the Working Group on the strengthening of the Biological Weapons Convention](#), Geneva, 19 Aug - 23 Aug
- [107th Session of the Executive Council of the OPCW](#), The Hague, 8 - 11 October 2024
- [Thirteenth EU Non-proliferation and Disarmament Conference](#), Brussels, 12 – 13 November 2024
- [CSP-29 – The Twenty-Ninth Conference of the States Parties](#), The Hague, 25 – 29 November 2024
- [BWC 2024 Meeting of States Parties](#), Geneva, 16 Dec - 18 Dec



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