Editorial

This issue of the CBW Magazine examines the evolving biological threats landscape and the existing biosecurity governance frameworks at the intersection of public health, technological innovation, and international security. Recent developments highlight the growing challenges posed by infectious diseases, risks associated with biological agents, and the growing need to strengthen the national and international governance mechanisms for prevention, preparedness, and response. Early 2026 was marked by the outbreaks of Hantavirus in South America and Ebolavirus in Central Africa. Both outbreaks underscored the importance of disease surveillance, rapid response mechanisms, robust biosafety and biosecurity standards, as well as the pressing need for international cooperation.

Significant developments also took place regarding the implementation and compliance with the Chemical Weapons Convention. The OPCW inspectors, in cooperation with the Syrian authorities, discovered previously undeclared chemical weapons, munitions, and documentation of the Assad-era chemical weapons programme. These findings marked a significant development toward the dismantling of the existing and previous chemical weapons in Syria. The OPCW also released a landmark report on the implications of artificial intelligence for the implementation of the Chemical Weapons Convention. The report examines the challenges and the opportunities associated with AI-enabled chemistry and verification.

This issue features six articles examining the biosecurity threat landscape, challenges posed by infectious diseases, and recent

developments in strengthening India's CBRN capacity.

The article by Animesh Roul analyses the implications of the recent outbreaks of Hantavirus and Ebolavirus on the global health governance frameworks. In his article, he argues that the biological security framework requires a comprehensive approach integrating biosafety, biosecurity, emergency response, and equitable access to health countermeasures. He examines the significance and gaps in the Pathogen Access and Benefit-Sharing framework of the WHO Pandemic Agreement.

The Kaleidoscope piece by Wg Cdr Anamika Choudhary (Retd.) focuses on the establishment of the DRDO's new CBRN Field Training and Demonstration Centre in New Delhi. She evaluates the significance of this initiative for strengthening India's CBRN preparedness architecture, improving inter-agency coordination, and improving the indigenous capabilities for managing CBRN emergencies.

The article by Lt. Col. Gangadhar Sai K examines the recently foiled ricin plot in India. He assesses the toxic properties of ricin, potential attack scenarios, and the existing preparedness mechanisms. The article also highlights the challenges posed by biological terrorism and underscores the importance of strengthening detection capabilities, institutional coordination, and response frameworks for biothreat incidents.

The article by Dr. Suryesh Namdeo and Tanya Sarawagi outlines a four-domain framework to address the emerging bio-security risks posed by artificial intelligence. The four domains framework categorises biosecurity risks driven by AI. This four-domain framework includes securing AI-Augmented Biosdesign tools, which lower the expertise requirement to engage in unregulated and potentially hazardous biological design, enhancing responsible use of LLMs for Dual-Use research, managing AI-driven misinformation and disinformation during a biological crisis or outbreak, and addressing the data and infrastructure vulnerability associated with the cyber-bio risks.

This issue also includes two book reviews. The book review by Dr. Mayuri Banerjee analyses '*Where did the COVID-19 virus come from? The mystery-solving race' by Dr. Monali C. Rahalkar-Bahulikar and Dr. Rahul A. Bahulikar*. In the book review, she discusses the continuing debates surrounding the origins of COVID-19 and reflects on the broader policy implications of gain-of-function research, laboratory biosafety, and global scientific transparency.

In the second book review, Dr. Maria Espona reviews the book '*Preventing Weaponization of CNS-acting Chemicals: A Holistic Arms Control Analysis' by Michael Crowley and Malcolm Dando*. The review highlights its warning about the security risks posed by CNS-acting agents and its proposal for a holistic arms control framework. Dr. Espona also explains that the book traces the historical development and potential misuse of such agents and examines the relevant legal and regulatory regimes. The book also argues that effective governance must go beyond single treaties to include scientific, medical, and wider policy communities.

This issue also features sections like "Chemical-Biological News." With feedback from our readers, we aim to publish future editions focusing on topics of particular concern.