

EMPOWERING AFRICA'S FUTURE: THE NEXT FIVE YEARS OF BIOSAFETY AND BIOSECURITY



Delegates at the End of Biosafety and Biosecurity 5-Year Strategic Plan Review and Validation Meeting

BIOSAFETY AND BIOSECURITY IN ACTION: KEY HIGHLIGHTS FROM MAY

Youth Contribution Highlighted in Lusophone Africa Biosecurity Workshop

Since its launch in April 2019, Africa CDC has been actively advancing the [Biosafety and Biosecurity Initiative \(BBI\)](#) to strengthen health security across the continent. The five year review of this initiative took place in Addis Ababa, Ethiopia, on 27-28 May 2025, gathering stakeholders in biosafety and biosecurity from across the continent and beyond. Representatives from African Union Member States; chairs of the five Regional BSBS Technical Working Groups; delegates from three regional Centres of Excellence; the Examination and Certification Committee, and regional institutions- including the World Health Organization (WHO), the West African Health Organization (WAHO), the World Organisation for Animal Health (WOAH), Global Partnership members, and BSBS partners-convened to identify priorities for the upcoming 2025-2030 strategy.

Prior to this meeting, AFRICA CDC conducted a series of consultative workshops to assess the status of biosafety and biosecurity implementation across the continent, culminating in a [Five-Year Strategic Plan \(2021-2025\)](#) based on identified capacity gaps and priorities. The BBI has been made possible through the support of Canada's Weapons Threat Reduction Program, the World Bank, and African Union Member States.

Priorities to guide Africa CDC's biosafety and biosecurity agenda include strengthening national legal and regulatory frameworks, building capacity for laboratory biosafety and pathogen control, and promoting secure and ethical research and development practices. The new strategy will focus on raising regional awareness of biosafety and biosecurity, while supporting the establishment of National BSBS Technical Working Groups and Associations to drive local implementation and institutionalisation. Additionally, priority will be given to the developing a sustainable funding framework to assist Member States in transitioning from external dependence to domestic resource mobilisation and to foster stakeholder engagement across the One Health sector for enhanced effectiveness and coverage of biosafety and biosecurity interventions throughout the continent.

Lisbon hosted a regional workshop titled "Strengthening Biosafety, Biosecurity and the Biological Weapons Convention in African Lusophone Countries", held under the framework of the [SIMBA-Luso project](#) (Signature Initiative to Mitigate Biological Threats in Africa Lusophone Countries) from 27th to 29th May 2025. The event, attended by one of our members, [Delfina Hlashwayo](#), brought together experts from civil, academic, and military institutions in Angola, Mozambique, Guinea-Bissau, Cape Verde, and São Tomé and Príncipe, as well as representatives of international organizations. Key topics covered in the workshop included:

- o Biological risk management,
- o The impacts of climate change
- o CBRN-related disinformation and laboratory infrastructure planning
- Professional certification tools available in Portuguese including the Portuguese version of WHO's RAST tool were also presented at this event.
- Delfina was invited to share her experience as the only African lusophone alumna to date. She highlighted how the fellowship influenced her career path and her on-going work in biosecurity and science diplomacy in collaboration with other Y4B fellows, emphasizing the promotion of the peaceful and responsible use of biological sciences.

Early-career scientists play a vital role in advancing biosecurity diplomacy and research. The involvement of young

professionals from Lusophone Africa in such initiatives should be significantly enhanced recognizing that broader engagement depends not only on individual interest, but also on greater visibility and accessibility of these opportunities. Delfina's commitment to raising awareness among young scientists in the region about applying and engaging in the responsible use of science emphasizes the crucial role of youth representation in Biosafety and Disarmament.



Photo: Remi Bacouillard (UNODA), Delfina Hlashwayo (UNODA Youth 4 Biosecurity Alumna) and Sylvain Fanielle. (UNODA).

- The Zambia BSBS Technical Working Group has established a provincial BSBS mentorship program as further capacity building in North-Western Province. This effort is spearheaded

by the provincial BSBS team, conducted via virtual meetings and recorded YouTube sessions for transfer of Material. Key successes attained thus far include:

- o Completion of 11 virtual training sessions conducted by the mentor using Zoom, Google Meet, and YouTube.
- o Development of BSBS Manuals tailored facility requirements
- o Development of 22 supporting forms for documenting and standardizing BSBS activities.
- One of our members, a [Youth for Biosecurity alum](#)- is developing a Biosafety and Biosecurity Manual to Equip Students for Safe and

Responsible Science for students in Botswana.

The Manual is envisioned as a practical and timely resource that will help students work safely, ethically, and confidently in laboratory and research environments. It aims to instil a safety-first mindset in the next generation of life scientists and health professionals.

Why it matters:

- o Laboratories can pose real risks ; students must learn how to prevent accidents and protect themselves and others.
- o Biosafety and biosecurity are global priorities - from pandemic prevention to bioethics- so students have a crucial

role to play.

- o Early training can build a lifelong culture of safe and responsible research practices.

Key Content:

- o Core concepts: Definition and explanations of biosafety and biosecurity terms
- o Risk assessment tools and emergency response procedures
- o Ethical considerations and dual-use concerns
- o Case studies, real-world scenarios, and interactive checklists
- o Links to self -learning materials

The manual will be available soon in both print and digital formats on August 2025.

BEYOND COVID-19:

THE PANDEMIC TREATY AND FUTURE PREPAREDNESS

On 20 May 2025, a milestone in global health security was reached as member states of the World Health Organization (WHO) formally adopted the world’s first-ever [Pandemic Agreement](#) by consensus following three years of negotiations prompted by shortcomings and disparities in national and global COVID-19 responses. This decision was made at the 78th World Health Assembly, WHO’s peak decision making body. The WHO Pandemic Agreement establishes key principles, strategies, and mechanisms to enhance international coordination across multiple sectors, reinforcing the global health framework for pandemic prevention, preparedness, and response. A crucial aspect of this agreement is ensuring equitable and timely access to vaccines, treatments, and diagnostics. Below are highlights from the text for which agreement has been reached by the Intergovernmental Negotiating Body: The full text can be accessed [here](#)

Article 4: Pandemic Prevention and Surveillance

Each Party shall take into account its public health priorities and relevant international standards, and guidelines, covering, among others:

- (i) Laboratory Biological Risk Management;** Through biosafety and biosecurity training and practices, and ensuring the safety and security of transportation, in accordance with applicable international and national regulations and standards; and
- (ii) Measures to Address Public Health Risks:** associated with the emergence and spread of pathogens that are resistant to antimicrobial agents, facilitating affordable and equitable access to antimicrobials and promoting appropriate, prudent, and responsible use across relevant sector

Article 9: Research and development (R&D)

This article urges Parties to collaborate in building and maintaining diverse R&D capacities worldwide—especially in developing countries. It promotes research collaboration, open access to information, and the rapid sharing of research results during global public health emergencies, such as pandemics. In addition, it encourages accelerating innovative research and development in line with biosafety and biosecurity obligations, laws, and regulations, while taking into account relevant standards and guidance.

Article 12: Establishment of the WHO Pathogen Access and Benefit-Sharing (PABS) System

Article 12 establishes the PABS System, a multilateral framework aimed at ensuring the safe, transparent, and equitable exchange of pathogen materials and associated sequence data between states. This framework acknowledges states’ sovereign rights over their biological resources and the need for collective action against public health risks. It emphasizes the rapid sharing of materials and sequence information on pathogens with pandemic potential, along with the fair distribution of benefits derived from their use in public health. The article also calls for enhanced laboratory biological risk management—including biosafety and biosecurity training and secure transport—and for measures to mitigate risks posed by antimicrobial-resistant pathogens, ensuring affordable access and responsible use of antimicrobials.

This milestone agreement provides the impetus to improve preparedness and mitigation of global health risks collaboratively.

Uniting for Progress:

Key Regional and International Initiatives

News highlights, events, and updates on biosecurity and health security in the region or topical to the region. Note that these are not exhaustive.

- The official SABBN website has been launched!! [Visit the site](#) and check in for more resources as we continue to build it out.
- [African Society for Laboratory Medicine \(ASLM\) Ambassador program](#) Applications are open for the ASLM Ambassador Program. This initiative is designed to promote awareness and visibility of ASLM’s mission and initiatives, strengthen engagement with key stakeholders in laboratory medicine and public health, support efforts to expand membership and fostering partnerships, and advocate for improved diagnostics and laboratory services across Africa. [[Apply here](#)].
- SynBio AFRICA will be host the [SBA.4 International Synthetic Biology and Biosecurity Conference in Africa](#) in Kigali, Rwanda. Abstracts should be emailed to abstracts@synbio.com . The deadline for submission is 13 June 2025.
- Applications are now open for the **‘Introduction to Biosecurity’ course** which offers valuable knowledge to address one of the world’s most pressing challenges-from biosecurity and pandemic preparedness to the impact of emerging technologies and relevant interventions. [[Apply here](#)] Deadline: 10 June 2025.
- **WHO Online Course on Dual Use Research and the Responsible Use of Life Sciences:** The World Health Organization has launched a self paced online course on Dual Use Research and the Responsible Use of Life Sciences. The course examines dual use research (DUR) issues and discusses ways to identify and mitigate potential biorisks through a multisectoral and cooperative approach that promotes the safe, secure, and responsible use of the life sciences (RULS) to prevent accidents and both unanticipated and deliberate misuse of biological materials, knowledge, and emerging technologies.[[Register Here](#)].
- [NTI’s Ninth Annual Next Generation for Biosecurity Competition:](#) NTI | bio hosts this competition to provide a platform for the next generation of global leaders in biosecurity to develop original concepts and share them with the wider biosecurity community. This year’s competition prompt is “How to define ‘biological weapons’ given the ever-evolving bio-threat landscape’. Submissions are due by 13 July 2025.