

TOWARDS MANDATORY EDUCATION IN SUPPORT OF BIOSECURITY CODES OF CONDUCT

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OUTLINE



- A. Previous Work on Codes of Conduct
 - ▣ Slides 1 - 5
- B. The Meeting in Tianjin
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- C. Next Steps
 - ▣ Slides 9 - 10

A1. Development of a Code of Conduct



- *Netherlands (2008) BWC/MSP/2008/MX/WP.8*
 - ▣ Quoting Brian Rappert, Briefing Paper No. 13 (Second Series), University of Bradford
 - ▣ Aspirational Codes
 - Set standards (Code of Ethics)
 - ▣ Advisory Codes
 - Provide guidelines (Code of Conduct)
 - ▣ Enforceable Codes
 - Prescribe or proscribe certain acts (Code of Practice)

A2. Biosecurity Awareness in UK Universities in 2005

- *Bradford Briefing Paper No.16 (Second Series)*
 - “64. There was little evidence from our seminars that participants:
 - a. regarded bioterrorism or bioweapons as a substantial threat;
 - b. considered that developments in the life sciences research contributed to biothreats;
 - c. were aware of the current debates and concerns about dual-use research; or
 - d. were familiar with the BTWC.”

A3. The Need for Mandatory Education

- Russian Federation (2005) *Basic Principles (Core Elements) of the Codes of Conduct of Scientists Majoring in Biosciences.* BWC/MSP/2005/WP 2.
 - “Scientists should:
 - (i) Be well informed of, and apply in their practice, international and national regulatory legal instruments on the prohibition of biological and toxin weapons;
 - (ii) Be involved in raising biologists’ awareness of international and national obligations related to the prohibition of biological weapons, including criminal liability for their violation;
 - (iii) Assist in improving and strengthening international legally binding arrangements banning biological weapons and their proliferation;
 - (iv) Participate, within their competence, in the development of national regulatory legal acts aimed at using scientific and practical results of biological research solely for peaceful purposes...”

A4. The Education Module Resource



□ Available at:

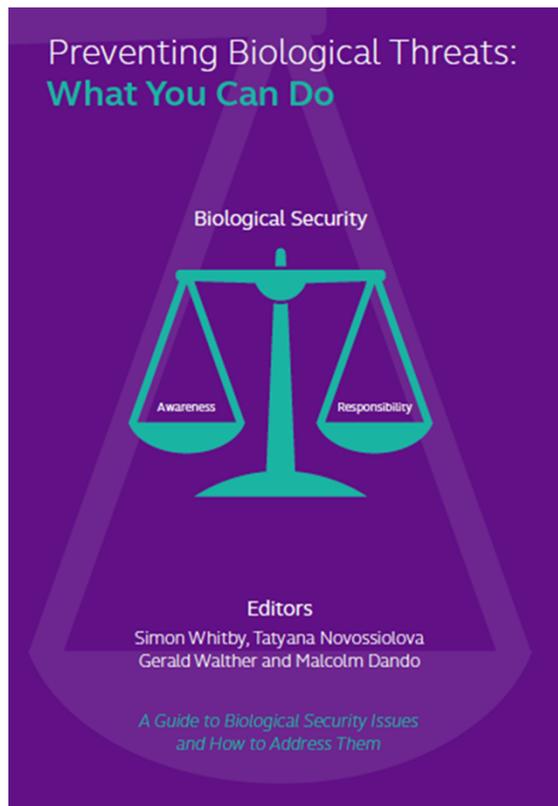
<https://fas.org/programs/bio/educationportal.html>

A. Introduction and Overview (Lecture 1)

- B. The Threat of Biowar and Bioterror, and the International Prohibition Regime (Lectures 2 – 10)
- C. The Dual-Use Dilemma and the Responsibilities of Scientists (Lectures 11 – 18)
- D. National Implementation of the BTWC (Lectures 19 – 20)
- E. Building an Effective Web of Prevention (Lecture 21)

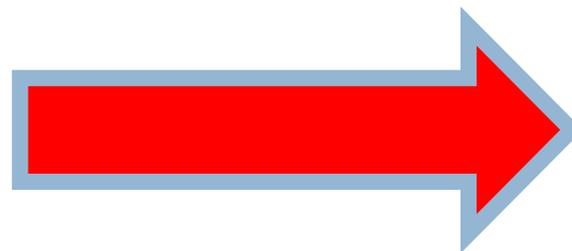
A5. Preventing Biological Threats: What You Can Do

Preventing Biological Threats

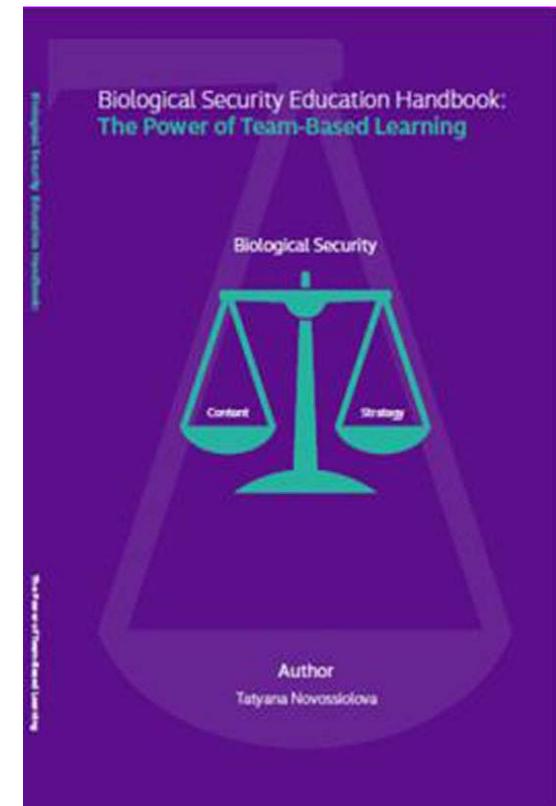


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<http://www.brad.ac.uk/social-sciences/peace-studies/research/publications-and-projects/guide-to-biological-security-issues/>



Biological Security Education Handbook: The Power of Team-Based Learning



B6. Fitting the Codes Together



- *OIE Presentation at Tianjin*
 - ▣ 1. An International Code of Ethics;
 - ▣ 2. National Codes of Ethics based on the International Code;
 - ▣ 3. Professional Advisory Codes based on the National Ethical Codes;
 - ▣ 4. Institutional Enforceable Codes where necessary (e.g., for Local Ethics Committees to deal with DURC);
 - ▣ Various Codes therefore become part of the overall system of regulation.

B7. The Hague Ethical Guidelines

□ Core Elements

- Sustainability, Education, Awareness and Engagement, Ethics, Safety and Security, Accountability, Oversight, Exchange of Information

□ Education

- “Formal and informal education providers, enterprise, industry and civil society should cooperate to equip anybody working in chemistry, and others, with necessary knowledge and tools to take responsibility for the benefit of humankind, the protection of the environment and to ensure relevant and meaningful engagement with the general public.”

B8. CWC Advisory Board on Education and Outreach, 2018

- “One of the most important implications of this research is that “active learning” methods, as opposed to traditional, lecture-based instruction in which students are passive recipients, produce better and longer lasting results. The results hold for factual information and for more fundamental concepts. The methods can be applied in many settings, including the classroom, the laboratory, or the field.”

C9. Next Steps (i): Code and Education

OPCW (2018) *Future Priorities*, RC-4/WP.1, The Hague, July

- 35. The Secretariat should develop a forward-looking, long-term strategic blueprint and roadmap for education and outreach, commensurate with the needs and requirements of the Organisation's core mandate and future priorities. Mechanisms should be put in place to evaluate the results of engagement activities.
- 36. Public engagement, education, and awareness-raising must become an integral part of OPCW activities, taking into account advice by the Advisory Board on Education and Outreach (ABEO), in order to strive for maximum public awareness, education, and augmented engagement of external partners.

C10. Toward a Comprehensive Curriculum for Biological and Chemical Security



There is a great deal of literature on biosecurity and the problem of dual use. It would not be an impossible project to convert a selected core of this literature into sets of TBL exercises in order to simplify the problem of teaching courses at University level.