



International Biosafety Working Group

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Background

The establishment of the International Biosafety Working Group (IBWG) was initiated in the Fall of 2001 in response to identifying a need for an international forum to discuss a wide range of important biosafety issues. This was a time of unparalleled change and challenge for our profession. Recent bioterrorism letter incidents had dramatically altered our biosafety work environment. The IBWG was seen as a unique opportunity to establish professional acquaintances, meet new colleagues, and share biosafety knowledge, ideas, and innovations.

Maureen Ellis, Canadian Office of Laboratory Security and President-elect of ABSA, was asked to coordinate this group. The Office of Laboratory Security participated in many international biosafety networks and working groups and was a recognized resource for professional and scientific expertise in international biological safety. IBWG met for the first time immediately prior to ABSA's 44th Annual Biological Safety Conference in New Orleans on October 21, 2001. It was clear that we needed to work together on biological safety issues related to guidelines, training, education, and outreach. Key biosafety priorities for the group were identified for further discussion. The second meeting, chaired by Maureen Ellis, then ABSA President, was held on January 26, 2002, in Atlanta immediately prior to the CDC Biosafety Symposium.

Mission

The IBWG offers a unique opportunity for biosafety professionals from different nations to coordinate and develop a global biosafety agenda aimed at

international harmonization, sharing of information, development of common standards, and collaboration in all aspects of biological safety. Its mission is to support and promote biosafety on national and international levels through collaboration among national and regional biosafety organizations worldwide. Its strategic goals are:

- Creation, coordination, and empowerment of an international biosafety advisory body
- Establishment, documentation, maintenance, and communication of standardized biosafety protocols and procedures
- Establishment of linkages with key partners
- Development of an inventory of biosafety laboratory and field best practices and sharing expertise among national biosafety organizations
- Supporting applied biosafety science and research

Membership

IBWG is composed of representatives from national and international organizations or groups with a recognized mandate in biosafety. It includes representatives from:

- European Biological Safety Association (EBSA)
- Asia Pacific Biosafety Association (APBA)
- American Biological Safety Association (ABSA) and its international affiliates:
 - ◆ ABSA Canada
 - ◆ Associacao Nacional de Biosseguranca, Brasil (ANBio)
 - ◆ Japanese Biosafety Association
- International Veterinary Biosafety Working Group (IVBWG)
- International Level 4 Users Group

- Pharmaceutical Biosafety Group
- Observers from the World Health Organization, the Pan American Health Association, biosafety professionals from Russia, the Centers for Disease Control, and others who share IBWG's goal of promoting biosafety

The IBWG is seen by these groups as a significant partner in expanding their efforts internationally. The biosafety world is small and by bringing biosafety professionals together on an international level our contributions can be large. Together we can mentor those new to the field of biosafety and build biosafety capacity on a global scale.

Meetings

The Working Group holds regular meetings and contacts (e-mail, conference call, etc.) to discuss strategic goals, objectives, current issues, funding and resources, communication flow, and priority-setting. Meetings are usually held twice a year in parallel with meetings of national or international biosafety conferences (e.g., EBSA, ABSA). The next meeting will take place this fall in Vancouver, Canada, immediately prior to ABSA's 48th Biological Safety Conference.

Activities

One of the first achievements of the IBWG was the development and publication of an *International Compendium of Regulations, Guidelines, and Information Sources* pertinent to the field of biosafety. Under the leadership of Jairo Betancourt and Esmeralda Prat, key information from around the globe was gathered together and collated by subject matter and by country of source. Thanks also to Jasmine Boudreau of the Office of Laboratory Security for designing the cover for the first published edition.

To make the compendium more accessible to biosafety professionals worldwide, and given the dynamic nature of the document and the continuous evolution of the field of biological safety, it was decided that an electronic web-based version would also be produced. This initiative is an example of the biosafety community's growing commitment to shar-

ing information, knowledge, and expertise across borders. Clearly, this commitment is helping us to improve the quality of biosafety practices and standards on a global scale. The International Compendium can be accessed at www.ebsa.be under "International Biosafety." Additional items for inclusion and updates should be forwarded to Jairo (jairob@miami.edu) or Esmeralda (Esmeralda.Prat@bayercropscience.com).

The issue of biological safety professional registration has also been discussed by the IBWG. It was felt that it would be worthwhile to explore further the possibility of an international Biosafety Professional Registration (similar to ABSA's Registered Biosafety Professional program but with an international focus). Jonathan Richmond and Helmut Bachmayer have been tasked to develop draft criteria for further discussion. All IBWG members have been requested to submit to Helmut and Jonathan any proposed criteria that they would like considered.

Another key activity is the group's ongoing effort to expand professional and public awareness of biological safety through effective communication. Strong communication and the collaborative process that flows from it are essential to establishing biosafety guidelines and standards, to setting up effective programs and practices, and to developing research and information-sharing networks. The hosting of the IBWG on EBSA's web site has been an enormous assistance to the Working Group, and the secretariat would like to thank Gary Burns and EBSA for their continued support. Further development of an IBWG stand-alone web site was identified as a key priority for the secretariat and work has begun on its development. It promises to be an effective and user-friendly tool for all IBWG members.

Another important initiative has been the IBWG's effort to forge stronger links with biosafety-related organizations and their members. The Group welcomed its newest member, the Asia Pacific Biosafety Association (APBA), at its last meeting held immediately following the EBSA Biological Safety Conference in April 2005. The establishment of the APBA is a crucial step in developing a more fluid and cohesive response to biosafety issues associated with emerging diseases in that region. The associa-

tion is currently holding a competition to design its logo. Send in your submissions via their web site at www.a-pba.org.

Conclusion

In a short amount of time, the IBWG has established itself as an excellent forum for international associations to interact and exchange information with each other. It has taken a number of significant steps towards the ambitious initiatives that were identified during its first year of unprecedented challenge. Throughout this process IBWG members have demonstrated flexibility, ingenuity, and perseverance. These qualities have enabled us to enhance our knowledge, to improve biosafety standards and procedures, and to build more effective working relationships.

Thanks to your efforts, and those of many IBWG members across the globe, we have emerged a stronger, more diverse, and more professional international biosafety organization. We look forward to hearing your views on our progress and your ideas on how we can continue to respond to the biosafety challenge in the coming years.

Acknowledgements

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Fact Sheets on Terrorist Attacks

The National Academies is preparing, in cooperation with the Department of Homeland Security, fact sheets on four types of terrorist attacks. Drawing on our many reviewed publications, the expertise of our members, and the knowledge of other esteemed authorities, the fact sheets will provide reliable, objective information. Go to: www.nae.edu/nae/pubundcom.nsf/weblinks/CGOZ-642P3W?OpenDocument.

They are being designed primarily for reporters as part of the project *News and Terrorism: Communicating in a Crisis*, though they will be helpful to anyone looking for a clear explanation of the fundamentals of science, engineering, and health related to such attacks.

These fact sheets are a product of the National Research Council Division on Earth and Life Studies.

Biological Attack (pdf file, 277 KB)—Where do biological agents originate? What's the difference between "infectious" and "contagious"? How long after exposure will symptoms appear?

Chemical Attack (pdf file, 72 KB)—What are the different origins of toxic chemicals that could be used? How do chemical toxicities vary? What are the practical steps to take if there's a chemical release?

Radiological Attack (pdf file, 68 KB)—What are radiological dispersal devices, a.k.a. "dirty bombs"? How are they different from nuclear bombs? What are their physical and psychological health effects?

Nuclear Attack (pdf file, 192 KB) **NEW!**—What is radioactive fallout, and how is it dangerous? What are the short-term and long-term effects of radiation exposure? What is the likely size of a nuclear explosion from an attack by terrorists?