Discussion within BWC meetings in relation to disease surveillance

The 1972 Biological and Toxin Weapons Convention (BWC/BTWC) – the international treaty that prohibits biological weapons – has hosted considerable discussions on disease surveillance during its meetings over many decades. These include the five-yearly Review Conferences, the Ad Hoc Group (1994-2001), and the inter-sessional work programmes that started in 2003 and meet annually between Review Conferences. The annual meetings have usually consisted of a Meeting of Experts (MX) during the middle of the year [or, since 2018, a series of shorter MXs held back-to-back] and a Meeting of States Parties (MSP) at the end of the year.

Disease surveillance was described in a background paper for the 2004 MX by the secretariat – the forerunner to the Implementation Support Unit (ISU) – as ‘the routine and continuous collection of passive and active data of a given population (human, animal, plant) followed by analysis, interpretation and dissemination of information to detect the occurrence of disease for control purposes or for public health actions’.

That disease surveillance and related activities support the BWC was highlighted in a 2009 MSP working paper summarizing an EU-sponsored workshop which noted: ‘Participants emphasized that improving cooperation for disease surveillance, detection, diagnosis and containment would directly support the security and non-proliferation objectives of the BWC, as well as supporting the development of the peaceful applications of biological science and technology in accordance with Article X’.

The public health overlaps
An attack with biological weapons that produced casualties would have a significant public health impact. If a biological attack were to be carried out using a disease that has limited spread from one human to another, such as anthrax, the casualties would be limited to those exposed to the pathogens — the disease-causing micro-organisms — from the delivery system. A biological attack using a disease with significant human-to-human transmission, such as smallpox, could mean that disease would spread widely across the population; the measures for detecting and controlling this spread would be the same as for naturally occurring disease. Similar concerns relate to animal and plant diseases.

Exchanges of information on outbreaks of infectious disease have been long recognised as helping the processes by which any deliberate outbreak might be distinguished from something naturally occurring. The BWC arrangement for doing this has been through Confidence-Building Measure (CBM) Form B, initially agreed in the Second Review Conference (1986) and amended five years later to be an ‘Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins’ with a focus on outbreaks ‘that seem to deviate from the normal pattern’. For human diseases, much more detail is now exchanged through the updated World Health Organization (WHO) International Health Regulations (IHR), agreed in 2005 and entering into force in 2007. The Seventh BWC Review Conference (2011) described the IHR as ‘important for building capacity to prevent, protect against, control and respond to the international spread of disease; such aims are compatible with the objectives of the Convention’. This has reduced the salience of CBM Form B.
The Eighth Review Conference (2016) recognized the ‘fundamental importance’ of enhancing international cooperation and agreed on the value of ‘working together to promote capacity building in the fields of vaccine and drug production, disease surveillance, detection, diagnosis, and containment of infectious diseases as well as biological risk management. The Conference affirms that building such capacity would directly support the achievement of the objectives of the Convention.’ It also acknowledged ‘the need to address the lack of ready operational capacity’ as a lesson from the Ebola Virus Disease (EVD) outbreak in west Africa.

The 2004 WHO study, Public health response to biological and chemical weapons – WHO guidance, underscored that the best counter to deliberately caused disease is to have effective understandings of and responses to naturally or accidentally occurring disease means that there is an overlap in activities between the WHO and the BWC. Some delegations to BWC meetings have expressed desires to avoid duplication of activities. Concerns have occasionally been raised about any roles that might be perceived as bringing the health body into the security realm with potential negative consequences for other health work.

Relevant resources from BWC meetings
The two key years of work on disease surveillance in BWC meetings were in 2004 and 2009. In more recent years, the topic of disease surveillance has not been an agenda item in its own right but has been raised under other agenda items.

One of the two topics on the agenda for the annual meetings in 2004 was ‘strengthening and broadening national and international institutional efforts and existing mechanisms for the surveillance, detection, diagnosis and combating of infectious diseases affecting humans, animals, and plants’. During the two-week MX there were 83 working papers submitted, the majority of which related to this topic. The papers are listed in the report of the meeting. Many papers focused on aspects of national systems to detect and respond to diseases. Examples of papers in relation to human diseases include: Australia [WP.25], Germany [WP.2, WP.6], Italy [WP.62], Netherlands [WP.73], South Africa [WP.12], Ukraine [WP.47, WP.48] and UK [WP.21]. Examples in relation to animal diseases include: Australia [WP.28, WP.29, WP.32], Italy [WP.61, WP.67], Russia [WP.45], South Africa [WP.14], Thailand [WP.65] and UK [WP.22]. For plant diseases examples include: Australia [WP.30, WP.33], Japan [WP.34], South Africa [WP.13] and UK [WP.23]. Some countries submitted papers covering more than one of these areas, for example: China [WP.18], Cuba [WP.52], Germany [WP.5, WP.9] and Sweden [WP.16].

Canada produced a short series of papers on lessons learned from earlier outbreaks, including SARS [WP.78, WP.79, WP.80]. The report of the meeting also includes a compilation of suggestions made during the MX.

The annual meetings for 2009 included a topic of capacity building to support disease surveillance. Working papers for the MX included Iraq [WP.28] reporting on its national system. There were joint papers illustrating capacity building activities such as Georgia/USA [WP.12] and Indonesia/Norway [WP.5] as well as a number of national papers. A total of 28 working papers and 5 ISU background papers are listed in the report of the meeting together with a compilation of suggestions made. The ISU prepared a compendium of national approaches based on information presented to the MX and MSP.

The Republic of Korea gave a presentation at a 2015 MX side event that included details of disease surveillance in relation to the MERS outbreak that year which has particular relevance for responses to the current pandemic.

This is the fourth in a series of reports looking at the impacts relating to the COVID-19 pandemic in relation to the BWC published by the BioWeapons Prevention Project (BWPP), a global network of civil society actors dedicated to the permanent elimination of biological weapons and of the possibility of their re-emergence. These reports follow the style of the daily reports that have been produced for all BWC meetings since the Sixth Review Conference in 2006 and are posted to <http://www.bwpp.org/covid.html> where links can be found to background materials that readers may find useful as well as to an email subscription link. The reports are prepared by Richard Guthrie, CBW Events, who is solely responsible for their contents. The author can be contacted via <richard@cbw-events.org.uk>. Financial support for these reports has been gratefully received from the Department of Foreign Affairs and Trade of Ireland.