## **12.** Chemical, biological and health security threats

## Overview

In 2021 the Covid-19 pandemic continued to wreak, in the words of the World Health Organization (WHO), 'unprecedented devastation on global population health'. By the end of 2021, the WHO had received reports of over 286 million cases of Covid-19 worldwide, and there had been over 5.4 million recorded deaths. The actual number of infections and recorded deaths were likely to be considerably higher from undiagnosed cases and generally poor Covid-19related data. The pandemic's global socio-economic impacts included economic recession, millions of job losses, extreme inequity, political divisions, and educational losses (see section I). The origins of the pandemic continued to be a politically divisive subject. A report by a joint WHO-China team in March 2021 concluded that of four origin hypotheses the 'most likely' pathway was that the virus jumped from one animal species to another before infecting people. However, the report was heavily criticized and the WHO concluded that all theories remained open. United States intelligence assessments were also inconclusive about the virus's origin but agreed that it was not developed as a biological weapon and that the Chinese government did not know about it prior to the outbreak. Although the origin question remained unresolved at the end of 2021, the WHO had established a permanent international scientific advisory group for origins of novel pathogens (SAGO), which was expected to play a vital role in the next phase of studies into the virus's origin.

The Covid-19 pandemic, and its public and socio-economic impacts, has shown that the international community needs to be much better prepared in responding to possible future pandemics. In December 2021, the World Health Assembly agreed to start a global process on a new international treaty to strengthen pandemic prevention, preparedness and response.

The pandemic also continued to impact the functioning of key biological disarmament and non-proliferation activities in 2021, as discussed in section II. Nevertheless, intersessional meetings of experts and the meeting of states parties under the 1972 Biological and Toxin Weapons Convention (BWC) that had been postponed in 2020 were held in 2021. While these meetings revealed areas of broad agreement among states on how best to strengthen the BWC, they also demonstrated significant areas of disagreement, with broader geopolitical tensions among China, Russia and the USA affecting the discussions. In response to US allegations of BWC non-compliance, China and Russia more closely coordinated their BWC diplomacy and counter-allegations against the

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USA. Finding sufficient common ground to successfully negotiate substantive outcomes will be challenging at the ninth review conference in 2022 but—with each of the three states articulating plans that address issues of compliance, transparency and accountability—there is potential for a workable compromise solution.

Disagreements within the BWC were largely mirrored within the 1993 Chemical Weapons Convention (CWC), including continued efforts by a handful of actors to stop, hinder, undermine and contest the authority and work of investigation teams within the Organization for the Prohibition of Chemical Weapons (OPCW) and the United Nations (see section III). Investigations into Syrian chemical weapons use continued in 2021; although no new instances were reported, chemicals weapons use was confirmed or likely in 20 out of 80 cases investigated to date. By the end of 2021, according to the OPCW, Syria's declarations continued to contain 'identified gaps, inconsistencies, and discrepancies'. Divisions over the investigation into chemical weapons use in Syria, and the 2020 decision to invoke the compliance procedure under CWC Article XII, were again at the forefront of discussions at the second session of the 25th conference of the states parties (CSP) to the CWC in April 2021, and at the 26th CSP in November. These disagreements point to investigations becoming more contentious and complex—and important.

Outside of Syria, there were further developments in 2021 related to toxic chemicals from the novichok group of nerve agents, as well as other developments in the OPCW, covered in section IV. The poisoning of Russian citizen Alexei Navalny with a novichok nerve agent in August 2020 had still not been officially investigated or resolved by the end of 2021, and it continued to cause political tensions between Russia and a number of Western countries. The pandemic again disrupted routine and other inspections by the OPCW Technical Secretariat throughout 2021. Political divisions were still evident at the two CSPs and in OPCW Executive Council meetings, especially over the re-appointment of the OPCW director-general and the budget for 2022-23, as well as efforts to address the threat from chemicals that act on the central nervous system. On a more positive note, construction of the new Centre for Chemistry and Technology started in June 2021. The United States is the only declared possessor state party with chemical weapons yet to be destroyed, but it is expected to complete its remaining destruction activities (less than 3 per cent of its declared stockpiles) within the current timelines.

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