

MONTHLY DIGEST

CHEMICAL AND BIOLOGICAL NEWS DIGEST

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CHEMICAL AND BIOLOGICAL NEWS DIGEST

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ARMS CONTROL**OPCW Director-General Addresses Global CBRNe Conference**

The OPCW Director-General, Ambassador Rogelio Pfirter, delivered the keynote address to the 2nd Annual CBRNe World Conference and Exhibition, a gathering of 350 experts from around the world that was held from 28-30 October 2009 in The Hague.

The Director-General's address, "A Multi-Stakeholder Approach to Implementing the Chemical Weapons Convention", provided an overview of OPCW activities in which the Organisation collaborates with a variety of stakeholders globally and at national level to ensure full implementation of the CWC.

An OPCW representative also spoke to the conference on the issue of safety and security at chemical plants.

Source: <http://www.opcw.org/news/news/article/opcw-director-general-addresses-global-cbrne-conference/>

DISARMAMENT**Researcher says ICC needs stronger biological, chemical weapons provisions****Paul Tinder, 13 November 2009**

In November, the States Parties to the International Criminal Court will come together in The Hague to

prepare for their review of the Rome Statute, the ICC's governing document, in Uganda in 2010. The primary goal of this meeting is to assess how the ICC and its governing documents can be improved, wrote Malcolm Dando, a biologist, who researches international security at the University of Bradford's Department of Peace Studies in the United Kingdom. He wrote this column for the Bulletin of the Atomic Scientists.

Although it is rare for biological and chemical weapons to be considered in general discussions about the ICC, Marlies Glasius, an international relations expert at the University of Amsterdam, recently revisited the potential for these weapons (and more broadly, weapons of mass destruction) to be criminalized within the Rome Statute and whether there was a role for the anti-biological and chemical weapons civil society community in making this happen.

The concern shouldn't be whether the small community of anti-biological and chemical weapon advocates is aware of the ICC and its potential to enhance Biological and Toxin Weapons Convention (BWC) and Chemical

In This Issue

This month is a grim reminder to the Bhopal Gas tragedy, 25 years ago. Stringent laws on industrial safety procedures still remain urgency in India. The Chemical Weapons Convention has been recognized as a success story towards global chemical disarmament.

Meanwhile a global effort has been initiated to criminalise the use of biological and chemical weapons and bring the two under the International Criminal Court weapon clauses.

There is also a growing concern of cyber attacks and biological warfare in present times.

We welcome our reader's feedback.

Editor

Weapons Convention (CWC) provisions. Instead, it's how to ensure that civil society is present and vocal at the meetings on the ICC's governing statute."

One might argue that this debate is academic — the use of WMD would certainly cause the types of death and injury that should come under the purview of the ICC even without specific mention.

But Glasius counters that without explicit criminalization of WMD, a prosecutor might be inclined to steer clear of a "politicized" investigation defined by implicit, rather than explicit, interpretations of the Rome Statute. On this point specifically, she indicates that it may be possible to make progress toward including WMD language in an updated Rome Statute.

For example, Belgium and other states have proposed that explicit references be made to the BWC and CWC in the ICC weapons clauses. Furthermore, the Coalition for the Criminal Court has suggested that, regardless of the outcome of the Belgian proposal, "the facilitators should consider the creation of a permanent working group on weapons, methods and means of warfare" in order to cope with the constant developments (e.g., in the life sciences revolution) that require legal attention.

Although several non-ICC member states — China, India, Israel, Pakistan, Russia and the United States — won't have a vote in these meetings, it's worth noting that they may have observers in Uganda and therefore will be kept in the loop when it comes to negotiations and outcomes.

A draft treaty to comprehensively criminalize biological and chemical weapons was published in 1998 and considerable effort had been expended to obtain advice and support from international legal authorities and states.

An editorial accompanying this draft clearly stated the reasons why such a treaty was required: "The BWC and CWC do not attempt to make the development, production, possession or use of biological and chemical weapons an international crime for which states establish jurisdiction over prohibited acts regardless of the place where they are committed or the nationality of the offender, nor do these treaties contain provisions dealing with the extradition of suspects."

Widespread adoption of a convention such as this draft treaty, or a similar development of the Rome Statute, would add to the web of preventive policies that help

minimize the potential for the development and use of these weapons in the future. Individuals who carried out such activities would do so knowing their actions had international, legal ramifications.

So the concern shouldn't be whether the small community of anti-biological and chemical weapon advocates is aware of the ICC and its potential to enhance BWC and CWC provisions. Instead, it's how to ensure that civil society is present and vocal at the meetings on the Rome Statute in order to demonstrate support for sensible improvements in the ICC governing documents regarding biological and chemical weapons arms control.

Source: <http://www.bioprepwatch.com/news/210917-researcher-says-icc-needs-stronger-biological-chemical-weapons-provisions>

Global Anti-Pollution Report Cites CWC as Success Story

The fourth annual World's Worst Polluted Places report, by the New York-based non-profit Blacksmith Institute, recognizes successful cleanup efforts in some of the most environmentally troubled places in the world, from mining communities and industrial sites in South America and Africa to overcrowded and desperately polluted cities in Asia.

The report's 12 success stories, all of which showed scientifically verifiable improvements in human health and decreases in environmental toxicity, were more the exception than the rule, said David Hanrahan, director of global operations for the Blacksmith Institute. "They are only pinpricks of light in the gloom out there," said Mr. Hanrahan.

Only two success stories in the report are global in scope and represent broad international cooperation: the phase-out of leaded gasoline, and the worldwide ban on chemical weapons. According to the report's section on chemical weapons:

"Destruction programs are ongoing in all seven possessor states, including the two main possessor states, the U.S. and the Russian Federation. (...) Regular inspections of chemical industry as foreseen in the CWC prevent clandestine reproduction of chemical weapons (and) countries that are not members of the CWC are excluded from global chemical trade.

Three primary challenges remain: the safe destruction of remaining stockpiles, the identification and disposal of improperly discarded chemicals, and the acceptance of the treaty among the few remaining countries outside of the treaty.”

Source: <http://www.opcw.org/news/news/article/global-anti-pollution-report-cites-cwc-as-success-story/>

Seventh Regional Meeting of CWC National Authorities in Asia Concludes in Viet Nam

97% of States Parties in the Asia region have now established National Authorities

The Seventh Regional Meeting of National Authorities in Asia was held from 28 to 30 October 2009 in Hanoi, Viet Nam. The meeting attracted more than 50 participants from 30 States Parties as well as a representative from Myanmar, a State not Party.

In a message to the meeting the OPCW Director-General, Ambassador Rogelio Pflirter, thanked the Government of Viet Nam for hosting the event and commended Viet Nam for its strong support to the Chemical Weapons Convention (CWC) and the OPCW. The Director-General stressed the critical role played by National Authorities in ensuring implementation of the CWC at the national level, and highlighted the fact that 97% of States Parties in the Asia region have now established National Authorities.

The regional meeting offered a platform for participating National Authorities and the Technical Secretariat to share information and experiences on different aspects relating to industry verification. Participants exchanged views on enhancing regional and sub-regional cooperation, identified areas for possible cooperation, and held bilateral meetings with OPCW Technical Secretariat staff on national implementation issues.

Source: <http://www.opcw.org/news/news/article/seventh-regional-meeting-of-cwc-national-authorities-in-asia-concludes-in-viet-nam/>

NATIONAL AND INTERNATIONAL

Leftover WW II Chemical Weapons Reported Discovered in Australia

09 November 2009

An apparently forgotten stockpile of mustard blister agent has been discovered in southwest Queensland, Australia, the country's *Sunday Mail* newspaper reported on October 1.

Australia's Defense Department said that 144 undetonated shells were found in the Darling Downs region by a company preparing a mine. The potentially lethal liquid chemical called Mustard H are believed to be carried in some of the shells. The location was formerly the site of a U.S. weapons facility during World War II.

Mustard agent was used during World War I and at times afterward.

Source: http://www.globalsecuritynewswire.org/gsn/nw_20091109_3847.php

Indian Army to deploy more troops along Arunachal border

Arun Joshi, *Hindustan Times*, Jammu
12 November 2009

India is quietly beefing up its defences along the China border in Arunachal Pradesh, even as it publicly downplays the growing diplomatic spat with Beijing over the Dalai Lama's visit to the state.

The Indian Army will deploy its new 15,000-strong 56 Division in Arunachal, which China claims as its own, within four weeks, a senior defence official told *HT*, requesting anonymity.

Simultaneously, it has put out a Request for Information (RFI) for acquiring 300 lightweight tanks that can be deployed in the North East and Jammu & Kashmir.

A second division will be deployed in Arunachal Pradesh in the next 12-18 months, the official added.

The army's RFI states the light tanks should be capable of destroying bunkers and soft-skin vehicles up to 3,000m away and should have armour-piercing anti-tank guided missiles and anti-aircraft machine guns.

The RFI, which is in HT's possession, also stipulates these tanks should "have protection against nuclear, chemical and biological warfare".

In recent months, India activated three airfields along the 646 km Line of Actual Control (LAC) with China, last used during the 1962 war with China. The army and the Indo-Tibetan Border Police have also stepped up patrolling along the LAC.

Source: <http://www.hindustantimes.com/special-news-report/News-Feed/Indian-Army-to-deploy-more-troops-along-Arunachal-border/Article1-475434.aspx>

WMD Commission Says U.S. Has Failed to Address Bioterror Threats

Martin Matishak, 22 October 2009

WASHINGTON — Despite progress addressing concerns over nuclear proliferation, the United States has not adequately tackled the more urgent threat of biological terrorism, a panel of experts asserted on October 7.

The "nation's level of preparedness for dealing with the threat of bioterrorism remains far lower than that of the nuclear threat," according to an interim report released on October 21 2009 by the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism.

The commission, stood up by Congress in 2007, issued a study last December which concluded an attack involving a weapon of mass destruction is likely to occur somewhere in the world by 2013 unless significant steps were taken. The analysis also found that a biological strike was the most likely event due to the widespread availability of deadly pathogens and materials.

The 27-page interim report, titled "The Clock is Ticking," is a "shot across the bow" for policy-makers and legislators before the task force issues a final report in January, according to former Senator Bob Graham (D-Fla.), who co-chaired the panel.

The commission's final appraisal will be a "report card" grading the administration and Congress on their progress in implementing the task force's recommendations, he said.

The panel's initial findings contained 13 calls to action, including conducting a major review of the program to secure dangerous pathogens and tighten oversight of high-

containment biodefense laboratories; curtailing suspected or known nuclear-weapon activities in Iran and North Korea; and implementing a comprehensive policy on the threat of nuclear proliferation from Pakistan.

"In the interim report, the task force was particularly critical of the White House's budget request for Project Bioshield, a program intended to promote development of countermeasures against weapons of mass destruction, and the Biomedical Advanced Research and Development Authority, which manages Bioshield and similar programs.

"This should be the threshold stuff. This should be the antiterror 101 stuff," commission co-Chairman and former Senator Jim Talent (R-Mo.) told the audience. He added that Congress was partly at fault for not appropriately funding the programs.

The outgoing Bush administration requested \$969 million in additional funding for the authority, according to the interim report. Those funds "could and should have been included in the stimulus package but was not."

The Obama administration's request for the authority in fiscal 2010 was only \$305 million. "That is insufficient by a factor of 10," the interim report states.

The document does not provide a dollar figure for Project Bioshield.

The University of Pittsburgh's Center for Biosecurity estimated that it would take roughly \$3.4 billion a year in medical countermeasure development to reach 90 percent chance of success defending the country against bioterrorism threats.

The panel also said the administration has not done enough to strengthen "disease surveillance" in the event that a biological outbreak occurred.

"If the president asked today how many people have been infected with H1N1, the [Centers for Disease Control and Prevention] couldn't tell him," Talent said, referring to the recent flu epidemic.

White House spokesman Nick Shapiro said the administration is committed to ensuring that U.S. residents have access to the medical products needed to protect them from current and emerging biological threats.

"We have available more than \$6 billion to make available vaccines, antivirals and other supplies and resources that

are essential to protect the American people from H1N1 influenza,” Shapiro said yesterday in an e-mail message. In fiscal 2010 the Biomedical Advanced Research and Development Authority is expected to have “over \$2 billion available for the development and acquisition of medical countermeasures for biodefense,” he said.

While the White House installed Gary Samore as the National Security Council’s arms control and nonproliferation coordinator — whose responsibilities include strategy on weapons of mass destruction — it has not appointed a senior official with an “extensive” public health and biosecurity background to take the lead on biodefense issues, the report states.

Samore “most definitely has the president’s ear on nuclear and biological nonproliferation,” Shapiro countered, adding the National Security Council has two teams of experts with scientific, public health and medical expertise to address biodefense issues.

Graham noted that both the Clinton and George W. Bush administrations had a dedicated biodefense official on the council.

The commission, in its report last year, stated that such an adviser could be placed within the vice president’s office or made the head of a separate White House organization. That idea “is either still in the trash can or maybe under consideration,” according to Graham.

Talent said that “if you connect up the dots ... the message we’re getting is the belief ... that intellectually, yes, bio is a threat, but nuclear is the real threat.”

The commission this week praised President Barack Obama for seeing through several biological laboratory security reports that were started by the Bush administration.

The task force also applauded the National Security Council’s effort to develop a “Bioweapons Prevention Strategy”.

Both former lawmakers offered effusive praise for legislation introduced last month by Senators Joseph Lieberman (I-Conn.) and Susan Collins (R-Maine) that would centralize the regulatory structure for federal and private laboratories working with the world’s deadliest diseases.

The proposed bill would also divide the select agent and toxin list into a tiered system, dictating that facilities

handling the eight to 10 most harmful agents install the highest security.

Graham said he hopes that a companion measure would be introduced in the House around January so that the United States can attend the Biological Weapons Convention review conference in 2011 with the “moral high ground” on biosecurity.

Talent said the commission was pleased by the “aggressive” stance Obama has taken toward nuclear nonproliferation, noting the president’s wide-ranging Prague speech last spring. The former lawmaker specifically lauded some of the less high-profile goals laid out in the speech, including increasing the funding of the International Atomic Energy Agency and announcing a nuclear summit to be held in Washington in March.

Source: http://www.globalsecuritynewswire.org/gsn/nw_20091022_8843.php

Regional Course for National Authorities in Asia on Training Escorts for Inspections

A 3-day Regional Training Course for National Authorities in Asia on Training Escorts for Inspections was held in Tehran, Islamic Republic of Iran from 8-10 August 2009. Over 40 participants from 15 States Parties in the region participated.

The training course provided comprehensive information on the technical aspects of conducting Article VI inspections by the OPCW. The topics covered included the history of chemical weapons and international efforts to ban their use, the status of implementation of the Chemical Weapons Convention (CWC), and the role of National Authorities in implementing the CWC and interacting with stakeholders.

The course provided in-depth information about Article VI declaration requirements, on the Article VI verification regime of the CWC, and on the identification of potentially declarable Article VI activities. Participants were familiarized with OPCW inspection procedures, specifically the rights and obligations of States Parties in facilitating the smooth conduct of inspections.

The Regional Training Course was followed by a 3-day national training course in Tehran from 11-13 August 2009 to train escorts for inspections, which attracted more than 50 participants. The national course was

designed to enhance national capacity and train participants as potential national escorts during OPCW inspections in the future. The mock inspection exercise was held at an OCPF site nearby the venue of the course.

Source: <http://www.opcw.org/news/news/article/regional-course-for-national-authorities-in-asia-on-training-escorts-for-inspections/>

Homeland Security Prepares First Responder Safety Measures for Anthrax Attack

28 October 2009

The U.S. Homeland Security Department said on October 28 that it had prepared new safety protocols intended to protect first responders dealing with an anthrax strike on a large population center.

The proposed measures would cover emergency health workers, medical professionals, skilled support staff and those employed in critical tasks at important infrastructure sites, among others. Measures included in the guidance would address individual protective gear, and decontamination and cleaning protocol for those potentially exposed to the anthrax bacterium.

“Protecting our first responders during terrorist attacks is critical to our nation’s security,” said Homeland Security Secretary Janet Napolitano said in a press release. “This guidance will better equip the courageous men and women across the country who would be the first to respond during a large-scale anthrax attack.”

Source: http://www.globalsecuritynewswire.org/gsn/nw_20091028_2473.php

SCIENCE AND TECHNOLOGY

U.S. Funds Research on Foreign Virus Threats

02 November 2009

The U.S. Homeland Security Department is alarmed enough by the potential threat posed by a bioterrorist attack involving the Hendra or Nipah viruses that it is funding research on the diseases, even though they have not been reported in the United States, the Australian *Courier Mail* reported on November 3.

Bats are the primary carrier for the viruses, which first appeared in the 1990s and can be passed on to other animals and humans.

“Americans see it as a potential bioterrorism weapon and that’s why [the Department of] Homeland Security are funding research into viruses in bats,” veterinarian Peter Reid said last week during a conference in Queensland, Australia.

“There is no effective treatment or vaccine for Hendra or Nipah and the mortality rate is high,” Reid said. “Bats are quite accessible and in the wrong hands it can pose quite a threat.”

The Nipah virus can be passed from bats to humans and from humans to humans. It causes death in 70 to 75 percent of cases, killing hundreds in Asia, the newspaper reported.

As of now, Hendra is believed to be only transferable from bats to horses and from horses to humans. No human to human transmissions have occurred with the virus, which has a mortality rate of 57 percent in seven known cases. All instances occurred in Queensland.

Source: http://www.globalsecuritynewswire.org/gsn/nw_20091030_1702.php

Other nations fear Hendra virus, conference told

AAP, 29 October 2009

OVERSEAS researchers were investing in Hendra virus research, despite it occurring only in Australia, because of fears it may be used in biological warfare.

A Queensland Horse Council Hendra virus conference attended by horse owners and bat carers in Cleveland, on Brisbane’s bayside, heard from Dr Peter Reid today.

Dr Reid, who was the veterinarian involved in the first known Hendra outbreak that claimed the life of horse trainer Vic Rail in 1994, said the virus and its relative, the Nipah virus, were so lethal that the US considered it a homeland security threat.

“Americans see it as a potential bioterrorism weapon that’s why (the department of) Homeland Security are funding research into viruses in bats,” Dr Reid said.

“There is no effective treatment or vaccine for Hendra or Nipah and the mortality rate is high.

“Bats are quite accessible and in the wrong hands it can pose quite a threat.”

Bats are the host of both viruses, with the Nipah virus being the deadlier of the two, having killed hundreds in Malaysia, Bangladesh and India.

The virus was originally known to transfer from bats to pigs and from pigs to humans but there have also been bat to human transmissions and human to human transmissions, with a 70 to 75 per cent mortality rate.

Hendra, so far, is only known to be transmitted from bats to horses and from horses to humans.

There have been no bat-to-human or human-to-human transmissions.

It has a 57 per cent mortality rate, with four human deaths out of seven people infected - all having occurred in Queensland.

Rockhampton vet Alister Rodgers was the most recent victim, succumbing to the virus last month after an outbreak at a horse stud in Cawarral.

Dr Reid warned against complacency in the southern states as bats continued to spread in NSW and Victoria due to climate change.

“Why hasn’t it happened down south? It might be just luck so far,” Dr Reid said.

“Wherever flying foxes live there’s the potential for Hendra to occur and people down south should not be lulled into a false sense of security that it only happens north of the Tweed (River).”

Dr Reid said it was his gut feeling that the virus was becoming more contagious, with more outbreaks in the past four years.

He warned horse owners that the virus could survive up to four days in the urine of bats and in the saliva or body fluids of infected horses.

QHC president Debbie Dekker said simple biosecurity measures such as wearing safety glasses, gloves, rubber boots and a mask would prevent infection.

Source: <http://www.news.com.au/story/0,27574,26276700-29277,00.html>

GE to develop wearable sensors

GE Global Research, the technology development arm of General Electric Co., said Tuesday it will get \$2 million federal grant to develop wearable sensors that alert people to chemical weapons and diseases.

Radio-frequency identification sensors are commonly used to track materials, including in baggage at airports. GE’s sensors would combine the tracking capability with gas sensors that could detect harmful chemicals in the air. Because they can be smaller than a penny, GE says the sensors could be integrated into identification badges or serve as part of warning systems.

GE said it also will develop sensors that can analyze breath and pick up early signs of diseases such as diabetes and cancer.

The grant is from the National Institute of Environmental Health Sciences, which is part of the National Institutes of Health.

Source: <http://www.google.com/hostednews/ap/article/ALeqM5jcOWI-8kEDUDGOKMebIVaaPaKiQQD9CIIMJ00>

Terrorism in the Age of Technology: Profs Discuss Biothreats and Cyber Warfare

Erin Szulman, 11 November 2009

While once considered unconventional, cyber attacks and biological warfare have become an increasing threat to security and a tactic of rising concern. Spanning the areas of computer science, technology and government, technological warfare elucidates the importance of functioning computer networks, screening technologies and the danger that such an attack could pose.

On Oct. 15, Herbert Lin, chief scientist at the Computer Science and Telecommunications Board, National Research Council of the National Academies, presented his work as part of the Peace Studies Program seminar series, housed in the Mario Einaudi Center for International Studies. He was quick to make the distinction between a cyber attack and cyber exploitation, a legal and operational distinction. A cyber attack is “an action to destroy, degrade and disrupt an adversary through information technology.” Both remote and close-access attacks can harm technology through a virus or

by launching a cyber attack via Wi-Fi or compromising a supply chain through a sensitive computer. Cyber exploitation is the means by which an adversary can quietly obtain information through eavesdropping “into the ether” or installing a Trojan horse to exfiltrate data.

Prof. Kathleen Vogel, science and technology studies and faculty member of the Peace Studies Program, gave a lecture on Nov. 9 on the issue of biothreats and policy logistics. According to Vogel, the critical questions that frame the understanding of biological weapons include what biological weapons threaten the U.S.; how the threats have changed after the Cold War, September 11 and the development of biotechnology; and how to better assess such threats for biodefense policy. Throughout history and across the world there have been analytical failures in detecting and assessing the scope of bioweapons programs, be they in the Soviet Union, Iraq, Japan, Afghanistan or the United States. “There’s this growing, elusive, more technologically advanced set of bioweapons threats due to the increasing pace and infusion of biotechnology,” Vogel said.

Vogel approaches U.S. bioweapons assessments as the result of a “sociotechnical assemblage” made up of narratives and accounts. The early 1990s brought about geopolitical changes with the collapse of the Soviet Union. Rogue states, such as Iraq, arose, creating concern in the U.S. over the difficulty of detecting covert weapons programs.

The 1995 Tokyo subway attack raised concerns in the U.S. because it demonstrated the capacity of a non-state actor to perform a chemical activity on a large scale.

The 2001 anthrax attacks underscored the need for more information, especially as weapons technology becomes increasingly accessible. Until U.S. military forces found an Al Qaeda makeshift lab in Afghanistan, the U.S. was unsure who had performed the attack. “We didn’t know that Al Qaeda was trying to do this in Afghanistan and this, once again, indicated that the US intelligence committee has underestimated another bioweapons threat,” Vogel said.

Scientific literature on pathogen research raises concerns about the accessibility of scientific knowledge to dangerous sources. Both speakers emphasized the growing threat of non-state actors and how difficult enacting preventative measures and policy becomes because of the stealth-like nature of the attacks.

New technical analytic units have arisen because of this increasing concern, such as directorates in the CIA and the Weapons, Intelligence, Nonproliferation and Arms Control Center in 2001. Even earlier, the Nonproliferation Center was founded in 1992, creating new science advisory groups to increase biological expertise at the same time that the U.S. Defense Intelligence Agency increased their focus on biochemistry. In the early 2000s, there was increased support for “science-based” threat assessments in intelligence in the policy arena. The focus was on biological and genetically-engineered agents, and technical assessments were separated from the notion of an adversarial attack.

Source: <http://www.cornellsun.com/node/39647>

Disclaimer

Chemical and Biological News Digest is a collection of news reports and press releases published in various newspapers and media related to the subject.

The news reports have been abridged to provide clarity. IDSA is not responsible for the accuracy and authenticity of the news items.



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