# **Chemical and Biological News**

#### ARMS CONTROL

#### **OPCW Director-General Visits Mexico**

The Director-General highlighted the recent accession of the Bahamas and the Dominican Republic to the CWC.

On September 1, 2009 the OPCW Director-General, Ambassador Rogelio Pfirter, paid an official visit to Mexico City where he addressed the opening session of the Tenth Regional Meeting of OPCW National Authorities in Latin America and the Caribbean.

During his visit Director-General Pfirter met withthe Deputy Foreign Minister for Multilateral Affairs and Human Rights, Ambassador Juan Manuel Gómez-Robledo. He commended Mexico for its unwavering commitment to the Chemical Weapons Convention (CWC) and work of the OPCW, and provided the Deputy Foreign Minister an overview on the implementation of the Convention.

Ambassador Gomez-Robledo reaffirmed Mexico's strong commitment to the objectives of the CWC and expressed his Government's firm support for the work of the OPCW in implementing the global chemical weapons ban.

In his address to the Tenth Regional Meeting, the Director-General highlighted the recent accession of the Bahamas and the Dominican Republic to the CWC, which he noted achieved universality of the Convention in Latin America and the Caribbean. He stressed that the next challenge will be to ensure that all OPCW Member States in the region appoint a National Authority, submit their initial declarations to the Technical Secretariat, and put into place the legislative and administrative measures to implement the CWC at national level.

http://www.opcw.org/news/news/ article/opcw-director-general-visitsmexico-1/

#### DISARMAMENT

## U.S. Reaches Chemical Disarmament Milestone

The U.S. Army Chemical Materials Agency announced today that it has eliminated 2 million chemical agent-filled munitions since the international Chemical Weapons Convention entered into force in 1997.

"The professional, dedicated government and contract workers at all of our locations are making great strides to safely eliminate our chemical weapons stockpile, making our nation and the world safer," said CMA Director Conrad Whyne said in a press release.

The United States is among the 188 nations that have signed the pact that prohibits the development, production, stockpiling, use or proliferation of warfare materials such as mustard blister agent and the nerve agents sarin and VX.

Chemical warfare material stockpiles at Aberdeen, Md., Newport, Ind., and the Johnston Atoll have all been safely destroyed. The Army is continuing disarmament operations at depots in Alabama, Arkansas, Oregon and Utah, while another Pentagon agency is set to manage disposal of weapons stored in Colorado and Kentucky.

The Army eliminated roughly 226,000 chemical-filled munitions before the pact's entry into force, according to CMA spokesman Greg Mahall. Another 1.2 million weapons remain to be destroyed, he said.

The service expects to meet the April 2012 disposal deadline established by the convention. Work by the Assembled Chemical Weapons Alternatives program could continue through 2021, according to current estimates.

http://www.globalsecuritynewswire. org/gsn/nw\_20091006\_1787.php

## Russian Site Finishes Disposal of Sarin Nerve Agent

A Russian chemical weapons disposal site has finished elimination of 232.6 metric tons of the nerve agent sarin, Interfax reported.

The Maradykovsky facility in the Kirov Region destroyed 4,866 munitions filled with the chemical warfare material.

Progress has also been made in preparations to begin disarmament operations for a cache of munitions filled with a mixture of mustard and lewisite blister agents. There are 150 metric tons of the material waiting for disposal.

"The facility has completed the construction of a line for the destruction of mustard-lewisite mixture," said the Kirov Region government in a statement. "In late November, hookup and commissioning work will start at the line, testing the technology for destroying this toxic substance."

Full chemical weapons destruction at Maradykovsky is expected to be finished by 2012.

http://gsn.nti.org/gsn/ nw\_20091119\_8050.php

# NATIONAL AND INTERNATIONAL DEVELOPMENT

## Export of bioweapon technology to India to remain restricted

The United States has maintained restrictions on the export of as many as 11 of its 16 dual use technology regimes to India, including on dual use technology in chemical and biological weapons.

Dual use technologies are those that can be used for both peaceful and military purposes, including those that can aid in the proliferation of nuclear weapons and the creation of bioweapons.

India currently faces that maximum number of dual use technology denial regimes, which are adhered by the United States' Department of Commerce, State Department and the Munitions Controller.

In addition to its restrictions in chemical and biological weapons, India faces restriction in one of the two categories in nuclear non-proliferation and missile technology and in both categories in the National Security and Regional Stability dual use technology regimes.

Researchers and regulators fear that lax security at laboratories, though not in India, have allowed potential select agents to fall into the hands of those who would use them for nefarious purposes. For this reason, the dual use technology regimes are often tightly constrained.

The 2001 anthrax attacks in the United States are believed to have stemmed from just such a situation as are the July 2007 terrorist attacks in central London and at Glasgow airport. In the latter, it is believed that NHS medical professionals were potentially involved.

As well as the restrictions, the recent attacks have also served as a wake-up call that screening of those who handle pathogens needs to be heightened.

http://www.bioprepwatch.com/ news/211044-export-of-bioweapontechnology-to-india-to-remainrestricted

### Group Warns Biosecurity Bill Could Burden Scientific Research

Mandates included in new federal legislation could impair the ability of U.S. laboratories to conduct important biodefense research, according to a leading U.S. science organisation.

The American Association for the Advancement of Science earlier this month submitted a letter to the bill's authors, Senate Homeland Security and Governmental Affairs Committee Chairman Joseph Lieberman (I-Conn.) and ranking member Susan Collins (R-Maine). It includes a series of comments and recommendations on the Weapons of Mass Destruction Prevention and Preparedness Act of 2009.

The association is primarily concerned that the bill calls for the establishment of a new system of oversight and security procedures under the Homeland Security Department for certain select agents, pathogens and biological toxins declared to pose a severe threat to human or animal health.

"We feel that having a whole separate system of oversight — even if it is for 12 or 13 agents — can very well complicate things about implementation," according to Kavita Berger, project director at the AAAS Center for Science, Technology and Security Policy. "And while you may have the best of intentions while writing the bill, it does not mean that upon implementation it will turn out the way that one intends."

Many in the biological research community have raised concerns that laboratories already must use time and resources that could be employed for research to deal with government security rules.

The Senate measure was approved November 4 in an 8-1 vote of the homeland security panel. Senator Carl Levin (D-Mich.) was the sole vote of dissent. It could not be determined when a Senate floor vote on the bill is slated.

If approved, the legislation would require the Homeland Security Department to prepare security regulations for laboratories and divvies the government's list of select agents and toxins into three tiers. Facilities that handle the eight to 10 most dangerous materials would receive the highest security and be regulated by Homeland Security while the Health and Human Services Department would oversee sites in the remaining two tiers.

The bill could affect as many as 400 facilities and 15,000 individuals authorized to work with deadly pathogens, according to Collins.

The measure would also mandate the establishment of a national strategy for dispensing medical countermeasures to the public before and after a disease outbreak or act of bioterrorism.

Representatives from the scientific association met with staff members from the homeland security panel before the bill was introduced in September, Berger said in a telephone interview.

After the committee's first attempted vote on the legislation October 28 "we thought it was appropriate to make these comments a little more official," Berger told Global Security Newswire. She added that while the association offered its input to lawmakers, the group has no formal position on the measure.

A spokeswoman for the homeland security committee did not return repeated phone calls or an e-mail message request for comment.

The four-page letter begins by applauding lawmakers for consulting with academic and scientific experts to guide the development of new security standards and regulatory oversight of select agent research programs. It also compliments them for calling for common standards on which all institutions working with "tier one" pathogens can base their security measures.

However, the association believes oversight for the select agent program should remain within the Centers for Disease Control and Prevention and the Agriculture Department's Animal and Plant Health Inspection Service.

Berger said that rather than having Homeland Security establish and oversee laboratory security standards the department could simply provide input to CDC officials.

"Trying to keep it simple, trying to affect change within the existing system to improve some of the problems that currently exist, would be good," Berger said. "A lot of the problems are not with the select agent program per se but rather more with the other agencies wanting to have their own oversight over the research that they fund."

Laboratories already deal with inconsistent requirements and multiple, uncoordinated government inspections, according to the AAAS letter. Some facilities can spend about \$50,000 per inspection and today might undergo more than eight per year, the group said.

The letter also notes that few federal funds are directly allocated for operations, security or training at high-containment laboratories — those that handle the most lethal pathogens — meaning they must use general finances that could otherwise go to research.

Increasing the security mandates could heighten the burden, further hampering scientific effort.

Bergernotedthatlawmakers "triedtoconsciously minimize" the number of inspections by suggesting in the bill that government agencies conduct joint assessments.

The letter also expresses concern about policy discussions in both the executive and legislative branches about the design and implementation of personnel reliability programs at research facilities to evaluate whether an individual is trustworthy enough to work with sensitive material.

"In the absence of evidence that such programs can identify individuals likely to misuse biology, the overall costs to science, health and other national goals from implementing such a system appear to outweigh the assumed security benefits," the letter states.

The programs — already employed by the Defense and Energy departments, among other agencies — can include psychological screening, polygraph testing and credit checks.

The association recommended that Congress look to the National Institutes of Health, which recently developed a "biological surety" program that relies on fostering a network and culture of responsible conduct of research.

The group also suggested lawmakers consult with administrators and laboratory managers

from a variety of research facilities on how a personnel reliability program and appeals process should be developed.

http://www.globalsecuritynewswire.org/gsn/nw\_20091119\_7367.php

### Biological Weapons Convention Must be Fixed, Experts Say

The Biological Weapons Convention must become stronger or risk falling into irrelevancy, experts said this week.

While the treaty embodies the "necessary" norm against the use of disease as a weapon of warfare "it's not sufficient" and suffers from shortcomings that need to be tackled by member nations, according to Jonathan Tucker, a senior fellow with the James Martin Center for Nonproliferation Studies.

Among the inadequacies that hinder implementation are the "relatively limited" number of states that adhere to the compact and the nonbinding results that stem from the annual meetings of member nations, Tucker said.

The treaty also has no provisions for verification of its rules, which led to the document being "blatantly disregarded" in the past by countries such as Iraq and South Africa, said Gigi Kwik Gronvall, a senior associate at the University of Pittsburgh's Center for Biosecurity.

Both offered their comments Tuesday during a panel discussion at a biodefense conference organized here by the center.

The Biological Weapons Convention entered into force in 1975 and today has 163 member nations. It prohibits the development, production and stockpiling of weaponized disease agents such as anthrax, smallpox or plague.

The pact has not been as widely accepted as other nonproliferation agreements, Tucker said. He compared it to the Chemical Weapons Convention, which entered into force in 1997 — more than 20 years after its biological weapons counterpart — and boasts 188 states parties.

A key reason for the divergence in the number of member states the existence of an implementing body, the Organization for the Prohibition of Chemical Weapons, that has "actively recruited or pressured countries to join" the Chemical Weapons Convention, Tucker said. The biological convention, meanwhile, has an "institutional deficit," he told the audience.

Today, the treaty's Implementation Support Unit, which helps coordinate activities related to the agreement, is composed of three people at the U.N. Office at Geneva, according to Tucker. He said that a congressionally mandated panel on weapons of mass destruction recently urged the United States to support an "appropriate increase" in the "size and stature" of that office.

The U.S. Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism also recommended that Washington propose a new "action plan" for achieving universal adherence to the treaty for adoption at the 2011 BWC review conference. The sessions are held every five years to review the workings of the treaty.

Another problem dates back to the 2001 collapse of negotiations that would have stood up a BWC verification regime, leaving the compact "without a clear direction for future efforts," Tucker said. That year the Bush administration moved to abandon six and a half years of negotiations toward an inspections protocol.

The "political vacuum" left over about how to strengthen the compact has only been partially filled by the intercessional conferences, separate annual meetings of experts and states parties that have focused on implementation of the treaty, Tucker said.

Those conferences have been useful in focusing the international community's attention on biosecurity issues, but they are reaching a point of "diminishing returns" because they do not have a direct impact on implementation of the convention, he told the audience. Those sessions address a different each issue year. This year's topic was disease surveillance and next year participants will address investigations of the alleged use of biological weapons.

The convention is also in danger of being overtaken by technology, Kenneth Luongo, president of the Partnership for Global Security, said during the panel discussion.

"We have to figure out how to deal with that because the BWC in a sense was dealing with governments that were producing biological materials for warfare," he said. Today "we're dealing with a primarily private sector owned industry that's producing biological agents for profit and not for warfare."

He added that most private sector biological research is devoted to pharmaceuticals and medical countermeasures.

The arms control model that was applied to the nuclear sector, focused on state production of fissile material, might not be applicable to biological agents, where a far greater number of private institutions are producing materials that might be of concern, Luongo told the audience. "I think we have a lot of different stakeholders here. That's going to be a challenge."

He referred to a report that examined the global biotechnology sector in 2008. More than 4,700 companies were found to have spent about \$30 billion on research that year, while the U.S. National Institute of Health spent slightly more than \$5 billion.

While U.S. President Barack Obama's statements on nuclear proliferation have been "well-informed" and backed by years of consensus within the scientific community, there is not the same kind of agreement on biological dangers, according to Luongo. He did not elaborate.

The White House in August convened a summit with roughly 40 biological scientists and research analysts to inform the administration's strategy on bioterrorism, including how it

should approach the treaty and its 2011 review conference.

#### **Possible Solutions**

Luongo said that in the future BWC member states should work on confidence-building measures instead of standing up a verification regime, which would be a "difficult concept" for some states and focused on a "small percentage of the research that we're worried about."

"The idea is to have a framework where we agree on the dangers and a range of solutions, but not mandate behavior," he said.

Another option to strengthen the treaty would be for the United States to prepare a U.N. Security Council resolution similar to one passed last month, according to Luongo. That document, numbered 1887, was aimed at promoting nuclear nonproliferation and disarmament.

"I'm wondering whether or not we need an 1887-B on the bio side," Luongo said during the panel discussion.

He did not say what specifically such a resolution would involve, only that it should outline a range of activities countries could take to adhere to the compact and allow for future negotiations about implementation.

Tucker said that existing confidence-building declarations — annual reports issued by countries to detail their biodefense activities or disease outbreaks on their soil — could be made mandatory to enhance transparency.

Fewer than half of the state parties issue the report today and the documents often are printed in a nation's native language and not translated, he said. In addition, the reports are not made public or given to nongovernment organizations that could play a useful "watchdog" role.

Thought is being given now as to how to make confidence-building statements "more

relevant," according to Tucker. He added that the 2011 review conference could take up the matter.

http://gsn.nti.org/gsn/nw\_20091008\_3610.php

### Two Cult Members to Stay on Death Row for Tokyo Sarin Attack

Japan's Supreme Court affirmed today the death sentences for two men who helped carry out the 1995 sarin nerve agent attack on the Tokyo subway system that left 12 dead, Kyodo News reported.

Toru Toyoda, 41, and Kenichi Hirose, 45, had filed an appeal of the death sentences handed down in 2000 by the Tokyo District Court and upheld four years later by the Tokyo High Court. They are allowed to object to today's decision on technical grounds, but that is unlikely to prevent their execution, Kyodo reported.

Should the decision hold, a total of eight former members of the Aum Shinrikyo cult would be awaiting execution for the sarin attack and other crimes. Among them are cult founder Shoko Asahara.

Death penalties have been unsuccessfully appealed by four of the five former Aum members who were found guilty of physically releasing the sarin gas that left thousands sickened. Toyoda and Hirose appear to be among that group.

Toyoda has also been convicted of conspiring with the cult to use a bomb against then-Tokyo Governor Yukio Aoshima in 1995. A metropolitan government official suffered serious injuries when the parcel bomb detonated.

http://www.globalsecuritynewswire.org/gsn/nw\_20091106\_7506.php

# Cornell University professor says bioweapons threat is increasing

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, the Sept. 11 terror attacks and the development of biotechnology; and how to better assess such threats for biodefense policy, a Cornell University professor said during a lecture Nov. 9.

Professor Kathleen Vogel, science and technology studies and faculty member of the Peace Studies Program, spoke about the issue of biothreats and policy logistics, according to The Cornell Daily Sun.

According to Vogel, 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-Qaida makeshift lab in Afghanistan, the U.S. was unsure who had performed the attack. "We didn't know that al-Qaida 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. She 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.

http://bioprepwatch.com/ news/210908-cornell-universityprofessor-says-bioweapons-threat-isincreasing

### European States Press to Make Chem, Bio Weapons Usage War Crimes

The Netherlands is expected to request that the International Criminal Court expand its definition of what actions constitute war crimes to include the use of chemical and biological weapons, Deutsche Presse-Agentur reported.

Dutch Foreign Minister Maxime Verhagen and Dutch Justice Minister Ernst Ballin told lawmakers by letter that they back a Belgian measure that would change the Rome Statute to address biological and chemical weapons. The Rome Statute is the undergirding document on which rests the court established in 1998 to prosecute war crimes and crimes against humanity.

The Rome Statute is due to be revisited later this month by its 110 signatory states during a meeting in The Hague.

The ministers told the Dutch parliament that they did not intend to back a Mexican proposal that would classify the use of nuclear weapons as a war crime. Designating the use of such weapons as a war crime might dissuade nonsignatory nations from recognizing the authority of the court in the future, the ministers advised.

http://www.globalsecuritynewswire.org/gsn/nw\_20091109\_7039.php

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