



By Carolyn Raffensperger

Bio Treaty, Spurned By Bush, Is Back

Before September 11 and the advent of anthrax letters, the issue of biological weapons was little more than a theoretical debate. President Bush must have presumed this when he refused last spring to negotiate further safeguards in the Biological and Toxin Weapons Convention, which bans the development, production, and stockpiling of biological weapons. Negotiations have been going on for the past six years to develop verification and enforcement measures to strengthen the treaty. The president will have a new opportunity to rejoin the effort to rid the world of these weapons when negotiations resume this fall.

The BTWC's weaknesses are notable. Since the treaty went into force in 1975, the United States and other parties — Bulgaria, Canada, China, France, Germany, Iraq, the Netherlands, Norway, Poland, the former Soviet Union, Sweden, and the United Kingdom — have continued bioweapons research programs, ostensibly for defense purposes. For example, the United States recently built a mini bioweapons factory and a small weapon, in order to be able to detect similar facilities in other parts of the world and to see how difficult it might be for less advanced countries or groups to make these things.

Biological weapons and their control have a complex history that goes back to World War I, when the Germans perfected the mass chemical attack. In all, 91,000 people died of chemical weapons during World War I. At that time and for decades afterward,

chemical poisons were seen as the principal threat, but when the 1925 Geneva Protocol was signed it prohibited "bacteriological methods of warfare" as well as "the use of asphyxiating, poisonous or other gases."

Given the broad sweep and clear language of these sanctions, it is unfortunate that there are several loopholes in the BTWC, which proscribes stockpiling but allows research and allows small quantities for "prophylactic (immunization), protective or other peaceful purposes." For legal purposes, motive determines liability, unfortunately, not mere presence of the product, making enforcement difficult.

Even as the treaty was being negotiated, its measures were already becoming obsolete. In the early 1970s scientists became alarmed at the potential for biological weapons to be developed and magnified through genetic engineering. This warning seemed to be borne out in the 1980s when renewed military interest in biological warfare emerged in many parts of the world, most significantly the Soviet Union and Iraq.

The Reagan administration responded by expanding and reactivating the Biological Defense Program. Since the "Evil Empire" was developing biological weapons, the United States felt justified in using biotechnology for biological defense. A 1986 Pentagon report to Congress on the program claimed that "biotechnology made warfare easier, cheaper, and far more effective." By 1987 the Defense Department budget for biotechnology totaled \$119 million annually, second only to the biotechnology budget of the National Institutes of Health.

Another loophole arises from the fact that the BTWC covers only international threats, not civil ones. No U.S. law governed acquisition of biological weapons by domestic groups until the Biological Weapons Act was passed in 1989. The act uses three strategies to address domestic threats: criminal penalties on possession, manufacture, or use of biological weapons; governmental authorization to seize such materials; and regulation of use and transfer of biological agents. The law authorizes government seizure of pathogens or toxic agents without proof of their intended

use as a weapon. However, the burden of proof in prosecuting criminal violations imposes a significant barrier when a scientist might claim a legitimate purpose.

To enforce the international restrictions under the treaty, in 1991 Congress passed the Chemical and Biological Weapons Control Act and created a panoply of economic and diplomatic sanctions to be imposed on any country that uses biological weapons in violation of international law. It also imposed sanctions on companies that knowingly export any goods or technologies used in the development of bioweapons to terrorist states or prohibited nations.

Meanwhile, chemical weapons regulation followed a similar course. Many countries signed the 1925 Geneva Protocol (which covered both chemical and biological weapons until the bioweapons treaty was spun off in the 1970s) but reserved the right to retaliate with chemical weapons, should they or any of their allies be attacked in kind. Some countries also reserved the right to use chemical weapons against non-signatories to the protocol. Eventually, a Chemical Weapons Convention was negotiated and went into force in 1997. The science of what constitutes a chemical weapon or its precursor is so complex and fluid, however, that the treaty's text must be updated every year.

This fall, the parties to the BTWC are scheduled to review the treaty. The United States now has an opportunity to rethink its security measures — and its unilateralist course of the past year — in light of the heightened threat from terrorism and shifting global alliances. Hopefully, the United States will make an unqualified commitment to uphold Article I, which prohibits all development, acquisition, and stockpiling of biological agents for hostile purposes, and endorse prompt completion of the draft BTWC Verification Protocol that the administration rejected earlier this year. Joining with other countries to eliminate these weapons once and for all is essential to our security.

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