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EDITORIAL

Ratify the Chemical Weapons Convention

International agreements prohibiting chemical weapons began in the 17th century, when the Germans and French agreed to prohibit poison bullets. New chemical toxins and new ways to deliver them have kept treaties to ban such weapons of mass destruction on the diplomatic and security agendas of large and small nations ever since. Although chemical weapons are among the most deadly military devices (the World War I battles in which they were used caused 8% of the deaths), never have they achieved eventual victory, and the Geneva Protocol of the 1920s sought to ban their use. The Chemical Weapons Convention (CWC) is the latest and best attempt at ridding the world of chemical weapons by targeting both their possession and the means to produce them. Only if the major powers agree to participate and to enforce its provisions without hesitation will the CWC increase the national security of all states by reducing the threat from chemical warfare. An excellent overview of the main issues can be seen at the World Wide Web site of the Provisional Technical Secretariat of the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons (http://www.opcw.nl/guide.htm), along with a list of countries that have become signatory parties to the CWC.

The CWC has now been signed by the leaders of 161 nations and will become effective on 29 April 1997. Under the Reagan and Bush administrations, the United States was instrumental in negotiating this agreement, and George Bush signed it in 1991. However, as of this writing, the U.S. Senate has still not ratified that signing. Unless that step is taken, the United States will find itself in the company of states that intend to ignore the convention, such as Iran, Libya, and North Korea.

Nonparticipation has diplomatic, economic, and scientific consequences. Nonratification does not give us a seat at the table with our allies, almost all of whom have ratified, and provides an excuse to other nonmember countries to remain outside. Only ratifying nations may join the Executive Council (which will prepare for implementation of the provisions of the treaty) or the Technical Secretariat (which will, among other functions, provide inspectors for suspected stockpiles or production sites and monitor the destruction of existing stocks). Failure to ratify the CWC will constrain some aspects of chemical trade with international partners who are member states. The consequences of these restrictions will affect chemicals required in research throughout the scientific community, as well as major domestic industries in agriculture, textiles, pharmaceuticals, and transportation. The CWC will not alter U.S. policy on chemical weapons: The United States has already begun destroying its aging stockpile of chemical agents and expects to complete the process by 2004; no new chemical weapons are planned.

Nevertheless, U.S. ratification has been stalled in the Senate for more than 2 years. Politics aside, the CWC has been opposed by groups who believe that compliance with its provisions will be unverifiable (small amounts of highly toxic chemicals or their precursors could be undetectable) and unenforceable (all penalties for violations would require approval by the Security Council of the United Nations). However, the need for improved means of remote sampling and for enhanced sensitivity in chemical identification and detection would surely benefit from U.S. expertise and instrumentation development in these fields. Opponents of the CWC also fear that any international inspection of chemical facilities could result in theft of proprietary processes that now give U.S. chemical manufacturers their edge. No group would have more to fear from this pillage than the U.S. chemical industry, yet the Chemical Manufacturers Association, along with the American Chemical Society, have been strong proponents of the CWC.

In February 1997, the AAAS Board urged every member of the Senate to ratify the CWC. The Senate should consider stipulations that will make the CWC effective not only for U.S. security but for world security. Not only must the U.S. Senate vote for ratification without further delay, the United States must use its diplomatic influence to persuade other present nonsignatories—especially Russia, China, and Iran—to ratify the CWC as responsible members of the global community. *Science* urges its U.S. readers to make their feelings known to the Senate and asks its international readers to support the CWC locally.

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