Biological and Chemical Weapons: Criminal Sanctions and Federal Regulations

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Summary

Various federal regulations and criminal sanctions apply to biological and chemical weapons. Some of the provisions are broadly drafted, covering biological and chemical weapons as well as other controlled material and technology. Some focus on biological and chemical weapons as such. Recent anti-terrorism legislation, Public Law 107-56, amended many of these provisions, broadening the scope criminal sanctions relating to the use of biological and chemical weapons and materials. This report outlines provisions criminalizing certain uses of biological and chemical weapons, and references other relevant domestic and international material.

Introduction

This report reviews international and domestic materials relevant to criminal sanctions attaching to the development, production, possession, and use of biological and chemical weapons. It also addresses certain federal regulations attaching to the development, production, and transportation of biological agents.

International Law

The United States is a signatory to the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC). Both the BWC and the CWC oblige signatory states to implement domestic legislation. Article VII of the BWC requires each signatory state to enact legislation or otherwise prohibit violations of the Convention committed within its territorial jurisdiction or in areas within its control. Prohibited acts include the development, production, stockpiling, acquisition, and retention of biological weapons.

Article VII of the CWC requires state parties to enact penal legislation proscribing activities prohibited by the Convention.²

**Domestic Law**

**A. Biological Weapons, 18 U.S.C. §§ 175 - 178.**

**General Offenses.** 18 U.S.C. §§ 175 - 178 deal with biological weapons as such.³ Section 175(a) punishes by fine or imprisonment, for life or a term of years, the knowing development, production, stockpiling, transfer, acquisition, retention, or possession of *any biological agent, toxin, or delivery system for use as a weapon*. Attempts, threats, and conspiracies to commit a proscribed act are also punishable. The statute also punishes those who knowingly assist a foreign state or organization to do so, or those who attempt, threaten, or conspire to do the same. The federal government enjoys extraterritorial jurisdiction to enforce the provisions of this statute, a juridical power extending enforcement power against acts beyond the physical limits of the United States.

Recently passed anti-terrorism legislation, Public Law 107-56, amends § 175(c) to clarify that the definition of “for use as a weapon” excludes uses for prophylactic, protective, bona fide research, or other peaceful purposes.

Under § 178(1), “biological agent” is broadly defined. It includes any “microorganism, virus, infectious substance, or biological product that may be engineered as a result of biotechnology,” or any naturally occurring or engineered part of the same that is capable of causing:

- *biological malfunction*, like death or disease, in a living organism;
- *deterioration* of food, water, equipment, supplies, or material of any kind; or
- *deleterious alteration* of the environment.

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² See, The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Jan. 13, 1993, 32 I.L.M. 800. The provisions require signatory states to "prohibit natural and legal persons" within their jurisdiction from "undertaking any activity prohibited to a State Party under this Convention," and requires signatories to enact penal legislation with respect to such activity. CWC, Art. VII, P1(a). Moreover, a state obligates itself to "extend its penal legislation enacted under subparagraph (a) to any activity prohibited to a State Party under this Convention undertaken anywhere by natural persons, possessing its nationality, in conformity with international law." CWC, Art. VII, P 1(c). It has been noted that this subparagraph requires that the penal legislation conform to international law, but need not conform to a signatory state’s constitution. Ronald Rotunda, *The Chemical Weapons Convention: Political and Constitutional Issues*, 15 CONST. COMMENTARY 131, 159 n. 6 (2001). Accordingly, “it is not a defense, under this subparagraph, that the United States refuses to enact penal legislation on the grounds that it violates our Constitution.” Id.

³ See also, 42 C.F.R. §§ 72.1 - 72.7 (regulating the transportation of biological products, biological materials, and etiologic agents, subjecting violators to fines ranging up to $500,000 and to terms of imprisonment of up to five years.)
Under § 178(4), “toxin” means the “toxic material of plants, animals, microorganism, viruses, fungi, or infectious substances, or a recombinant molecule, whatever its origin or method of production.”

Section 178(3)’s definition of “delivery system” includes “any apparatus, equipment, device, or means of delivery specifically designed to deliver or disseminate a biological agent, toxin, or vector; or any vector.”

**Possession Offenses.** Compared to § 175(a), which punishes those who possess a proscribed biological agent “for use as a weapon, 18 U.S.C. § 175(b), as amended by Public Law 107 - 56, reflects a broader prohibition. It punishes those who knowingly possess “any biological agent, toxin, or delivery system of a type or in a quantity that, under the circumstances, is not reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose.” (Emphasis added). Violators are subject to a fine, imprisonment for up to 10 years, or both. For purposes of this section, the terms “biological agent” and “toxin” do not encompass any biological agent or toxin that is in its naturally occurring environment, if the biological agent or toxin has not been cultivated, collected, or otherwise extracted from its natural source.”

A third possession offense is found at 18 U.S.C. § 175b. It punishes restricted classes of persons, by fine or imprisonment, for possessing, shipping, or transporting certain biological agents.

**B. Chemical Weapons: 18 U.S.C. §§ 229 et seq..**

18 U.S.C. 229 to 229F deals with chemical weapons. Under § 229 it is unlawful for a person to knowingly “develop, produce, otherwise acquire, transfer directly or indirectly, receive, stockpile, retain, own, possess, or use, or threaten to use any chemical weapon.” Additionally, it is unlawful for any person to assist or induce any person to do the same, or to conspire or attempt to do the same. Criminal liability extends to proscribed extraterritorial activities of United States nationals.

Violation of § 229 is punishable by fine, imprisonment, or death, and, also, triggers civil penalties payable to the United States.

Various governmental agencies or departments and those authorized by law, such as a member of the Armed Services authorized to receive chemical weapons, are exempted, as are those who, in an emergency situation, attempt to destroy or seize the weapon.

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4 Section 178(4) defines “vector” as a living organism, or molecule, including a recombinant molecule, or biological product that may be engineered as a result of biotechnology, capable of carrying biological agent of toxin to a host.

5 Under § 175b(b)(2) “restricted person” includes, among others, an individual who (A) is under indictment for or has been convicted of a crime punishable by a term exceeding a year, (B) is a fugitive, (C) is an unlawful user of a controlled substance, (D) is an alien unlawfully in the United States, (E) has been committed to any mental institution, or (F) has been dishonorably discharged from the Armed Services.

Section 229F provides three, integrated definitions of “chemical weapon”:

1. “A toxic chemical and its precursors,” unless it is intended for a purpose otherwise permitted under § 229 generally.

2. “A munition or device, specifically designed to cause death or other harm” through the release of “toxic properties of those toxic chemicals” defined in definition (1).

3. Any equipment specifically designed for use directly in connection with the employment of munitions or devices” specified in definition (2).

C. Miscellaneous Statutory Provisions.

**Mailing Injurious Articles, 18 U.S.C. § 1716.** The statute defines categories of nonmailable items and outlines conditions for prosecuting those who send prohibited items through the mails. A person who merely mails a prohibited item, without more, is subject to a fine of $1,000, up to one year in prison, or both. A person who does the same, but with an intent to kill or injure a person, or with an intent to injure the mails or other property is subject to a fine of $10,000, imprisonment for up to twenty years, or both. If death results, then a person who mails with intent to kill or harm may be subject to the death penalty.

Under § 1716, some notable “nonmailable” items include:

- “all kinds of poisons,”
- “all articles and compositions containing poison,”
- “chemical devices . . . which may ignite or explode,”
- “all disease germs.”

Various exclusions and exceptions apply. For instance, the postal service enjoys discretion to permit the mailing of such items.

**Weapons of Mass Destruction and Terrorism, 18 U.S.C. § 2332a.** Section 2332a triggers when a person, “without lawful authority,” uses, threatens, attempts, or conspires to use a weapon of mass destruction, including “any biological agent, toxin, or vector,” but excluding “chemical weapons” as defined in §229F.

Such action is punishable by death or imprisonment when it is directed against:

- a United States national abroad,

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7 It is unclear whether a “hoax” constitutes a threat under this section. See e.g. Barry Kellman, *Biological Terrorism: Legal Measures for Preventing a Catastrophe*, 24 HARV. J.L. & PUB. POL’Y 417, 467 (2001).

8 See this Report’s discussion of “Biological Weapons,” above, for a definition.

9 See this Report’s discussion of “Chemical Weapons,” above, for a definition.
any person in the United States, when the action affects or could affect interstate commerce, or
the domestic or foreign property of the United States government.

The provision also punishes by imprisonment or death the use of a weapon of mass destruction by a United States national outside the territorial jurisdiction of the United States.

Under the statute, “weapon of mass destruction” includes, but is not limited to, any weapon:

- designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors;
- involving a disease organism;
- designed to release radiation or radioactivity at a level dangerous to human life;
- or,
- that is a “destructive device” under 18 U.S.C. § 921.

Section 921 applies to firearms. Under the section, “destructive device” includes any explosive, incendiary, or poison gas” bomb, grenade, rocket, missile, mine, or other similar device. The definition also covers “any type of weapon,” which will expel, or may be converted to expel “a projectile by the action of an explosive or other propellant, and which has any barrel with a bore of more than one-half inch diameter.” “Destructive device” also includes any combination of parts “designed or intended for use in converting any device” into a weapon described above. Exclusions include various devices designed for non-offending purposes, like pyrotechnic purposes; devices used for non-offending purposes, like sporting purposes; devices excluded from definition by the Secretary of the Treasury; or devices that are “antiques.”

**Harboring or Concealing Terrorists.** 18 U.S.C. § 2339, added pursuant to Public Law 107-56, punishes those who harbor or conceal “any person who he knows, or has reasonable grounds to believe, has committed, or is about to commit, an offense under . . . 175 (relating to biological weapons), section 229 (relating to chemical weapons), [or] . . . section 2332a (relating to weapons of mass destruction).” Violation of § 2339 is punishable by fine or imprisonment for up to 10 years.

**Providing Material Support to Terrorists.** 18 U.S.C. § 2339A punishes those who provide material support or resource or conceal or disguise the nature, location, source, or ownership of material support or resources, knowing or intending that they are to be used in preparation for, or in carrying out, a violation of section 175 (relating to biological weapons) or section 229 (relating to chemical weapons.) Violation of § 2239A is punishable by fine and up to 10 years in prison.

**Acts of Terrorism Transcending National Boundaries.** 18 U.S.C. § 2332b(g)(5)(B)(i), as amended by Public Law 107-56, includes within the definition of “Federal Crime of Terrorism” an offense that is “a violation of . . . 175 or 175b (relating to biological weapons), . . . [or] 229 (relating to chemical weapons).”

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10 Presumably, “poisonous chemicals” does not include “chemical weapons” as defined in § 229F.
Instruction. 18 U.S.C. § 231(a)(1) forbids teaching or demonstrating to any person any “technique capable of causing injury or death to persons, knowing, or having reason to know, or intending that the same will be unlawfully employed for use in, or in furtherance of, a civil disorder.” This section could be applied to proscribe the dissemination of information relevant to the development and production of biological and chemical weapons, although it could raise First Amendment concerns. Violation of this section is punishable by fine or imprisonment for a term of years, not to exceed five years.

D. Biological Agents and Federal Regulations.

Scope. In 1996, the Centers for Disease Control tightened existing regulations pertaining to the “acquisition, transfer, packaging, labeling, or handling of biological agents,”11 confining the possession of pathogens to highly regulated and controlled research and commercial facilities. Biological products introduced into the stream of commerce face licensing requirements,12 as do producers of those products.13 Manufacturers, distributors, and other market participants face record keeping, reporting, inspection, and testing requirements.14 The transfer and shipping of biological agents is also highly scrutinized.15 Federal regulations also attach to the importation of pathogens.16

Penalties. Violations of these regulations trigger varied penalties. For instance, individuals who violate regulations pertaining to the interstate shipment of ecological agents face fines of up to $250,000, or imprisonment of up to one year in jail, or both.17 Organizations doing the same face fines of up to $500,000 per event.18 Other penalties involve the revocation or suspension of an organizations or individual’s license.19

11 Kellman, 24 HARV. J.L. & PUB. POL’Y at 450.
13 See 42 U.S.C. § 262(a).
14 See e.g., 9 C.F.R. § 116 (2001)(outlining an extensive record keeping and reporting requirement for producers of biological products); 21 C.F.R. § 601.20 (2001)(outlining a testing procedure to ensure the products are “safe, pure, and potent”); 21 C.F.R. § 600.81 (2001)(record keeping and reporting requirements); 21 C.F.R §§ 600.20-22 (2001)(inspection protocols).
15 See e.g. 42 C.F.R. §§ 72.6(a)(1), (d)(1)(iv), (h)(2) (2000).
16 See e.g. 42 C.F.R. §§ 71.54(a) 71.54(b), 72.3, 72.6 (g) (2000)
17 See 42 C.F.R. § 72.7 (2000).
18 See id.
19 See e.g. 21 C.F.R. §§ 601.5, 601.6 (2001).