## Biopreparat: The Soviet biological weapons programme

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Biological weapons have been viewed with a nearly unparalleled revulsion since their conception. Subject to some of the earliest attempts at disarmament and arms control, biological weapons were renounced by major possessor states without previous international agreement.<sup>1</sup> It is noteworthy, then, that a multitude of allegations concerning their development and use have been raised throughout the years. Particular amongst these is the case of the Soviet Union's biological weapons programme, which stands out due to its representing a major breach of both the letter and spirit of the 1972 Biological Weapons Convention (BWC).

Considered one of the "best-guarded secrets in the old Soviet Union," it was only in the 1990s when the extent of the Soviet violation of the BWC came to light.<sup>2</sup> The Soviet Union's biological weapons program was a massive clandestine effort which concealed a vast network of biological weapons research, development, testing, and production facilities under the direction of an organisation known as Biopreparat.<sup>3</sup> Details regarding the full extent of this biological weapons programme only emerged following the defection of two high-placed insiders. Vladimir Pasechnik and Kanatian Alibekov revealed that the Soviet military had developed virulent strains of smallpox virus as a biological weapon and mass-produced it. They were the key research director of a clandestine Soviet biological weapons facility, and the director (1988-1992) of the biological weapons programme respectively.<sup>4</sup>

The revelations that followed on the scale and depth of the Soviet Union's biological weapons program, particularly from Pasechnik, were impressive. Seeing an early start following the First World

<sup>&</sup>lt;sup>1</sup> Milton Leitenberg, "Biological weapons arms control," *Contemporary Security Policy* 17, no. 1 (1996): 1 <sup>2</sup> Ibid, 4.

<sup>&</sup>lt;sup>3</sup> Jack M. Beard, "The Shortcomings of Indeterminacy in Arms Control Regimes: The Case of the Biological Weapons Convention," *The American Journal of International Law* 101, no. 2 (Apr., 2007): 282.

<sup>&</sup>lt;sup>4</sup> Jonathan B. Tucker, "Preventing the Misuse of Biology: Lessons from the Oversight of Smallpox Virus Research," *International Security* 31, no. 2 (Fall, 2006): 129-130; David C. Kelly, "The Trilateral Agreement: Lessons for biological weapons verification," in *Verification Yearbook 2002*, ed. Trevor Findlay and Oliver Meier (London: Verification Research, Training and Information Centre, 2002), 93-94; Jeanne Guillemin, *Biological Weapons. From the Invention of State-Sponsored Programs to Contemporary Bioterrorism* (New York: Columbia University Press, 2005), 144-145; Stockholm International Peace Research Institute, *SIPRI Yearbook of World Armaments and Disarmament, 1994* (Oxford: Oxford University Press, 1994), 717-718.

War in 1925, the research continued through to the Second World War and beyond.<sup>5</sup> The modern biological weapons program came to being in 1971, with the establishment of the All-Union Science Production Association, 'Biopreparat', and continued through the initial negotiations of the BWC, its signing, and its entry into force.<sup>6</sup>

A number of biological weapons were developed, with all agents being designed to be dispersed as aerosols, including a number of pathogens such as smallpox and anthrax .<sup>7</sup> This weaponization of smallpox started before 1971 and continued beyond the point when the World Health Organisation declared the world free of naturally occurring smallpox. With a number of governments stopping vaccination programmes for their populations at the time, the Soviet Union became "the sole possessor of stocks of this particularly lethal biological weapons agent."<sup>8</sup> A 1993 interview with Pasechnik, most likely with aerosolised *Y. Pestis* in mind, stands out in showcasing the potential lethality of these weapons:

If you take, for example, a city with a population, say of 100,000 people, then I would say that it is very possible that in a short time, say a week time, the preparations will be prepared to apply to the whole city, with effect that about half of its population will be killed.<sup>9</sup>

The Soviet biological weapons programme came to last for a total of 65 years—from 1928 or earlier to September of 1992—the longest in the 20<sup>th</sup> century. The longest U.S. program had a 27-year duration by comparison (from 1942 through to 1969), with British/Canadian programs lasting 21 years (1939-1960), the Japanese biological weapons program lasting 13 years (1932-1945), and the Iraqi program about 16 years (1975-1991).<sup>10</sup> It was "the largest such program by many times," with the Soviet Ministry of Defence possessing more experience in "researching, developing, testing, and stockpiling biological weapons" than any other national biological weapons program.<sup>11</sup>

<sup>&</sup>lt;sup>5</sup> Leitenberg, Milton, and Raymond A. Zilinskas, *The Soviet Biological Weapons Program, A History* (Cambridge, Massachusetts and London: Harvard University Press, 2012), 18-44.

<sup>&</sup>lt;sup>6</sup> Ibid, 71-72

<sup>&</sup>lt;sup>7</sup> Ibid, 284

<sup>&</sup>lt;sup>8</sup> Ibid, 305

<sup>&</sup>lt;sup>9</sup> Vladimir Pasechnik, interviewed by Mark Urban on BBC Newsnight, January 21, 1993, quoted in Leitenberg and Zilinskas, *The Soviet Biological Weapons Program*, 305.

<sup>&</sup>lt;sup>10</sup> Leitenberg and Zilinskas, *The Soviet Biological Weapons Program*, 698

<sup>&</sup>lt;sup>11</sup> Ibid. See further: Kathleen M. Vogel, "The Soviet Biological Weapons Program: A History," *The Nonproliferation Review* 19, no. 3 (2012): 473; Michael J. Selgelid, "Smallpox Revisited?," *American Journal of Bioethics* 3, no. 1 (2003): 6; W. Seth. Carus, "A century of biological-weapons programs (1915–2015): reviewing the evidence," *The Nonproliferation Review* 24, no. 1-2 (2017): 144.

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