

Smallpox Infobrief #2

Written by Edward Hammond for the Third World Network and smallpoxbiosafety.org, April 2011
Second in a series of short informational briefings on the issue of destruction of smallpox virus stocks

Alleged Unauthorized Stocks and the Myth that Smallpox Virus is Needed to Respond to Them

“If I were to go on to say that, since my assertion cannot be disproved, it is an intolerable presumption on the part of human reason to doubt it, I should rightly be thought to be talking nonsense.” – Bertrand Russell

Perhaps the most often repeated smallpox myth to emerge in the last fifteen years is the notion that because the United States has alleged that unauthorized smallpox stocks may exist, then the remaining World Health Organization (WHO) smallpox stocks stored in the United States and Russia should not be destroyed.

In fact, even if unauthorized stocks of smallpox exist – and there is no evidence to suggest that they do - smallpox virus is not needed to respond to that hypothetical problem. Unless the United States cares to substantiate its allegations, a simple analysis can lay this tired argument to rest.

Biological Warfare Prohibited

First, the Biological and Toxin Weapons Convention prohibits the development and stockpiling of biological agents for the purpose of war. The United States and Russia are both parties to this treaty and have an international legal commitment not to prepare to conduct this type of warfare.¹ (Not to mention the severe moral disgrace that would be associated with it.)

Further, and equally importantly, the smallpox stocks do not belong to Russia or the United States. They may only be retained, and research may only be conducted upon them, for purposes approved by and under the control of the WHO. Needless to say, it is unimaginable that the World Health Assembly (WHA) would ever permit and oversee use of smallpox stocks for biological weapons purposes.

Thus, the United States and Russia are not permitted, and have expressly disavowed, use of smallpox stocks for biological warfare, therefore whether or not unauthorized stocks exist, the stocks could never be retained for this purpose.

No Use in Outbreak Response

Some people assume, perhaps naturally but incorrectly, that smallpox stocks could be used to respond to a future smallpox outbreak, however unlikely the possibility. This is not true. This incorrect assumption may come about because vaccines are typically produced in a process utilizing the disease agent itself and people presume this is also the case with smallpox.

¹ For more information on the Biological Weapons Convention, see URL: <http://www.unog.ch/bwc/isu>

In fact, smallpox vaccine is produced from a related but less dangerous virus, vaccinia. Stocks of vaccinia are not controlled by the WHA and there are no plans to destroy them. There is no need for the smallpox virus in order to produce smallpox vaccine, and numerous existing vaccines based on vaccinia have already shown efficacy against the virus. These include the vaccines that were used to eradicate smallpox in the first place.

Similarly, many rapid and accurate smallpox diagnostic tests exist and these may be produced and used without smallpox virus. Nearly 50 smallpox genomes have been sequenced, providing ample genomic information for comparative and other health purposes. And smallpox virus is not needed to produce antiviral drugs whose use might supplement the primary public health containment technique of vaccination.

Finally, in the unlikely event of a future outbreak, if there were a renewed need for smallpox stocks for essential public health research purposes, new samples of the virus could be readily obtained from outbreak victims.

No Evidence for Unauthorized Stocks

It has become a divisive annual occurrence at the WHA and elsewhere – especially in the media – that the United States alleges that unauthorized stocks of smallpox virus exist and, therefore, the WHA-authorized smallpox stocks cannot be destroyed. These allegations are layered on the previous year’s allegations, creating an illusion of substance; but in fact, all of the allegations are equally unsubstantiated. No concrete evidence has ever been produced to prove them.

On the contrary, in the past decade, the United States has been a notable source of false allegations about biological weapons in general,² including smallpox in particular.³ It alleged that Iraq possessed a biological weapons program including smallpox stocks and aggressively sought to prove the latter claim. No evidence of this was ever found despite extensive investigations.⁴ The United States also alleged that Libya had a biological weapons program, and again failed to find any evidence supporting the allegations.⁵

The United States has also alleged that Sudan is interested in “*developing a BW [biological weapons] program*”, a claim it also made about several other countries including Cuba.⁶ The United States has even directed smallpox allegations against its allies. In 2004, it charged France with possessing undisclosed smallpox stocks.⁷ None of these claims has been substantiated.

Deceptive Conflation with Bioterrorism Issues

The subject of alleged unauthorized smallpox stocks is also sometimes linked to bioterrorism by non-state actors. There has been no case of use of smallpox virus in what could be termed terrorism since the 18th Century. In that case, it was not the

² See, for example: Rissanen J 2001. **Acrimonious Opening for BWC Review Conference**. Acronym Institute, 19 Nov. URL: <http://www.acronym.org.uk/bwc/revcon1.htm>.

³ BBC News 2002. **US exposes 'hidden smallpox stocks'**. 5 Nov. URL: <http://news.bbc.co.uk/2/hi/americas/2404051.stm>

⁴ Linzer D 2003. **No Evidence Iraq Stockpiled Smallpox**. Associated Press. 18 September.

⁵ Squassoni S 2006. **Disarming Libya: Weapons of Mass Destruction**. US Congressional Research Service, US Library of Congress. 22 September. URL: <http://fpc.state.gov/documents/organization/78338.pdf>

⁶ Associated Press 2002. **U.S.: Cuba Developing Biological Weapons**. 6 May.

⁷ Associated Press 2004. **U.S. Suspects 4 Nations Possess Smallpox**. 30 September.

doing of a small group, rather, it was an attack by the British military against Native Americans.

Today, the practical hurdles for a 'classical' terrorist organization to obtain, store, and utilize smallpox as a weapon are extremely high. First, there is no natural reservoir of smallpox virus, so a virus sample would have to be obtained from a WHO Collaborating Centre or another (unproven) virus stock whose existence has evaded detection for nearly 30 years. A terrorist organization would also have to move and store the virus stock without causing a new outbreak (including killing themselves), because such an event would be quickly detected. Such an effort would require capacities and facilities that would be difficult to impossible to secretly acquire, operate and maintain, especially in a remote location.

Effective use of smallpox as a weapon is beyond the documented capability of any known terrorist organization and, in any event, it is unfortunately true that many more practical options to commit attacks exist for these groups to utilize.

To the extent that a capable bioterrorism threat exists, persons with access to the WHA-authorized stocks arguably present the greatest risk. Globally, the only major bioterrorism incidents that have occurred this century were the 2001 anthrax letters in the United States. Law enforcement officials there concluded that those attacks were perpetrated by an unhinged biomedical researcher at a military laboratory in Frederick, Maryland (US).

This year, pursuant to a court order, an expert panel concluded that directors at the lab, the United States military's highest security biological research facility, did not properly vet laboratory staff, including failure to identify the perpetrator's sociopathic mental illness (despite having access to relevant psychiatric records) and failure to identify and act upon incidents of "impaired behavior" at the lab, both before and after the attacks occurred.⁸

Other researchers from this same US military laboratory have repeatedly led experiments with smallpox virus at the WHO Collaborating Centre in Atlanta, Georgia (US).⁹

***Argumentum ad Ignorantium* – The Role of Allegation at the WHA**

If there is no military or medical use for smallpox stocks in a future outbreak, including in the unlikely and unsubstantiated event that unauthorized stocks exist, then why does the United States continue to allege that unauthorized stocks provide a rationale for retaining the virus?

It does so because the argument may be accepted without proof by some and, more directly at the WHA, serves the tactical purpose of deflecting attention. The rhetorical strategy of relying on an assertion that cannot be disproved seeks to shift the burden of truth by placing Member States that favor destruction in the position of having to prove a negative (i.e. that unauthorized stocks do not exist).

⁸ Amerithrax Expert Behavioral Analysis Panel. 2011. **Report of the Expert Behavioral Analysis Panel**. Research Strategies Network. See URL: <https://www.researchstrategiesnetwork.org/pages/view/Amerithrax/>

⁹ To be balanced, comparatively little information is available about conditions at the WHO Collaborating Centre at VECTOR in Russia. It is known that a scientist there died of Ebola in 2004 (Pravda, 31 May 2004) and that VECTOR was linked to weapons related research in the former Soviet Union. Notwithstanding accidents, VECTOR, or for that matter any other Russian government lab, has had no documented relationship to an act of bioterrorism such as the US anthrax letters.

Logicians would call this *argumentum ad ignorantium*, or argument from ignorance. It is a recognized type of logical fallacy and, borrowing the words of Bertrand Russell, the United States “*should rightly be thought to be talking nonsense*” so long as it relies on this argument.

Ironically, as this short brief has tried to demonstrate, even if the United States was able and willing to substantiate its claim with empirical evidence that other stocks exist, it would still be most unlikely that these create a compelling public health purpose for retaining the WHO stocks. Perhaps this is why the United States instead relies on *argumentum ad ignorantium*. If it were to produce evidence of its allegations, assuming it has any, then it would still be unlikely to change the conclusion that the smallpox virus stocks should be destroyed.