## • <u>Atlantic Storm - PMC</u> (simulated)

"On 14 January 2005, ten heads of government from Europe and North America and the Director General of the World Health Organization (WHO; Geneva, Switzerland) were scheduled to meet for a "Transatlantic Security Summit' in Washington, DC, USA, to discuss the threat of international terrorism. On the eve of the meeting, news broke that citizens from several European countries appeared to have become ill with smallpox; shortly thereafter suspected smallpox cases appeared in the USA. Although the assembled leaders did not know it at the time, a radical terrorist group had obtained seed strains of *Variola major*—the virus causing smallpox—and deliberately released the virus in a number of main transport hubs and sites of commerce throughout Europe and North America. On 14 January, the heads of states who gathered in Washington were confronted with one of the worst nightmares imaginable: the use of contagious and deadly disease as a weapon."

- <u>Killer mousepox virus raises bioterror fears | New Scientist</u> Mouse pox, a virus that kills every one of its victims, by wiping out part of their immune system, was accidentally discovered.
- <u>The Deadliest Flu: The Complete Story of the Discovery and</u> <u>Reconstruction of the 1918 Pandemic Virus</u> Accident ; evil scientist(s)?
- <u>Francisella tularensis: Taxonomy, Genetics, and Immunopathogenesis</u> of a Potential Agent of Biowarfare - PMC

"The Soviets did, however, eventually succeed in developing a strain of *F. tularensis* that was resistant to multiple antibiotics and retained its pathogenic characteristics. They also worked on four additional

bacterial strains – *B. anthracis* (which causes anthrax), *B. mallei* (glanders), *B. pseudomallei* (melioidosis), and *Y. pestis* (plague) – with the goal of making each of them resistant to 10 antibiotics, but this proved too technically difficult."

• <u>Chemical synthesis of poliovirus cDNA: generation of infectious virus</u> in the absence of natural template

"The reagents and tools used in synthetic biology will eventually be converted into commercial kits, making it easier for biohackers to acquire them. Moreover, as synthetic biology training becomes increasingly available to students at the college and possibly high-school levels, a "hacker culture" may emerge, increasing the risk of reckless or malevolent experimentation."

"In 2002, scientists from the State University of New York at Stony Brook chemically synthesized the complete poliovirus genome, highlighting the transformative potential of SynBio. While this effort was accomplished by experienced professional scientists over the course of years in well-equipped laboratories, the playbook is now freely available and the tremendous advances in molecular engineering techniques since then have only reduced the complexity of this once-monumental effort."

(these have actually been called myths and not quite so easy to be replicated by amateurs due to a variety of reasons but since this is all fictional, we can pretend)

## Source:

Synthetic Biology and Biosecurity: Challenging the "Myths" - PMC