## What Happened At Sverdlovsk?

Recent reports of an anthrax outbreak last year in the Soviet Urals fuel speculation of biological warfare activity

BY LINDA GARMON

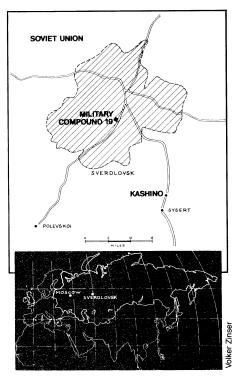
The U.S. government is having a tough time draining the question marks from the pool of information it has gathered on a Soviet anthrax epidemic. Although the amassed evidence suggests the epidemic that swept the area of Sverdlovsk in April 1979 was the result of biological warfare activities banned by international convention, holes remain in this theory.

Soviet authorities maintain that those holes will never be filled. Referring to the 1975 convention forbidding the production of biological agents such as anthrax in quantities in excess of those permitted for peaceful purposes or defensive research, a Soviet embassy report states, "The Soviet Side strictly abides by all the provisions of the documents it has signed"; the outbreak of anthrax has "nothing to do with the convention." Instead, explains the report, entitled "A Germ of Lying," the anthrax epidemic was caused by cutting and consuming tainted meat: "It is well-known and it was repeatedly reported in scientific publications — that the Sverdlovsk region has been for many centuries affected or threatened by epizootic (mass-scale) anthrax incidence affecting livestock.

Whether "A Germ of Lying" has a grain of truth to it is one major question in the anthrax affair that U.S. officials cannot yet definitively answer. Prevailing sentiment, however, echoes the recently released conclusion of the U.S. House Intelligence Oversight Subcommittee investigation: "The Soviet government's statement appears to be incomplete at best, and at worst a fabrication."

The House Subcommittee initiated its investigation shortly after the U.S. State Department acknowledged in March that the outbreak of anthrax may have signaled Soviet violation of the Biological Weapons Convention. Those appearing before the Subcommittee included representatives of the State Department and the U.S. intelligence community in addition to a Soviet emigre, "Mr. Popovsky," who testified he had received information from contacts within the Soviet Union.

"Mr. Popovsky's sources reported that one night in April 1979, an explosion at Military Compound 19 [an installation rumored to be involved in biological warfare activities] in Sverdlovsk released a cloud of anthrax spores into the atmosphere," the Subcommittee report states. Fortunately, winds blew the anthrax cloud south, away from the more densely populated center of town; nonetheless, as many as 1,000 residents of the suburbs may have





Photomicrograph of blood from a sheep that died of anthrax shows rod-shaped anthrax bacilli among red blood cells.

died, according to Popovsky's testimony.

Moreover, the Subcommittee report continues, humans can acquire anthraxcausing Bacillus anthracis by eating contaminated food (gastrointestinal anthrax) or by touching (cutaneous anthrax) or inhaling (inhalation anthrax) bacterial spores. If the Soviet contaminated-meat explanation of what happened at Sverdlovsk is correct, townspeople were victimized by gastrointestinal anthrax; if Popovsky's version is correct, inhalation anthrax was the culprit. According to the report, "Information available to the U.S. government indicates that the symptoms displayed by victims in Sverdlovsk were those of inhalation anthrax."

A second recently released report on the Sverdlovsk incident also attributes the catastrophe to an airborne agent. The report, disseminated by the New York City civil liberties organization Freedom House, first appeared July 3 in the Paris emigre newspaper Russkaya Mysl (Russian Thought). Freedom House members believe it to be an eyewitness account.

The account says that some time between April 4 and 6 last year, an explosion at Military Compound 19 released a bacterial strain called "I-21." For a month following the explosion, there were 30 to 40 deaths per day in southern Sverdlovsk and the nearby village of Kashino. In an attempt to control the epidemic, officials removed the topsoil from the village and paved its streets for the first time, according to the account.

Mark Palmer, director of the Office of Disarmament and Arms Control in Washington, says the account released by Freedom House coincides in part with information his office has gathered. "The incident which it [the account] covers is a matter of the gravest concern to us," Palmer says. "We've been raising it with the Soviets; we are pursuing it vigorously."

Also concerned with the Sverdlovsk incident is Harvard University geneticist Matthew Meselson, who for ten years, beginning under then President John F. Kennedy's administration, counseled the arms control agency on matters of chemical and biological warfare. But Meselson tempers his concern with caution: "I would say that anybody who claims that this is a highly probable or confirmed violation of the biological weapons treaty is definitely jumping the gun." Explains Meselson, who recently reviewed classified information regarding the Sverdlovsk incident, "The

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#### ...Sverdlovsk

Soviets say there was a major outbreak of gastrointestinal anthrax .... There's nothing on the face of that story that's patently wrong." In fact, says Meselson, "It could well be."

Meselson refers to a standard Soviet textbook, *The Course in Epidemiology*, which was translated into English in 1961 (Pergamon Press). According to that textbook, gastrointestinal anthrax is a serious problem in the Soviet Union. Moreover, the Sverdlovsk region sits on the edge of a high-risk anthrax zone. "Now this book's been sitting in the Harvard University library for years," Meselson says; "they [the Soviets] didn't slip into the library and stick it there a few weeks ago."

Another reason Meselson has not ruled out the Soviet explanation of the Sverdlovsk incident is his assessment of anthrax as a biological agent. He explains that the effectiveness of such a weapon would be unpredictable and cites one outbreak of anthrax in Philadelphia in which the source was traced to a factory processing goat hair. Victims of the disease were "one man who waited for his bus across the street [from the factory], but who wasn't a factory worker, and one lady who lived a mile and a half away," Meselson says. "It's a lousy weapon," he says of anthrax; "why would they [the Soviets] be messing around with it?

In addition to knowing "of nothing which definitively rules out the Soviet explanation" of the Sverdlovsk incident, Meselson finds puzzling several aspects of the "worst-case" (biological-warfare plant explosion) explanation.

For example, all of the worst-case reports give a range of dates for the explosion. "That means that nobody heard an explosion—if you hear a 'boom' you look at the calendar and you know the date—and that the explosion is some kind of hypothesis," Meselson says.

Moveover, Meselson finds the reported time range for deaths in the anthrax affair inconsistent with the worst-case explanation. "It is claimed in all of the accounts that the cases continue to appear and people continue to die over a period of weeks and weeks," Meselson says. "With an airborne incident, the cloud goes by in a matter of minutes, and secondary infections after that would be either zero or negligible," he explains. The reported time period for deaths, therefore, seems more consistent with a continuous-source explanation, such as contaminated meat, says Meselson.

While Meselson finds flaws in the worst-case explanation of the anthrax epidemic, he nonetheless finds the incident disturbing. The anthrax affair "will cast a shadow that, unless cleared up, will have a discouraging effect on arms control effort," he says.

So, concludes Meselson, "It would do all parties good to get more facts out than they have so far given."