

'No One Asked Questions'

Scientists Recount U.S. Biodefense Labs' Security Lapses

By Joby Warrick
Washington Post Staff Writer
Tuesday, February 19, 2002; Page A01

Former Army scientist Richard Crosland kept scrupulous notes about the frozen crystals he kept in his lab, and for good reason: The crystals contained botulinum toxin, a biological poison so deadly a single gram could kill a million people.

For 11 years, Crosland carefully logged each shipment of toxin he received and accounted for every molecule, thinking somebody would want to know. But no one asked -- not once during his career as an Army biodefense researcher, and not when he left the job in 1997, hauling away boxes of personal effects that no one checked.

"No one asked questions," Crosland said of his time at U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), the Pentagon's top biodefense research center at Fort Detrick, Md. "You could literally walk out with anything."

As the FBI investigates possible military links to last fall's anthrax attacks, new revelations suggest that the nation's premier biological defense labs failed at least through the mid-1990s to adopt strict safeguards against the theft of lethal viruses and bacteria. Informal policies and lax accounting procedures for researchers -- described in Army documents and in interviews with former USAMRIID scientists -- could have provided an opening for someone with a grudge or a desire to make money on the black market.

Even more troubling to some scientists was the Army's policy of recruiting foreign researchers to work in some of USAMRIID's most secure labs. A steady stream of researchers from China, the former Soviet bloc and other nations passed through the lab in the 1980s and 1990s to work alongside U.S. scientists, according to Army documents and interviews.

"It blew me away," said one microbiologist who worked at the lab in the 1980s and early 1990s. "I could have lifted vials of anything and they never would have been missed. There was nothing to stop me."

USAMRIID strongly defends its security policies and says there is no evidence that any hazardous microbes in its care were stolen or misused. Security has been sharply tightened since the mid-1990s -- and still further in the past four months, Army officials say.

The reports of security lapses come amid intense scrutiny of USAMRIID and other military labs by FBI officials probing the anthrax attacks. Outwardly, the investigation appears to have stalled, as the FBI has doubled to \$2.5 million the reward for information leading to the arrest of whoever was behind the attack. Agents last month e-mailed 40,000 members of the American Society of Microbiology, asking for help.

Much of the military's biological research on anthrax since the 1940s has been performed at Fort Detrick, one of about 20 research facilities known to possess the strain of the bacterium used in the attacks that killed five people in October and November. No cases of anthrax theft have been reported, but the Army lab's security policies came into question last month with the disclosure that 27 biological specimens had been reported missing in the early 1990s.

The lost microbes, described in Army documents released as part of a lawsuit, included several anthrax specimens

as well as the virus that causes ebola hemorrhagic fever. A USAMRIID spokesman said a search turned up all but three of the 27 specimens. Of the three, the only one containing anthrax bacteria had been rendered harmless, spokesman Charles Dasey said. Current security practices are in line with guidelines adopted by the National Institutes of Health, he said.

But, according to former USAMRIID scientists, until recently lab workers could have walked away with live microbes without being challenged. In interviews, the scientists said the lab failed to exercise stringent inventory controls over the pathogens and toxins used by scientists -- a practice that would be considered standard at private labs working with less dangerous material, they said.

"No one ever came in and asked, 'Where's that material you ordered?' Never once did they ask what you did with it," said Crosland, the scientist who worked with botulinum toxin, a substance regarded by bioterrorism experts as the deadliest on Earth. "7-Eleven keeps better inventory than they did."

Another scientist who had worked at Fort Detrick as a young technician said he was surprised to find himself being granted unsupervised access to the most secure, "Bio-hazard Level 4" laboratories, where ebola and other highly virulent pathogens were kept.

"I would work all by myself with some of the most dangerous organisms in the world," said the scientist, who spoke on condition of anonymity. "It wasn't just a matter of security lapses -- there was absolutely no security."

Procedures were no different for foreign scientists who worked at USAMRIID for weeks and sometimes months at a time, the sources said. The scientists, some of whom eventually immigrated to the United States, generally were recruited because of their experience with lethal microbes or expertise in biodefense. "These people would often have unrestricted access to secure lab facilities," said one former USAMRIID researcher. "It was not uncommon to see them working nights and weekends."

One of the visiting scientists was promoted to a senior position overseeing the development of liquid aerosols used in exposing lab animals to anthrax -- despite lacking U.S. citizenship and a security clearance.

According to a 1996 Army memo, USAMRIID also tried to recruit Soviet and Eastern European scientists with military weapons research to work at the Fort Detrick lab "for their expertise and as leverage against an aging workforce."

"It was a concern to me that these scientists were being allowed access not only to the [microbes] but to knowledge and information," said Ayaad Assaad, an Environmental Protection Agency scientist who worked at USAMRIID for nearly a decade.

Army documents from the early 1990s depict an institution in disarray. In a sworn statement in 1992, the newly appointed head of USAMRIID's pathology division told Army investigators that "shenanigans have been going on" at the lab.

Scientists were working "covertly" on unauthorized projects, technicians were being asked to come in on weekends for off-the-books assignments and "quite a bit of stuff was unaccounted for," Lt. Col. Michael Langford is quoted as telling investigators in a transcribed interview.

"It was obvious to me there was little or no organization of that group and little or no accountability of many things," Langford was quoted as saying. Langford, who has since left USAMRIID, declined to comment.

While not disputing that problems had occurred, USAMRIID officials say the chaos of the early 1990s was the

product of a major shift in emphasis after the Persian Gulf War. "There was a huge culture change," said Dasey, the USAMRIID spokesman. "Before the war, the threat from weapons of mass destruction wasn't as real as it became after the war. Suddenly the threat was very real."

Part of the change was a shift from an "academic style of research" to an intense focus on the possibility of a biological attack. "Some of the scientists at the time weren't comfortable with that change," Dasey said.

Two of the scientists interviewed, Assaad and Crosland, lost their jobs at USAMRIID as a result of budget cuts in 1997 and have since filed an age discrimination lawsuit, alleging that the Army chose older scientists for the job cuts.

Dasey also defended the recruitment of foreign scientists, a policy that he said is encouraged under the Convention on Biological Weapons. "We have always maintained a posture of openness, including exchanges of information," Dasey said. "Nobody loses when we work together on medical research."

Past weaknesses in security were documented not only at USAMRIID, but also at Department of Energy labs that carry out basic research on "biological select agents" -- bacteria and viruses that can potentially be used as bioterrorist weapons. At one DOE facility, scientists experimented with anthrax bacteria for years before anyone notified the officials responsible for security, an internal audit found.

An investigation by the DOE's inspector general completed last February found that several labs exchanged microbe samples -- including anthrax and the bacteria that cause brucellosis and plague -- without reporting the transfers to the Centers for Disease Control and Prevention, as required by the law. Another lab had "provided potentially misleading information" to the CDC about whether it was qualified to handle certain kinds of dangerous pathogens, the inspector general's report said.

No one was harmed, but the lapses could have placed the public at risk, the investigators concluded.

"The department's activities lacked sufficient federal oversight, consistent policy and standardized implementing procedures, resulting in the potential for greater risk to workers and possibly to others," the report said.

The DOE, in a statement, said it had adopted several measures in the past year to safeguard its workers and the public. New policies require all DOE labs and contractors to follow CDC guidelines on handling hazardous microbes, a department spokesman said.

Tara O'Toole, DOE undersecretary for the environment, safety and health from 1993 to 1997, acknowledged that biological security at that time was not the priority it is today.

"It's a measure of how fast things have changed," said O'Toole, now director of the Center for Civilian Biodefense Studies at Johns Hopkins University. "It is unfair to impose January 2002 standards and sensibilities on 1999."

© 2002 The Washington Post Company