

# The History of Biological Weaponization

*The following study is from Chapter Four of our newly revised and greatly enlarged book, Vaccination Crisis. The entire book is now available from us. Part One deals with dangerous adult vaccination problems. Part Two is about childhood vaccines, and is an expansion of the first edition of Vaccination Crisis; but It now includes still more information on how to avoid childhood vaccination, covers enlarged data and protection regarding mandatory, and other childhood, vaccines. VACCINATION CRISIS-This important book has been revised and enlarged. It is now 8 1/2 x 11 in size and 116 pages in length. Price: \$6.50 + \$2.50 p&h. -vf*

## BEGINNINGS

**How it began.** The Soviet germ weapon program began in the 1920s and gradually grew into a mammoth operation. The objective was to develop weapons capable of infecting people with anthrax, typhus, and other diseases. Stalin spent large amounts of money on the project.

**We get involved.** Back then, the United States had no germ weapons. By the late 1930s, with intelligence agencies warning that Tokyo and Berlin had biological weapons, Washington began to mobilize against germ attacks in 1942. President Franklin D. Roosevelt publicly denounced the germ warfare plans of the enemy, even while preparing to retaliate with similar ones. George W Merck, president of the drug company, Merck & Co., was placed in charge of the new project.

**Fort Detrick.** The army base at Fort Detrick, Maryland, was selected as the place where the research should begin. It would eventually become an immense U.S. biological weapons center.

**When World War II ended.** Meanwhile, in 1946 at Sverdlovsk, the Soviets set up a factory that specialized in anthrax. The next year, outside Zagorsk, they built a complex for making weapons out of viruses, including smallpox.

The outbreak of the Cold War and the Korean War in 1951 led Washington to put new emphasis on planning for germ battles, and rapid expansion of facilities took place at Fort Detrick. Nuclear testing was already occurring both in the Soviet Union and the United States.

**Spraying San Francisco.** In one experiment, U.S. scientists sprayed mild germs (*Serratia marcescens*) on San Francisco, to assess the ability of pathogens to spread through urban centers. The germs were meant to be harmless. However, they were not harmless enough. Eleven patients were admitted to Standard University Hospital with sarratia infection. One patient, Edward J. Nevin, died. The physicians were so astonished at the outbreak of a totally rare disease that they wrote it up in a medical journal. Years later, in 1981, the government denied any responsibility and the judge dismissed a lawsuit (Cole, *Clouds of Secrecy*, pp. 52-54, 75-104).

**Clusters of anthrax.** Another U.S. project consisted of cluster bombs, each of which held 536 bomblets. Upon hitting the ground, each bomblet would emit a little more than an ounce of anthrax mist. This terrible disease, if untreated, kills nearly every infected person (a very high mortality rate, even compared with the Bubonic plague and most other pathogens).

**Practice runs.** A substance, something like anthrax, was used in practice sessions against St. Louis, Minneapolis, and Winnipeg, cities whose climates and sizes were considered similar to Kiev, Leningrad, and Moscow. Code named Project Saint Jo, the clandestine tests involved 173 releases of noninfectious aerosols (CBW Conventions Bulletin, June 2000, pp. 16-19).

In 1956, the Soviet defense minister, Georgi Zhukov, told a Communist Party Congress that any modern war would certainly include the use of biological weapons (Sidell et al., Medical Aspects, p. 54). When American intelligence learned of that statement, it energized our bioweapons program even more.

The same year, American U-2 spy planes began flying over the Soviet Union. By that time, the Russians had built many secret bases throughout the nation, which were developing and producing germ weapons.

**Island in the Aral Sea.** Shortly afterward, an American U-2 spy plane, flying high over a desolate island in the Aral Sea, photographed dense clusters of buildings and odd geometric grids which CIA agents recognized as belonging to a biological weapons base (Mayday: Eisenhower, Khrushchev and the U-2 Affair, p. 121).

The bull's eye ring pattern was identical to one at our Utah desert biological testing base, where roads, sensors, electrical poles, and test subjects were placed at increasing distances from germ sprayers.

Germ factories. By the late 1950s, the U.S. was building factories capable of producing enough pathogens and biological toxins to fight wars. But, officially, they were only doing that which was needed to defend against such attacks.

**Q fever.** In 1956, the Pine Bluff Arsenal, an army base in the woods of northern Arkansas, was turned into a weapons factory producing bacteria, including tularemia. Soon it expanded into virus production. Before long, it was also producing Q fever (Sidell, et al., Medical Aspects, pp. 50-51, 429).

Q fever is a relatively mild disease which was meant, not to kill enemy troops, but cripple them with chills, coughing, headaches, hallucinations, and fevers of up to 104° F. It was thought that sick soldiers would cause more problems to the enemy in a war than dead ones. Another virus was Venezuelan equine encephalitis (VEE), a horrible disease.

## **THE 1960s**

**Nixon was absent.** President Eisenhower was briefed on Fort Detrick's advances just before he left the White House. The full meeting of the National Security Council occurred on February 18, 1960. But Richard Nixon, the vice president, was absent. He was preparing for his run for president. By this time, researchers had found ways to concentrate the diseases and extend their storage lives from one to three years.

**Under Kennedy.** Spending on biological weapons greatly increased after John F. Kennedy took office in January 1961. The new secretary of defense, Robert McNamara, along with the Joint Chiefs of Staff thoroughly analyzed the program and were satisfied that the new weapons would prove very handy in case of war, especially those (such as Q fever) which could cripple the enemy's troops rather than kill them. Caring for injured soldiers would cause more problems than disposing of dead ones. The development of virus weapons was accelerated (Regis, Biology of Doom, pp. 185-186).

Tests were made in both the Pacific and Alaska. The hundreds of personnel involved in these tests were coordinated from Fort Douglas, near Salt Lake City.

**Improving smallpox.** As we became more involved in the Vietnam War, work focused on improving smallpox and its delivery. This ancient disease was highly contagious, and killed about a third of its victims, mainly from blood loss, cardiovascular collapse, and secondary infections as pustules spread over the body (New York Times, June 15, 1999).

It was during this time that biologists at Fort Detrick learned how to extend the life of the variola (smallpox) virus by refrigerating it in a special way which made use of freeze drying. In connection with this, an ominous discovery was made: Freeze drying would kill some microbes, but not smallpox (Hahn, Screening Studies, pp. 15, 55). This meant they could be stored for an indefinite period of time. Methods were devised for making it into a fine powder and spraying it.

**Another fake test.** In May 1965, Fort Detrick scientists packed fake smallpox powder in suitcases— and sprayed it in Washington National (now Reagan International) Airport, just across the Potomac from the Capital.

The resultant report concluded that one in every twelve travelers would have become infected, quickly spreading the disease throughout the nation, and that smallpox powder would be an excellent choice for terrorism against a foreign power.

A special warfare advantage is that its incubation period is a full twelve days before the first symptoms (malaise, headache, fever, and vomiting) begin to occur and medical diagnosis is made.

Our military leaders considered applying smallpox to the Ho Chi Minh Trail in Vietnam. But the anger caused by a fearful spread of the disease throughout southern Asia, and the quick retaliation likely to come from Chinese and Soviet stockpiles, were feared. So the project was abandoned.

**Protests begin.** Nearly all of the information you have just read was not generally known back then (nor is much of it known today). Nevertheless, by the late 1960s, the American public had gradually become aware that biological weapons were being made at Fort Detrick. Crowds of Vietnam anti-war protesters gathered at its entrance. Books opposed to germ warfare began being published (Susan Wright, ed., Preventing a Biological Arms Race; S.M. Hersh, America's Hidden Arsenal; etc.).

**Nixon calls an end.** Then, on November 25, 1969, Richard Nixon announced the end of biological weapon testing. In January, Nixon also stopped all our chemical weapons programs. The scientists were told to focus their work on "germ defense," not germ attack.

But no limits were set on the quantities of dangerous microbes or chemicals which could be used in that research. So our stockpiles were not reduced.

**Overseas: business as usual.** But our biological/ chemical defense program had been greatly damaged. Our scientists were well-aware of the fact that it takes 18 months to develop a weapons-grade agent and ten years to develop a good vaccine against it. They also knew that the Soviet Union would not stop their deadly projects, just because we had.

By that time, China was also working on chemical and biological weaponization projects. Soon after, certain Near Eastern nations would begin doing the same.

## **THE 1970s**

**The Senate is angry.** In the fall of 1975, Senate hearings uncovered a number of astonishing projects, plans, and plots by our BW (biological warfare) scientists, working with the military.

At least 16 different, terrible diseases were stockpiled, mostly at Fort Detrick. The single largest item was anthrax.

**The germ treaty.** That same year, 1975, an international germ treaty took effect. All BW arsenals throughout the world were to be totally destroyed within three years. How wonderful if that had happened! But it did not take place.

**Soviets in fast forward.** Shortly afterward, secret papers smuggled out of the Soviet Union revealed that Soviet leaders were continuing to amass and develop germ weapons. Then, in 1978, a senior Soviet diplomat at the UN defected to the United States (Arkady Shevchenko, *Breaking with Moscow*, pp. 34, 172-174, 179, 202). But his warnings, like those in the secret papers, were largely ignored by our leaders. They did not believe him.

**The Sverdlovsk accident.** Then, in October-1979, a Russian language newspaper for Russian immigrants living in Germany revealed something important. Newly arrived immigrants told of a thousand Russians living in a village close to Sverdlovsk, an industrial complex in the Ural Mountains, who had, within two weeks, died of anthrax. The report said that Soviet troops quickly entered the area and spread fresh dirt over the ground (Jeff Goldberg, *Plague Wars*, pp. 71-74).

This story went around the world. U.S. intelligence compared data and photos and verified activity in that area at the time specified. It was clear that an accident had occurred and the Soviets were, indeed, continuing to produce, refine, and stockpile biological weapons.

**Deadly anthrax.** The anthrax bacillus can enter the human body in three ways: into the lungs by breathing spores, into the digestive tract by eating infected livestock, or into scrapes or open sores on the skin.

Bacteria from spores in the lungs produce several toxins that attack cells. The first symptoms are coughing and fatigue, then a brief recovery as the body fights the infection. This is usually followed by respiratory failure and death. But a major drawback in attacking an enemy with anthrax is that the spores can persist in the soil for decades.

## **THE 1880s**

**Reagan approves.** In January 1981, Ronald Reagan took office; and, soon after, some of his researchers gathered evidence that the Soviet Union was working on a two-track plan: Stockpile old-fashioned germ weapons, such as anthrax, while developing advanced, bioengineered pathogens.

A research paper, issued by the army's Drugway center in Utah, warned that such highly developed germs could be used to make highly concentrated weapons. In fact, genetic manipulation could change such diseases as anthrax, so they could not be treated by any medicine or protected against by vaccines.

In early 1984, Reagan ordered more money given to the military and intelligence to assess what was happening in certain foreign nations. In April, his administration told the public of the danger. Shortly afterward, the *Wall Street Journal* began a series of

seven articles, warning about the dangers of super-germ weapons (Wall Street Journal, April 23, 1984, et al.).

More congressional hearings followed. America was awakening to the danger. Under Reagan, all types of new military weapons were produced. Biodefense alone was given \$91 million annually. We started inventing our own "super bugs."

**In the name of defense.** By this time, our leaders were declaring that we had not violated the earlier biological weapons treaty, since all research was only done for purposes of defense. This "biological defense" research between 1980 and 1986 produced 51 projects which produced strange, new bacteria and viruses; 32 which increased toxin production; 23 which no vaccine could resist; 14 which could not be diagnosed; and 3 which no drug could treat.

**Urgent call for vaccine.** In December 1984, a paper was produced by Fort Detrick researchers, which, urgently called for the stockpiling of large amounts of anthrax and botulinum vaccine to inoculate two million soldiers against attack.

By 1985, the army asked the nation's pharmaceutical manufacturers to develop an improved anthrax vaccine, since the only one available frequently caused a variety of negative effects, some of them long-term. To add to the problem, that vaccine did not protect against all types of anthrax.

**Brain-damaged children.** But no drug company wanted to sign a contract. A rising number of lawsuits had been hitting the courts. Parents were suing the pharmaceutical companies because of vaccines which had caused brain damage and death to their children. Many immense judgments had been awarded by sympathetic juries.

**The Michigan plant.** So the army turned to the only licensed manufacturer of anthrax in America, a decades old facility with run-down buildings and equipment owned by the Michigan Department of Public Health.

Brushing aside concerns, on September 29, 1988, the army signed its first-ever contract to purchase large quantities of anthrax vaccine. The initial order was for 300,000 doses. The army bought the equipment and gave Michigan five years (till September 1993) to deliver them.

**Iraq also doing it.** A few months earlier, in June, it was learned that Iraq, under Saddam Hussein's leadership, was beginning to build its own biological weapons stockpile. By that date, intelligence reports disclosed that Baghdad had already used *Clostridium botulinum* (botulism mold) to make a deadly toxin said to be 10,000 times more lethal than nerve gas. Iraq was said to be working on large quantities of anthrax and other biological agents. Reports had even disclosed that Saddam Hussein had scientists preparing things useful for assassination of selected individuals, and that his son-in-law, Hussein Kamel, was personally in charge of the research work.

**Made in the U.S.A.** But that was not all: U.S. intelligence revealed that the Iraqis were buying their starter germs from an American company, the American Type Culture Collection (ATCC). Without such starter germs, Saddam's germ warfare development program could not go forward. We provided what was needed for him to get started in business (Defense Intelligence Agency, report dated June 28, 1988).

The ATCC, at that time located in Maryland on the outskirts of Washington, D.C., housed the world's largest collection of germ strains, including the especially virulent

variants of anthrax and botulinum which our germ warfare experts had developed in the 1950s.

The ATCC sold from its stockpile to overseas nations, so their scientists could find ways to improve the health of their citizens. At least, that was the plan. Licenses to purchase the most virulent strains could easily be obtained from the Department of Commerce.

The first purchase had been made in May 1986, when ATCC sold an assortment of terrible disease germs to the University of Baghdad (ATCC batch No. 010072; date of shipment: May 2, 1986). Included among them were three different types of anthrax, five of botulinum, and three of brucella (which causes brucellosis, an incapacitating livestock disease).

However, U.S. officials expressed little concern. Iraq was considered a friendly power in its fight against Iran, which earlier had held U.S. hostages. They even seemed not to be disturbed when Iraq used nerve gas on Kurds in northern Iraq. No calls were placed to ATCC, notifying them to stop selling to Iraq-or anyone else.

Three months after the intelligence report had been submitted to U.S. government leaders, a second large shipment of germs was sent to Iraq on September 29, 1988. It included four types of anthrax, including strain 11966, a type of specially deadly anthrax developed by Fort Detrick in 1951 for germ warfare.

The order was placed by the Iraqi Ministry of Trade's Technical and Scientific Materials Import Division (TSMID). Even though we had earlier identified TSMID as a front for Baghdad's germ warfare program, the State Department permitted the shipment to be sent.

**Closing the barn door.** It was not until February 23, 1989, that the Commerce Department banned sales of anthrax and dozens of other pathogens to Iraq, Iran, Libya, and Syria (all of which had earlier been able to buy virulent germs from ATCC). By that time, it was too late.

**Drug resistant germs.** It was becoming obvious that microbes were becoming increasingly resistant to antibiotics and other medicinal drugs. This included drug resistant tuberculosis, new varieties of E. coli, and AIDs. Other diseases were becoming harder to treat. How would we deal with drug-resistant germs sent to us by foreign powers?

**Funding refused.** Throughout 1989 and the next year, an effort was made to obtain government funding for defenses against this threat. But the General Accounting Office said the project requests, totaling \$47 million including toxic germ items, did not involve "valid threats" (GAO, special report, December 1990, p. 2). Senator John Glenn agreed and helped quash efforts to obtain the funding.

**Big news.** By 1989, the Soviets were still considered a problem, yet it was thought that they had shut down their germ weapon projects. But, in October, a leading Soviet biologist (Vladimir Pasachnik) defected to Britain. He had been the director of the Institute for Ultra-Pure Biological Preparations in Leningrad, one of many research and development sites.

Pasachnik revealed that over 10,000 Soviet scientists were hard at work on projects to produce both the worst possible kind of microbes and ways to best deliver them to the enemy. Long-range missiles had been constructed which could carry them great distances. Cruise missiles were able to fly low and spray them in the air.

For the first time, our leaders had the opportunity to actually learn what was happening in the Soviet GW (germ warfare) program.

The Soviets had even perfected a type of bubonic plague, which could not be defended against or treated. Pasachnik disclosed that they had packed a dry powdered form of the disease into bombs, rocket warheads, and artillery shells. Yet this was only one of many Soviet germ warfare projects.

Investigators found that Pasachnik was able to provide detailed information and freely admitted when he did not know the answer to a question. Yet, in spite of this, U.S. leaders hesitated. Was Pasachnik really telling the truth? Once again, nothing was done.

### **THE 1990s**

**Awakened by the Gulf War.** By June 1990, our intelligence was focusing on Al Tuwaitha, near Baghdad, and suspecting that it was an important germ warfare production facility.

Then, on August 2, Saddam's army invaded Kuwait. It was obvious that we had waited too long. Hussein had biological warfare capability, and our defenses were inadequate. We lacked detection devices for airborne anthrax spores; they would not be developed by the January 15, 1991, deadline that was set by the UN for Iraq's withdrawal from Kuwait. There was also little likelihood of having enough vaccine by that time. The antiquated Michigan anthrax vaccine facility was not able to produce enough.

**Warning our ships.** On August 6, the U.S. Navy sent its commanders a warning, that Iraq might have germ weapons which could be used against ships 25 miles away or closer. "The Iraqis would deploy these agents if needed" (Navy Operational Intelligence Center Report No. 0604327, August 6, 1990).

**Already stockpiled.** Two days later, another intelligence report noted that Saddam already had "substantial amounts of botulinum toxin" which was "probably weaponized." Other germs being developed, or already available for weaponization, included cholera, anthrax, staphylococcus enterotoxin (SEB), and clostridium perfringens. "It is assessed that Iraqi forces will use BW [biological weapons] only as a last resort" (Armed Forces Medical Intelligence Center, Special Weekly Wire, 32-90(C)(U), August 8, 1990).

**Anthrax shots begin.** On December 17, Colin Powell recommended to Secretary of Defense Dick Cheney, that inoculations should begin right away. President G.H.W. Bush approved it. The army began urging the FDA to permit it to give the botulinum vaccine to U.S. soldiers without obtaining the "informed consent" normally required of patients given experimental, unapproved drugs. The FDA reluctantly gave permission. That decision laid the seeds of grief for many Americans in coming years.

The Pentagon gave anthrax shots to 150,000 Persian Gulf soldiers, many of whom later developed the mysterious "Gulf War Syndrome."

Another question concerned what to do with the remains of U.S. soldiers killed by a germ attack. In response, a memo from Fort Detrick said that the remains would have to be soaked in a powerful chlorine bleach. Only then could they be safely sent to the States for burial.

**At the war's end.** After repeated bombings and 100 hours of action, the sudden end of the Gulf War meant that Saddam did not have to release his germs.

But it was discovered later that many of our "smart" bombs had not hit their targets –and Iraq's germ warfare plants, which were bigger and more in number than we had earlier suspected, were largely intact.

**Russians still busy.** Vladimir Pasachnik's disclosures turned out to be correct. By January 1991, we had far more evidence that Russia had an immense germ warfare program. But Russian leadership continued to deny that it was producing biological weapons.

**Inspections begin.** On August 2, 1991, the first team of United Nations Special Commission (UNSCOM) inspectors had arrived in Baghdad. UNSCOM spent four years and repeated trips trying, in vain, to actually see what CIA intelligence had discovered by the fall of 1991.

**Alibek defects.** In the autumn of 1992, Kanatjan Alibekov (who later changed his name to Ken Alibek) defected from Russia and arrived in America. He was debriefed for over a year. Alibek had worked in Soviet germ warfare plants for 17 years and had risen to become the second in command of Biopreparat, which U.S. intelligence had been tracking for years. Biopreparat was the central agency in charge of all chemical/ biological weaponization production throughout Russia.

Alibek told the Americans that Russia had secretly produced hundreds of tons of anthrax, smallpox, and plague germs for use against the United States and its allies. Tens of thousands of people were employed at over 40 sites, spread across Russia and Kazakhstan.

He also told the techniques used to accomplish this, including breakthrough methods devised after the U.S. stopped its own germ program in 1969.

**First Trade Center bomb.** Thirty-five days after Bill Clinton took office, a bomb exploded in the basement of the World Trade Center. Among the results of this wakeup call was renewed interest in developing and stockpiling vaccines against biological weapons.

**Iraq hard at work.** Meanwhile, Iraq was rapidly improving its own germ-making facilities. An Iraqi clerk told the UNSCOM team that Iraq's large Technical and Scientific Materials Import Division (TSMID) was actually part of their intelligence services. By the mid-1990s, British and German firms had sold nearly 40 tons of microbial food (needed to mass produce germs) to TSMID. Iraq had purchased far more than it needed for normal research and medical treatment. Yet as early as the late 1980s, the CIA had already identified the true role of TSMID.

**South African stockpile.** By the mid-1990s, both Iraq and Libya were trying to buy germs from South Africa. The Apartheid regime in South Africa had, for years, been developing a stockpile of anthrax, botulinum toxin, ebola, Marburg, and HIV virus (the cause of AIDS), to use against an uprising of blacks.

When the government suddenly collapsed in 1994, Libyan leader, Muammar Qaddafi, sent agents to purchase supplies and hire out-of-work scientists. They especially wanted Wouter Basson, who had been in charge of South Africa's former germ warfare program.

**Tokyo attack.** On March 19, 1995, a nerve gas attack was carried out in a Tokyo subway, using sarin, which sickened thousands of people. Eventually, the leaders of Aum Shinrikyo were jailed. It was later learned that the cult had acquired some of its materials from ATCC, that Maryland germ center, as well as from Russia.

**Oklahoma bombing.** One month later, on April 19, the Alfred P Murrah Federal Building in Oklahoma City was bombed. Nearly two hundred people died. Although no chemical or germ weapons were used, it was also a terrorist attack, the largest ever to occur in the U.S. up to that time.

**First time inside a Russian germ facility.** Stepnogorsk is a place you may never have heard about. It is a city in Kazakhstan which had been built in 1982 as part of the Scientific Experimental and Production Base (SEPE). This was the most advanced of all Soviet germ warfare plants, and the only one on the edges of Russia. When Kazakhstan broke away from Moscow in 1991, its leaders wanted closer relations with America, and let them examine the now-empty production facilities.

Andy Weber, a young diplomat stationed at the American embassy in Kazakhstan, led the inspection team. Inside just one structure, Building 221, they saw ten 20 ton fermentation vats, each four stories tall. Each one could hold 20,000 liters of fluid. The building was as long as two football fields. Yet it was only one of more than 50 buildings.

Building 221, alone, could produce 300 tons of anthrax in just 220 days, enough to fill many ICBMs.

Yet the Stepnogorsk complex was just one of at least six Soviet production facilities.

**Immense production.** American intelligence was beginning to realize the astounding fact of what had been accomplished. Begun in 1973, by the late 1980s, the Soviet germ warfare program had employed over 60,000 people, run by the military with an annual budget of close to \$1 billion; they had stockpiled immense amounts of plague, smallpox, anthrax, and other agents for intercontinental ballistic missiles and bombers.

**Two questions.** But there were two questions: First, **what had happened to all that germ stockpile?**

Second, where were the hundreds of scientists and technicians who had once worked here? At its peak, Stepnogorsk alone had 700 scientists and top-level technicians. Now there were only 180. Where were the rest? Were they driving taxis or farming or had they been hired by foreign nations?

Fortunately, young Weber was fluent in Russian, and he set to work to find answers. He had abundant opportunities, for the U.S. government found he was very effective at obtaining uranium transfers to the U.S. It was Weber who first learned of the existence of Stepnogorsk, during a hunting trip with a friend who was a high-placed Kazakh official.

**Vector.** Then there was Vector. The defector, Alibek, had earlier identified this remote location in western Siberia as the Soviet's largest and most sophisticated virus facility. Russia had secretly moved its smallpox samples there from Moscow, in violation of a 1992 treaty. That treaty broke down in 1995, when the Russians refused to permit the Americans to visit Vector and other facilities. Obviously, they were still being used to store and work on germ weapons. It would not be till several years later that we would be able to enter that facility.

**Scientists for hire.** One evening during supper, Gennady Lepyoshkin, a former Soviet colonel who had managed the Stepnogorsk plant after Alibek transferred to Moscow in late 1987, told Weber that Iran had repeatedly tried to recruit remaining scientists and technicians at Stepnogorsk. But, so far, they had not succeeded. But this

could not continue forever. Everyone at Stepnogorsk was impoverished; some were close to starvation. Lepyoshkin asked for U.S. help to retrain these scientists at something they could use to support themselves. Later, Weber relayed the message. But, for a time, little was done.

**The Aral Sea site.** Lepyoshkin offered to show Weber other secret germ sites in Kazakhstan. Especially important to the Americans would be a visit to Vozrozhdeniye Island, located 850 miles east of Moscow, and the Soviet Union's largest open-air testing site. Located on an island in the midst of the shrinking Aral Sea, it had been used to test brucellosis, Q fever, plague, glanders, tularemia, and even smallpox. ("Vozrozhdeniye" means "Renaissance" or "new life" in Russian.)

**Buried treasure.** After arriving there, Lepyoshkin told his new friend, Andy Weber, a very deep secret: When the Soviets lost Kazakhstan, they put their cache of anthrax into 66 stainless steel canisters, shipped them on a train with 24 cars, poured bleach into the canisters, then buried them under three to five feet of sand on this desolate island.

This discovery enabled the Americans to later dig up some of that anthrax, test it, discover that part of it was still alive, and learn its potency. There was enough buried anthrax to kill, many times over, every person in the world.

**Waiting to be dug up.** But, when others learned the secret (now rather well-known or I would not be mentioning it here), they could come to the lonely, totally deserted island and dig up some of the anthrax canisters (so many that they originally filled 24 box cars) and carry them back home! One does not even need a boat to go there, for at certain times of the year a sandbar extends out to the island.

**Thousands of gallons.** Meanwhile, UNSCOM inspectors in Iraq were trying to learn the facts. On the evening of July 1, 1995, one of the Iraqi scientists broke down and told the truth. Rihab Taha had trained in Britain and spoke excellent English. She told them that Iraq began its biological weapons program in 1988, just as the Iran-Iraq War was coming to an end. Production of germ agents began the next year. Since then, thousands of gallons of anthrax and botulinum had been produced at Al Hakam. The anthrax and botulinum were stored in stainless-steel tanks in a warehouse.

**Kamel exits.** On August 8, Lieutenant General Hussein Kamel, a son-in-law of Saddam Hussein, defected to Jordan. He was the highest level Iraqi official to escape, and had been in charge of much of the special weapons program.

Fearing that Kamel would provide the West with some inaccuracies, Baghdad hurriedly decided to "discover" a cache of his papers, to which they led the UNSCOM inspectors. A massive amount of information was there.

(Shortly thereafter, when Saddam promised his son-in-law a warm, loving welcome, Kamel returned to Baghdad, only to be shot dead by Saddam. )

**Gulf War Syndrome.** By 1995, thousands of Persian Gulf War veterans were complaining of a mysterious sickness which seemed to be ruining their lives. They insisted that their illnesses were caused by the medicines they were given, the air they breathed, or the anthrax inoculation. But poor records had been kept of which soldiers had received the anthrax and botulinum shots during the war.

**Faulty records.** Were the anthrax shots, given to our troops during the Gulf War, part of the cause of Gulf War Syndrome? In 1990, about 268,000 doses were sent to the military, but it reported that only 170,000 or less were given to our troops. Where are the

rest? Between 1991 and April, 1999, an additional 1.2 million doses were sold to our military.

**Said to cause "little harm."** On October 20, 1995, a Defense Department slide showed a 1.3% systemic reaction level from the anthrax vaccine. This was shown to demonstrate that little harm could come to America's forces, if the anthrax vaccine was given. However, based on 2.4 million troops, that would equal 31,200 troops with varying degrees of sickness!

**Nerve gas explosions.** On June 21, 1996, the Pentagon made a startling announcement. For nearly five years, it had denied that any one serving in the Gulf War had been exposed to chemical or biological weapons. Now they admitted that, after American soldiers blew up an Iraqi ammunition depot containing chemical weapons, tens of thousands of allied soldiers might have been exposed to nerve gas. It was believed that prevailing winds may have blown it toward them.

Checking further, government experts found a second incident in which allied soldiers had blown up chemical weapons.

**Anthrax for all.** By the fall of 1996, the Joint Chiefs of Staff at the Pentagon reversed themselves and approved a recommendation to vaccinate the entire U.S. military force with anthrax vaccine. The cost would be \$2 billion. Six injections were to be taken by each of 2.4 million American military personnel.

**Not so fast.** Bitter complaints arose from the Gulf War veterans who said it was the anthrax shots which caused at least part of their health problems!

**Medical experts also complained.** They declared that the anthrax vaccine had not been proven by testing to safeguard against the aerosolized (air sprayed) form of the disease, the kind inhaled by the lungs. (The other type is the much milder form of the disease which falls on the skin and burrows in, a type not likely to be included in weaponized anthrax.)

Then the FDA got into the quarrel, arguing that the Michigan anthrax vaccine building did not follow its own manufacturing procedures, had rusting equipment, and a dirty environment with floors and even equipment not sanitized.

Demands were made that the current, entire Pentagon stockpile of anthrax vaccine doses be tested for sterility, potency, and safety. But the Pentagon balked. They knew that testing would reveal serious problems, and they wanted to get on with the vaccinations.

In order to obtain a better report, the Pentagon sent its own inspection team to the Michigan plant. Military officials feared that, even if problems were found with the vaccine, if the plant did not keep producing vaccine, it would close its doors. Then where would they turn to for vaccine? All the regular pharmaceutical firms had steadfastly refused to manufacture it, knowing that the anthrax vaccine could cause health problems in those receiving it. Efforts to begin vaccinating all our soldiers screeched to a halt.

**Weber learns more.** In June 1997, Andy Weber went to Kirov in eastern Russia in order to attend an international meeting of science researchers, sponsored by the United States, Europe, and Japan.

One evening after a conference session, Weber went to a large cedar-panel sauna (steam bath). Eavesdropping bugs don't work well in such places. There he met two Russian scientists of the Obolensk State Research Center of applied Microbiology.

They told him confidentially that at Obolensk, two hours drive from Moscow, the Soviets in earlier years had perfected dozens of strains of deadly bacteria for weaponization.

**Iranian offers.** They also told him that a delegation of Iranians had recently visited Obolensk and Vector (an important former germ warfare, center which studied viruses, not bacteria). The scientists, who made less than \$1,000 year, had been offered salaries of up to \$5,000 a month if they would come to Iran and help them on their germ warfare program.

The Iranians said they, the Iranians, were interested in developing germ and chemical weapons, to be used not only against people but crops and livestock. They also were interested in Russian genetic engineering.

**Ominous developments.** Several impoverished Russians from Moscow institutions had already accepted positions in Iran or agreed to provide it with information by computer.

Obolensk alone had lost 54% of its staff between 1990 and 1996, including 28% of its top scientists. How many had gone to Iran or some other foreign country was unknown. (U.S. intelligence sources learned that similar offers had come from Iraq and North Korea.)

At the time Weber was told this, Washington was spending much less than \$1 million a year, helping Russian biologists. This was very small, considering that there were over 15,000 Russian biologists; most of them were trained in research and development of biological weapons.

After the Kirov conference, Weber traveled to other places in Russia. At almost every stop, he learned that Iranian agents had been there already, making offers for workers.

One Russian scientist told Weber that, by the year 2015, Russia would be 60% Muslim. Fearful of a Muslim takeover, Russian leaders had secretly moved their stockpiles of exotic disease germs from the designated repository in Moscow to Vector, which was in faraway central Siberia.

**Finally inside Vector.** In September, 1997, Weber was at last permitted to investigate what was inside Vector, that immense facility with over a hundred buildings, located in a desolate part of western Siberia. Many meetings by Weber in Russia and conferences of officials in Washington followed.

**Joint research projects.** Finally, in the fall of 1997, the U.S. agreed that it should begin joint research projects with scientists at Vector. In this way, the U.S. could learn more about what was taking place and try to prevent Iran, Iraq, or China from getting its scientists.

Soon after, similar agreements were entered into with Obolensk and other Russian research centers.

By this time, samples brought back from the eleven burial pits on the island of Vozrozhdeniye in the Aral Sea definitely revealed that some of that massive cache of buried anthrax, just below the surface, was still alive and deadly.

**Still secret labs.** Unfortunately, by early 1998, U.S. analysts noted that four leading Russian military labs remained totally closed to the Americans. It was feared that some of the money used to help scientists at the other labs would be shared with the military labs. We had no idea what was happening in them.

**Smallpox contract.** In late November 1997, the Pentagon awarded a \$322 million, ten-year contract to DynPort, a British-American firm, to develop and obtain licenses for smallpox and 17 other vaccines for the military, plus a new recombinant anthrax vaccine.

**New anthrax campaign.** On December 15, the Pentagon announced that the vaccination of the entire U.S. military against anthrax was to begin soon. It would take six years and cost \$130 million.

Soon after, the Michigan plant was purchased by BioPort; this was owned by the wealthy Iranian, Fuad El-Hibri, with Myers and Ravenswaay on the board. But it still did not seem to know how to properly manufacture anthrax vaccine. When Pentagon officials were asked about the sloppy work at the plant, they consistently sidestepped the question. The truth was that the Michigan plant was their only source, and they intended to use the vaccine coming from it, regardless of its quality controls.

**Many anthrax strains.** In view of all that you have learned so far in this study, you might ask, If the enemy has so many different types of dangerous bioweapons, knowing that our troops are to be vaccinated against anthrax, why would not the enemy use a different agent against us -smallpox, ebola, bubonic plague, or something else? The answer to such a sensible question is quite obvious.

It is a known fact that there are over 1,000 different strains of anthrax (Care McNair, Dynport Vaccine Company, Maryland, quoted in Dave Eberhart, Anthrax, October 29, 2001).

**Genetically modified anthrax.** Much of what the defector, Ken Alibek, had told our intelligence in 1992 had been ignored. One thing he had said was that Russia was continuing to find ways to blend ebola and smallpox. But the December 1997 issue of Vaccine (pp. 1846-1850), a London-based scientific journal, disclosed that Russian research had produced genetically modified anthrax. The Russian strains of Bacillus anthracis and Bacillus cereus were found to be closely related and often in soils near one another. Based on that fact, the project was successfully carried through to completion.

Russia, it turned out, was far more advanced in some areas of recombinant research than we had assumed. U.S. military men and scientists were alarmed to discover that Russia was in the process of making "super bugs"!

**Alibek goes public.** In February 1998, in interviews with the New York Times and ABC's Prime Time Live, Ken Alibek went public with the frightening news of what was happening inside Russian biowarfare labs. He said the Soviet Union had planned that World War III include "hundreds of tons" of anthrax bacillus and scores of tons of smallpox and plague viruses. He also said that the Soviet labs had made hybrid germs from ebola and smallpox, which no vaccine or antibiotic could protect against. Many Washington legislators did not know that Alibek even existed.

**Pscho germs.** A new development was the discovery about the time of the former Soviet Union effort to use genetically engineered germs and toxins to cause psychological and physiological changes in people. The program involved making changes in peptides (short chains of amino acids that send signals to the central nervous system), to alter moods, sleep patterns, and heart rhythms—all without detection. They could also be used to produce death. The discovery was also made that these drugs were being used on patients in a hospital located close to that Russian research center!

**Smallpox canisters.** Soon after, we found that smallpox had also been tested on that Aral island, and that large amounts of it were also buried in canisters there.

**Rapid-reaction teams.** On March 17, 1998, Secretary of Defense Cohen announced that the National Guard was preparing ten rapid-reaction teams which would rush to any locality in America attacked by chemical or biological weapons.

**25 nations.** He went public with the fact that 25 nations had or were developing chemical and biological weapons, and the expertise was spreading rapidly through the internet. He said terrorist groups would eventually be able to acquire those weapons. Soon after, Congress lavished money on the new state guard program.

**Vaccinations resume.** In March 1998, the Pentagon began vaccinating our troops in the Near East against anthrax. But over two dozen sailors on two U.S. navy carriers refused them, fearing for their own health. They were about to be court-martialed, but managed to get emails to Mark Zaid, an extremely competent Washington-based attorney who was already handling a case about the Gulf War Syndrome cover-up.

**Zaid makes discoveries.** Zaid filed a lawsuit under FIA (Freedom of Information Act) for every document connected to the anthrax vaccine program.

He quickly found that, in 1998, the Michigan vaccine facility had been sold BioPort, a new company whose owners included William J. Crowe, Jr., the former chairman of the Joint Chiefs of Staff. Government contracts for massive quantities of anthrax vaccine could be lucrative.

Zaid also discovered that, for years, the FDA had been reporting on deficiencies at that Michigan plant. The latest inspection, on February 1998, was not much better. Many deficiencies still needed to be corrected. There was something wrong with almost every phase of the production process. -Yet its vaccines were already being injected into U.S. servicemen overseas!

He also learned that the anthrax vaccine had been significantly altered. The new vaccine was quite different from the original one. The manufacturing process was changed, the strain of anthrax was different, and the added ingredients were changed "in order to increase the yield of protective antigen" (Heemstra, Anthrax, pp. 18-19).

Another researcher, Redmond Handy, uncovered many secret U.S. files. For example, one document from Fort Detrick revealed this:

"There is no vaccine in current use which will safely and effectively protect military personnel against exposure to this hazardous bacterial agent." "Highly reactogenic, [it] requires multiple boosters to maintain immunity and may not be protective against all strains of the anthrax bacillus" (Redmond Handy, Analysis of DOD's Anthrax Vaccine Immunization Program (AVIP)," report presented at the Call for Amnesty Press Conference, Washington, D.C., February 12, 2001, p. 7).

Delayed approval. It was not until two months after the military began vaccinating troops for anthrax that, in May 1998, Secretary Cohen officially gave approval for it to be done.

U.S. military within U.S. In the latter part of June, John Hamre, Secretary of Defense, told NATO officials that the Pentagon was thinking of appointing a regional commander to be in charge of "homeland defense." The plan was, in case of a bio-weapons attack, to send the national guard to set up field hospitals, bury the dead, and help care for the living.

But civil liberties experts were alarmed and, pointing to the Posse Comitatus Act enacted after the Civil War, declared it would be illegal for the federal government to interfere with activities within the states. The U.S. military would be involved in domestic law enforcement. The Pentagon immediately backed down. It would not be until 2002 that a Homeland Security Agency would finally be enacted into law.

**\$2 billion requested.** On January 22, 1999, Clinton announced his decision to ask Congress for \$2.8 billion to avoid and prepare for biochemical attacks. Donna Shalala, Secretary for Health and Human Services, commented that it was the first time in U.S. history that the public-health system was being integrated into national security planning.

**Our stockpiles not destroyed.** It was only a few months later that the White House had to decide whether America should destroy its remaining stocks of smallpox virus. But experts immediately stepped forward, declaring that not only Russia but other nations had smallpox stockpiles. A special committee, formed by the National Academy of Science to study the matter, decided in March that it was not wise to destroy our smallpox stocks.

**Shocking facts.** About a month later, William Patrick, a germ weapons expert, revealed a few facts to a special military conference at Maxwell Air Force Base:

Dry agent production (in metric tons per year) during peak production periods by the U.S. and former Soviet Union (S.U.):

Tularemia: U.S. 1.6 / S.U. 15,000

Q fever: U.S. 1.1 / S.U. 0

Anthrax: U.S. 0.9 / S.U. 45,000

Encephalitis: U.S. 0.8 / S.U. 150

Botulinum: U.S. 0.2 / S.U. 0

bubonic plague: U.S. 0 / S.U. 15,000

smallpox: U.S. 0 / S.U. 100

Glanders: U.S. 0 / S.U. 2,000

Marburg virus: U.S. 0 / S.U. 250

Exposure to no more than 10,000 anthrax germs, all of which would fit comfortably into the period at the end of this sentence –could kill a human being. The spores are so tiny, they can slip through the fibers of an envelope or sheet of paper.

**Zaid goes public.** Meanwhile, the anthrax vaccine crisis only deepened. Mark Zaid, the attorney representing some of the first soldiers who refused the vaccine, had obtained thousands of pages of damaging facts about it. He began issuing press releases about his findings and sharing copies with the media.

**Soldiers refuse vaccine.** By this time, hundreds of soldiers, fearing for their health, had refused orders to take the shots. Fearing that their example would produce a general rebellion, the military took steps to courtmartial them.

The problem had been worsened by a spring 1998 decision by the Pentagon, "in the interest of fairness," to also vaccinate reservists who were not stationed in high risk areas.

**Pilots quit.** This decision especially angered pilots in the Air National Guard. Many had jobs back home flying for commercial airlines. Strong and healthy, they feared for their personal safety.

**Over 260 pilots quit the Air National Guard or Air Force Reserve.** The GAO predicted a 43% total loss of pilots over the next six months. At a cost of \$6 million to train each of these combat ready pilots with eight to ten years of experience, the total cost was \$1.5 billion.

**GAO testimony.** At an April 1999 hearing before Chris Shay's house subcommittee, a GAO (General Accounting Office) auditor told the congressmen that no study had ever been made of the long-term safety of the anthrax vaccine. "Therefore one cannot conclude there are no long-term effects," he said. He also stated that there were questions about how effective it was in protecting against an anthrax attack. It appeared that the vaccine was both dangerous and useless.

Another GAO official, Sushil Sharma, revealed that the Defense Department's brochure about the vaccine was not true when it said that the vaccine had already been given to large numbers of "veterinarians, laboratory workers, and livestock handlers." It had actually been given to only a few.

**Records missing.** It was also discovered that there was no record of who received the anthrax shots in the Gulf War, yet the Pentagon had been claiming for years that the Desert Storm illnesses were not caused by the vaccine (Hearing before the Subcommittee on National Security, Veterans Affairs, and International Relations of the Committee on Government Reform, 106th Cong., 1st sess., Apr. 29, 1999, pp. 10-20).

**Protecting BioPort.** As if that was not bad enough, Zaid, the attorney, disclosed that he had come across documents which had been drafted earlier by the army in order to indemnify companies making the anthrax vaccine! BioPort in Michigan was so afraid of the dangers of the anthrax vaccine it was manufacturing, it wanted governmental protection against lawsuits that would pour in when Americans were injured by receiving it or when it proved ineffective in protecting against an anthrax attack!

**Long-term study promised.** The Pentagon replied that there really was nothing to worry about, but a month later it promised to begin "a long-term study" of the vaccine's safety. This was more than a year after large quantities of the shots began to be given and nine years after it had been given during the Gulf War. We are still waiting for that study to begin.

**BioPort in trouble.** More trouble erupted in the autumn of 1999, when BioPort, the Michigan company churning out the vaccine, was unable to meet FDA standards. So far, that plant never had met them. But this time, the FDA threatened to close down its operations.

There was danger that the firm might become financially insolvent. So, to help the company financially (not to improve the safety of the vaccine), the Pentagon agreed to raise the price of what it was paying the firm per anthrax dose, from \$4.36 to \$10.64.

This gave the company an additional \$24 million; \$18.7 million of this was immediately paid in advance. You will recall that it was BioPort which earlier spent millions on office furniture for its executives and bonuses for its executives.

**Vaccine still flunking tests.** Shortly after this, it was discovered that nearly 1.5 million vaccine doses, manufactured at BioPort, did not pass potency tests. Others were

rejected by the FDA because it had not followed sterility procedures! A new inspection report found over 30 deficiencies, including the fact that batches did not uniformly meet the same specifications.

**House report.** The house committee investigating the anthrax vaccine issued a special report in April 2000: "The Department of Defense Anthrax Vaccine Immunization Program: Unproven Fbrce Protection."

**Strains not defensible against vaccine.** The report included the very serious fact that gene splicing by an enemy could easily produce a strain of anthrax which would be completely resistant to our anthrax vaccine, making the program a "medical Maginot Line, a fixed fortification protecting against attack from only one direction." In other words, it was a waste of time to inject Americans-any Americans-with anthrax vaccine (Committee on Government Reform, 106th Cong., 2d sess., House Report 106-556, April 3, 2000, p. 2).

Could the same be true about the other biowarfare protection vaccines? One example should suffice:

**Variant U.** In the spring of 1988, Nikolai Ustinov had died at Vector, the Siberian smallpox research complex. He was a scientist who had accidentally infected himself with the Marburg virus, a hemorrhagic killer that he and his colleagues had been trying to perfect as a weapon. After his death, his colleagues at Vector had cultured the virus that killed him. They discovered that, inside his body the virus had changed slightly., The new variant, according to Ken Alibek, was particularly virulent and had been weaponized as a replacement for the original. In Ustinov's honor, it was named "Variant U." In addition, any vaccine prepared to defend against Marburg virus would be useless against Marburg-U virus.

It was not difficult to produce disease variants which vaccines could not protect against. We would have to have samples of the secret virus; and, even if we made a vaccine, which could take years, there was a good likelihood it would neither be safe nor protective. We were already discovering that with our anthrax and smallpox vaccines.

## **2000 AND A NEW CRISIS**

**"Unknown effects."** A March 2000 study, released by the Institute of Medicine at the National Academy of Sciences, concluded that there was "inadequate/insufficient evidence" to determine whether the anthrax vaccine could cause "long-term adverse health outcomes." It added that there was a "paucity of published, peer reviewed literature," and those few reports only described "a few short-term studies" (NAS Institute of Medicine, An assessment of the Safety of the Anthrax Vaccine, A Letter Report," Washington, D.C., March 30, 2000, pp. 5-6). In other words, almost no research had ever been done about the safety or effectiveness of the strain of anthrax vaccine we had, and no long-term studies had ever been made!

No official clinical research had ever been done to prove anything. But, of course, there were thousands of service men and women known to have been damaged by the vaccine.

**More pilots quit.** By this time, hundreds of reserve pilots had quit the military. By the summer of 2000, over 400 servicemen had been disciplined for refusing to take the shots, and 51 had been court-martialed. A few served brief sentences in the brig.

**Only the U.S. military.** Because of the extreme dangers of these anti-attack vaccines, no other nation in the world required its troops to be vaccinated, not one!

Britain made anthrax vaccinations for its troops voluntary, and France did not give them at all.

**Mock bio-attacks.** In the spring of 2000, 10-day mock bio-attacks were staged in Portsmouth, New Hampshire, and Denver, Colorado. Much of this was done on paper, some in practice sessions.

The exercise in Denver ended on May 23, as the make-believe "epidemic" spread out of control. Estimates of how many people would have gotten sick varied widely. Some said 3,700 plague cases with 950 deaths; others estimated more than 4,000 sick and 2,000 dead. Federal, state, and local officials quickly proclaimed the catastrophe a successful exercise. The entire operation cost \$10 million.

**Interesting question.** One problem was whether scarce resources should be devoted to treating the sick who might die or trying to stop the spread of the epidemic. At least the government discovered that it had lots of unanswered questions.

**How the money was spent.** In the fall of 2000, Amy Smithson, an analyst at the Henry L. Stimson Center in Washington, conducted an 18-month investigation; and, among other things, he found that only \$315 million of the \$8.4 billion the government spent on counterterrorism in the year 2000 was devoted to training people in cities and states to respond to a covert bioterrorism attack. Less than 4% of that amount was being spent outside of Washington, D.C., and only 6% to strengthen public-health facilities, the heart of useful biodefense preparedness. The rest was spent on faulty detectors, special vehicles, and other marginal items (Amy Smithson and Leslie Anne Levy, *Ataxia: The Chemical and Biological Terrorism Threat and the U.S. Response*, Henry L. Stimson Center). Lots of money was being misdirected to objectives which would not protect the public.

**Teams set up.** By January 2001, more than \$143 million had been spent on rapid-reaction teams (renamed Civil Support Teams) within the National Guard. Each one was located on a military base, and many were long distances from the cities they were supposed to protect. (The closest one to Atlanta was 250 miles away in Florida.)

After the September 11 tragedy occurred, everything speeded up, but there was much confusion as to what should be done, how it should be done, who should be in charge, and how should they cooperate with one another.

**Protecting another vaccine firm.** In the fall of 2002, a last-minute addition was made in secret the night before the last major budget bill (the Homeland Defense Security Act) was passed by Congress. The addition released Eli Lilly & Co. from liability for damage from vaccines it sold to the public and to the military.

## **WHAT IS THE SOLUTION?**

**What is the answer?** In this chapter, we have overviewed a massive problem, caused by production of dangerous biological weapons. What is the answer? Are there solutions, and what are they?

**Treatment, not vaccination.** If rapid detection, diagnosis, and treatment methods are in place, people exposed to anthrax can be cured of the disease. That is part of the solution. Not vaccination, but immediate treatment of the sick!

**Vaccination cannot protect against multiple strains.** In Sverdlovsk, Russia, when anthrax was accidentally released from a biowarfare facility in 1979, when the spore cloud passed directly over a nearby ceramics factor shop, only 10 out of 450 workers fell ill and died. This was a fatality rate of only 2% (Redmond Handy, `Analysis

of DOD's Anthrax Vaccine Immunization Program [AVIP], " report to Call for Amnesty Press Conference, Washington, D.C., February 12, 2001, p. 49).

Later at the Los Alamos National Laboratory in New Mexico, autopsy studies were made of some of those 10 people. It revealed that they were infected by at least four different strains of anthrax. This means that no vaccine could have protected against such an attack!

One scientist, Paul Jackson, concluded, "The purpose of such a mixture might have been to overwhelm the American vaccine (Jackson, quoted in Nicholas Wade, "Tests with Anthrax Raise Fears that American Vaccine Can be Defeated," New York Times National, March 26, 1998).

**Vaccination cannot protect against genetically altered strains.** The Russians had developed a special combined strain which would defy any vaccine we could make against it. It is known that they have also made gene-altered strains that could defeat their own vaccine, not only ours; this is much more powerful.

**The experts agree.** Testifying before Congress in the spring of 1998, Ken Alibek, the former deputy director of the Soviet biological warfare directorate (BioParat), said, "We need to stop deceiving people that vaccines are the most effective protection . . . In the case of most military and all terrorist attacks with biological weapons, vaccines would be of little use" (Dr. Ken Alibek, statement to Joint Economic Committee of Congress, May 20, 1998).

Our leaders have known this for a long time. In a test done at Fort Detrick in 1986, guinea pigs were immunized with our U.S. anthrax vaccine and then given several different anthrax strains. Half of them died.

In a separate Fort Detrick study, over 50% of the guinea pigs died.

Here is an intriguing statement by an expert at a major U.S. vaccine firm: "The great challenge was to manufacture a vaccine that will be effective against as many as possible of the more than 1,000 known anthrax strains."-Care McNair, Dynport Vaccine Company, Maryland, quoted in Dave Eberhart, Anthrax; October 29, 2001.

Here is the fourfold defense that is needed. Instead of stockpiling dangerous vaccines as an effective military strategy, military planners should emphasize rapid detection, decontamination, and medical treatment after exposure in the event of a confirmed attack. In addition, ways should be developed to render the enemy's biological weapons obsolete.

**Why weapon vaccines do not work.** First, vaccination is useless as a protection against deadly multi-strain diseases, Second, the vaccines against those deadly diseases are themselves extremely dangerous to those taking them. The evidence is abundant and obvious. The problem is that, so far, the U.S. military and homeland defense agencies refuse to consider these facts.

Lederberg speaks. Joshua Lederberg, Nobel Prize winner and biological weapons expert, summarized it in these words:

"There is no technical solution to the problem of biological weapons. It needs an ethical, human, and moral solution if it's going to happen at all. There is no other solution."-Lederberg, quoted in Meryl Nass M.D., `Anthrax Vaccine and the Prevention of Biological, Warfare," p. 6.

**Polls of U.S. citizens.** A 1999 poll of 7,800 Americans found that 83% disapproved of the anthrax vaccine. They said it should not be given and they did not want to receive it (USA Today, Weekend Poll, September 9, 1999). A poll of service personnel found that 77% were opposed to it (Army Times, March 1999).

In Britain, where the anthrax vaccine was given on a voluntary basis, 80% refused it.

However, regarding the smallpox vaccine, which is also dangerous, but lesser so, a slight majority of Americans polled say, if it were offered, they would be willing to take it.

## **GLOSSARY**

APHIS - Animal and Plant Inspection Service, a department of the USDA

ATCC - American Type Culture Collection, the world's largest collection of germ strains

AVIP - The Department of Defense's massive Anthrax Vaccine Immunization Program of our troops

BioParat - (Biopreparat) - Soviet biological warfare directorate. The central Russian agency in charge of all chemical/biological weaponization production

BW - Biological weapons

CDC - The Centers for Disease Control, based in Atlanta

CBW - Chemical/biological warfare

DOD - Department of Defense

FDA - Food and Drug Administration

FIA - Freedom of Information Act

GAO - General Accounting Office

GW - Germ warfare

JVAP - Joint Vaccination Acquisition Program

Pentagon - Headquarters of the DOD

POX - The skin eruptions in smallpox

SEPE - Russian Scientific Experimental and Production Base, the code name for its bioweapons projects

TSMID - The Iraqi Ministry of Trade's Technical and Scientific Materials Import Division. This is in charge of obtaining supplies for their CBW program.

UNSCOM - United Nations Special Commission

USDA - U.S. Department of Agriculture

VA - Veterans Administration

VAERS - Vaccine Adverse Event Report System forms, which are often either not recorded or lost afterward

Vaccinia - The vaccine given to protect against smallpox. It is derived from cowpox

Variola - Variola major is the scientific name for smallpox

WHO - World Health Organization

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