

MEDICAL GENOCIDE

PART EIGHTEEN

For over thirty years, our government has conducted deadly experiments affecting millions of unwitting citizens.

THE MILITARY'S GUINEA PIGS

BY GARY NULL

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ere you near or in San Francisco between 1965 and 1967? Those were the years the U.S. Army conducted secret chemical and biological warfare tests in populated areas of the San Francisco peninsula. The chemical zinc cadmium sulfate was used, along with the bacteria *Bacillus globigii*. Similar tests were performed a decade previously. But it wasn't until 1977 that the Army finally admitted to a Senate subcommittee that it had conducted such tests on 239 occasions.

The tests, which were classified at the time of the Senate hearings, released chemical substances into the air. In an earlier experiment, aerosol chemicals were released by a ship steaming up and down just outside the Golden Gate Bridge. The released substance, sprayed over a 117-square-mile region and exposing 800,000 people, contained a bacteria known as *Serratia*, considered by the military to be harmless. More recently it has been found to cause a fatal type of pneumonia.

Defense Department documents show that the Army never revealed the nature of the experiments, despite an outbreak in San Francisco of an otherwise rare *Serratia*-

PAINTING BY JIM WARREN

related pneumonia. These are not isolated incidents.

Apparently, the C.I.A. and the Army conducted bacteriological and chemical tests in the streets and tunnels of New York City in the late 1950s. Original records of the New York test, as well as most other ethically questionable experiments, are hard to come by. Most have either been destroyed or are still classified. But documents and testimony presented at congressional hearings revealed that the C.I.A. and the U.S. Army's Special Operations Division had carried out a series of tests up until the late sixties that were designed to gauge the vulnerability of metropolitan areas to chemical and bacteriological warfare.

United Press International obtained a summary of a report called "Operation Big City," which charged that government researchers, without warning the public, released chemicals from the exhaust of a specially modified car and from a special device concealed in a suitcase. The car traveled 80 miles through the streets of New York, through tunnels and over four turnpikes. These experiments were apparently part of the C.I.A.'s larger MK-ULTRA mind-control experiments. Documents detailing some of these experiments were released during the early 1980s and late 1970s. But even with the Freedom of Information Act, and the release of previously secret material, it is still unknown just what kind of gas was released in the tunnels and streets of New York.

C.I.A. financial records released in recent years indicate that the agency conducted at least one open-air test of whooping-cough bacteria along Florida's Gulf Coast. According to state medical records, the number of whooping-cough cases recorded in Florida jumped from 339 with one fatality to 1,080 with 12 fatalities the following year.

As citizens fight to get classified information from the government, more and more facts about these bizarre experiments come to light. The Army conducted chemical- and biological-warfare (C.B.W.) experiments over 10,000 square miles of Texas in 1965, spraying zinc cadmium sulfate from fighter planes 17 times. There was no evidence that public consent was obtained.

A 1969 Army document revealed details of 131 C.B.W. tests that released approximately 800 pounds of zinc cadmium sulfate around Searcy, Arkansas (pop. 33,000). Again, there is no evidence that the public was ever advised, or that consent was ever obtained.

The Army admitted it conducted similar tests, using zinc cadmium sulfate over a 125-square-mile region between Fort Hood and Fort Worth, Texas, in 1960. The same tests over Fort Wayne, Indiana, were conducted in 1964 and 1965. In 1980 *The Baltimore Sun* reported that 34 nighttime tests were conducted in Cedar Hill, Texas, a town near Dallas, in which the gas cloud

traveled for at least 30 miles. A wooded area near a small eastern Maryland town was subjected to 115 C.B.W. tests over a two-month period in 1969. The Army reported that tests were conducted in 1964 and 1965 in towns and cities in Texas, Missouri, Minnesota, South Dakota, Iowa, and Nebraska.

Since 1950, U.S. government agencies have carried out a variety of secret C.B.W. tests, many of them by the Army and the C.I.A. The experiments range from chemical tests on unwitting servicemen to bacteriological open-air tests carried out over populated areas of the United States. It hardly needs to be emphasized that these tests did not involve only a few unaware and disadvantaged subjects, but millions of unsuspecting men, women, and children, who were exposed to deadly bacteria and chemicals.

From 1953 to 1975, the Army conducted such tests on about 7,000 soldiers. According to the *Army Times*, the tests were conducted to determine whether certain biological and chemical substances could incapacitate enemy troops without killing them. Among the substances tested were LSD and BZ (quinuclidinyl benzilate), a powerful hallucinogen said to be up to 100 times stronger than LSD.

Army strategists believed BZ to be an ideal way to incapacitate whole battlefields. With this strategy in mind, the Army bought the nation's entire supply of BZ and stored it in bombs at depots in Arkansas, Utah, and Maryland. Between 1963 and 1964, the Army manufactured 50 tons of BZ, enough to kill everyone in the United States four times or incapacitate everyone in the world ten times over.

The potential threat of BZ was raised after a 99-page report on BZ was issued by the Army's Medical Bioengineering Research and Development Laboratory in August 1977. The study began in 1975, when the Army decided to dispose of the deadly BZ but didn't know how. Any procedure used to break down the BZ compound and detoxify it could result in the production of other poisons. In addition, the chemical lasts up to 135 years. The Army's Medical Bioengineering report also concluded that the "need for ecological-impact studies is of relatively low priority."

One would expect the greatest care in the handling of such a potent chemical. According to *The Washington Star*, however, the Army subjected volunteers to open-air tests to prove soldiers could be incapacitated by the drug.

Robert D. Bowen, a former Air Force enlisted man, told the *Los Angeles Times* that he suffered memory disorientation and constant weight loss after he was put in a gas chamber and subjected to BZ gas. By the early 1980s, a number of former servicemen complained of long-lasting ailments that they attribute to the drug tests. Steven Bonner, of Fayetteville, North Carolina, told the *Los Angeles Times* that

he was given, in a series of Army tests, an injection of an unknown drug that caused immediate and intense hallucinations as well as partial amnesia. Bonner's daughter was born with unusual birth defects that he felt were caused by the drug tests. Even while acknowledging the potency of the drugs used in the tests, the Army maintains that there are no long-lasting effects and that the drug is safe if used properly.

The government has previously attempted to identify, contact, and if necessary, provide medical treatment to persons who received LSD during experiments. But it has refused to provide the same assistance to those who were subjected to other, perhaps more dangerous, chemicals.

Under the Freedom of Information Act, *The Philadelphia Inquirer* acquired 1,800 pages of Army documents that detail a \$78 million chemical-warfare testing effort. From 1964 to 1968, according to the documents, two trailers were parked on the grounds of Holmesburg Prison in northeast Philadelphia. During that three-and-a-half-year period, the Army and the University of Pennsylvania were conducting secret chemical-warfare experiments on 320 prisoners. The researchers were trying to increase amounts of mind-control drugs given to prisoners until a dose known as MED-50—the minimum dose needed to mentally disable 50 percent of a given population—was achieved.

The association between the Army and the University of Pennsylvania had begun in 1964, when C.B.W. research was at its peak. The Holmesburg participants were removed from the prison facility and kept in the trailers for weeks or sometimes months. They were paid \$12 for medical screening and \$25 for injection fees. According to the documents, the Penn doctors said that they took great care to accept only healthy prisoners as subjects. Most of them were young adults; two-thirds were black.

After each injection of a drug, the researchers watched the inmates for reactions. They also gave intelligence tests to determine how the drug impaired intellectual performance. In one section of the report it was noted that one inmate had to undergo special therapy after taking the drug test, which caused him to experience hallucinations, dizziness, drowsiness, and rambling; to wander aimlessly; to suffer dry mouth and throat, and abdominal pains; and to act verbally aggressive and belligerent.

No one seems to have considered the purpose or morality of the experiments—except one Army lawyer who wrote a memo questioning any research project that was intended to produce "irrational or irresponsible behavior" among unsuspecting volunteers. But beneath his memo was a handwritten note from a superior officer saying that these reactions were precisely "the purposes of the

study."

One phase of the experiments involved hardening the skin. "Our objective," one report said, "is to learn how the skin protects itself against chronic assault from toxic chemicals, the so-called hardening response." The researchers tried a variety of blister-producing chemicals by applying them to the prisoners' foreheads, backs, or forearms. Sometimes they would immerse their arms in the caustic solution. One researcher reported a year after the experiments started that "an inescapable conclusion from all our studies is that solid hardening is attainable only if the skin passes through a very intense inflammatory phase with swelling, redness, scaling, and crusting." Turpentine, he went on, would be a good skin hardener, except that almost half the prisoners contracted

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undesirable allergies on contact. "These reactions," he said, "may be quite severe when an entire forearm is involved."

Toxic effects were another problem. A researcher wrote that almost all inmates exposed to pure ethylene glycol monomethyl ether "exhibited psychotic reactions [hallucinations, stupor, disorientation] within two weeks and had to be hospitalized." In addition, prisoners were kept "hardened" for a year to both sodium lauryl sulfate and chlorinated phenol. The final insight, however, was that the "hardening is short-lived [and requires] continuing exposures for its peak maintenance."

At the end of the contract between Penn and the Army, the researchers reported that they had found the MED-50 of seven different chemical compounds. In their final report they declared, "No subject suffered any toxic or harmful effect." This statement could not be verified because the files had mysteriously disappeared by this time. Even the names of the Holmesburg prisoners who participated had been eliminated. Most of the names of the drugs used were also missing from the files. With the exception of the well-

known LSD tests, the Army has failed to do any effective long-term follow-up study on the health of the people involved.

In addition to the Holmesburg experiments, the University of Pennsylvania received five other Army contracts for drug testing. The same investigators continued to test prisoners until 1971. In the final Inspector General's report, it was noted that at least 94 inmates had been tested with "choking agents, nerve agents, blood agents, skin-blister agents, vomiting agents, incapacitating agents, and toxins." The contract was finally terminated in February 1973 because of criticism by the prison board.

Experiments like these raise some alarming issues. First, they are characterized by a total disregard for human dignity and an abandonment of even the most rudimentary form of ethical behavior. Many were performed as recently as 1980 on American citizens, by the American military, paid for with American tax dollars. This was not a time of war; these acts were not directed against an "enemy." Second, the MED-50 experiments on prisoners offer a good example of what happens when the military and academia collaborate on scientific research. Professors on today's campuses have warned the public about the growing "militarization of science," a situation in which America's scientists are given a clear-cut choice. They can agree to join the military in its onward and upward quest for new and more efficient means of killing, destroying, and maiming, or they can refuse to do such research. If the former path is chosen, an illustrious career at one of the nation's top universities or a directorship of a government agency may lie ahead. If the latter is chosen, chances are the researcher will be ostracized by others in the community. (Look at what happened to Robert Oppenheimer when he began to question the propriety of the atom bomb.) Even a professorship at an obscure university may be hard to come by.

The third issue that arises from experiments such as these is the military's longstanding practice of using a captive audience for its human experimentation. Its most immediate and obvious guinea pigs are its own personnel, who up until recently have shown a marked reluctance to sue the military or hold it in any way responsible for its actions. This fact has given the Pentagon a virtual carte blanche to conduct a host of experiments on American GIs with impunity.

Disturbing thoughts reoccurred throughout the research and writing of this article. If it took more than 20 years to drag these facts from the government, how many more as yet unrevealed abuses are hidden in its archives? Are such unjustified, bizarre, and callous experiments still being secretly conducted by government agencies, or hospitals and universities working with the C.I.A. or the military? How do we know that such ex-

periments are not being conducted and unsuspecting people are not being used as human guinea pigs? What assurances do we have that our streets are not being gassed or our subways filled with toxic chemicals? What guarantees have we that high-flying jets are not seeding the air with poisons or that Navy ships in our harbors are not spraying bacteria into the air that blows in from the sea?

Some supporters of these experiments argue that this type of research involving humans is within acceptable limits and does not create any long-term medical problems for the subjects. But this claim is undermined by the fact that few follow-up studies have been made.

In one of the rare long-term research programs, the Department of Energy published studies that assessed the long-range health of several different populations, most of whom had been exposed to occupational radiation hazards. These studies, which were funded by the Atomic Energy Commission, now a part of the Department of Energy, continue into the present day and are being carried out by the Argonne Cancer Research Hospital at the University of Chicago.

One of the groups studied was the more than 400 persons who experienced "considerable radium body burden," some for over 20 years, while working at various jobs (most were painters of radium dials and luminous watches, while others had received radium chloride by injection or orally as a medical treatment). Those with considerable radium exposure were found to have characteristic defects, destructive changes, and tumors in the skeleton. It should be noted that the victims of occupational radiation had considerably less of a body burden than did the subjects of the nuclear medical research.

A separate study is under way to examine 1,000 children who, while in their mother's wombs, were exposed to X rays taken in the course of pelvic examinations; another is being administered by the Defense Nuclear Agency of the De-

fense Department in order to register and identify the approximately 200,000 Defense Department personnel exposed to fallout from atmospheric nuclear tests. The agency wants to determine the level of exposure, identify incidences of death or illness that may be the result of radiation contamination, and to assist veterans in claims for compensation.

Even with these government-sponsored studies, can we trust assurances that such experiments are no longer being conducted when the experiments themselves were presented to unwitting victims with clever misrepresentations or outright lies?

Unfortunately, there are no absolutes.

radiation or chemical-induced diseases, and offer compensation for damage they have suffered with minimal delay.

Clearly, human experiments of this nature must never be repeated. Even though clear ethical and scientific guidelines on human experimentation existed in the 1960s and 1970s, though not codified in law, scientists and government personnel took it upon themselves to dissemble and misrepresent, to obfuscate and confuse, the subjects of their experiments—all to allow them to pursue some misguided goal of scientific research. Must a scientist be threatened under the law that other human beings cannot be abused in the name of science?

This question is especially important, since we talked with responsible officials in the very agencies and institutions where the experiments took place. Their attitudes were surprisingly similar to the experimenters themselves. In telephone calls to the universities and hospitals involved in the research, those that were aware of the "experiments" continued to justify their institutions' involvement as scientific progress. It was disturbing to hear the same rationale that allowed the experiments to occur in the first place.

But another disconcerting fact came from these interviews: Most of the present-day officials were unaware that such experiments had ever occurred at their institutions. Santayana's insightful axiom seems to apply here, with disastrous ramifications: Those ignorant of history are doomed to relive it.

Editor's note: The author wishes to acknowledge the valuable assistance of Trudy Golobic in compiling this article. Reprints of the articles in this series are available to readers. Please send a stamped, self-addressed envelope with a check or money order for \$1.00, payable to Penthouse Int'l, to: Editorial Department, Penthouse, 1965 Broadway, New York, N.Y. 10023-5965. Allow two months for delivery. ☐

There are no official statements that can comfort those whose lives were permanently made impossibly painful. What, then, can be done? As the Markey Report, the congressional subcommittee report on energy and commerce, strongly suggested (see "Medical Genocide: Part 15," September 1987), "If there is one thing the government can do for these experimental victims and their families, even at this late date, it is to conduct long-term medical follow-up of populations exposed to radioactive material."

In addition to its other efforts, the Department of Energy must make every effort to identify the subjects in these experiments, examine them for long-term

