

# Beryllium tests urged for military workers

By Sam Roe  
Tribune staff reporter

Several members of Congress are calling for the Department of Defense to test thousands of military personnel who might have been exposed to the highly toxic metal beryllium.

The lawmakers assailed the Pentagon for ignoring federal health guidelines that recommend blood tests for workers exposed to beryllium, a lightweight metal whose dust can cause an often fatal lung disease. Testing in other industries has revealed dozens of illnesses.

"This is a national disgrace the way the Department of Defense has treated these workers," said Rep. Tom Udall, a Democrat from New Mexico.

The Tribune reported this month that beryllium dust has been detected at 73 Army, Air Force, Navy and Marine Corps facilities in 23 states, with some exposure levels twice the federal legal limit.

The Defense Department estimates that 9,513 military and civilian personnel might have been exposed in the last 10 years. The agency said the decision to screen workers rests with doctors at each of its facilities, but military officials said they were unaware of any such testing.

The Pentagon has used beryllium for decades in a variety of applications, including missiles, aircraft brakes and helicopter components. While the Defense Department reports that only one of its workers has developed the disease since the 1940s, studies have long shown that the illness is often misdiagnosed or goes undetected.

Five congressmen contacted by the Tribune said they wanted the Defense Department to take action. They are Udall and Reps. Charlie Gonzalez (D-Texas), Paul Kanjorski (D-Penn.), Ted Strickland (D-Ohio) and Ciro Rodriguez (D-Texas).

The lawmakers also said the Defense Department should compensate employees harmed by beryllium and other substances, similar to the way the Energy Department aids ailing workers who were employed at that agency's facilities.

"This is just about doing the right thing," said Gonzalez, whose district includes former workers at the now-closed Kelly Air Force Base, where beryllium was used.

Strickland said officials who say they support U.S. troops overseas should support the right to basic medical care.

"I don't know how we can wave the flag and speak in glowing terms about fighting the war against terrorism" and not screen the military for a potentially fatal disease, he said.

Other lawmakers said they were concerned about beryllium exposure but wanted to investigate further.

The Energy Department, which has used beryllium in nuclear weapons, reported few disease cases until it started screening workers in the early 1990s. The agency has since tested 27,300 workers at 18 facilities, finding 729 people with beryllium disease or blood abnormalities linked to the illness.

The screening is recommended by federal agencies, including the Occupational Safety and Health Administration. Early detection is important because it allows treatments that can attempt to limit lung damage.

Beryllium disease has been found in virtually every industry in which workers have been screened. Studies show that about 3 percent of those exposed to beryllium dust develop the illness, sometimes decades after their last exposure.

Kanjorski said it was important to notify all former workers who worked near beryllium.

"There may be a lot of retired people who don't even know that they had the exposure," he said.

# Navy looks into testing workers exposed to metal

## Officials discuss hazards posed by beryllium dust

By Sam Roe

Tribune staff reporter

Facing increasing scrutiny over its health policies, the Navy is shifting course and considering whether to test its workers who might have been harmed by the highly toxic metal beryllium.

Navy officials said they are studying whether to routinely give blood tests to those exposed to the lightweight material, which has long been used in weapons systems and whose toxic dust has killed or injured hundreds of workers in other industries.

The Tribune reported last month that beryllium dust has been detected at 73 Army, Air Force and Navy facilities in 23 states, with some exposure levels twice the legal limit. Despite the risks, the Department of Defense has ignored federal health guidelines by not providing blood tests to those who might have been exposed.

Following the newspaper's report, several members of Congress called for the Defense De-

partment to test military personnel. In recent days, Navy officials have gathered data from beryllium experts and held meetings to discuss the hazards.

Dr. John Muller, a Navy physician researching the issue for the service, said that testing has value but that questions remain, including who should be tested and how often.

"It's not as simple and straightforward as it might seem," he said.

The Defense Department has resisted such testing for years, fearing it could lead to expensive lawsuits, Pentagon records show.

In solid form, beryllium appears to be safe. But when the metal is machined, sanded or otherwise altered, the resulting dust can cause an often fatal lung disease. Studies show that about 3 percent of those exposed develop the illness, sometimes decades after their last exposure.

Dr. Lee Newman, a beryllium expert at the National Jewish Medical and Research Center in Denver, said the Navy contacted him about the hazards and appeared serious about addressing the issue.

"They sounded like they have rolled up their sleeves," he said.

The Defense Department estimates that nearly 7,000 workers in the Navy may have been ex-

posed to beryllium dust in the last 10 years. The dust has been found at 51 Navy sites.

The Navy has used beryllium in aircraft brakes, electrical components and dental work. A recent Defense Department report to Congress said a dozen Navy job categories are high risk for beryllium exposure. Two jobs—"dental lab operations" and "heat treating"—have shown average beryllium dust levels above the federal legal limit.

The Army said it was not considering testing workers, and the Air Force did not respond to questions about testing.

While the Defense Department reports that only one of its workers has developed beryllium disease since the 1940s, studies show the illness is often misdiagnosed or goes undetected.

The Energy Department, which has used beryllium in nuclear weapons, has tested thousands of its workers, finding hundreds with beryllium disease or blood abnormalities linked to the illness.

The tests are recommended by federal agencies, including the Occupational Safety and Health Administration. Though beryllium disease is incurable, early detection allows for treatments that can attempt to limit lung damage.

# Argonne workers show exposure to toxic metal

## Beryllium linked to fatal disease

**By Sam Roe  
and David Heinzmann**

Tribune staff reporters

Seven current or former workers at Argonne National Laboratory have blood abnormalities caused by exposure to the highly toxic metal beryllium—the first such cases at the facility.

The cases were discovered during recent testing by the U.S. Department of Energy as part of a nationwide screening program of potential beryllium victims. The workers have been referred to medical specialists to determine whether they have beryllium disease, an incurable lung illness that has claimed the lives of scores of workers in the

nuclear industry.

“We regret that their exposure has caused them physical harm,” said Brian Quirke, spokesman for the Energy Department, which owns Argonne. The laboratory, near Lemont, conducts research in fields that include high-energy physics, chemistry and materials science.

The news comes at a time when U.S. officials are in the Chicago area to help ailing weapons workers and others associated with Energy Department facilities apply for a new federal compensation program. People with beryllium disease qualify.

Beryllium is a strong, lightweight metal that has been used for decades in nuclear weapons and research experiments. Microscopic amounts of beryllium

PLEASE SEE **ARGONNE**, PAGE 17

# ARGONNE: Beryllium used at lab since 1940s

CONTINUED FROM PAGE 1

dust—the toxic form of the metal—can cause disease, and workers who inhale the dust have a lifelong risk of developing the illness.

People who have the blood abnormalities do not necessarily have the disease; but it means that the body's immune system has reacted to beryllium exposure. Further tests, such as a lung biopsy, are needed to confirm the illness. Experts estimate about half of the people with blood abnormalities will develop the disease.

In a statement, Argonne said the facility "puts worker and public health and safety first in all its research and has done so for more than 50 years."

Argonne has used beryllium, which has rare nuclear properties, since the 1940s. The metal is used at the lab in X-ray machine windows and in neutron beam experiments to study the property of materials.

## Safeguards in place

Officials said many safeguards have been used for decades, including extensive ventilation.

Former Argonne safety director Don O'Neil said he was surprised and saddened by the results.

"I thought our controls were exemplary from the 1950s on," said O'Neil, who retired in 1989.

Argonne reports that about 1,775 current and former workers have had potential exposure to beryllium dust over the years.

But no one currently works with the metal in a way that could create dust, Argonne spokeswoman Donna Jones Pelkie said. The facility once had a beryllium machine shop, but it closed around 1980, she said.

In recent years, the Energy Department has been testing the blood of current and former beryllium workers at nuclear facilities nationwide. As of December, 27,835 workers have been screened, with 183, or less than 1 percent, showing beryllium disease. Another 546 have blood abnormalities.



Tribune photo by Ed Wagner

**Denise Vigil, a federal employee, talks to a client about compensation for nuclear weapons workers who got sick.**

## Beryllium disease

Beryllium is an extremely lightweight metal that is six times as stiff as steel. It is not hazardous in solid form, but its dust can cause an often-fatal lung illness if it is inhaled.

### SYMPTOMS

It can take up to 40 years after exposure to develop beryllium disease symptoms, which can include:

- Cough
- Night chills
- Fatigue
- Weight loss
- Shortness of breath

### EVALUATION, TREATMENT

Blood tests and chest X-rays are used to help confirm a diagnosis. The disease can be treated with steroids, but there is no cure.

Chicago Tribune

Ninety-seven former workers at Argonne and Site B, a former laboratory at the University of Chicago, have been screened, with six former Argonne workers showing blood abnormalities. Officials have been unable to track down hundreds more who might have been exposed at those facilities.

Forty-eight current Argonne workers have been tested in ongoing screening, with one showing the blood abnormality.

Officials disclosed few details about the people affected at Argonne, saying only that they fell into the job categories of welder, scientist, truck driver, technician and clerical worker.

Three of the seven worked at Site B, the secret World War II lab that used beryllium to construct the world's first atomic

bomb. The U. of C.'s wartime research labs evolved into Argonne, which opened in 1946. In the 1940s the dangers of beryllium were not fully understood, and Site B had few precautions.

"It was a very dusty place," said Larry Kelman, 82, of Naperville who developed the disease after working at Site B. "Every morning the secretaries had to clean off the dust before starting work."

At least 10 workers developed beryllium disease after working at Site B. The facility was torn down more than 25 years ago.

For decades, the U.S. government denied fault when workers became ill in the course of building nuclear weapons. But in 1999, the Energy Department said it would compensate workers who became sick from exposure to beryllium, radiation and silica.

## 417 Illinois claims filed

In Illinois, 417 people have filed claims on behalf of themselves or deceased relatives, U.S. Labor Department spokesman Larry Hoss said. Of the 18,000 claims filed nationwide, the government has paid \$91 million to 1,272 people, he said.

This week, Labor Department officials are in Joliet and Willowbrook helping claimants fill out forms. On Monday in Joliet, Virginia Susner of Crest Hill checked on her claim. She said her husband, Richard, had been healthy before working as an electrician at Blockson Chemical in the 1950s. The Joliet firm produced uranium for the defense program, officials said.

But after a few years of crawling around in the plant's insulation and wiring areas, his bones started to ache. His doctor told him the yellow powder that dusted his clothes every day was probably causing his ailments, she said. He died in 1980 at age 53. Cancer started in his lungs and spread throughout his organs, she said.

Harry Burkhart and his sister, Linda Reavis, both of Joliet, said the government did not fully inform workers of the risks at facilities such as Blockson, where their father was a maintenance man from 1959 to 1985.

Harold Burkhart died in 1996, two months after a rare form of lung cancer was diagnosed, his son said.

"Nothing's going to bring him back," Harry Burkhart said. "I guess the money would give us the satisfaction that [the government] admitted that something was wrong."



Tribune photo by Terrence Antonio James

Retired electrician Bob Hightower, 66, of Addison said he occasionally worked at Argonne and thinks he should be tested.

# Beryllium exposure test expands

## Subcontractors at Argonne added

By Sam Roe  
Tribune staff reporter

Responding to the discovery of blood abnormalities among several workers at Argonne National Laboratory, the federal government said it will greatly expand its testing program at the facility for workers who might have been exposed to the highly toxic metal

beryllium.

The U.S. Department of Energy will soon offer blood tests to thousands of subcontract workers, including electricians, carpenters and plumbers, who have periodically worked at the laboratory over the last 50 years.

Recent testing of full-time employees at Argonne revealed that seven current or former workers have blood abnormalities linked to beryllium disease, an often fatal lung illness caused by the metal's dust.

"Argonne and the Energy Department never intended to cause harm to people who came to work here," said Brian Quirke, spokesman for the Energy Department, which owns Argonne. "Argonne tried to keep exposure to a minimum, but we know that in some cases we did cause injury."

Quirke said it was unclear whether subcontract workers were exposed. "We are taking the cautious approach, and it's a possibility they were exposed. So let's test them," he

said.

Argonne consists of dozens of buildings on 1,500 acres near Lemont. Managed by the University of Chicago, the laboratory conducts research in high-energy physics, chemistry and materials science.

The facility has used beryllium since the 1940s. In recent years, the strong, lightweight metal has been used in X-ray machine windows and in neutron beam experiments to study the properties of materi-

PLEASE SEE ARGONNE, PAGE 6

# ARGONNE: Lab has used beryllium since 1940s

CONTINUED FROM PAGE 1

als.

Argonne officials said the laboratory has employed numerous safeguards, including extensive ventilation, to protect workers from beryllium dust. Subcontract workers, officials said, are properly trained and warned about all hazards at the facility.

The laboratory currently does not handle beryllium in a way that could create toxic dust, Argonne officials said. The facility once had a beryllium machine shop, but it closed around 1980.

"That machine shop was operated under the strictest possible guidelines," Argonne spokeswoman Catherine Foster said.

She said officials are investigating how the seven workers with blood abnormalities were exposed to beryllium dust. Their jobs varied, from truck driver to secretary, and no clear route of exposure has emerged.

Energy Department officials said local unions will help notify subcontract workers who are eligible for expanded screening. The tests are voluntary and will be paid for by the Energy Department.

Because it is difficult to determine who might have been ex-

posed, the testing is open to all subcontract workers who spent time at Argonne—a group that numbers in the thousands. But officials expect a much smaller number, perhaps dozens, to take the test.

Similar testing has uncovered beryllium disease or blood abnormalities at other sites owned by the Energy Department, which has used beryllium for decades in nuclear weapons.

At the former Rocky Flats bomb plant near Denver, four subcontractors—two sheet metal workers, an electrician and a custodian—have beryllium disease. Several more have blood abnormalities.

People with blood abnormalities do not necessarily have beryllium disease; but it means that the body's immune system has reacted to beryllium exposure. Further tests, such as a lung biopsy, are needed to confirm the illness. Experts estimate that about half of the people with blood abnormalities will develop the disease.

Microscopic amounts of beryllium dust can cause disease, and workers who inhale the dust have a lifelong risk of developing it. Studies show about 3 percent of people who have been exposed contract the disease.

Ken Lambert, assistant business manager for the International Brotherhood of Electrical Workers Local 701, said he expects about 70 electricians to be tested.

Retired electrician Bob Hightower, 66, said he occasionally worked at Argonne and does not recall being warned about beryllium. He said he does not know if he was exposed but

thinks he should be tested because his job was often dirty.

"Concrete dust, sawdust and fumes and what have you," said Hightower of Addison. "You open walls up, and you don't know what the hell is in there."

The electricians union first raised the issue of screening Argonne subcontract workers last year after reading about the hazards of beryllium in the Tribune, officials said. The union contacted the Energy Department, which agreed to the tests after problems were detected in full-time Argonne workers.

In recent years, the Energy Department has been testing the blood of current and former beryllium workers at nuclear weapons and research facilities nationwide. Of the 27,835 workers screened, 729 have beryllium disease or blood abnormalities.

One hundred and fifty current and former workers at Argonne have been tested, with six former and one current worker showing blood abnormalities.

The Energy Department's decision to screen additional workers at Argonne occurs at a time when the Defense Department has come under fire for not testing its employees.

The Defense Department reports that beryllium dust has been detected at dozens of Army, Air Force, Navy and Marine Corps facilities, with some levels exceeding the federal legal limit. The agency estimates that 9,500 people might have been exposed in the last 10 years, but it has ignored federal health guidelines by failing to test them. This month, several members of Congress called for such screening.