

What's Happening

I N T H E U S A ?

BY LAWRENCE GABLE

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In 1951 the U.S. began testing nuclear weapons in Nevada. Over eleven years a hundred bombs were tested there. They sent radioactive fallout that has sickened and killed many people. A law forces the government to give them money, and now some people in a nearby county in Arizona want some too.

The nuclear age began in the 1940s when scientists in the U.S. developed atomic bombs. The only use of atomic bombs in history came in World War II in 1945. The U.S. dropped two on Japan, where they caused tremendous destruction and death. After the war the Soviet Union developed its own nuclear weapons. The U.S. was afraid of that, and that fear led to its testing program.

The testing of nuclear bombs in the U.S. took place at the Nevada Test Site. It lies 65 miles north of Las Vegas, and covers an area of desert and mountains the size of Rhode Island. Between 1951 and July 1962 the U.S. exploded a hundred atomic bombs above ground there, and many more underground after that.

The government was concerned about how people would respond to the tests. The explosions were loud and produced flashes of blinding white light. They often broke some windows in Las Vegas. People for 100 miles in any direction could see the mushroom clouds that rose 40,000 feet in the sky. The government reassured people that testing was a routine activity, and that it presented no danger to them.

The government knew that radiation could sicken and kill people though. It had evidence from earlier tests and from the bombings of Japan. The government postponed tests when the wind blew toward Las Vegas or California. It tested only when winds blew radioactive fallout toward lightly populated regions in states like Utah, Montana and Wyoming.

Early complaints came from sheep ranchers in Utah. In 1955 they filed a lawsuit against the government for disease and deaths in their animals. Fallout was causing blisters and scabs on the animals' mouths

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and noses. It killed animals, and some lambs were born with deformities like two heads or no legs.

The fallout was causing disease and death in humans too.

It was in the water for irrigating crops, so the vegetables they ate and the milk they drank was poisoned. Residents in Utah, Idaho, Nevada and Arizona suffered from high rates of cancer. They filed many lawsuits that always failed. Finally Congress passed a law in 1990 that helped people who had lived downwind of the nuclear tests.

The law is called the Radiation Exposure Compensation Act. It apologized to people who later got certain cancers and other diseases, and it established payments for them. People who mined and transported uranium for the bombs each receive \$100,000. People who were present at the tests receive \$75,000. Finally, it compensates each "downwinder" who lived in specific counties in southern Utah, northern Arizona and much of Nevada with \$50,000.

The law has some restrictions. It requires proof from downwinders that they lived or worked in those 21 counties for a period of at least two years between January 21, 1951, and October 31, 1958. It also covers downwinders who were there from June 30 to July 31, 1962. The compensation goes to the individual who is sick, or to the survivors of those who died. Many people have criticized the law because it covers too small an area.

Mohave County is Arizona's closest one to the Nevada Test Site. Somehow the law left out the southern part of the county though. This month a congressman from Arizona is introducing a bill to include it. The government estimates that downwinders there got three times more fallout than the counties in Arizona that the law covers. Higher cancer rates and birth defects among people there confirm that.

The government admits that radiation harmed people in counties and states that the law does not cover. However, since downwinders in southern Mohave County got more fallout than most people, the harm to them and their survivors has been greater. Now they hope that help comes to them too.



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The government assured people that testing was a normal activity that presented no danger. The explosions were loud and produced white flashes of light. They often broke some windows in Las Vegas. People 100 miles away could see the mushroom clouds rise high into the sky.

The government knew that radiation could sicken and kill people though. It postponed tests when the wind blew toward Las Vegas or California. It tested only when winds blew radioactive fallout toward lightly populated states like Utah, Montana and Wyoming.

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The law has some restrictions. It only pays downwinders who lived or worked in 21 counties for at least two years between 1951 and 1958. It also covers downwinders who were there from June 30 to July 31, 1962. The money goes to the downwinders or their survivors. Many people argue that the law covers too small an area though.

Mohave County is Arizona's closest one to the Nevada Test Site. Somehow the law left out its southern part. This month a congressman from Arizona is introducing a bill to include it. The government agrees that downwinders there got more fallout than the counties in Arizona that the law covers. Higher cancer rates there prove that.

The government admits that radiation harmed people in counties and states that the law does not cover. However, downwinders in southern Mohave County have suffered more than most people. Now they hope that help comes to them too.

Background Information

The Nevada Test Site's landscape looks something like the moon, with hundreds of craters from explosions. Of the hundred bombs tested above ground, 23 were larger than the one dropped on Hiroshima, Japan.

Underground testing of weapons there continued until September 23, 1992. The total number of tests, above ground as well as underground, was 928.

The Soviet Union tested its first bomb in 1949.

The U.S. tested bombs in the South Pacific, but international fear of fallout caused the move to Nevada. In 1954 the U.S. paid Japanese fishermen who had been contaminated by an explosion at the Bikini Atoll.

The law compensates individuals who contracted one of 27 medical conditions. The National Cancer Institute estimates that the Nevada Test Site may be responsible for up to 212,000 cases of thyroid cancer alone.

As the radioactive matter reached high altitudes, winds blew them eastward for long distances. The Centers for Disease Control says that anyone who has lived in the contiguous United States since 1951 has been exposed to radiation.

As of January 2010 the U.S. Department of Energy had accepted 22,000 claims and paid out nearly \$1.5 billion.

As part of a test site public-relations program in March 1953 the government invited 600 observers to watch a test and its effect on manikins, typical homes and cars. They watched from seven miles away, and later went into the test area.

Critics say that the law should have included payments to surviving siblings, should have covered greater areas in the West, and should have included more forms of cancer.

In 1981 Utah's Senator Hatch introduced an early version of the law. He said: "A great wrong was committed by the Federal Government in exposing thousands of Americans to radioactive fallout while simultaneously conducting a massive campaign to assure the public that no danger existed ..."

A booklet from the government told people near the test site, "Your best action is not to be worried about fallout."

The new bill to include southern Mohave County comes from Congressman Trent Franks.

Topics for Discussion and Writing

Pre-reading:

- Why do dentists put a protective apron on patients when they do X-rays?

Comprehension:

- Explain how the Nevada Test Site came to be, and describe what happened there.

Beyond the Text:

- The government told people that it was their patriotic duty to accept the inconvenience of the explosions. What duties do you think citizens have?
- Why is safety the greatest concern at nuclear power plants?
- Do you think compensating people is appropriate?

Vocabulary (*advanced article only)

Article-specific: downwind; radioactive fallout; atomic bomb; radiation; lawsuit; deformity*; exposure; compensation; to mine; uranium; birth defect*

High-use: nuclear; to assure/reassure*; to respond*; routine*; evidence*; to postpone; to irrigate; resident; rate; to establish; restriction; to estimate*; to confirm*

Sources

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January 17, 2010

National Geographic Magazine November 2002
"Origins of the Nevada Test Site"
(U.S. Department of Energy, December 2000)

Sharlot Hall Museum www.sharlot.org

U.S. Dept. of Justice
www.justice.gov/civil/torts/const/reca

U.S. Department of Energy www.nv.doe.gov

Nevada Test Site www.nv.doe.gov

CA Curricular Standards (4–12)

English-Language Arts

Reading 1.0 Vocabulary Development
2.0 Comprehension (Informational Materials)

Writing 1.0 Writing Strategies
2.0 Writing Applications

ELD—Intermediate and Advanced

Reading Vocabulary Development/Comprehension
Writing Strategies and Applications
Listening and Speaking

History-Social Science

10.8; 10.9; 11.7; 11.9