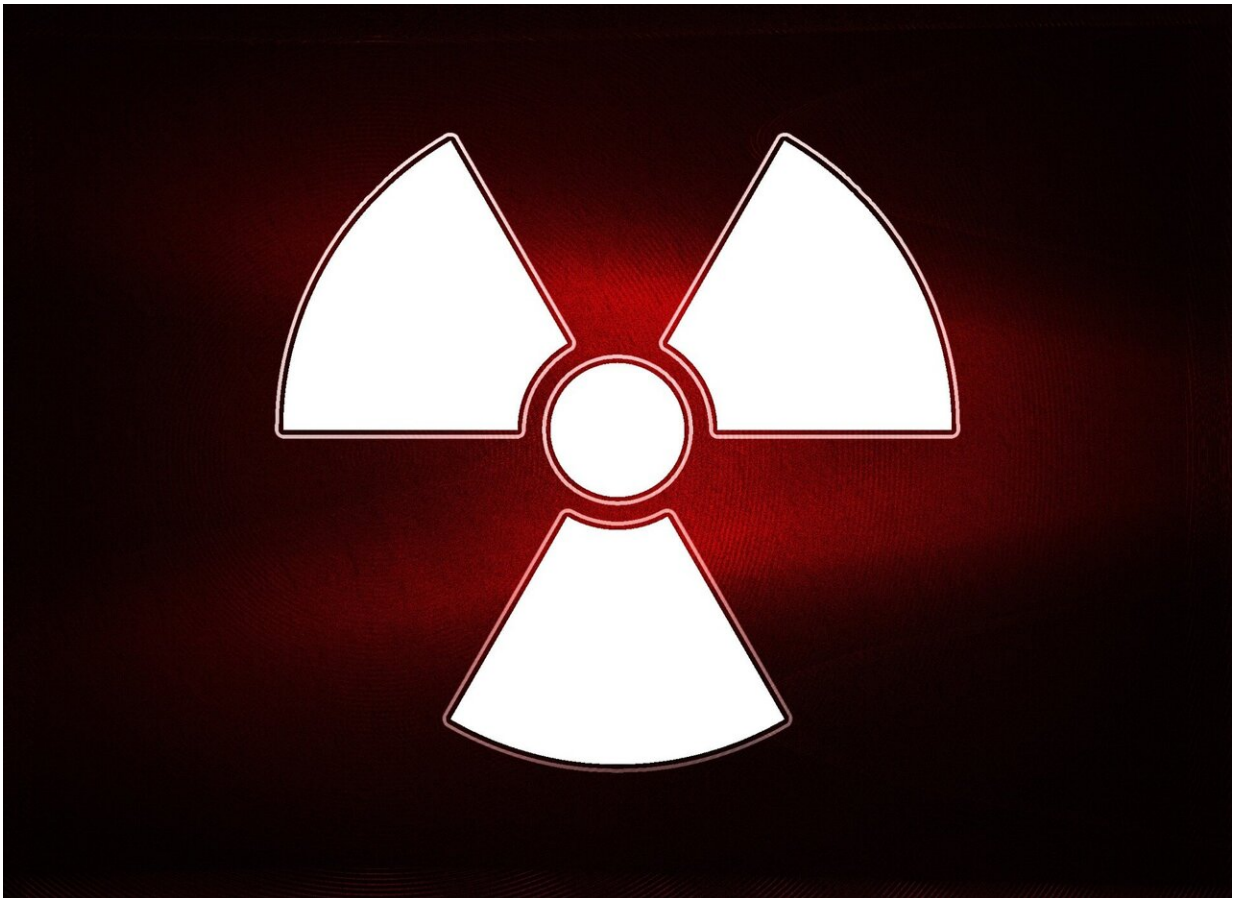


Study: Cancer cases likely in those exposed to atomic test

September 1 2020, by Susan Montoya Bryan



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After years of study, the National Cancer Institute said Tuesday that some people probably got cancer from the radioactive fallout that wafted

across New Mexico after the U.S. government detonated the first atomic bomb in 1945. However, the exact number is unknown.

The institute disclosed its conclusions in a series of scientific papers on radiation doses and cancer risks resulting from the Trinity Test, which marked a key point in the once-secret Manhattan Project. The Congress considers legislation that would include the downwinders in New Mexico in a federal compensation program for people exposed to radiation released during atmospheric tests or employees in the uranium industry.

U.S. Rep. Ben Ray Luján, a sponsor of the legislation, organized a meeting in August with lawmakers, former miners, survivor groups from New Mexico, Idaho and Guam and others.

"If you listen to the stories of downwinders, it's clear that the Trinity Test unleashed a lifetime of illness and suffering for many New Mexico families," Luján said Tuesday.

Downwinders have said their communities have been plagued by cancer, birth defects and stillbirths.

Tina Cordova, a co-founder of the Tularosa Basin Downwinders Consortium and a cancer survivor, has said the government did nothing at the time or in the decades after to monitor what was happening because of the fallout.

She's disappointed in the latest studies, saying researchers did not do any new sampling of soil or water but rather made "guesstimates" about the risks based on a review of scientific literature and used an old fallout map when modern computer modeling may have helped to provide a more accurate picture of how the radioactive particles were disbursed given New Mexico's often turbulent summer weather patterns.

She also pointed to research published in 2019 in the *Bulletin of the Atomic Scientists* on data that showed a spike in infant mortality with no known cause other than it began after the Trinity Test. She said the increase followed what had been a steady decline in infant mortality in New Mexico up until August 1945.

"The most egregious part is that babies died and still no one is addressing that," Cordova said.

Dr. Steven Simon, a lead investigator with the National Cancer Institute, said during a briefing Tuesday that the research was aimed at estimating the range of possible radiation-related cancer cases in New Mexico linked to the Trinity Test. The team looked at published data on fallout from the test and gathered information about the typical diet and lifestyle of people living in the area in 1945.

Small focus groups were formed and interviews were done with 11 older adults who were in the same communities where they lived during the 1940s or 1950s.

Simon acknowledged the studies' limitations, saying researchers had to rely on what little data they had, the physics of radioactivity and modeling to estimate what was unknowable.

The researchers described the process for estimating radiation doses as lengthy, saying the work involved more than 120 million calculations to approximate doses to the organs or tissues at greatest risk from fallout exposure. At the top of the list is the thyroid.

They estimated that the largest doses would have occurred in Torrance and Guadalupe counties based on the fallout pattern. All of the state's counties were included in the analysis.

While the full impact on New Mexico residents is difficult to gauge, officials with the institute say the models used and the review of possible paths for exposure—from inhaling dust contaminated by fallout to drinking water or milk and eating vegetables from the garden—make the Trinity study one of the most detailed assessments of exposure from nuclear testing fallout to have ever been conducted.

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