60 Minutes Transcript
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Fallon Cancer Cluster Probed

- *CDC Investigates Cluster of Childhood Leukemia Cases*
- *Questions Raised About Jet Fuel For Top Gun Flight School*

FALLON, Nevada, Jan. 9, 2002

(CBS) In one Nevada town, 15 children have all come down with the same disease - childhood leukemia. This is an alarming statistic in a town so small that more than one case every five years would be unusual.

Correspondent Carol Marin reports that both the families of the children and the U.S. Centers for Disease Control are urgently trying to find out what's causing it.

Just three days after Christmas, a 3-year-old boy became the latest cancer victim. He lives in Fallon, a small town near Reno with a population of about 9,000. He is the 15th child in Fallon to get that diagnosis in the last four years, one reason why the CDC is doing something it quit doing 20 years ago - aggressively investigating a cancer cluster.

Adam Jernee was the first to die - this past June. He was just 10. Richard Jernee says his son seemed to have a chest cold that wouldn't go away. Adam was taken to the hospital in Fallon where a CAT scan found a tumor in his chest.

"Within two hours we were on an airplane for Sacramento to start chemotherapy" his father recalls. "They put a tube into his chest to drain excess fluid around his heart and they're trying to get an I.V. in his arm and he's screaming for me."

Richard Jernee says Adam had been living in Fallon for a year when he was diagnosed and he thinks the town killed his son. A second child has since died.

Scientists have never been able to find an environmental cause to childhood leukemia. In Fallon, there are a host of question marks, including high levels of arsenic in the drinking water, pesticide spraying in the fields, naturally occurring uranium in the ground and a history of nuclear tests nearby in the 1960s. In addition, a pipeline runs through the center of town, carrying millions of gallons of jet fuel to the Fallon Naval Air Station and the Navy's Top Gun Flight School.

Dustin Gross was among the first to be diagnosed, a full year before Adam Jernee. At first, Brenda and Reto Gross thought their son had the flu.

Dustin was also taken to the hospital in Fallon, where the doctor told them just how grave their son's condition was.

"And I'm trying to ask the doctor," Brenda says, "and the doctor's explaining everything to me and saying, 'You know, this is a cancer. I've already contacted U.C. Davis. We're gonna get you flown over there. Dustin's got to be seen now.'"

In the spring of 2000, the number of seriously ill children in Fallon began to explode. Statistically, an area the size of Fallon should expect one case of childhood leukemia every five years. But in Fallon in just one half-year period, there were seven cases.

Betsy Holcomb's daughter Kaylene, 18, was diagnosed in May. Matt Warneke's daughter Annastacia was 5 when she was diagnosed.

"When my daughter was diagnosed," Warneke says, "the first thing I thought was, 'Not my daughter.' And the second thing I thought was, 'If this is going on in Fallon, I want to leave. I don't want to be here.'"

Childhood leukemia is a cancer that damages the white blood cells and weakens the immune system. In most cases, doctors can cure a child, but it takes aggressive chemotherapy.

Despite years of research, scientists still have very little understanding of what causes white blood cells in children to go bad. Genetics, they say, play a part. Across decades, there have been dozens of studies looking for an

environmental cause, examining everything from radiation and chemical exposure to second hand smoke and maternal alcohol use. Despite all the studies, scientists have been unable to find a smoking gun.

"Everybody has their own opinions," says Matt Warneke. "You can put whatever you want on the top of the list. But until they study it and prove that that's it, nobody knows for sure."

This fall, scientists from the Centers for Disease Control and other federal agencies arrived in Fallon. For the first time in a cancer cluster investigation, scientists are using new, specially designed equipment to collect samples of dust, to test the air, to draw water from homes and to test the soil, as well as to analyze blood and urine samples.

"Our new tools are capable of looking at a greater number of contaminants, in this case, a greater number of volatile organic compounds, pesticides, heavy metals and some radioactive materials," says Dr. Thomas Sinks of the CDC.

Part of the study is for parents of kids who don't have leukemia, but who feel their children may be at risk.

"Part of the reason that we are looking at the environment so carefully is to answer the questions for the entire community: Is my community safe? Is the air I breathe safe? Is the water I drink safe? It'll be at a level that has never been applied to a cancer cluster before," Sinks says.

The question at the top of the list for many in Fallon is about the 34 million gallons a year of jet fuel used at the Navy's Top Gun flight school. The fuel, called JP-8, is made up of over 200 chemicals including benzene, a known carcinogen.

The base began using it in 1993. Four years later, the first case of childhood leukemia was diagnosed. But even before families began to ask questions about JP-8, Matt Warneke says, the Navy already had an answer.

"The base was denying it, before we even ever asked the question," he says. "They were denying everything before anybody ever brought up anything from the base."

Until recently Captain Roy Rogers was the commanding officer in Fallon.

"We are anxious to contribute to the investigation out here," he says. "And, to date - I mean for me, I'm not a scientist - but the people that have been out here and looked at JP-8, looked at fuels, have not established a scientific link between JP-8 and leukemia."

But Mark Witten, whose own scientific work has been funded by the military, is not so sure. He's a research professor at the University of Arizona and has more than anyone else in the country studied the health effects of exposure to JP-8. And this is one theory about what may be going on in Fallon.

"You may be getting a little bit of jet fuel exposure, a little bit of arsenic in the drinking water, as well as uranium exposure," he says. "No one at this point in time can rule out any possible toxic containment causing childhood leukemia in Fallon."

Witten is just one of a number of scientists the military has hired to conduct health tests on JP-8. He says his work on laboratory mice shows JP-8 fumes can cause damage to their lungs and can weaken the immune system of newborn mice.

As for humans, Witten says he's concerned about something the military has already learned. Fuel handlers at six bases were measured for exposure to JP-8. At the Davis-Mothan Air National Guard in Tucson, Witten says, tests found elevated levels of benzene.

"The benzene levels in the Davis-Mothan workers was five times that of any other air base," he says. "And that was never adequately explained. Benzene's highly carcinogenic, I mean incredibly carcinogenic. I'd sure like to know why my benzene levels were five times higher in Tucson than they were at other bases."

Witten has also been conducting field tests, measuring the exhaust when a jet engine is started.

"Every time they start a jet engine it is putting out uncombusted jet fuel," he says. "And then in an aerosol form. And so this then goes whichever way the wind blows."

Witten says his gut feeling is that it could go a long way.

But Capt. Rogers says the data is inconclusive. "We are still anxiously awaiting the results of studies," he says.

In Fallon, they are waiting for results, too and some frustration has set in, especially with the CDC. Though it was first notified of a possible cancer cluster back in July of 2000, the CDC took a year to start testing in Fallon. That's because it stopped initiating cluster investigations 20 years ago after conducting more than 100 such probes and never turning up a concrete answer. Now, because of Fallon, the CDC is reassessing its policy.

"We are working currently to rethink how we respond to cancer clusters and the type of approach we have," Dr. Sinks says. "The types of infrastructure we can help states build, and a step-by-step process by which cancer clusters might be investigated."

As for finding a cause of leukemia in Fallon, he says, "I think history tells us it is unlikely, but that doesn't mean we're resigned that we won't be able to find it."

So why do people stay in Fallon?

"The reason I stay," says Matt Warneke, "is because this family right here. And that family right there and that family right there. That family down there. And the rest of us up here. You can't ask for a better community."