

A Relentless SISTER

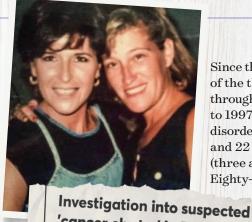
SKIDS, CHERYL LUMSDEN Josza and her older sister, Terri Lumsden Jewell, always had their arms around each other. After they became moms, they'd hit the beach together with their children every spring break. "She was the sweet to my spicy," says Cheryl, now 54. "She was my best friend."

In early 1999, Terri slammed her leg in a car door, and it swelled so badly that she went to the emergency room. Doctors suspected leukemia right away. After more tests, they diagnosed Terri with Stage III chronic myelogenic leukemia. Despite a bone marrow transplant, for

which Cheryl was the donor, Terri died that fall at age 38. "I was devastated," says Cheryl. "It all happened so quickly."

A few years later, Cheryl heard that Bruce Bell, a classmate of Terri's at Bayshore High School in Bradenton, FL, had been diagnosed with the same type of leukemia as Terri. She called Bruce's sister, Erin Bell, to commiserate. When Cheryl hung up the phone, a lightbulb went on. This can't be just a coincidence, she thought.

In 2010, Cheryl set up a Facebook page to collect information about other alumni who were sick.



'cancer cluster' in Bradenton

"I refuse

to give up

the fight,'

Above:

Since then, she has learned that of the thousands who passed through Bayshore High from 1978 to 1997, 118 have autoimmune disorders, 107 have died of cancer, and 22 have died of leukemia (three are still living with it). Eighty-seven children of alumni

> have been born with birth defects. All told, nearly 500 graduates have become sick, died, or given birth to sick

children. And those are just the ones she knows about. says Cheryl.

A History of Health Complaints

The original Bayshore High School was built in 1962 on the

outskirts of Bradenton, surrounded by middle-class homes and lush farmland. The sprawling building stood next to a vocational tech school, down the street from a company that manufactured machine parts, and a few miles from a juice plant and a now defunct company that produced vinyl products.

In 1998, the school was torn down after mounting complaints of headaches, breathing issues, and sore throats from faculty and students. The school board eventually blamed the problems on mold, and a new building was erected nearby the same year.

Over the next two decades, as the health ->

A Steadfast STUDENT



In 2013, Destiny Watford, then 17, rallied her Baltimore high school's human rights group, Free Your Voice, to protest the construction of a trash incinerator, which would pollute the air in her community. The students led tours of the construction site and presented the facts to public institutions that had agreed to buy energy from the incinerator.

In March 2016, her dogged efforts paid off: Due to increasing pressure from the public and from the Maryland Department of the Environment, the company was forced to halt construction of the

incinerator. A month later, Destiny became one of the youngest people to receive the Goldman Environmental Prize, a prestigious. worldwide award for grassroots environmental activists.

Now a senior at Towson University, Destiny still fights for the environment in her hometown. "I want to see my neighborhood succeed and build something we can be proud of," she says.

To learn more about Destiny and the work of Free Your Voice, go to facebook.com/freeyourvoicegroup. problems worsened, some alumni and their families began to wonder if the issues were actually due not to mold but to contaminated water.

In 2003, Chervl, a school board records specialist by day, began to devote her spare time to investigating the possible links between the school's drinking water and the alumni deaths. Her early research suggested that benzene, a colorless, toxic liquid that the American Cancer Society has associated with leukemia, had been leaking from a diesel storage tank buried near the school. Cheryl recruited a lawyer, a toxicologist, and an epidemiologist, who encouraged her to look closely at the chemicals released by some of the local companies.

Soon after, Cheryl began presenting her initial findings at

school board meetings and to county commissioners. In 2006, she reached out to then Florida state representative Bill Galvano, who held a town hall meeting about the issue the following year. Dozens of Bayshore alumni families showed up. As a result, soil testing was conducted for the area around the old school, but results were inconclusive.

Frustrated, Cheryl took her investigation to local television and newspaper reporters, whose stories drew out even more reports of Bayshore alumni who were sick or had died.

Cheryl and several experts, including Richard Smith, Ph.D., a professor of statistics and



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Betty Lou Rocklein (above left) with her daughter Denise Sproul and husband, Joe.

biostatistics at the University of North Carolina, Chapel Hill, believe that the mounting cases of leukemia and other cancers among alumni qualify as a "cancer cluster," an official designation by government health agencies and the Centers for Disease Control and Prevention (CDC) that often leads to considerable public attention, lawsuits, and even legislative action.

But as Cheryl discovered, proving the existence of a cluster was exceedingly difficult. "I can count on one hand the areas where the CDC has acknowledged that a cluster exists," says toxicologist Stephen Lester, science director at the Center for Health, Environment & Justice.

As the years went on, Cheryl continued to show up at school board and county commissioner meetings. She pointed out indications that the

old school used well water, which is more susceptible to contamination than municipal sources. She told them about an area a mile north of the old school that was a designated Superfund site, the label for highly contaminated land. "I was constantly bringing another piece of evidence or another expert who said, 'This warrants an investigation,'" says Cheryl. "But the school board always countered with the results of the soil test that really proved nothing."

Finally, on May 25, 2017, Cheryl, Betty Lou Rocklein, and a handful of other alumni and friends attended a meeting of the Manatee County school board and the county commissioners.

Cheryl and Betty Lou had met in 2011 at the funeral of Betty Lou's daughter Denise Sproul, a 1983 graduate of Bayshore High, who died of acute myelogenic leukemia at 46. She was the mother of eight children. Betty Lou had never spoken publicly about her daughter, but by May she was ready. "I wanted Denise to be remembered as a strong and caring woman," she says.

For her allotted three minutes, Betty Lou's voice quavered as she described Denise, her middle child, a former athlete and the kind of person who hosted cookie exchanges at Christmas, even when she was ill. "She had three different cancers," Betty Lou told the group. By the time she sat down, there wasn't a dry eye in the room.

Next, Cheryl presented a staggering statistic, based on Smith's calculations: The chances of the percentage of leukemia deaths being as high as it is among former Bayshore students are about one in a billion. "You're 35 times more likely to win the Florida lottery with one ticket," Smith says.

Before the meeting adjourned, the school board and the board of county commissioners agreed to ask the Florida Department of Health in Manatee County to conduct an investigation. They also said they would hire an independent company to test two irrigation wells still in use on the property. "Cheryl and the other alumni wanted to find out what happened," Charlie Kennedy, then chair of Manatee County School Board, said later. "They wanted some closure."

Next Steps

Now the Florida Department of Health must decide whether the problems among Bayshore alumni warrant the designation of cancer cluster. "The idea is to link people who attended or who worked at Bayshore with people who have registered on the state cancer registry," explains Tom Iovino, communications director for the Florida Department of Health in Manatee County. On December 1, the department officially began collecting data.

As for Cheryl, she'll keep knocking on doors, standing up at meetings, sifting through piles of documents—and talking to the national media. In December, CBS Good Morning aired a segment on the investigation, including an interview with Cheryl.

Those who've lost friends and family members from Bayshore are awed by her resolve. "I've never met anyone with a heart as big as this woman's," says Erin Bell.

The task takes its toll, Cheryl admits. "I learn of new people all the time," she says. "But I have to be their voice."

RESEARCHER With Heart



Starting last summer, a group of promotoras—Spanish- and English-speaking community health workers—began reaching out to residents of low-income communities in Arizona with the goal of teaching them how to test their harvested rainwater, soil, and plants for contaminants. The work was led by Mónica Ramírez-Andreotta, assistant professor of soil, water, and environmental science at the University of Arizona, who launched the five-year citizen science study after noticing that many neighborhoods were commonly exposed to pollution but had little access to health care and education. She plans to develop guidelines for harvested water use, which could be especially helpful for families who rely on home gardens for food. Says Mónica: "Everyone has a right to the same degree of protection from environmental and health hazards."

To learn more about Mónica's research, go to projectharvest.arizona.edu.



An Activist ARTIST

Since 2014, filmmaker Dayna Reggero, 37, has used her camera to expose the effects that climate change has on people all over the world.

One recent film highlighted a Walnut Cove, NC, community that traced friends' illnesses to coal ash in the air and water and eventually halted the town's proposal to use fracking, a controversial method to collect natural gas.

Over the years, Dayna's Climate Listening Project, a partnership with other environmental groups, has produced films on topics like extreme weather, toxic runoff, and land degradation, which have been shown at colleges, churches, and events around the world. "I was shocked that so many people were sick, struggling, and losing their homes because of these things," she says.

Despite the sometimes grim topics she covers, Dayna and her subjects remain hopeful. "They want to protect their children, communities, and themselves," Dayna says. "They're working together, finding solutions, and meeting those goals."

To watch Dayna's films, go to climatelistening project.org.

