Stricken Ground Zero Workers Learn the High Price of Heroism

BY ANA M. ALAYA

Most mornings Jeffrey Endean gasps so hard for breath that he can barely get out of bed.

Once up, he uses steroid inhalers to fight the inflammation in his lungs and takes a pill to ward off an acute asthma attack. Without medication, simply walking his dogs or playing with his grandchildren could land him in the hospital.

Doctors have told him he has a rare form of asthma, his vocal cords and larynx are damaged, and his lungs are so scarred they look "leathery." His sinuses often bleed and he is prone to headaches, chest infections and acid reflux. Rheumatoid arthritis, linked to his weak immune system, can make his hands throb so badly, he can hardly turn a wrench.

Five years ago, as a commander for the Morris County Sheriff's Office in New Jersey, the former SWAT team leader and K-9 squad chief was among 40,000 people who worked the World Trade Center site after the Sept. 11 terrorist attacks. Volunteering night and weekend shifts for more than two months, Endean provided stress counseling to emergency workers who were untangling the heap of nearly 2 million tons of twisted steel and concrete, amid a cloud of toxic dust, burning fuels, metals and other poisons.

"The EPA said the air was safe," said Endean, 56. "That was all the talk -- it was just dust. Of course, it turned out to be a lot more than just dust."

Today, thousands of men and women who spent weeks or months in the debris at the World Trade Center site are battling health problems, including respiratory and gastrointestinal ailments, depression and post-traumatic stress disorder, and other severe illnesses.

A series of scientific studies have linked the ailments directly to work at Ground Zero. One published last month, by lung specialists at Montefiore Medical Center, found that the average rescuer among 12,079 New York firefighters and emergency personnel experienced a decrease in lung function equivalent to 12 years of aging in the first year following the attacks.

Though no one questions that thousands of Ground Zero workers are

getting sick, the battle over who is responsible and who should pay the medical costs promises to tie up workers in disputes for years, if not decades.

Thomas Cahill, an air-pollution expert and professor emeritus at the University of California, Davis, who studied the Ground Zero plume, said it was like a chemical factory spewing toxic particles including glass and pulverized dust that could penetrate deep into the lungs of workers and cause health problems.

"The mixture of metals and acids was among the worst we've seen anywhere," Cahill said. "It was an especially hazardous mix."

When al-Qaida terrorists slammed two commercial jets into the Twin Towers on 9/11, Lower Manhattan was engulfed in an immense cloud of caustic dust, fumes and burning materials including 24,000 gallons of jet fuel, spewing soot, lead and other metals, volatile compounds, and cancer-causing polycyclic aromatic hydrocarbons.

Among those to rush into the mayhem was John Vinciguerra, at the time a lieutenant with the New York City Fire EMS.

"The air smelled like a bad car fire, like burning rubber and fuel, only it was much stronger," said Vinciguerra, who lives in New Egypt, N.J. "You couldn't escape it."

At the time, government officials said the air was safe. On Sept. 13, 2001, federal Environmental Protection Agency Administrator Christie Todd Whitman stood on Canal Street north of Ground Zero and declared to reporters that the air over Lower Manhattan was safe to breathe. She and the EPA issued similar statements in the days and weeks that followed.

The EPA's inspector general, or internal watchdog, later found that the agency had given misleading assurances. In February, U.S. District Judge Deborah A. Batts criticized Whitman for reassuring New Yorkers soon after the attacks that it was safe to return to their homes and offices, saying Whitman's actions were "without question, conscience-shocking."

Whitman and the EPA have defended the agency's actions. An EPA statement says the agency took more than 10,000 samples of air, water and dust at the WTC site, which yielded more than a quarter-million results.

Mary Mears, an EPA spokeswoman, said Whitman's press statements in 2001 were "generally meant to apply to the area around Ground Zero and not the pile itself." Also, she noted, the EPA sent a memo to New York City during the cleanup, expressing concern that workers weren't wearing protective equipment.

Charles Miller, a spokesman for the U.S. Department of Justice, which is representing Whitman in a lawsuit filed by residents and workers of Lower Manhattan and Brooklyn, said her lawyers won't comment while the suit is pending. Legal papers filed by the department state that Whitman is immune from liability because she was acting in her official capacity when she made the statements after 9/11.

Whitman did not return phone calls seeking comment for this story.

New York City and its contractors have also come under fire. A lawsuit filed in federal court in Manhattan alleges that they, along with the Port Authority, real estate mogul Larry Silverstein and others who oversaw the cleanup, failed to protect workers at Ground Zero.

David Worby, whose firm Worby, Groner, Edelman, in White Plains, N.Y., has sued on behalf of 8,000 Ground Zero workers, argues that once the rescue effort was over and the recovery begun, government agencies should have declared the area a hazardous waste site and enforced strict worker-safety protection rules.

"Some of my people have 1,000 hours of exposure in six months. Some have 100 hours," said Worby, whose suit seeks damages and the establishment of a medical monitoring program. His firm is looking to tap into a $1 billion federal insurance fund established shortly after 9/11 to facilitate the recovery work.

The city says it made a "good faith" effort to protect workers and that it is immune from liability because the work was done as a result of an attack on the U.S.

"Within three days of 9/11, the city set up twice-daily safety meetings to address numerous worker-safety concerns, including those relating to environmental conditions, which were continually monitored," said Gary Shaffer, a deputy chief of the World Trade Center Unit of the city's law department.

He noted that the federal Occupational Safety and Health Administration and the city distributed more than 200,000 respirators.

Yet while OSHA conducted daily mask fittings and handed out goggles, few workers complied with safety recommendations, the city argues. Many workers dispute the claims that there were adequate masks, saying that the masks either became clogged, didn't fit or had to be removed in order to talk.

"It wasn't until a week after 9/11 that I saw masks available," Vinciguerra said. "Sometimes you had a mask, sometimes you didn't. People were working 12-hour shifts, and after a few hours, the mask

got clogged."

Vinciguerra was assigned to a Brooklyn firehouse on 9/11 and cleaned out ash-laden emergency vehicles before he was assigned to search and rescue at Ground Zero.

The 38-year-old father of four said he had childhood asthma, but after 9/11 he developed severe respiratory problems. He suffers from shortness of breath, persistent bronchial asthma and pulmonary hypertension, a common ailment among 9/11 workers.

He takes seven medications daily to help him breathe, and wears a mask hooked up to an oxygen machine at night. He can work only light duty and his medical bills forced the family to sell its dream house.

In July, Vinciguerra won a legal battle to get workers' compensation aid from New York, after a doctor for the city concluded that his persistent bronchial asthma was exacerbated by the "exposure and inhalation of multiple toxic substances that are still under analysis."

The Mount Sinai Medical Center in New York City has screened about 16,000 World Trade Center workers. Program co-director Jacqueline Moline estimates that about 40 percent to 50 percent suffer from respiratory ailments including persistent cough, asthma-like symptoms, sinus problems and shortness of breath.

Doctors have even come up with a term -- World Trade Center cough -- to describe the dry, hacking cough many first responders suffer. Others, like Morris County's Endean, suffer from reactive airways dysfunction syndrome, or RADS, a rare, irritant-induced, chronic asthma-like condition.

Gisela Banauch, an author of the Montefiore study, said her research indicates that for those hardest hit, breathing disorders are persistent and may progress to chronic obstructive pulmonary disease, an illness typically seen in longtime smokers.

"This study with other literature now proves a causal connection between World Trade Center exposure and subsequent development of asthma," Banauch said.

The medical studies will surely be used as evidence in the 9/11 legal disputes. But in a courtroom, proving that Ground Zero toxic exposure is linked to a worker's ailments could be complicated and difficult, said Sheila Foster, a Fordham University School of Law professor who is an expert in environmental law.

"That's where the plaintiff really gets stuck, because then the inquiry gets opened up to what type of lifestyle this worker was leading,"

Foster said. "Where you live, whether you smoke, what you do. What are the chances that this particular exposure was a result of your illness, versus another exposure."

Joe Picurro, a 39-year-old ironworker who volunteered for two 14-day shifts at the WTC site, to cut metal and help recover bodies, has joined the lawsuit against New York City.

The laborer from Toms River, N.J., once a "rock solid" 185 pounds, now finds it difficult to make dinner for his 11-year-old daughter, Allison. Picurro, who suffers from shortness of breath, was diagnosed at Mount Sinai with chronic rhinitis, chronic bronchitis, migraines, acid reflux and depression.

According to Laura Bienfeld, his doctor, the symptoms were "a result of his volunteer work at Ground Zero."

"When I throw up, I see bits of my throat," Picurro said. "I cough so hard, I see stars."

Picurro has been smoking for 20 years. But he is convinced his 9/11 exposure caused his illnesses.

"Smoking doesn't help my condition at all, but it didn't cause it," he said. "How did I get pulverized glass in my lungs?"

Picurro said he was standing feet from Whitman when she said the air was safe.

"It makes me angry," Picurro said. "I think all of us knew in the back of our minds what we were breathing couldn't be good. But we didn't know it was toxic dust and that it was killing us the minute we breathed it in."

James Zadroga was scheduled to meet with a lung transplant team on Jan. 10. Instead, that was the day his family buried him.

The 34-year-old New York Police detective's autopsy report for the first time medically linked 9/11 contamination to a worker's death. Gerard Breton, a pathologist at the Ocean County (N.J.) Medical Examiner's office, said Zadroga's exposure to "toxic fumes and dust" led to fatal respiratory failure.

On a recent afternoon at Zadroga's parents' home in Little Egg Harbor Township, N.J., his 4-year-old daughter Tyler Ann clacked about in faux Cinderella shoes, one of the last gifts her father gave her.

"You know what my dad got me for Christmas?" asked the cherub-faced girl, whose mother died two years ago. "He got me shoes, and a wig."

Zadroga was a 13-year veteran of the NYPD with more than 40 citations for good deeds, a nonsmoker who lifted weights and loved his job, said his father, Joe.

Soon after working 470 hours at Ground Zero, Zadroga began to have trouble breathing, his father said. "He was coughing up black dust. He couldn't walk up a flight of stairs."

In January 2003, doctors compared his condition to someone with black lung disease, an ailment that veteran coal miners suffer after years of inhaling coal dust.

"Toward the end everything was falling apart," said Zadroga's mother, Linda, who is now caring for Tyler Ann. "His eyesight was deteriorating. He had short-term memory loss because the lack of oxygen in his body was affecting his brain. He had to wear an oxygen mask all the time.

"We literally sat here and watched him die," she said.

The family used a $1 million payout from the federal 9/11 Victim Compensation Fund to help defray medical costs, but Joe Zadroga said he thinks his son's life could have been prolonged if he had received a better early diagnosis and treatment.

"I'd like to see the government take care of these people who are sick. I would hate to see any more families have to go through what we did," he said.

It is unclear what the long-term health toll will be for the thousands of workers affected, but the costs of care are rising.

The federal government has stepped up, with $75 million for screening and treatment for rescue and recovery workers, as well as $50 million for the New York State Uninsured Employers Fund for 9/11 claims.

Some workers who became ill have been able to get financial aid from the federal 9/11 Victim Compensation Fund. Others cobble together assistance through their employers' health insurance, Red Cross funds and other charities. The New York Workers' Compensation Board has also approved 94 percent of 10,780 claims related to the World Trade Center attacks.

Medical experts, however, say still more funding is needed because serious conditions may emerge. Lung-scarring diseases such as asbestosis and cancer tumors usually don't begin to show up until five to 20 or even 30 years after toxic exposure.

"We need to follow these people because many of these diseases are treatable if caught early," said Moline of the Mount Sinai program. She said some patients may need lung transplants down the road.

Last month, New York Gov. George Pataki signed three pieces of legislation aimed at covering millions of dollars in health costs for 9/11 responders.

New York City Mayor Michael Bloomberg criticized the measures because they require the city to pick up the bill. He has also opposed legislation that forces the city to pay certain benefits to sick workers and raised concerns about a "presumption" law that assumes certain illnesses were a result of Ground Zero exposure and entitles workers to three-quarters disability.

The city would be "derelict" if it didn't ask for proof of a connection, he said.

Sept. 5, 2006

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