

## New 9/11 casualties strain health-care programme

Thousands of people enrol in the World Trade Center Health Program every year, but—two decades after the 9/11 attacks—a funding shortfall is looming. Susan Jaffe reports.

For more on the **9/11 research programme** see https://wwwn.cdc.gov/ResearchGateway

For the **American Journal of Industrial Medicine study** see https://doi.org/10.1002/ ajim.23278 Nearly 3000 people died on Sept 11, 2001, when Al-Qaeda terrorists hijacked four commercial airliners and flew them into the twin towers of the World Trade Center, the Pentagon, and crashed one plane in Pennsylvania reportedly headed for a target in Washington, DC. But the deadliest attack on US soil is still claiming lives.

In 2011, Congress passed the James Zadroga 9/11 Health and Compensation Act—named after a New York City police detective who died in 2006—which created the World Trade Center Health Program (WTCHP). Operated and funded by the federal government, the Program is a free health insurance plan for the increasing numbers of people harmed by the toxic chemical mix that permeated the air after the towers collapsed.

The destruction of the twin towers incinerated glass, computers, heating and air conditioning systems, fluorescent lighting and other electrical equipment, steel, cement, and drywall, as well as human remains. The dust and smoke contained asbestos fibres, heavy metals, polyaromatic hydrocarbons, and dioxins among other poisons. The Program also covers those with post-traumatic stress disorder (PTSD) and other mental health problems, as well as health services for responders to the Pentagon and Pennsylvania sites.

More than 112 000 people were enrolled in the Program as of June, 2021, an increase of 6773 compared with the same time a year ago. "We've been getting around 50 to 60 new patients a month just at Mount Sinai," said Michael Crane, an occupational medicine physician and medical director of the WTCHP Clinical Center of Excellence at the Icahn School of Medicine at Mount Sinai, New York, NY—one of eight such

centres that monitor and treat WTCHP patients.

But unless Congress provides additional funding, the WTCHP could eventually run out of money. By 2025 (75 years before the Program is supposed to end) the costs of health monitoring and medical treatment will exceed its funding

## "...remember and understand that it's not over...We're losing people every week."

despite additional aid Congress allocated in 2015, said John Howard, the Program's administrator and a pulmonologist who also heads the National Institute of Occupational Safety and Health. "Our population of responders and survivors has developed conditions that need ongoing treatment," Howard said. And some of these diseases—such as cancer and mesothelioma—can have a long latency period so patients might not become ill until many years after exposure. "We're seeing new members all the time," he said.

The most common health problems treated under the WTCHP include chronic rhinosinusitis, gastrooesophageal reflux disease, cancers, asthma, sleep apnoea, PTSD, and chronic respiratory disorder, Howard told congressional staffers at a briefing last week. Most patients can have more than one health condition, said Denise Harrison, a physician and director of the WTCHP Clinical Center of Excellence at NYU Langone in New York. "If a chemotherapy drug affects the kidney, then we pay for the care of the kidney," she said. "That's one example of how the cost could ramp up because we cover not just the condition, but conditions associated with it."

The Program provides medical examinations, monitoring and diagnostic procedures, prescription drugs, and treatment without copayments or deductibles for health conditions that have been certified as 9/11-related by law or the WTCHP administrator. That list continues to grow, and last week, Howard issued a request for comments on whether uterine cancer should be added.

Beneficiaries include firefighters, police officers, emergency medical service providers, recovery, cleanup, and construction workers, and volunteers. Undocumented workers are also eligible for coverage, said Liam Lynch, safety and health specialist at the New York Committee for Occupational Safety and Health, which receives federal funding to educate and enrol new members. About 47 000 of those enrolled are residents and other non-responders who lived or worked near the attack sites. They include people who lived near the World Trade Center site, as well as office and retail workers and high school and college students who spent time in the area from September, 2001, until July, 2002. The area is approximately 3 km<sup>2</sup> in lower Manhattan plus a small section of northern Brooklyn.

WTCHP health benefits are available only from eight medical centres in New York and New Jersey plus a network of 232 998 providers across the country. If patients have workers' compensation (for on-the-job injuries and illness), Medicare, Medicaid, or private health insurance, those plans pay providers first and the WTCHP covers the remaining cost. Patients diagnosed with at least one of the physical health conditions covered by the WTCHP are also eligible for financial assistance from the government's Victim

Compensation Fund for economic losses such as being unable to work and also for pain and suffering.

The Zadroga Act also established a research programme to investigate the health impact of the attacks, treatment efficacy, and any additional health conditions that should be covered. At the congressional briefing, Howard said that research topics of interest include cognitive impairment, cardiovascular, and autoimmune diseases.

One new study, published in The American Journal of Industrial Medicine, might help extend the lives of patients with cancer. It found that responders in New York who were enrolled in a precursor programme that was folded into the WTCHP and who contracted cancer had a lower mortality rate compared with a group of nonresponders with cancer, adjusted for demographic and other factors. These results "provide evidence that systematic health surveillance and treatment improves survival among cancer patients," the authors wrote. The authors also attributed better survival rates to the fact that medical care was free to WTCHP patients and included extensive case management that is likely to improve adherence to screening and treatment.

## "This can't be good"

After a couple of weeks sifting through mountains of debris left after the two World Trade Center towers were destroyed, Terence Opiola remembers how his occasional cough turned into almost uncontrollable bouts of coughing while he had "sinus infection after sinus infection". At the time, Opiola was a US Customs special agent who investigated money laundering, narcotic smuggling, and white-collar crimes. His office was in a building adjacent to the World Trade Center North Tower. Its collapse damaged his building beyond repair. Opiola had the day off.

When he was not working on the so-called pile, Opiola was stationed

at a closed landfill in Staten Island where the World Trade Center debris was taken. Wearing a protective suit, face mask, and helmet, he used a rake to look for any items "that meant something". Methane gas wafted up from the garbage. "There wasn't much left but then all of a sudden you'd be sifting through stuff and you'd find a shoe or half of an identification card or something that looks like skeletal remains." He spent about 700 h at both sites.

For weeks after the World Trade Center attacks, dust and smoke could be seen at night, drifting through high-powered portable spotlights trained on the recovery workers and backhoes, bulldozers, and other heavy construction equipment that lumbered across the apocalyptic landscape. The fires smouldering under the debris finally went out in mid-December.

Opiola tried to ignore his cough and sinus problems but remembers "thinking to myself: 'This can't be good." His health continued to decline as his breathing became more difficult. He was diagnosed with asthma and prescribed inhalers but still had trouble sleeping. In 2015, he was diagnosed with chronic lymphocytic leukaemia. His brother-in-law, a lawyer, helped him enrol in the WTCHP at Mount Sinai. He sees several doctors through the Program, including a pulmonologist, cardiologist, gastroenterologist, oncologist, and a dermatologist for his skin cancer. "I believe it saved my life," he said.

## **Replenishing funds**

"We, as a nation, have a moral obligation to take care of the people who took care of us and those who take care of them," Representative Carolyn Maloney, a New York Democrat whose district includes part of lower Manhattan, said in an email to *The Lancet*. "First and foremost, for what they did on 9/11 and in the days, weeks, and months that followed, and secondly because of the toxic lie our government told them: that it was safe



to work on the pile, go back to work, and go back to school when it was not."

Last month, Maloney introduced legislation in the House of Representatives along with New York Democrat Representative Jerrold Nadler and New York Republican Representative Andrew Garbarino that would provide the WTCHP with US\$2.6 billion over 10 years and authorise a research study to examine how the attack has affected the health of 35 000 young adults who were children in 2001 and lived or attended school near the World Trade Center site. "Due to rising medical inflation, an aging membership, and the complexities of treating complicated health conditions such as cancers. the spending formula included in the 2015 law is not keeping up with the Program's needs," said Maloney. Garbarino hopes the bill will not be viewed by his Republican colleagues as a New York-focused or partisan effort. Survivors and responders affected by the attacks have spread out across the country and now live in every state. "We created this Program and we need to see it through," he said.

On this 20th anniversary of the attacks, Opiola was not planning to attend any memorial events. "I'll go to church and pray that people remember and understand that it's not over," he said. "We're losing people every week."

Susan Jaffe