Statement of

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Examining the Continuing Needs of Workers and Communities Affected by 9/11

And The

James Zadroga 9/11 Health and Compensation Act of 2009

(S. 1334)

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Committee on Health, Education, Labor and Pensions

United States Senate

Good morning Chairman Harkin, Ranking Member Enzi and Members of the Committee. My name is Dr. David Prezant, and I am the Chief Medical Officer, Office of Medical Affairs, for the New York City Fire Department (FDNY). I am also a Professor of Medicine in Pulmonary Diseases at the Albert Einstein College of Medicine. Along with Dr. Kerry Kelly, who could not be here today, I am the Co-Director of the FDNY World Trade Center (WTC) Medical Monitoring and Treatment Program. I am delighted to be here today to support this legislation, which will provide needed long-term funding for the monitoring and treatment of WTC-exposed responders and specifically for FDNY first responders. Many of these responders, unfortunately, have become patients with critical health needs related to physical, respiratory and mental health illness.

I would first like to thank this Committee and the Members of the Senate and the House of Representatives who have shown their extraordinary support for our patients and our program, especially those from the New York delegation – Senators Gillibrand and Schumer and our New York Members of the House of Representatives.

The FDNY WTC Medical Monitoring, Treatment and Data Analysis Programs are operated under a cooperative agreement with the National Institute of Occupational Safety and Health (NIOSH). This funding that the

Senate and House have generously provided has helped the FDNY to provide needed monitoring and treatment, an ability to analyze our results, develop treatment protocols and share this information with other healthcare providers so that our experience could be used to help other patients with similar WTCrelated problems. These patients have chronic WTC-related medical conditions that require long-term healthcare commitments – impossible to achieve when the funding is provided year to year and will run out on or before June 30, 2011. Currently our annual budget for monitoring, treatment (physical and mental health) and our data center is nearly \$35 million. Without continued funding, we will have to stop clinical services in late spring to early summer of 2011. Clearly, we need a long-term solution – a commitment from the Senate, the House and the President that matches the commitment FDNY firefighters and EMS workers made on 9/11, the day our nation was attacked and 2,751 innocent victims were killed -- the day 343 FDNY first responders made the ultimate sacrifice. That day began a ten-month long rescue/recovery effort during which nearly every FDNY member was exposed to WTC dust and chemicals, risking their life and health.

I am often asked, how many have been exposed, how many are in the monitoring and treatment program and will there be funding left to allow this program to continue? The FDNY-WTC Center of Excellence, its clinical and

data center components, is uniquely capable of providing this information because, as a group, our exposure was the most intense and our group is the only one with pre-9/11 baseline health data. So, the effects of WTC exposure on the health of our members can be objectively measured. The following data will help to answer these questions and allow you to better understand the FDNY's WTC-related healthcare needs.

- Nearly 16,000 FDNY rescue workers took part in the WTC rescue, recovery and fire suppression efforts roughly 11,500 firefighters and fire officers, 3,000 EMTs and paramedics and 1,000 FDNY retirees. So far, arrival time at the WTC site has been the best predictor of health outcomes. Nearly 2,000 members -- or 15 percent of our workforce -- arrived in the morning on 9/11, 54 percent arrived during the remainder of that day, 14 percent on day two, 15 percent during days three through 14, and the rest thereafter. Duration, total time spent at the site, has also been an important predictor of health outcomes, but not as important in our group, probably because of their extensive exposures during the first week.
- As of March 31, 2010, 15,307 FDNY WTC-exposed rescue/recovery workers (active and retired fire and EMS

personnel) have received at least one FDNY WTC monitoring exam for a 96 percent compliance rate.

- Retention rates in our program remain extremely high. In the past 12 months (6/1/09 to 5/30/10), we provided 9,922 monitoring exams to active and retired WTC-exposed FNDY firefighters, EMS personnel and officers. By the end of the year, we will again achieve over 10,000 monitoring exams and overall since 10/1/01, FDNY has provided over 73,000 WTC monitoring medical exams. As of 5/31/10, retention rates have been excellent:
 - 94% have received a second WTC monitoring exam.
 - 86% have received a third exam.
 - 74% have received a fourth exam
 - Each year the above rates improve and already many have received fifth and sixth exams.
- Disease surveillance is a critical part of our program. In the first year post-9/11, the average annual decline in pulmonary function, for symptomatic and asymptomatic FDNY-WTC responders, was 372 ml, or 12 times greater than the average annual decline noted five years before 9/11. And in those most affected, the decrease in pulmonary function was over 600ml or 10% of their lung

capacity. Further testing has indicated that the predominant problem is obstructive airways diseases such as airway hyperactivity, asthma, Reactive Airway Dysfunction Syndrome (RADS) and chronic bronchitis. In April 2010, we reported in the New England Journal of Medicine (see appendix and attachment) that over the first seven years post-9/11 (9/11/01 to 9/10/08), for the majority of our members, the drop in pulmonary function identified in year one has persisted with no significant improvement. Time and treatment has only prevented further decreases. More than 30 percent of the members who participated in follow-up WTC medical monitoring exams continue to report upper and/or lower respiratory symptoms.

 Sarcoidosis is an auto-immune disease that can affect any organ but primarily affects the lungs. In the first year after 9/11, FDNY identified 13 Sarcoidosis cases, as compared to an annual rate of only two to three cases per year in the 15 years before 9/11.
While the numbers have leveled off – we now see about four cases a year – these Sarcoidosis cases continue to have more serious clinical presentation than we saw prior to 9/11. Before 9/11, they were nearly always asymptomatic. Now the majority

of the Sarcoidosis cases we see have objective evidence of airway obstruction and a few have disabling systemic inflammation involving joints, bones, muscles and other organs.

- Unrelated to Sarcoidosis, we have also seen several cases of pulmonary fibrosis, one of which has been fatal, and two of our patients have received lung transplants – both are doing well. As this is nearly always a fatal disease, with lung transplantation the only available option, we are fortunate that very few have come down with fibrotic lung disease. However, in the 15 years prior to 9/11/01, FDNY saw no such cases.
- In a mental health study, 76 percent of our FDNY-WTC firefighters reported at least one psychological symptom post-WTC. The most frequent symptoms reported are insomnia, irritability and anxiety, and 12 percent met criteria for Post Traumatic Stress Disorder (PTSD). PTSD rates remain elevated and we are now seeing more cases of chronic depression.
- Since 9/11, the FDNY WTC Medical Monitoring Program has provided treatment for WTC-related physical health (majority being asthma, rhinosinusitis, GERD) and mental health (majority being PTSD, depression, prolonged grief and anxiety) conditions

to over 9,000 members. In the past 12 months (6/1/09 to 5/30/10), our program provided WTC-related physical health and mental health treatment to 4,241 and 1,770 members, respectively. This year, we are on track to equal those numbers.

- Nearly all of the patients in our treatment program report improvement in symptoms. Many have been able to return to work but others have had to retire with documented disability based on serious reductions in lung function. Between 2002 and 2010, over 1,300 FDNY firefighters have qualified for disability benefits, primarily due to lung disease but with some due to other WTC-related conditions (mental health, chronic rhinosinusitis, etc.). Annually, we have been averaging 150 cases per year, as compared to 49 cases in the three years before 9/11.
- In addition to publishing nearly 40 peer-reviewed medical articles on WTC medical conditions (see appendix), the FDNY distributed a summary data publication to every FDNY-WTC member, a copy is available online (see appendix) and also coauthored with the NYC Department of Health and the other Centers of Excellence clinical guidelines for the treatment of

respiratory and mental health conditions related to World Trade

Center Exposure that is also available online (see appendix).

These numbers only begin to express the real healthcare needs of our exposed members and patients. They provide the basis for understanding the extent of this disaster and our future funding needs, but they do not speak to the heart of the matter -- to the special commitment that was made on 9/11 between those in need of help and those who could provide the help.

On 9/11, when the Twin Towers were burning, FDNY firefighters ran into those buildings. By the time the second plane hit, most realized that this was not just a fire, but a terrorist attack; our members were the first to enter this urban war zone. In a tower that morning, one senior firefighter told a young firefighter to search the right hallway while he searched the left. At the time he could not have realized that he would come home and the younger man would not. But, because he is my patient, I can tell you that there are still nights when he wakes up screaming in a cold sweat reliving that decision. Thankfully, this happens less often than before we started treatment, but still too often to claim a medical victory.

One fire officer was buried in the first collapse and was rescued by a group of firefighters who, without a second thought, ran in to pull him out. Many of the members of that unit are my patients today. They have asthma and

sinusitis that prevents them from being firefighters or from living anything that resembles the life they once took for granted. But, like every patient I have, they all shared a common commitment that remains unshaken, no matter how ill they are or might become. They would not have done anything different that day. In fact, they would all do it again and only wish they could have done more. They were the lucky ones because that morning their efforts were rewarded. They found that fire officer with the top part of his skull hanging off to the side and barely breathing. One of those firefighters told me that "we had no choice but to push it back on as if it was his helmet, pick his heavy ass up and run for our lives." He got to the hospital alive, but was suffering severe head trauma, and airway and lung injuries. The next few days were tough ones for him and his family. He was saved many times over. I spoke to his wife and tried to explain to her how critical his condition was and what decisions she needed to make. She looked up at me and said I can't think straight, I am counting on you and the others here to make those decisions. Thankfully, he eventually recovered. He continues to have a daily cough, vertigo, headaches and a host of other problems. But, the treatment that this program provides him has gotten him back on his feet and he remains hopeful that the monitoring and treatment that we have promised him will continue. He also remains angry that each year he is told that federal funding may not be renewed and if so our

program and the other WTC programs will have to severely curtail their programs, eventually even close their programs and that his medical needs may be ignored. All he wants is to remain well enough to see his children and grandchildren grow and prosper in a safer world because of the sacrifice he and others made that morning on 9/11.

Others were not so lucky. They could not be rescued. But, it was not for lack of effort or commitment. Nearly every FDNY member suffered significant and repeated exposures and they were not alone in these efforts. Members of the Police and Sanitation Departments, and construction and communication workers, and others helped in every way possible. A perfect example are the two firefighters who required lung transplants after working at Ground Zero, trying in whatever way they could to find someone. Without new lungs, they would in all likelihood have had less than a year to live. I have seen both of these men struggle with their illness over the years since 9/11, learning how to breathe with limited reserve and on constant oxygen. Despite knowing that death was around the corner, they remained outwardly unemotional and completely stoic about their fate. That is until the day each was notified that donors had been found. Joy, fear, tears mixed with a grateful understanding that none of this would have been possible without the FDNY WTC Treatment

Program. Both are now doing well with substantial improvements in their quality of life – in fact, one no longer requires supplemental oxygen.

This program needs to continue for all of the patients I have talked about today, for every FDNY WTC rescue/recovery worker and for all the others who were exposed at the World Trade Center site. This legislation will provide long-term funding so that the FDNY and the other Centers of Excellence can continue monitoring and treatment programs for our exposed workforce (both active and retired firefighters and EMS workers), and use lessons learned to inform lesser exposed groups (and their healthcare providers) of the illnesses seen and the treatments that are most effective. Most importantly, I am proud to say that this legislation will allow the FDNY, New York City and all of America to fulfill the commitment we made to each of these heroes on 9/11 – to help those lucky enough to survive and to help those who helped us survive.

Thank you for your past efforts, and your continued support of our members, patients and Department and I urge you to support S. 1334.

Appendix – FDNY WTC Publications:

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