

Statement of

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“World Trade Center 9/11 Health Monitoring and Treatment Program”

Thank you Chairman Obey, Ranking Member Walsh, and members of the committee:

My name is Joan Reibman, and I am an Associate Professor of Medicine and Environmental Medicine at New York University School of Medicine, and an Attending Physician at Bellevue Hospital, a public hospital on 27th Street in NYC. I am a specialist in pulmonary medicine, and for the past 16 years, I have directed the NYU/Bellevue Asthma Center. I am pleased to be able to testify today on behalf of the workers, residents and students of downtown New York, and the clean-up laborers, all of whom were exposed to World Trade Center dust and fumes.

On the morning of 9/11 over 300,000 individuals were at work in the area, or in transit to their offices. Many were caught in the initial massive dust cloud as the buildings collapsed – these are the thousands whom we saw in video and still photographs coated in white, running for their lives. In the great outpouring of pride and patriotism after 9/11, many area workers returned to work one week later, the streets still covered in WTC dust, the massive WTC clean-up and rescue operation still in full force, and buildings incompletely cleaned or decontaminated.

As you know, Lower Manhattan is also a dense residential community; almost 60,000 residents of diverse racial and ethnic backgrounds live south of Canal St. (US census data). They are economically diverse; some living in large public housing complexes, others in newly minted coops. Lower Manhattan is also an educational hub; there are some 15,000 school children, and large numbers of university students. Some were locked in their buildings; others were let out and told to run. The dust of the towers settled on streets, playgrounds, cars, and buildings. Dust entered apartments, schools and office buildings through windows, building cracks, and ventilation systems. The WTC buildings continued to burn through December.

Each of these groups had potential for exposure to the original dust cloud, to the re-suspended outdoor dust that remained or was generated by the clean up, to indoor dust and to fumes from the fires that continued to burn. As pulmonologists in a public hospital, we sought to determine whether the collapse of the buildings posed a health hazard.

Our first step was to monitor the effect on the local residents. With funds from the Centers for Disease Control, and in collaboration with the New York State Department of Health, we looked at the rate of new respiratory symptoms in local residents after 9/11. It was the first such study, completed just over a year after 9/11. The results have been reported in three peer-reviewed publications (Reibman et al. The World Trade Center residents' respiratory health study; new-onset respiratory symptoms and pulmonary function, *Environ. Health Perspect.* 2005; 113:406-411. Lin et al. Upper respiratory symptoms and other health effects among residents living near the world trade center site after September 11, 2001, *Am. J. Epidemiol.* 2005; 162:499-507, Lin et al., Reported respiratory symptoms and adverse home conditions after 9/11 among residents living near the World Trade Center. *J. Asthma* 2007; 44:325-332).

We surveyed residents in buildings within one mile of Ground Zero, and, for purposes of control, other lower-risk buildings approximately five miles from Ground Zero. From an epidemiologic perspective, the exposed population was over sampled because at that time, this was the only study of the residents. Analysis of 2,812 individuals revealed that new-onset and persistent symptoms such as eye irritation, nasal irritation, sinus congestion, nose bleed, or headaches were present in 43% of the exposed residents, more than three times the number of exposed compared to control residents. New-onset and persistent lower respiratory symptoms of any kind were present in 26% versus 8% of exposed and control residents respectively; a more than three fold increase in

symptoms. This included an increase in cough, shortness of breath, and a 6.5-fold increase in wheeze (10.5 % of exposed residents versus 1.6% of control residents respectively). These respiratory symptoms resulted in an almost two-fold increase in unplanned medical visits and use of medications prescribed for asthma in the exposed population compared to the control population.

Our most recent analysis of the data also suggest that residents reporting longer duration of dust or odors or multiple sources of exposure had greater risk for symptoms compared to those reporting shorter duration. Data from the NYCDOHMH WTC Registry administered by the New York City Department of Health and Mental Hygiene, accrued after our study, further document adverse health effects in additional populations, including building evacuees and school children, and confirm our original findings. These data are provided in the testimony of Lorna Thorpe, PhD.

After 9/11, we began to treat residents who felt they had WTC-related illness in our Bellevue Hospital Asthma Clinic. We were then approached by a community coalition and together began an unfunded program to treat residents. We were awarded an American Red Cross Liberty Disaster Relief Grant in 2005 to set up a medical treatment program for WTC-related illness in residents and responders. A year later, we received additional philanthropic funding, and major funding from the City of New York to provide evaluation and treatment of individuals with suspected World Trade Center-related illnesses. This program, initially awarded \$16 million over 5 years to Bellevue Hospital.

In 2006, Mayor Bloomberg appointed a panel to make recommendations about the sufficiency of resources available to those whose health has been affected by the September 11, 2001 terrorist attacks. The panel recommended that the Mayor expand the Bellevue program and seek federal funds to support it. Although the Bellevue

program has yet to receive any federal funding, the Mayor committed to implement the Panel's recommendation and added another \$33 million in 2007, allowing for expansion of the program to two additional sites. But the City cannot afford to be the lone supporter of a treatment program to address this national problem indefinitely. For now, the WTC Environmental Health Center is funded by the City with a commitment that will average nearly \$10 million per year over five years—but we need federal support to sustain and enhance the program over the long term.

We now have an interdisciplinary medical and mental health program that has evaluated and is treating over 2000 patients since 2006. With little outreach, we continue to receive over 200 inquiries each week; while most come from local people, we have received calls from individuals living in about 20 other states. These calls to our hotline (1-877-WTC-0107) result in 30 new patients each week, demonstrating an unmet need.

To enter our program, an individual has to have a medical complaint; we are not a screening program for asymptomatic individuals. To date, our patients are almost equally men and women, of diverse race/ethnicity and many, although not all, are uninsured. Some have never sought medical care, others have been seeing doctors for years, with a history of recurrent bronchitis, pneumonia, and sinusitis. These individuals have a complex of symptoms that include persistent sinus congestion (55%), asthma-like symptoms of cough (55%), shortness of breath (70%) or wheeze (39%), and acid indigestion (48%) for which they continue to need care more than 6 years after 9/11.

Over 50% of our patient population has concurrent mental health issues, including PTSD, depression and/or anxiety. We have heard from countless individuals who were highly physical active – even training for marathons -- who now require daily medication to allow them to walk a few city blocks. While many of them can be treated aggressively as if they have asthma, the sickest among them show a process in their lungs that may

consist of a granulomatous disease – a type of inflammation that is like sarcoid or other interstitial lung diseases that, even after review by multiple pathologists have been hard to define pathologically, and have been described as hypersensitivity pneumonitis, alveolar destruction similar to emphysema, and often associated pulmonary arterial hypertensive changes. Some have pulmonary fibrosis, characterized as scarring or permanent damage in the lungs, and are now so sick that they are waiting lung transplants.

Many challenges remain. How can we determine whether an illness is WTC-induced? We have no simple test to determine whether any individual illness is related to WTC exposure. What we have is six years of clinical experience in Centers that have seen so many cases that we can now recognize a set of symptoms associated with the World Trade Center dust. Our tools are the history of exposure, the temporal sequence of illness and a particular constellation of symptoms that are by now sadly familiar. Armed with these tools, we can more effectively differentiate such cases from illnesses that are unrelated. The Registry provides us with the larger epidemiological picture and context that inform our daily clinical practice.

Why are some people sick, while others are well? We now suspect that while the level of exposure plays a role, so does individual susceptibility. This is similar to tobacco-induced disease: some smokers remain healthy, while for others, tobacco causes lung disease, cancer, and heart disease. Only through the existence of Centers will there ever be sufficient data collected to attack such medical puzzles.

What are these disorders, and will they respond to treatment? Will there be late emergent diseases, with cancers? For patients, these are the paramount questions and I wish I could clearly answer them. Without Centers, we will never have answers.

We now know, from peer-reviewed published literature as well as our clinical experience, that large numbers of residents and workers in downtown Manhattan and even Brooklyn were subjected to environmental insults on a large and unprecedented scale and that these insults had measurable medical consequences. These men, women and children will require continued evaluation, screening and treatment for years to come.

You, Chairman Obey, Ranking Member Walsh, Congresswoman Lowey and all the members of this committee have been very supportive of our efforts and we are very grateful. Our Center is funded by the City with a commitment that will average nearly \$10 million per year over five years. But the actual cost of the program continues to rise significantly and is projected to cost an average of \$15 to \$18 million per year. Last year, for the first time, you made eligible for federal funding the people that we treat: the nearby residents, the local workers, the laborers hired to clean up the residents and offices, the schoolchildren and those who just happened to be in the WTC area on September 11 and immediately following. As you know, in FY 08 you provided \$108 million for all those whose health was compromised by September 11 and its aftermath. We have not yet received any of these federal funds for treatment at the WTC Environmental Center at Bellevue. We have not been informed that we will receive any of these funds any time soon. It is my understanding that a study, taking over a year, may have to be completed before any funds are released. We have peer-reviewed articles demonstrating respiratory and mental health illness in residents and local workers. We have data coming from the Registry. We know these people are sick. A study is always helpful but its completion should not be a pre-condition to releasing funds this fiscal year. The Administration in its proposed FY 09 budget would make the residents, officer workers and students ineligible for any federally funded WTC health programs.

I thank you very much for your time and will be glad to take any questions. Joan Reibman, MD

Pertinent funding to Joan Reibman, MD.

- 2001-2002 CDC, World Trade Center Residents Respiratory Survey (Institutional P.I, Lin P.I.)
- 2001-2003 NIH, NIEHS, World Trade Center Residents Respiratory Impact Study: Physiologic/Pathologic characterization of residents with respiratory complaints (P.I.)
- 2004-2005 CDC, NIOSH WTC Worker and Volunteer Medical Monitoring Program (P.I.)
- 2005-2007 American Red Cross Liberty Disaster Relief Fund (P.I.)
- 2006-2011 New York City funding for WTC Environmental Health Center (Linda Curtis, Bellevue Hospital, PI)