

**Background on
9/11 Health and Compensation Issues
and the need for
H.R. 847, the James Zadroga 9/11
Health and Compensation Act**

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Overview

Thousands of people died on September 11, 2001 during the largest terrorist attacks our nation has seen. Yet thousands more – including first responders, area residents, workers, students, and others - are sick and getting sicker from exposure to the cocktail of toxins released from the collapse of the World Trade Center Towers. Numerous studies have documented the health effects of the WTC attacks which include lower and upper respiratory, gastrointestinal, and mental health conditions. These illnesses have caused major financial strains on many of those exposed who are subsequently no longer able to work and face the high price of health care without a federally-funded national program to incur the costs. The federal government has an obligation to help the heroes of 9/11 and all others exposed, and failure to do so may have long-lasting implications on future response efforts.

The Maloney-Nadler-King-McMahon 9/11 Health and Compensation Act (H.R. 847) would ensure that every American at risk of illness from exposure to the Ground Zero toxins has a right to be medically monitored and all who are sick as a result have a right to treatment. The bill builds on the expertise of the Centers of Excellence, which are currently providing high-quality care to thousands of responders, residents, area workers, school children, and others, including the thousands of people from across the country who assisted with the recovery and clean-up effort. It would also ensure on-going data collection and analysis for all exposed populations. The legislation would also ensure consistent funding for these vital programs.

In addition to addressing health care needs, the bill would reopen the September 11 Victim Compensation Fund (VCF). Congress created the VCF in the immediate aftermath of the September 11th terrorist attacks to provide aid to the families of 9/11 victims and to individuals who suffered personal injury. In return for accepting these funds, recipients relinquished rights to any future litigation. Close to 100% of the families who lost loved ones had filed with the fund by the December 22, 2003 application deadline. However, many of those who suffered personal injury had not, mainly due to lack of awareness of the fund or of their illness. There are potentially thousands of individuals who are just now developing career-ending injuries but are not eligible to receive assistance because they developed their symptoms after the deadline. Reopening the VCF would ensure fair compensation for those in need. Lastly H.R. 847, would provide liability protections for the City of New York and for the contractors at the site for pending and future claims and liability related to the rescue and recovery efforts in response to the WTC attacks.

II. 9/11 Health Issues

A. Current Federally Funded WTC Health Programs

Presently, the National Institute for Occupational Safety and Health (NIOSH) administers the World Trade Center Health Programs, which provide medical monitoring and treatment to WTC Responders, WTC Community Members (residents, area workers, students), and WTC National Responders.

WTC Responder Program: According to an April 2008 Report to Congress from HHS, 50,300 responders were enrolled in the WTC Medical Monitoring and Treatment Program, and more than 39,500 had an initial medical screening examination, as of December 31, 2007. 9,744 people were being treated for a combination of 9/11 health related illnesses such as asthma, interstitial lung disease, chronic cough, and gastroesophageal reflux disease (“GERD”), and more than 5,674 had been treated for mental health conditions, often for conditions like Post Traumatic Stress Disorder (PTSD). In general, the number of ailing 9/11 rescue and recovery workers is increasing, workers’ illnesses are becoming more severe, and the projected cost of treating these illnesses is surging.

See HHS’s August 2008 Report to Congress:

http://maloney.house.gov/documents/911recovery/20080506_WTCReporttoCongress_ProvidingMonitoringandTreatment.pdf

The WTC Responder Program is made up of two other programs, the FDNY program and the Consortium, which serves non-FDNY responders.

1. The FDNY Monitoring and Treatment Program

The FDNY Monitoring and Treatment Program monitors and treats firefighters, emergency medical technicians, paramedics, officers and FDNY retirees who responded to the WTC disaster and participated in rescue, recovery and clean-up operations. As of December 31, 2007, FDNY has conducted over 32,000 screenings, including 14,620 initial examinations and 17,569 follow-up examinations. Overall at least 16,200 individuals are active participants, and since this number accounts for about 94% of all eligible firefighters, the population is not expected to grow substantially. Because FDNY requires all members to undergo pre-employment medical evaluations and regularly scheduled annual visits, the program is a source of crucial pre-exposure baseline data to help develop a more complete understanding of the long-term health effects in responders. The program is supported by federal grants from the National Institute for Occupational Safety and Health (NIOSH).

See <http://www.nyc.gov/html/fdny/html/units/bhs/wtcmm/index.shtml> and “World Trade Center Health Impacts on FDNY Responders: A Six Year Assessment September 2001-September 2007”: http://www.nyc.gov/html/fdny/html/publications/wtc_assessments/2007/wtc_2007.shtml

2. The WTC Medical Monitoring and Treatment Program at Mt. Sinai (“The Consortium”)

The WTC Medical Monitoring and Treatment Program at Mt. Sinai Hospital is a consortium of five NYC-area clinical centers that provide standardized medical monitoring, referral, and treatment for workers and volunteers who provided rescue, recovery, demolition, debris removal and related support services in the aftermath of the attacks on the World Trade Center. Participating clinical centers are at Mt. Sinai, Queens College, SUNY Stony Brook, University of Medicine and Dentistry of New Jersey (UMDNJ), and Bellevue Hospital. As of December 31 2007, these clinics have conducted 22,748 initial examinations and 11,315 follow up examinations. These numbers however are expected to rise significantly as potential participants experience new or worsened health problems that may be related to 9/11, and as outreach efforts and press reports inform individuals of their eligibility. The Consortium is also currently supported by grants from NIOSH. Previous funding from the American Red Cross is no longer available..

See <http://www.wtcexams.org/> and <http://www.wtcexams.org/programinformation.html> for more information.

3. WTC Community Program

In September 2006, the City of New York established the WTC Environmental Health Center at Bellevue Hospital to provide comprehensive physical and mental health treatment to all individuals with suspected WTC-related health problems. The program absorbed a pre-existing WTC-related program that was started in 2005 with a grant from the American Red Cross. In September 2007, the Center was expanded to include two additional NYC Health and Hospitals Corporation locations, Gouverneur Healthcare Services in Lower Manhattan and Elmhurst Hospital Center in Queens.

In 2007, the New York delegation successfully worked to secure \$108 million for FY2008 for 9/11 health care programs. The \$108 million was made available to all exposed populations – including residents, area workers, students, and others who had previously been receiving care from programs funded solely by the City of New York. A \$30 million/ 3-year grant was awarded to the NYC Health and Hospitals Corporation to continue the WTC Community Program. Approximately 2,800 community members are receiving treatment for WTC-related health conditions.

4. WTC National Responder Program

Thousands of people traveled from *every state in the nation* to assist with the rescue and recovery efforts. Many are now sick and need to access expert care within reasonable traveling distance from their homes.

In October 2007, HHS issued Requests for Contracts to establish a World Trade Center Processing Center which would serve as the first national program to coordinate the medical treatment and monitoring as well as pharmaceutical needs for first responders from outside the NYC metropolitan area. However, in December 2007, right before the deadline for proposals, HHS halted the program citing insufficient funds and “bidder confusion.” Yet within days, Congress appropriated \$108 million dollars (in addition to \$50 million allocated earlier in the

year) to 9/11 health care and one potential bidder has publicly stated that not only were they not confused, but they were ready and willing to submit a bid.

The Requests for Contracts was especially important as the two programs that were serving exposed populations outside of the New York metropolitan area—the Association of Occupation and Environmental Clinics (AOEC) 9/11 program and the Mt. Sinai School of Medicine contract program with QTC Management—were expected to run out of money in May 2008 and June 2008 respectively.

On January 22, 2008, the House Oversight Subcommittee on Government Management, Organization, and Procurement of the Oversight and Government Reform Committee held a field hearing in lower Manhattan to investigate the cancellation of the call for proposals for the national program. Neither Secretary of HHS Leavitt nor a representative from HHS attended the hearing despite requests from subcommittee chairman Edolphus Towns to testify.

On April 4, 2008, the Centers for Disease Control and Prevention issued a Request for Proposals to replace the AOEC and QTC Management programs with a new program aiming to serve responders who live outside the metropolitan New York City area. Logistics Health, which is headed by Tommy Thompson, former HHS Secretary under the Bush Administration, was awarded the one-year contract in June 2008. Currently, of an estimated population of 4,000-5,000 across the country, only 225 national responders are in active treatment (as of 12/5/08).

5. WTC Federal Responder Medical Program

Federal workers have explicitly been barred from obtaining services from the Consortium. Instead, the approximately 10,000 federal workers who were at Ground Zero have been eligible for a federally funded, HHS-administered WTC Responder Screening Program which provides a one-time screen, but not medical monitoring or treatment. The GAO has testified at hearings in the National Security Subcommittee of the House Oversight and Government Reform Committee about the WTC Federal Responder Medical Program, stating that it has “accomplished little” and lags behind other federally funded monitoring and treatment programs. Most recently, GAO has reported that HHS has not ensured the uninterrupted availability of screening services and is not designed to provide monitoring for federal worker 9/11 responders.

It is expected that federal workers and retirees will be allowed to participate in the new national program

Read a summary of the GAO report and access the full text here:

http://maloney.house.gov/documents/911recovery/20070724_SummaryofGAOReport.pdf

6. World Trade Center Health Registry

In 2003, the New York City Department of Health and Mental Hygiene created the WTC Health Registry with funding from the Centers for Disease Control and Prevention’s Agency for Toxic Substances and Disease Registry - a division of HHS. The WTC Health Registry gathers information about the physical and mental health status of registrants who were exposed to

environmental contaminants for up to 20 years through regular health surveys and detailed studies. Enrollees answered an initial 30-minute telephone survey about where they were on September 11, 2001, and they were asked to report the status of their health. This information allows health professionals to compare the health of enrollees with the health of the general population. There is no medical monitoring or treatment provided by the Registry.

Of the estimated 410,000 individuals who met the Registry's exposure criteria, more than 71,000 of people have enrolled. They hail from every state and nearly every Congressional District in the nation.

Read more on the WTC Health Registry: <http://www.nyc.gov/html/doh/html/wtc/index.html>

7. Other Programs

There are two federally funded programs that provide mental health services to police officers: Project COPE and POPPA (Police Organizations Providing Peer Assistance). These programs are significantly smaller in size and scope than the programs mentioned above.

8. Coordination (Department of Health and Human Services)

In February 2006, Dr. John Howard, Director of the National Institute for Occupational Health of the Centers for Disease Control and Prevention subdivision of the Department of Health and Human Services was appointed to serve as the federal government's coordinator to oversee the response to Ground Zero health impacts. In September 2006, Secretary Leavitt announced the creation of a new high-level task force to advise on federal policies and funding issues related to responder WTC-associated health conditions based on scientific data and other relevant information. The WTC Task Force was chaired by Assistant Secretary of Health Dr. John Agwunobi. Dr. John Howard served as the lead scientific advisor on the task force and coordinated federal, state, local and private partners in their implementation of monitoring and treatment. The taskforce briefed Secretary Leavitt on their internal recommendations on April 3, 2007, which have yet to be made public.

Moreover, the leadership of the WTC Task Force has been shaken up in the past two years. First, on August 7, 2007, Dr. Agwunobi announced his resignation as Assistant Secretary of Health, effective September 4, 2007. He joined Wal-Mart as Senior Vice President and President for the Professional Services Division. To date, Secretary Leavitt has not appointed a new Task Force chair. Additionally, on July 3, 2008 the Administration informed Dr. Howard that he would not be reappointed to a second term as Director of NIOSH. This comes despite universal praise regarding Dr. Howard's service protecting American workers and accolades for his outstanding work on behalf of the heroes of 9/11 in his capacity as 9/11 Health Coordinator. Neither former HHS Secretary Michael Leavitt nor former CDC Director Julie Gerberding provided a reason for their decision to terminate Dr. Howard.

HHS maintains a website with World Trade Center Health Resources, <http://hhs.gov/wtc/>, including a section with Scientific Reports published about health effects of 9/11, <http://hhs.gov/wtc/reports/>.

B. Congressional Actions

1. Federal Legislation

House bill: In February 2009, Reps. Carolyn Maloney, Jerrold Nadler, Peter King, and Michael McMahon introduced H.R. 847, the James Zadroga 9/11 Health Compensation Act in the 111th Congress.

H.R. 847, the 9/11 Health and Compensation Act would:

- Provide medical monitoring and treatment to WTC responders and community members (area workers, residents, students and others) who were exposed to toxins released at Ground Zero,
- Build on the existing monitoring and treatment program by delivering expert medical treatment for these unique exposures at Centers of Excellence,
- Require a matching contribution by New York City of 10 percent for the health program,
- Provide for research into WTC-related health conditions,
- Reopen the 9/11 Victim Compensation Fund to provide compensation for economic losses and harm as an alternative to the current litigation system, and
- Provide liability protections for the WTC contractors and the City of New York.

Funding for most of the bill would not be subject to yearly Congressional appropriations battles, but rather will be mandatory spending.

See House bill status and current cosponsors:

<http://thomas.loc.gov/cgi-bin/bdquery/z?d111:h.r.847>:

Senate bill: The Senate companion bill in the 111th Congress (S. 1334) was introduced by Sens Gillibrand, Schumer, Lautenberg, and Menendez on July 24, 2009. This was the first time comprehensive 9/11 health legislation had been introduced in the Senate. S. 1334 is nearly identical to H.R. 847, with the exception of a lower cost share for the City of New York. Under S. 1334, New York would be required to contribute a 20 percent matching cost share of the community health program only, but not more than \$250 million over 10 years. Under H.R. 847, New York is required to contribute a 10 percent matching cost share of the entire health program, but not more than \$500 million over 10 years.

See Senate bill status and current cosponsors:

<http://thomas.loc.gov/cgi-bin/bdquery/z?d111:s.1334>:

House bill in the 110th: On September 27, 2008, Reps. Carolyn Maloney, Jerrold Nadler, Vito Fossella, Peter King, Charles Rangel, Eliot Engel, Edolphus Towns, and others introduced new legislation in the House, the *9/11 Health and Compensation Act* (H.R. 7174) which is strongly

supported by the AFL-CIO, the Laborers International Union of North America (LIUNA), the Governor of the State of New York, and others.

This bill replaced H.R. 6954, the James Zadroga 9/11 Health and Compensation Act which was introduced by Reps. Maloney, Nadler, and Fossella on 7/24/2008. After conferring with Speaker Pelosi and the leadership of both committees of jurisdiction, the New York lawmakers decided that changes were needed to sharpen the scope of the proposal.

2. Federal Funding

To date, funding for the responder's health needs has come in six waves. An initial \$12 million for screening started the program in FY02, followed by \$90 million for monitoring which was appropriated in FY04. A FY06 \$75 million appropriation included the first money made available for treatment. \$50 million was included in an FY07 supplemental spending measure, and \$108 million, including the first money for community members, was designated in the FY08 Consolidated Appropriations Act (Omnibus bill). The FY09 Omnibus Appropriations Act included \$70 million.

A timeline for funding issues follows:

September 18, 2001	Public Law (P.L.) 107-38 provides for a \$20 billion appropriation for 9/11 disaster relief
January 12, 2002	P.L. 107-117 provides a \$12 million allocation (as part of the \$20 billion appropriation) to the Centers for Disease Control for "disease control, research and training for baseline screening for the emergency service personnel and rescue and recovery personnel."
February 20, 2003	P.L. 108-7 provides \$90 million to "administer baseline and follow-up screening and clinical examinations and long-term health monitoring and analysis for emergency service personnel and rescue and recovery personnel." Of the \$90 million, no less than \$25 million was required to be made for current and retired firefighters.
February 7, 2005	President Bush's FY2006 Budget proposes a rescission of \$125 million in 9/11 funding originally directed at providing workers' compensation benefits as a result of 9/11.
December 30, 2005	P.L. Law 109-148 restored the \$125 million rescission and appropriated \$50 million to pay for workers compensation claims and \$75 million for continued monitoring and, for the first time, federally-funded treatment.

February 5, 2007	President Bush's FY2008 Budget proposed \$25 million for "expenses to provide screening and treatment for first response emergency services personnel related to the September 11, 2001, terrorist attacks on the World Trade Center"
May 24-25, 2007	The House and Senate passed the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act of 2007, which included \$50 million to remain available until expended for health monitoring and treatment of rescue and recovery workers. The President signed the bill into Law.
July 20, 2007	The House passed the FY 2008 Departments of Labor, Health and Human Services and Education appropriations bill, which included \$50 million for federally-funded 9/11 health clinics. The House bill also included strong language requiring the Secretary of HHS to create a comprehensive, long-term plan to monitor and treat all exposed to Ground Zero toxins, including residents, area workers, students, and others . The plan must also address compensation and liability issues.
October 23, 2007	The Senate passed their LHHS appropriations bill with \$55 million and language explaining that residents, area workers, students and others were also to be eligible. The President threatened to veto the bill.
November 2, 2007	The Joint House and Senate Conference Committee approved \$52.5 million in the LHHS appropriations bill for federally funded medical monitoring and treatment for all those exposed to the toxins of September 11.
November 13, 2007	President Bush vetoed the LHHS appropriations bill including the \$52.5 million designated to health clinics for first responders, residents, students, and area workers exposed to the toxins of Ground Zero
November 15, 2007	The House failed to override the President's veto of the LHHS appropriations bill by a vote of 277 to 144.
December 17 -19, 2007	The House and Senate passed P.L. 110-161, Consolidated Appropriations Act for FY2008 (Omnibus bill) which included \$108 million for screening and treatment for first response emergency services personnel, residents, students, and others related to the September 11, 2001 terrorist attacks on the World Trade Center. \$56.6 million of the sum was issued as emergency spending while \$51.5 million was provided under the Labor,

Health and Human Services Appropriations Bill covered in the Omnibus package.

- February 1, 2008 President Bush's FY2008 Budget proposed \$25 million for September 11 health programs cutting federal funding 77 % from FY2008. The National Institute for Occupational Safety and Health (NIOSH) estimated that the existing programs would need more than \$200 million to cover their operating costs for 2009.
- June 19, 2008 The House Labor-HHS-ED Appropriations Subcommittee marked up its draft bill and approved it for consideration by the full committee including \$108 million in federal funding to provide health care to first responders, local residents, area workers, students, and others who were exposed to environmental hazards released as a result of the 9/11 attacks.
- June 26, 2008 The Senate Appropriations committee reported out their Labor – HHS- ED appropriations bill which includes \$51,583,000 for screening and treatment for first response emergency services personnel, residents, students, and others related to the September 11, 2001 terrorist attacks on the World Trade Center. As a result of the Committee’s concern that residents, students, and other non-responders may not be receiving the treatment provided for in previous appropriations, it also directs the Secretary of HHS to provide a report to the Committee detailing the activities and services provided to non-responders within 90 days of the date of enactment of the proposed bill.
- September 30, 2008 The Consolidated Security, Disaster Assistance, and Continuing Appropriations Act of 2009 (P.L.110-329) was signed into law. The “CR” continues funding at FY 2008 levels, but does not extend emergency funding. Accordingly, about \$51.6 million is made available for screening and treatment for first response emergency services personnel, residents, students, and others related to the September 11, 2001 terrorist attacks on the World Trade Center.
- February 24, 2009 H.R. 1105, The FY09 Omnibus Appropriations Act, included \$70 million to “provide screening and treatment for first response emergency services personnel, residents, students, and others related to the September 11, 2001 terrorist attacks on the World Trade Center.” The Explanatory Statement noted that “For the World Trade Center (WTC) Medical Monitoring and Treatment program, the fiscal year 2009 program level is \$182,000,000. Approximately \$112,000,000 in carryover balances from prior year

appropriated funds are available in fiscal year 2009. Combined with the \$70,000,000 included in this bill, the total amount available for the WTC program is sufficient to continue to expand the program in the New York City area and around the country for first response emergency personnel, residents, students, and others whose health has been impacted from exposure to toxins in or around the WTC site.”

3. Hearings

Since 2002, six separate House Committees have held hearings on 9/11 Health and Compensation issues.

In 2009, two hearings have been held:

- 1) House Judiciary Subcommittees on the Constitution and Immigration (03/31/09) Joint Hearing on "H.R. 847, the James Zadroga 9/11 Health and Compensation Act of 2009"
- 2) House Energy and Commerce Subcommittee on Health (04/22/09) "H.R. 847, the James Zadroga 9/11 Health and Compensation Act of 2009"

Four hearings were held in 2008:

- 1) House Oversight and Government Reform Subcommittee on Government Management, Organization and Procurement (01/22) "9/11 Health: Why Did HHS Cancel Contracts to Manage Responder Health Care?"
- 2) House Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies Hearing (03/12) "World Trade Center 9/11 Health Monitoring and Treatment Program"
- 3) House Judiciary Subcommittees on the Constitution and Immigration Joint Hearing (4/1) "Paying with their Lives: The Status of Compensation for 9/11 Health Effects"
- 4) House Energy and Commerce Subcommittee on Health (7/31) "H.R. 6954, James Zadroga 9/11 Health and Compensation Act"

In 2007, there were five hearings:

- 1) House Judiciary Subcommittee on the Constitution, Civil Rights and Civil Liberties (6/25) "Substantive Due Process Violations Arising From the Environmental Protection Agency's Handling of Air Quality Issues Following the Terrorist Attacks of September 11, 2001"
- 2) House Oversight and Government Reform Subcommittee on Government Management, Organization and Procurement (9/10) "9/11 Health Effects: The Screening and Monitoring of First Responders"
- 3) House Energy and Commerce Subcommittee on Health (9/11, 10:00am) "Answering the Call: Medical Monitoring and Treatment of 9/11 Health Effects"
- 4) House Committee on Education and Labor (9/12) "9/11 Hearing on Why Workers Weren't Protected"
- 5) House Committee on Homeland Security (9/14) "Protecting the Protectors: Ensuring the Health and Safety of our First Responders in the Wake of Catastrophic Disasters"

Prior to September 2007, the House of Representatives had held six hearings on the issue, each in subcommittees of the Oversight and Government Reform Committee. The Senate Health, Education, Labor and Pensions Committee has held one hearing on the issue. GAO has testified

at four of the House hearings and has released a fifth report. See all five GAO Reports on 9/11 Health (including abstracts):

http://maloney.house.gov/index.php?option=com_content&task=view&id=1405

More information on all of the federal hearings, including testimony, are available in Appendix B of this document as well as on Rep. Maloney's website:

http://maloney.house.gov/index.php?option=com_content&task=view&id=1189

II. 9/11 Compensation Issues

A. September 11 Victim Compensation Fund (VCF)

In the immediate aftermath of the September 11th terrorist attacks, Congress created the Victims Compensation Fund (VCF), a federal program to compensate victims of the September 11 attacks. The statute was introduced on September 21, 2001, as title IV of H.R. 2926, in the 107th Congress. The bill passed the House and Senate the same day, was signed by the President on September 22, 2001, and became Public Law 107-42. The fund provided aid to the families of 9/11 victims and to individuals who suffered personal injury. In return for accepting these funds, recipients relinquished rights to any future litigation. Specifically, a victim (or if he is deceased, his "personal representative") may seek no-fault compensation from the program or may bring a tort action against an airline or any other party, but may not do both. The fund had a deadline for applicants of December 22, 2003.

At the deadline, close to 100% of the families who lost a loved one had filed with the fund, but many individuals who were injured as a direct result of 9/11 had not. After the filing, many of the injured were denied benefits, despite a clear need.

The main reasons for not filing applications included people who did not know they were eligible as well as others who were to become sick later. As discussed above, there are potentially thousands of individuals who are now just developing career-ending injuries – such as pulmonary and respiratory ailments – but are not eligible to receive assistance because they developed their symptoms after the deadline.

While there was some leeway, the rules required workers to have arrived at Ground Zero within 96 hours of the attack and would have needed to seek medical treatment within 72 hours. This is reasonable for rescue workers who suffered immediate injuries, but leaves no recourse for individuals with late-onset injuries or who arrived after September 15, 2001 to assist in the recovery effort and are now suffering from injuries. As noted above, new legislation would reopen the VCF to provide fair compensation for those people in need.

On April 1, 2008, the House Judiciary Subcommittees on the Constitution and Immigration held a joint hearing on the VCF entitled, "Paying with their Lives: The Status of Compensation for 9/11 Health Effects."

Read hearing materials via the Judiciary Committee website:

<http://judiciary.house.gov/oversight.aspx?ID=428>

Read volume 1 of the “Final Report of the Special Master of the Victims Compensation Fund of 2001”: http://www.usdoj.gov/final_report.pdf

Read volume 2 of the “Final Report of the Special Master of the Victims Compensation Fund of 2001”: http://www.usdoj.gov/final_report_vol2.pdf

B. Liability and the WTC Captive Insurance Company, Inc.

The majority of rescue, recovery and clean up workers who labored in debris removal activities at the site of the World Trade Center did so under the direction of the City of New York and its contractors, who controlled all work at the site. It quickly became apparent at early stages of the debris removal efforts that no private insurer would take on the risks associated with the site.

In response, Congress passed legislation that would lead to the creation of the WTC Captive Insurance Company, Inc. Public Law 108-7 (117 Stat. 517) directed the Federal Emergency Management Agency (FEMA) "to provide, from funds appropriated to [it] for disaster relief for the terrorist attacks of September 11, 2001, in Public Law 107-117, up to \$1,000,000,000 to establish a captive insurance company or other appropriate insurance mechanism for claims arising from debris removal, which may include claims made by city employees." After the New York Legislature passed enabling legislation and the Insurance Department amended New York insurance law in 2003, the WTC Captive was formed by the City of New York and incorporated under Section 402 of the Not for Profit Corporation Law. Subsequently, on December 3, 2004, the WTC Captive was funded by FEMA and licensed by the New York State Insurance Department.

Since its formation, the WTC Captive has paid out many millions of dollars to defense attorneys fighting the Ground Zero workers in court, but has not paid a single claim by a worker made ill by his or her exposures to toxic substances at the WTC site. Media coverage and financial documents indicate that the WTC Captive has spent nearly \$75 million in salaries and benefits to those associated with the Captive, as well as overhead and fees to private law firms. Members of the New York Delegation, Chairman Leahy and Ranking Member Specter of the Senate Judiciary Committee have raised concerns about these questionable uses of taxpayers' money when claims are not being paid. It has been alleged that the Captive is fighting each and every claim by each injured worker, regardless of its merit, refusing even to accept and analyze medical records and claim documents to properly value such claims.

Sick 9/11 workers are suing the WTC Captive, alleging that the WTC Captive violated a congressional mandate to pay their injury claims and instead spent millions of dollars fighting those claims. This is part of class action lawsuits of as many as 10,000 plaintiffs who are suing the City of New York and the contractors who oversaw the work at Ground Zero, among others. Reps. Nadler, Maloney, Hinchey, Ackerman and Clarke submitted an amicus brief to the Second Circuit Court of Appeals in re: World Trade Center Disaster Site Litigation expressing that Congress provided the billion dollar allocation of funds expressly because the City of New York

faced liability for Ground Zero workers' injuries and stating their intent for the monies allocated and their concern about the WTC Captive's waste of those funds.

C. Provisions in the 9/11 Health and Compensation Act that address fair compensation and liability issues:

H.R. 847 reopens the September 11 Victim Compensation Fund (VCF): The fund would be reopened until December 22, 2031 to provide compensation for economic damages and loss for individuals who did not file before or became ill after the original December 22, 2003 deadline. Because the bill links the VCF to the limitation on liability, this long date allows protection for victims with latent claims while extending limitation on liability period.

It requires the Special Master to update regulations consistent with revisions to VCF under this Act.

It also defines the geography of the WTC site to include area under the original VCF and debris removal routes. It defines debris removal comprehensively to cover vast majority of claims. It defines Immediate Aftermath (time of exposure) as being from 9/11/01 until August 30, 2002.

H.R. 847 also provides liability protections for the WTC Contractors and the City of New York: It limits liability of defendants for claims previously resolved, currently pending or filed through December 22, 2031. It limits liability to the sum of the amounts of: 1) the WTC Captive Insurance Co.; 2) Insurance identified in the WTC Captive Insurance Co.; 3) the City's liability limit of \$350 million; 4) the Port Authority's insurance; and 5) the contractors' insurance. There is no limitation on liability for intentional torts or other acts for which punitive damages are awarded. With respect to settlements or judgments obtained for claims under this section, the section establishes a priority of claims payments from which plaintiffs may satisfy those judgments or settlements. The priority requires exhaustion of the Captive and its insurance, followed by exhaustion of City's \$350 million, followed by exhaustion of Port Authority's insurance, followed finally by the contractors' insurance.

Appendix A

Summary of H.R. 847, the 9/11 Health and Compensation Act in the 111th Congress

Prepared by the Office of Rep. Carolyn B. Maloney

February 24, 2009

The 9/11 Health and Compensation Act would do the following:

Establish the World Trade Center Health Program, within the National Institute for Occupational Safety and Health (NIOSH), to provide medical monitoring and treatment for WTC-related conditions to WTC responders and community members. The program will be administered by the Director of NIOSH or his designee. The bill would also establish the WTC Health Program Scientific/Technical Advisory Committee to review and make recommendations on scientific matters and the World Trade Center Health Program Steering Committees to facilitate the coordination of the medical monitoring and treatment programs for responders and the community.

The WTC Program Administrator is required to develop and implement a program to ensure the quality of medical monitoring and treatment and a program to detect fraud; to submit an annual report to Congress on the operation of the program; and to provide notification to the Congress if program participation has reached 80 percent of the program caps.

Establish a medical monitoring and treatment program for WTC responders and a medical monitoring/screening and treatment program for the community to be delivered through Clinical Centers of Excellence and coordinated by Coordinating Centers of Excellence. The bill identifies the Centers of Excellence with which the program administrator enters into contracts, and provides for additional clinical centers and providers to be added. The specified Clinical Centers of Excellence, which provide monitoring and treatment, are FDNY, all members of the Mt. Sinai coordinated consortium (currently Mt. Sinai, Queens College, Bellevue, SUNY Stony Brook, University of Medicine and Dentistry of New Jersey), the WTC Environmental Health Center at Bellevue Hospital, and other facilities identified by the program administrator in the future. All of these clinical centers participate in the responder program, and the Bellevue Hospital participates in the community program.

In addition to monitoring and treatment, Clinical Centers of Excellence provide the following non-monitoring, non-treatment core services: outreach and education; counseling for monitoring and treatment benefits; counseling to help individuals identify and obtain benefits from workers' compensation, health insurance, disability insurance, or public or private social service agencies; translation services; and collection and reporting of data.

The Coordinating Centers of Excellence collect and analyze uniform data, coordinate outreach, develop the medical monitoring and treatment protocols, and oversee the steering committees for the responder and community health programs. The coordinating centers designated in the bill are FDNY and Mt. Sinai, which help coordinate the responder program, and the WTC Environmental Health Center at Bellevue Hospital which helps to coordinate the community program.

Provide Monitoring and Treatment for WTC Responders in the NY area: If a responder is determined to be eligible for monitoring based on the monitoring eligibility criteria provided for in the bill, then that responder has a right to medical monitoring that is paid for by the program. Once a responder is in monitoring, the condition that an experienced physician diagnoses must be on the list of Identified WTC-related conditions in the bill. In addition, the physician must find that exposure to airborne toxins, any other hazard, or any other adverse condition resulting from the attacks is substantially likely to be a significant factor in aggravating, contributing to, or causing the illness. The physician's determination must be evaluated and characterized through the use of appropriate questionnaires and clinical protocols approved by the NIOSH Director. Last a federal employee designated by the Program Administrator shall review the determination and provide certification for treatment if appropriate. If the physician diagnoses a condition that is not on the current list of identified conditions and finds that the substantially likely to be related to exposure at Ground Zero, then the program administrator, after review by an independent expert physician panel, can determine if the condition can be treated as a WTC-related condition. Additional conditions can be added to the list of conditions by regulations promulgated by the Program Administrator.

The program pays for the costs for medical treatment for certified WTC-related health conditions at a payment rate based on Federal Employees Compensation Act (FECA) rates (FECA rates are used in all federal compensation systems, like Energy Workers, Black Lung, Longshoremen, and compensation for Members of Congress). Treatment is limited to what which is medically necessary. The administrator reviews the determination of medical necessity and decides if payment will be made.

Workers' Compensation and public or private insurance are primary payors, followed by the government, if there are no worker's compensation benefits or private or public insurance.

The bill sets a cap of 15,000 additional participants in the responder medical monitoring and treatment program, over the number of current participants certified (about 40,000) as eligible by the WTC program administrator, for a total of 55,000 responders.

Payment for non-monitoring, non-treatment core programs will be paid at a rate of \$300 per person in monitoring and \$600 per person in treatment.

Provide Treatment and Monitoring for eligible community members: The bill establishes a community program to provide initial health screenings, medical treatment, and follow-up monitoring to eligible community members. It sets forth geographic and exposure criteria for defining the potential population who may be eligible for the program (i.e. those who lived, worked or were present in lower Manhattan, South of Houston Street or in Brooklyn within a 1.5 mile radius of the WTC site for certain defined time periods). The criteria and procedures for determinations of eligibility, diagnosing WTC-related health conditions and certification are the same as for those in the responder health program.

For those WTC-related health conditions certified for medical treatment that are not work-related, the WTC program is the secondary payor to any applicable public or private health

insurance. For those costs not covered by other insurance, the program pays for the costs for medical treatment for certified WTC-related health conditions at a payment rate based on FECA rates.

The bill sets a cap of 15,000 additional participants in the community program for residents and non-responders, over the number of current participants (about 2,700) certified as eligible by the WTC program administrator, for a total of around 17,700.

Payment for non-monitoring, non-treatment core programs will be paid at a rate of \$300 per person for treatment in a hospital-based facility and \$600 per person for treatment in a non-hospital based facility.

There is a contingency fund of \$20 million per year established to pay the cost of WTC-related health claims that may arise in individuals who fall outside the more limited definition of the population eligible for the community program included in the revised bill.

Provide Monitoring and Treatment for eligible individuals outside of the NY area: The program administrator will establish a nationwide network of providers so that eligible individuals who live outside of the NY area can reasonably access monitoring and treatment benefits near where they live. These eligible individuals are included in the caps on the number of participants in the responder and community programs.

Cost Share for the City of New York:

The City of New York is required to contribute a 10 percent matching cost share, but not more than \$500 million over 10 years. Each year the program administrator will certify whether the City has paid their 10% for the year. If it is certified that the City has paid their 10%, then the program will pay the cost of medical care that would have been otherwise be covered by workers' compensation or line of duty for City employees. If the City does not pay their share, then the City is responsible for payments under workers' compensation and line of duty like any other employer and insurer.

Provide for Research into Conditions: In consultation with the Program Steering Committee and under all applicable privacy protections, HHS will conduct or support research about conditions that may be WTC-related, and about diagnosing and treating WTC-related conditions.

Extend support for NYC Department of Health and Mental Hygiene programs: NIOSH would extend and expand support for the World Trade Center Health Registry and provide grants for the mental health needs of individuals who are not otherwise eligible for services under this bill.

Reopen the September 11 Victim Compensation Fund (VCF): The fund would be reopened until December 22, 2031 to provide compensation for economic damages and loss for individuals who did not file before or became ill after the original December 22, 2003 deadline. Because the bill links the VCF to the limitation on liability, this long date allows protection for victims with latent claims while extending limitation on liability period.

Requires the Special Master to update regulations consistent with revisions to VCF under this Act.

Defines the geography of the WTC site to include area under original VCF and debris removal routes. Defines debris removal comprehensively to cover vast majority of claims. Defines Immediate Aftermath (time of exposure) as being from 9/11/01 until August 30, 2002.

Provide liability protections for the WTC Contractors and the City of New York: Limits liability of defendants for claims previously resolved, currently pending or filed through December 22, 2031. It limits liability to the sum of the amounts of: 1) the WTC Captive Insurance Co.; 2) Insurance identified in the WTC Captive Insurance Co.; 3) the City's liability limit of \$350 million; 4) the Port Authority's insurance; and 5) the contractors' insurance. There is no limitation on liability for intentional torts or other acts for which punitive damages are awarded. With respect to settlements or judgments obtained for claims under this section, the section establishes a priority of claims payments from which plaintiffs may satisfy those judgments or settlements. The priority requires exhaustion of the Captive and its insurance, followed by exhaustion of City's \$350 million, followed by exhaustion of Port Authority's insurance, followed finally by the contractors' insurance.

Appendix B: Government Accountability Office (GAO) Products on 9/11 Health

05/30/08 – September 11: HHS Needs to Develop a Plan That Incorporates Lessons Learned from the Responder Health Program

- Full GAO Testimony (pdf): Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d08610.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-08-610&accno=A82223>

03/11/08 – September 11: Fiscal Year 2008 Cost Estimation Process for World Trade Center Health Programs

- Full GAO Testimony (pdf): <http://maloney.house.gov/documents/911recovery/20080311GAO08-537R.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-08-537R&accno=A81285>

01/22/08 - September 11: Improvements Still Needed in Availability of Health Screening and Monitoring Services for Responders outside the New York City Area

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d08429t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-08-429T&accno=A79971>

09/20/07 - September 11: Problems Remain in Planning for and Providing Health Screening and Monitoring Services for Responders

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d071253t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-07-1253T&accno=A76509>

09/18/07 - September 11: Improvements Needed in Availability of Health Screening and Monitoring Services for Responders

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d071228t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-07-1228T&accno=A76388>

09/10/07 - September 11: Improvements Needed in Availability of Health Screening and Monitoring Services for Responders

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d071229t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-07-1229T&accno=A75933>

07/24/07 - September 11: HHS Needs to Ensure Availability of Health Screening and Monitoring for all Responders

- Full GAO Report (pdf): <http://www.gao.gov/new.items/d07892.pdf>
- Summary prepared by the office of Rep. Maloney (pdf): http://maloney.house.gov/documents/911recovery/20070724_SummaryofGAOReport.pdf

09/08/06 - September 11: HHS Has Screened Additional Federal Responders for World Trade Center Health Effects, but Plans for Awarding Funds for Treatment Are Incomplete

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d061092t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-06-1092T&accno=A60492>

02/28/06 - September 11: Monitoring of World Trade Center Health Effects Has Progressed, but Program for Federal Responders Lags Behind

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d06481t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-06-481T&accno=A47937>

09/10/05 - September 11: Monitoring of World Trade Center Health Effects Has Progressed, but Not for Federal Responders

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d051020t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-05-1020T&accno=A36360>

09/08/04 - September 11: Health Effects in the Aftermath of the World Trade Center Attack

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d041068t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-04-1068T&accno=A12271>

09/08/04 - September 11: Federal Assistance for New York Workers' Compensation Costs

- Full GAO Testimony (pdf): <http://www.gao.gov/new.items/d041013t.pdf>
- Abstract: <http://www.gao.gov/docdblite/summary.php?rptno=GAO-04-1013T&accno=A12275>

Appendix C: Federal Hearings on 9/11 Health

04/22/09 - House Energy and Commerce Subcommittee on Health hearing on "H.R. 847, the James Zadroga 9/11 Health and Compensation Act of 2009"

- [Hearing Materials via Energy and Commerce Committee website](#)

03/31/09 - House Judiciary Subcommittees on the Constitution and Immigration Joint Hearing on "H.R. 847, the James Zadroga 9/11 Health and Compensation Act of 2009"

- [Hearing Materials via Judiciary Committee website](#)

07/31/08 - The House Energy and Commerce Subcommittee on Health on "H.R. 6594, the James Zadroga 9/11 Health and Compensation Act"

- [Hearing Materials via Energy and Commerce website](#)

04/01/08 – House Judiciary Subcommittees on the Constitution and Immigration Joint Hearing on “Paying with their Lives: The Status of Compensation for 9/11 Health Effects”

- [Hearing Materials via Judiciary Committee website](#)

07/31/08 – House Appropriations Subcommittee on Health on “H.R. 6594, James Zadroga 9/11 Health and Compensation Act”

- Hearing Materials via Energy and Commerce website:
http://energycommerce.house.gov/cmte_mtgs/110-he-hrg.073108.9-11compensation.shtml

04/01/08 – House Judiciary Subcommittees on the Constitution and Immigration Joint Hearing on “Paying with their Lives: The Status of Compensation for 9/11 Health Effects”

- Hearing Materials via Judiciary Committee website:
<http://judiciary.house.gov/oversight.aspx?ID=428>

03/12/08—House Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies Hearing on "World Trade Center 9/11 Health Monitoring and Treatment Program"

- Hearing Information via Appropriations Committee website:
http://appropriations.house.gov/Subcommittees/sub_lhse.shtml

01/22/08 – House Oversight and Government Reform Subcommittee on Government Management, Organization and Procurement Hearing on “9/11 Health: Why did HHS Cancel Contracts to Manage Responder Health Care?”

- Hearing Materials via Oversight and Government Reform website:
<http://governmentmanagement.oversight.house.gov/story.asp?ID=1687>

09/20/07 – House Homeland Security Full Committee Hearing on “Protecting the Protectors: Ensuring the Health and Safety of our First Responders in the Wake of Catastrophic Disasters”

- Hearing Materials via Homeland Security Committee website:
<http://homeland.house.gov/hearings/index.asp?ID=87>

09/18/07 – House Energy and Commerce Subcommittee on Health Hearing on “Answering the Call: Medical Monitoring and Treatment of 9/11 Health Effects”

- Hearing Materials via Energy and Commerce Committee website:
http://energycommerce.house.gov/cmte_mtgs/110-he-hrg.091807.911effects.shtml

09/12/07 – House Education and Labor Full Committee Hearing on "Why Weren't 9/11 Recovery Workers Protected at the World Trade Center?"

- Hearing Materials via Education and Labor Committee website:
<http://edworkforce.house.gov/hearings/fc091207.shtml>

09/10/07 – House Oversight and Government Reform Subcommittee on Government Management Field Hearing in Brooklyn on “9/11 Health Effects: The Screening and Monitoring of First Responders”

- Hearing Materials via Oversight and Government Reform Committee website:
<http://governmentmanagement.oversight.house.gov/story.asp?ID=1477>

06/25/07 - Subcommittee on the Constitution, Civil Rights, and Civil Liberties of the House Judiciary Committee oversight hearing on "the U.S. Environmental Protection Agency's Response to Air Quality Issues Arising from the Terrorist Attacks of September 11, 2001: Were There Substantive Due Process Violations?"

- Hearing Materials via Judiciary Committee website:
<http://judiciary.house.gov/Oversight.aspx?ID=341>

06/20/07 - Subcommittee on Superfund and Environmental Health of the Senate Environment and Public Works Committee hearing on the “EPA's Response to 9-11 and Lessons Learned for Future Emergency Preparedness.”

- Hearing Materials via Senate Environment and Public Works Committee website:
http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=2acd0554-802a-23ad-4488-6423daa414dc

04/23/07 – House Oversight and Government Reform Subcommittee on Government Management, Organization and Procurement holds 9/11 Health Effects Field Hearing in Brooklyn

- Hearing Materials via Oversight and Government Reform Committee website: <http://governmentmanagement.oversight.house.gov/story.asp?ID=1384>

03/21/07 - Senate Full Committee on Health, Education, Labor, and Pensions hearing on "the Long-Term Health Impacts from September 11: A Review of Treatment, Diagnosis, and Monitoring Efforts"

- Hearing Materials via the Senate Health, Education, Labor, and Pensions Committee website: http://help.senate.gov/Hearings/2007_03_21/2007_03_21.html

02/28/07 – House Oversight and Government Reform Subcommittee on Government Management, Organization and Procurement Hearing on “9/11 Health Effects: Federal Monitoring and Treatment of Residents and Responders”

- Hearing Materials via GPO Access: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_house_hearings&docid=f:34912.wais

09/08/06 – House Government Reform Subcommittee on National Security Field Hearing in NYC on “9/11 Health of Responders and Residents “Progress Since September 11th: Protecting Public Health and Safety of the Responders and Residents”

- Hearing Materials via GPO Access: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_house_hearings&docid=f:36998.wais

02/28/06 – House Government Reform Subcommittee on National Security Hearing on “Progress Since 9/11: Protecting Public Health and Safety Against Terrorist Attacks”

- Hearing Materials via GPO Access: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_house_hearings&docid=f:28531.wais

09/08/04 – House Government Reform Subcommittee on National Security Hearing on “Assessing September 11th Health Effects”

- Hearing Materials via GPO Access: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_house_hearings&docid=f:98999.wais

10/28/03 – House Government Reform Subcommittee on National Security Hearing on “Assessing September 11th Health Effects: What Should Be Done?”

- Hearing Materials via GPO Access: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_house_hearings&docid=f:92728.wais

02/11/02 – Senate Committee on Environment and Public Works Subcommittee on Clean Air
Field Hearing in NYC on "Air Quality in New York City After the September 11, 2001 Attacks"

- Hearing Materials via GPO Access - Part I: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=107_senate_hearings&docid=f:80397.wais
- Hearing Materials via GPO Access - Part II: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=107_senate_hearings&docid=f:82894.wais

Appendix D: Studies on the Health Impacts of 9/11

Updated March 2009

	Author	Year	Peer Reviewed Journal	Findings:
1	Rom, W	2002	American Journal of Respiratory and Critical Care Medicine	38 year old firefighter with eosinophilic pneumonia. Washings of his airways showed fly ash, degraded glass, metal, and asbestos fibers
2	Prezant, D	2002	New England Journal of Medicine	90% of FDNY firefighters working at the WTC site had a cough, nasal congestion, chest tightness and chest burning; 87% had new onset GERD (gastroesophageal reflux disease). Increased bronchial reactivity was present and worsened over time in many firefighters.
3	Trout, D	2002	Journal of Occupational and Environmental Medicine	Federal workers working near the WTC site were far more likely to have symptoms to shortness of breath, chest tightness and eye irritation, compared to workers in Dallas. Rates of depression and PTSD symptoms were also significantly higher.
4	Galea, S	2002	New England Journal of Medicine	Rescue workers at the site were far more likely to have PTSD and depression than NYC residents who did not do this type of work.
5	CDC	2002	Morbidity and Mortality Weekly Report	82% of the adult population surveyed in neighborhoods surrounding the WTC two months after the event had persistent respiratory symptoms that developed or worsened after the WTC attack, and 39% had symptoms suggestive of PTSD.
6	Das, D	2003	Journal of Urban Health	Individuals within two miles of the WTC site were significantly more likely to visit an Emergency Department for smoke inhalation, trauma, asthma or anxiety compared to those outside a two-mile radius
7	CDC	2003	Morbidity and Mortality Weekly Report	High school and college staff present near the WTC at the time of the collapse had increased rates of eye, nose and throat irritation, cough, and shortness of breath compared to similar workers five miles away.
8	Berkowitz, GS	2003	The Journal of the American Medical Association	Women pregnant and present in lower Manhattan on 9/11/01 and in the three weeks after 9/11 were more likely to have babies with intrauterine growth retardation (smaller babies at birth).
9	Fireman, EM	2004	Environmental Health Perspectives	Sputum (phlegm) induced in firefighters (FDNY) showed WTC dust and particles with a high pH more than eight months after the attack, as well as signs of inflammation

10	Salzman, SH	2004	Journal of Occupational and Environmental Medicine	78% of police officers at the WTC site developed respiratory symptoms, and 29% of participants had abnormal breathing tests. The study was conducted in December 2001.
11	Skloot, G	2004	Chest	A study of ironworkers working at the site from September 11-15, 2001 had one or more respiratory symptom five months after the attack. Fifty-three percent had evidence of lung function abnormalities.
12	Lederman, S	2004	Environmental Health Perspectives	Birth outcomes for women living within two miles of the WTC had smaller babies than those living farther away, after controlling for other factors.
13	Lin, S	2005	American Journal of Epidemiology	Residents living near the WTC site were significantly more likely to have new-onset respiratory symptoms, compared to residents 6 miles away.
14	Tapp, LC	2005	American Journal of Industrial Medicine	Transit workers evaluated seven months after 9/11/01 with dust cloud exposure had more symptoms of PTSD and depression compared to those without these exposures.
15	Mann, JM	2005	American Journal of Industrial Medicine	A 42 year old highway patrol officer who arrived on September 11 th and was in the dust cloud developed severe respiratory symptoms and was found to have interstitial lung disease on open lung biopsy.
16	Reibman, J	2005	Environmental Health Perspectives	56% of residents surveyed in lower Manhattan had new onset lower respiratory symptoms. 26% of the residents had persistent new-onset respiratory symptoms.
17	Banauch GI	2005	Critical Care Medicine	One year post-collapse, 23% of FDNY responders who had been heavily exposed to WTC dust had persistent lung dysfunction, as compared with only 11% of moderately exposed and 4% of unexposed firefighters.
18	Banauch. G	2006	American Journal of Respiratory and Critical Care Medicine	Pulmonary function was compared before and after September 11 th . A significant decline in pulmonary function was noted in FDNY personnel who were present at the WTC from September 11-13, 2001, about 12 times more than would be expected from normal aging.
19	Herbert, R.	2006	Environmental Health Perspectives	Over 9000 WTC responders were examined over 2.5 year period from July 2002 to April 2004. 69% reported new or worsened respiratory upper and lower symptoms while performing WTC work. Symptoms persisted to the time of examination in 59% of these workers. 28% of responders had abnormal breathing tests.

20	Mauer, MP	2007	Journal of Occupational and Environmental Medicine	Nearly half of NY State personnel (1,400) responding to the WTC had lower and upper respiratory symptoms, and one third reported psychological symptoms. Participants were evaluated from May 2002 – November 2003.
21	Buyantseva, LV	2007	Journal of Occupational and Environmental Medicine	44% of police officers surveyed at one month and 19 months after September 11 th had persistent cough, and other respiratory symptoms. Rates of lower respiratory symptoms increased significantly from 2001 to 2003.
22	Izbicki, G	2007	Chest	26 firefighters (FDNY) developed sarcoidosis in the five years after September 11, 2001. The incidence of sarcoidosis was significantly (nearly 8 times) increased when compared to the years before September 11 th .
23	Mendelson, D.	2007	Journal of Occupational and Environmental Medicine	25 World Trade Center workers with lower respiratory symptoms had chest imaging revealing air trapping. Air trapping in these workers may be a result of disease of the small airways in the lungs.
24	Wheeler K	2007	Environmental Health Perspectives	WTC rescue, recovery and clean-up workers were surveyed in the WTC Health Registry and found elevated rates of newly diagnosed asthma.
25	Brackbill, RM	2007	Morbidity and Mortality Weekly Report.	Data from the New York City Dept of Health Registry show that, two to three years after 9/11, survivors of buildings that collapsed or that were damaged as a result of the WTC attack reported substantial physical and mental health problems. The long-term effects require followup.
26	Perrin MA	2007	American Journal of Psychiatry	This NYC DOH Registry study compared the rates of posttraumatic stress disorder (PTSD) across different occupations involved in rescue/recovery work at the WTC site and found that PTSD was significantly higher among those who performed tasks not common for their occupation.
27	Tao XG	2007	Journal of Occupational and Environmental Medicine	Respiratory health among cleanup workers at the WTC disaster site was evaluated approximately 20 months after the initial exposure; compared with those never at the site, WTC workers were more than three times as likely to report lower respiratory symptoms.
28	Perera, FP	2007	Environmental Health Perspectives	Exposure of pregnant women to the WTC dust cloud may have contributed to a reduction in cognitive development of their children at age 3.

29	DiGrande L	2008	Journal of Traumatic Stress	NYC DOH Registry surveyed 11,037 adults who had lived south of Canal Street in New York City on 9/11, and found that that posttraumatic stress disorder (PTSD) is a continued health problem in the local community.
30	Farfel M	2008	Journal of Urban Health	NYC DOH Registry data estimate that between 3,800 and 12,600 adults experienced newly diagnosed asthma and 34,600–70,200 adults experienced PTSD following the attacks, suggesting extensive and continuing health impacts.
31	De la Hoz, RE	2008	International Archives of Occupational and Environmental Health	In a cohort of World Trade Center workers, five categories of disease were predominant: upper airway disease (78%), gastroesophageal reflux disease (58%), lower airway disease (49%), psychological (42%) and chronic musculoskeletal illness (18%).
32	De La Hoz, RE	2008	American Journal of Industrial Medicine	In addition to upper and lower airway disorders, vocal cord dysfunction has been found in World Trade Center workers.
33	Moline, Jacqueline	2008	Mount Sinai Journal of Medicine	Clinicians at Mount Sinai developed a medical screening program to evaluate the health status of workers and volunteers who sustained exposure at the WTC disaster site. The program has successfully recruited nearly 22,000 responders, and serves as a model for the rapid development of programs to assess the health of others exposed to similar hazards.
34	Savitz, David	2008	Mount Sinai Journal of Medicine	Comparison of the experience at the World Trade Center disaster with 4 past incidents of chemical and radiation releases at Seveso, Italy; Bhopal, India; Chernobyl, Ukraine; and Three Mile Island, USA, provided useful contrasts and insights.
35	Szeinuk, Jaime	2008	Mount Sinai Journal of Medicine	Diffuse parenchymal lung diseases (DPLDs) appear to be associated with heavy or extended exposure to the toxins released at the WTC disaster site. This suggests the need for continued long-term clinical follow-up of this population.
36	Bills, Corey	2008	Mount Sinai Journal of Medicine	The mental health needs of workers exposed to the events of September 11 th varied widely. These findings suggest the need for future programs for disaster workers to include accessible mental health treatment services as well as comprehensive post-disaster surveillance.
37	Enright, Paul	2008	Mount Sinai Journal of Medicine	This article describes the approach used to standardize lung function testing for the consortium of institutions providing medical monitoring examinations to WTC responders.

38	Landrigan, Philip	2008	Mount Sinai Journal of Medicine	To assess effects on children's health associated with the attacks on the WTC, research teams at the Mount Sinai School of Medicine and other academic health centers in New York City launched a series of clinical and epidemiologic studies. They found medical, developmental and mental health problems.
39	Reissman, Dori	2008	Mount Sinai Journal of Medicine	This article reviews lessons learned about managing the safety and health of workers who were involved in the WTC disaster, including the ongoing responder health burdens, and the changes in federal infrastructure, response planning, and resources for protection of response and recovery personnel.
40	Stellman, Jeanne	2008	Environmental Health Perspectives	Working in 9/11 recovery operations is associated with chronic impairment of mental health and social functioning, which greatly exceed population norms. Surveillance and treatment programs continue to be needed.
41	Prezant DJ	2008	Lung	This paper describes treatment recommendations for the main respiratory health consequence from the collapse of the WTC, which has been called "WTC Cough Syndrome", and includes chronic sinusitis, asthma, and/or bronchitis, often complicated by gastroesophageal reflux dysfunction (GERD).
42	Prezant DJ	2008	Mount Sinai Journal of Medicine	This paper reviews several respiratory consequences of occupational and environmental disasters and uses the WTC disaster to illustrate the consequences of chronic upper and lower respiratory tract inflammation.
43	De La Hoz, RE	2008	Journal of Occupational and Environmental Medicine	A variety of gastroesophageal reflux symptoms and disorders is found in WTC responders and seems to be related to the presence of lung disease.
44	De La Hoz, RE	2008	Journal of Occupational and Environmental Medicine	The WTC experience of immigrant responders demonstrates that their health burden is exacerbated by limitations in access to appropriate health care, disability and compensation benefits, and vocational rehabilitation services.

45	Thomas PA	2008	Environmental Health Perspectives	Asthma prevalence after 9/11 among WTC Health Registry enrollees under 5 years of age was higher than national estimates, and new asthma diagnosis was associated with dust cloud exposure in all age groups. Severity of asthma and persistence of other respiratory symptoms will be determined on follow-up surveys.
46	Daly ES	2008	Journal of Trauma and Stress	Disaster relief workers may experience an increase in stress symptoms at the anniversary of their traumatic exposure.
47	Tao, L	2008	Environmental Science and Technology	WTC responders were exposed to airborne pollutants through inhalation of dust and smoke released during and after the collapse of the WTC. The potential health implications of these results need more follow up.
48	Skloot, Gwen	2009	Chest	Lung function abnormalities remain evident more than 5 years after the disaster in many exposed individuals, indicating the need for longer term monitoring of WTC responders.
49	Katz, CL	2009	Psychiatric Bulletin	Ironworkers at Ground Zero tend to have significant psychiatric symptoms likely associated with the traumatic experience of working there during the clean-up operation.

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