

The Lancet, [Volume 378, Issue 9794](#), Pages 854 - 855, 3 September 2011
doi:10.1016/S0140-6736(11)61297-X

Medical care for workers exposed to the WTC disaster

[James M Melius](#) 

In *The Lancet*, the report by Rachael Zeig-Owens and colleagues¹ marks important progress in the assessment of health outcomes for rescue and recovery workers who were exposed to the aftermath of the Sept 11, 2001 (9/11) attacks. Over 50 000 workers were exposed while responding to the World Trade Center (WTC) incident, attempting to rescue survivors and recover the dead, clearing the site, or cleaning the surrounding buildings.² These workers were exposed to an incompletely characterised mix of asbestos, alkaline cement dust, pulverised building materials, and fire smoke for many days and weeks, often without proper protection.³ Hundreds of these people are disabled and can no longer work, and thousands have become ill and continue to receive medical treatment nearly 10 years after 9/11.⁴



[Full-size image \(110K\)](#) Corbis

Until now, documentation of illnesses in WTC rescue and recovery workers has been based on data collected during medical examinations or follow-up health interviews.^{4–6} The only study on cancer outcomes in these workers was a small case series of multiple myeloma (n=8).⁷ Case studies, although useful for alerting the health-care community about the potential for new or late emerging illnesses, are of little value for determining WTC-exposure-related health outcomes due to self-selection and case-ascertainment biases. The study by Zeig-Owens and colleagues is the first to assess chronic or latent diseases in a defined study population.

Zeig-Owens and colleagues report an early assessment of cancer outcomes in 9853 men who were employed as New York City firefighters, and describe a modest excess of cancer in WTC-exposed firefighters compared with rates in non-exposed firefighters. The WTC-exposed firefighters had a 10% higher (95% CI -2 to 25) overall cancer incidence ratio than was expected in a similar demographic mix from the general male population in the USA, and a 32% higher (7 to 62) incidence than in non-exposed firefighters.

WTC rescue and recovery workers are concerned about possible latent or long-term health effects, especially cancer. Zeig-Owens and colleagues do not provide a definitive answer to their concerns. Their study covers only firefighters and many other groups were exposed although few, if any, had the same type and intensity of exposure as did firefighters. A follow-up period of 7 years is short for a cancer study, the number of cancers for specific sites is often small, and the ability to do internal comparisons was limited by the fact that few New York City firefighters were not exposed to the WTC.

Some might suggest that the researchers should have waited longer rather than publish their findings now, yet the value of these findings far outweighs the limitations. This is a special population with substantial exposure to toxic materials (including carcinogens) who already bear a high burden of other illnesses as a result of their occupational exposures. Despite the remaining uncertainty, this report and future cancer studies should provide reassurance that medical follow-up is being done in a way that will detect new disease patterns in a timely manner and, hopefully, while there is time to intervene. The methods used in this study will serve as the foundation for other studies, and the investigators and participants in this labour–management partnership should be applauded.

The study also comes at an important time for the federally funded medical follow-up of these workers, which has just been guaranteed for the next 5 years.⁸ This medical programme does not currently cover cancer treatment. The findings from the accompanying study show an increased overall cancer risk in these WTC-exposed firefighters, and significantly raised cancer risk at a few specific sites (ie, melanoma, thyroid, prostate, and non-Hodgkin lymphoma) compared with the general population. These heightened risks, tempered by concerns about potential surveillance bias, support careful consideration of the addition of cancer to the medical disorders covered in the programme. Waiting to do so until definitive cancer studies have been completed (probably many years from now) would be unfair and would pose a hardship for workers who willingly risked their health by responding without hesitation to the WTC crisis. Meanwhile, the New York City Fire Department and other groups caring for this population need to continue their efforts to assess cancer and other long-term health effects of WTC exposure.

I work for a joint labour-management fund for the Laborers Union in New York, which represents many of the workers at the WTC site. I have chaired a committee that has overseen federally funded medical programmes for these workers, including firefighters. I have not received any compensation for this work, and have not been involved in litigation regarding workers at the site. I have chaired a medical advisory committee for the national firefighters' union (IAFF), again without compensation.

References

- [1](#) Zeig-Owens R, Webber MP, Hall CB, et al. Early assessment of cancer outcomes in New York City firefighters after the 9/11 attacks: an observational cohort study. *Lancet* 2011; 378: 898-905. [Summary](#) | [Full Text](#) | [PDF\(143KB\)](#) | [PubMed](#)
- [2](#) Savitz DA, Oxman RT, Metzger KB, et al. Epidemiological research on man-made disasters: strategies and implications of cohort definition for World Trade Center worker and volunteer surveillance program. *Mt Sinai J Med* 2008; 75: 77-87. [CrossRef](#) | [PubMed](#)
- [3](#) Landrigan PJ, Liou PJ, Thurston G, et al. Health and environmental consequences of the World Trade Center disaster. *Environ Health Perspect* 2004; 112: 731-739. [CrossRef](#) | [PubMed](#)
- [4](#) Herbert R, Moline J, Skloot G, et al. The World Trade Center disaster and the health of workers: five-year assessment of a unique medical screening program. *Environ Health Perspect* 2006; 114: 1853-1858. [PubMed](#)
- [5](#) Moline JM, Herbert R, Crowley L, et al. Multiple myeloma in World Trade Center responders: a case series. *J Occup Environ Med* 2009; 51: 896-902. [CrossRef](#) | [PubMed](#)
- [6](#) Webber MP, Gustave J, Lee R, et al. Trends in respiratory symptoms of firefighters exposed to the World Trade Center disaster: 2001–2005. *Environ Health Perspect* 2009; 117: 975-980. [CrossRef](#) | [PubMed](#)
- [7](#) Wheeler K, McKelvey W, Thorpe L, et al. Asthma diagnosed after 11 September 2001 among rescue and recovery workers: findings from the World Trade Center Health Registry. *Environ Health Perspect* 2007; 115: 1584-1590. [CrossRef](#) | [PubMed](#)
- [8](#) US Congress. James Zadroga 9/11 Health and Compensation Act of 2010. <http://www.gpo.gov/fdsys/pkg/BILLS-111hr847enr/pdf/BILLS-111hr847enr.pdf>. (accessed Aug 23, 2011).

[a](#) NYS Laborers' Health Fund, Albany, NY 12211, USA

Copyright © 2011 [Elsevier](#) Limited. All rights reserved. The Lancet ® is a registered trademark of Elsevier Properties S.A. used under licence.
The content on this site is intended for health professionals.