

## The scene at Ground Zero

Into this devastated, almost apocalyptic war zone of a landscape marched a host of different players from government, nonprofit groups, hospitals and medical institutions, and private industry.

To some, it was an environmental health disaster from the very first. “Standing down there, with your eyes closed,” says R

A veteran of disasters from the Mississippi floods Mt. St. Helens, Burger said it reminded him most of the volcano, if he forgot he was in downtown Manhattan. “Feeling the heat, seeing the molten steel, the layers upon layers of ash, like lava, it reminded me of Mt. St. Helen’s and the thousands who fled that disaster,” he said.

**“It could have been a tornado or an avalanche or a volcano.”**

Ground Zero was a disaster site like no other—with hazards everywhere. Shards of steel lay upon shards of steel, shifting and unstable, uncovering red hot metal beams excavated from deep beneath layers of sub-floors, exposing further dark crevasses. All around the 16-acre site lay millions of piles of debris, covered in dust, with noxious smoke smoldering up, carrying unknown toxins, from benzene to heavy metals, into surrounding neighborhoods.



Photo: Paul Olivier

Throughout New York, people wore light masks and scarves over their faces. As the mayor and governor tried to assure people that the city was safe to inhabit, rumors of asbestos hung in the air. People heard news reports with terrorism experts quoted saying that dispersing a biological poison via airplane would be inefficient, while inspectors continued to inspect the debris for signs of biological or chemical poisons.

To cope with a disaster of this magnitude, New York City had to coordinate its operations with a vast number of local, state and federal agencies. Like the Oklahoma City bombing incident, the affected geographical area was small but involved massive damage to buildings. (There the comparison ends, since the World Trade Centers were far taller and made of lightweight steel versus the Murrah

Building, made of concrete and only nine stories tall.)

Dr. Bruce Bernard, a public health specialist at the National Institute for Occupational Safety and Health (NIOSH) at the Centers for Disease Control and Prevention in Atlanta, who traveled to the site a few days after the terrorist attack, remarked that the federal agency was aghast at the size and variety of hazards present at the site—dust, blood borne pathogens, unstable structures, physical injuries, heavy metals, carbon monoxide, hazards of being trapped in confined spaces, and heat stress.

At first, when NIOSH arrived, Bernard said, “The major concern was dust.” But with thousands still thought to be missing, and workers determined to stay until all potential survivors were found, “health and safety was on the back burner,” according to Bernard. (2)