

Physical health and its determinants in victims and relief workers of the Enschede firework disaster after 18 months.

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May 13-2000, a firework storage facility with 1000 tons of heavy fireworks exploded in a residential area in Enschede, The Netherlands. The explosions and fire killed 22 and injured over 900 people; some 400 homes were destroyed. Two-three weeks after the explosion, a health survey was performed among victims and emergency relief workers. The first health survey showed that at least 50% of the victims reported health problems, such as sleeping problems and restrictions in daily functioning. Relief workers from the disaster area and from Enschede reported a poor perceived health after the disaster. The perceived health status of relief workers from outside of Enschede after the explosion was on average better than that of the other groups. Important determinants for health problems 2-3 weeks after the disaster were: victims who were injured, lost their homes or loved-ones, or experienced strong fear and aspects of peri-traumatic dissociation. They reported 2-3 times more health problems than victims without these experiences.

Since little is known about (early) development of disaster-related health effects and 10-30 % of victims may, as a rule of thumb, develop aspects posttraumatic stress and to a lesser degree, medically unexplained symptoms, a follow-up of the victims was considered necessary. Therefore a second health survey was performed 18 months after the disaster. Both surveys are part of a larger health care program for the victims. The main objectives of the second survey were to investigate the changes in health between the first survey and second survey and some of the important determinants of bad health in the second survey. Data collection of the second survey finished in January 2002. First indications show a response in the second survey of over 75%. Among the respondents substantial health problems can still be observed 18 months after the disaster. The paper will present the health status 18 months after the disaster in comparison with a control population and the changes in health problems since the first survey. Determinants of health status and of change over time will be discussed.