LESSONS FROM A STRANGE CASE OF DIOXIN CONTAMINATION

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Introduction

In the course of 1998 several occupational safety incidents in Austria attracted broad attention by the media and the public. One of these incidents turned out to be a strange case of dioxin contamination in a company situated right in Austria's capital Vienna. While medical investigation and treatment of those employers suffering from health impairments was established in the General Hospital of Vienna a "silent alert" concerning occupational health and safety was triggered by the Austrian Workers Compensation Board (AUVA).

Methods

The AUVA employed its own capacity of equipment and occupational hygiene experts to check for immediate measures and to find evidence that the impairments observed were caused by the insured occupation. At the same time cooperation with several public authorities responsible for important aspects of public safety led to numerous requests for investigations and resulted in a burst of the number of samples. The AUVA therefore acquired additional capacity for sampling and analysis and attempted to serve these requests by managing the efforts.

Results and Discussion

By careful employment of the capacity at hand a large number of material and air samples was analysed. Interpretation of the data indicated that at the time when the investigations started the TE-values of air were far below the German limit-value ("TRK" applicable for worksites) of 50 pg/m³. It was crucial to interpret the congener pattern to find adequate evidence for the recognition of occupational diseases. Both material and air samples were also used to serve additional demands (e.g. checking for immediate necessity of closing down the site, establish plans for clean-up, checking food and construction material). It will be demonstrated that the interpretation of congener patterns allowed for the recognition of occupational diseases and compensation. We will discuss that complete reconstruction of the incident was obviously not possible due to a marked time lap between a period of exposure and the time of investigation. Furthermore the impact of media reports and the general reception of the probably most ill-reputed chemical "dioxin" on the ongoing investigation will be stressed and recommendations for information policy resulting from the current experience will be outlined.

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