

WHO/Europe concludes mission on health impact of sludge spill in Hungary

A four-day WHO expert field mission to Hungary has developed a set of recommendations to minimize the short- and long-term health impact of the sludge spill at an alumina plant in Hungary on 4 October 2010.

(Full story)

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A four-day WHO expert field mission to Hungary concluded on 16 October by making recommendations to minimize the short- and long-term health impact of a sludge spill at an alumina plant of Magyar Alumínium Zrt. (MAL Zrt.), Ajkai Timfoldgyar in the town of Ajka, and to prevent similar events with potential transboundary effects.

The team was led by staff of WHO/Europe's WHO European Centre for Environment and Health, Rome, and included experts from the WHO collaborating centre for chemical incidents in the United Kingdom and ICARO, the Italian consulting company on environment and health risk assessment. The team added international know-how to the efforts and expertise of the national authorities and the WHO Country Office, Hungary; it focused on the public health aspects of the event, complementing the work of a European Union mission.

Acute health risk diminished

The spill caused 9 deaths and over 150 injuries, mostly due to drowning and chemical burns from the corrosive effect of the red mud. It destroyed or severely damaged over 300 houses in the villages of Kolontár, Devecser and Somlóvásárhely in western Hungary.

At the affected sites, measures were promptly taken to neutralize the corrosive mud and reduce the immediate danger of exposure. As the sludge has receded and its pH decreased, the risk of direct health damage from contact has been substantially reduced.

Focus on resident population and rescue workers

As the recovery and rehabilitation phase is under way, particular attention now needs to be paid to preventing potential health risks to the population of the affected areas, and the nearly 4000 rescue workers and volunteers involved in the clean-up.

Exposure to the mud by contact, inhalation or ingestion should be minimized. This requires completing the removal of the sludge from the affected areas (particularly houses), monitoring the concentration of outdoor and indoor air pollutants, and providing the population and first-line workers with clear advice on protecting themselves.

As the psychological effects of the disaster are recognized, a specialized team of Hungarian psychologists is providing support on site to people who have been evacuated, suffered injuries

and/or deaths in their families, and/or sustained losses of and damage to property. This need will persist for both the short and medium terms.

No danger to health from drinking-water

Importantly, the quality of drinking-water supplied to the affected areas has remained adequate and poses no health risk to the community.

Continued monitoring of outdoor and indoor air, drinking-water and the quality of soil and food production will remain essential to assess the risk of exposure, particularly to heavy metals, in the medium and long terms and to take action as required.

No risk from international spread

Great effort has been dedicated to preventing the further spread of the spill to the river Danube, as this could result in environmental damage to neighbouring countries. The information available indicates that the quality of Danube water has remained substantially unaffected.

Nevertheless, with some 150 waste reservoirs located along the river, the spill highlights the need for comprehensive mapping and assessment of these installations, their resilience to extreme weather events and to any risk of contamination of soil and ground water from poorly isolated reservoirs.

Risk from currently used and heritage industrial sites is common to many countries in the lower Danube. Existing policy instruments, such as the Protocol on Water and Health, can support action to identify and remediate particularly contaminated sites with a potential to harm health through water contamination. The upcoming second meeting of the Parties to the Protocol, taking place on 22–25 November 2010 in Bucharest, Romania, offers a unique opportunity to discuss possible options on this important topic.