

The occupational physician and chemical disasters: old problem, new threats

S.W. BORRON

Clinical Professor of Emergency Medicine, Department of Surgery (Emergency Medicine), The University of Texas Health Science Center at San Antonio

KEY WORDS

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SUMMARY

Chemical disasters continue to occur, in spite of significant progress in process engineering, industrial hygiene practices, and improved enforcement of health and safety legislation. In addition to the ever-present risk of unintentional incidents, recent geopolitical events have raised the specter of chemical terrorism. Terrorists or even disgruntled employees may exploit lapses in chemical plant security and ready access to large quantities commodity chemicals, capable of causing great harm to the population if suddenly and unexpectedly released. Occupational physicians, who are uniquely equipped to understand the health hazards associated with industrial chemicals should be involved in prevention of, planning for, and response to chemical disasters. Measures for improving preparedness include training and collaboration, not only with plant health and safety personnel but also with public safety and health care providers, through drills and assessment of needs and capacities. Occupational physicians should be aware that communications and other systems often fail in disasters, requiring multiple alternatives. Likewise, occupational health specialists should be prepared to deal with mass casualties, including psychological casualties which may be difficult to distinguish from those of organic etiology. Chemical disaster preparedness is an urgent and demanding responsibility for occupational physicians everywhere.