Nosocomial poisoning risk in Sodium Azide ingestion: Analysis of an exposure

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Objective:

External decontamination is important in chemical exposures to prevent secondary contamination of health care and other emergency service workers. The place of a hazmat response in an oral ingestion with minimal external contamination is less clear and the requirement for staff to wear personal protective equipment (PPE) that might impair their ability to deliver patient care is controversial. We undertook a follow up contact to ascertain any major physical effects on emergency services professionals involved in the care of a patient with a fatal ingestion of Sodium Azide. The patient presented to an urban Emergency department without pre hospital decontamination and despite a hazmat assessment 100 minutes after presentation, a decision was reached that staff did not require PPE beyond standard measures. The patient died 3 hours after arrival in ED.

Methods:

A record of clinical staff directly involved with the case was obtained from ED administrative staff and contact made by phone or in person a minimum of 3 months after the incident. Additionally 2 ambulance personnel and one police officer, all of whom had close contact with the patient and who subsequently presented to the ED for a medical assessment were also contacted. Data collected were age, sex, time in contact with the patient, time off work as a result of the incident and details of this.

Results:

Ten individuals were deemed to have had close contact with the case. Of these 10 cases, 5 were male and median age was 39 years old (Range 22-52) Four individuals described being in close contact for greater than 60 minutes, 3 estimated being in contact for 15-60 minutes and 3 for 5-15 minutes. Absence from work occurred in 2 cases for 1 day and several weeks. Both of these cases were ambulance personnel and neither of these were due to physical effects of exposure.

Conclusion:

Our data does not support Sodium Azide ingestion as a high risk situation in causing significant nosocomial poisoning in emergency service workers.