A CHARACTERIZATION OF OCCUPATIONAL IRRITANT AND ASPHYXIANT GAS EXPOSURES

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• Occupational exposures to irritant and asphyxiating gases are common
• Some gases in the workplace are known to cause morbidity and mortality.
• Characterizing these exposures can direct efforts for workplace controls for the proper handling of these gases
• The purpose of this study is to describe the characteristics of occupational irritant and asphyxiating gas exposures reported to the National Poison Data System (NPDS)
RESULTS

- N = 29,175; Males (20,335, 69.7%), Ages 20-49 (20,357, 82.7%)
- Headache (6,997, 14.9%)
- Poor ventilation (747, 36.4%); Mixing chemicals (489, 23.8%)
- Admitted Non Critical Care (1,055, 7.0%); Admitted Critical Care (656, 4.3%)
- Minor (12,401, 60.9%); Moderate (6078, 29.9%); Death (61, 0.30%)
CONCLUSIONS

• There is a continuing need for workplace controls to prevent exposures to hazardous gases

• Inadequate ventilation and improper chemical mixing practices appear to be the most common contributing factors for hazardous gas exposures

• Most exposures result in minor and moderate clinical outcomes although deaths are reported