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Potential Allergy and Irritation Incidents among Workers in the Health Care Industry: Findings from British Columbia, Canada

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Background:

Previous studies have observed the long term effects of certain allergy and irritation inducing reagents. However, despite the constant and serious nature of the risk of exposure, along with the significant number of workers in the health care sector, there is little research in occupational health and safety to date that identifies the types of events, causes, or the specific groups of vulnerable workers in risk of contracting workplace allergies or irritations.

Aims:

This study describes the types, causes, and outcomes of potential irritation and allergy incidents among workers in the health care industry of British Columbia.

Methods:

Data on occupation-induced allergy and irritation incidents were extracted from a standardized operational database using the number of productive hours obtained from payroll data as a denominator over a one year period from three BC health regions. The analysis was conducted using Poisson regression, with the occurrence of a work-related event as the dependent variable, to examine its association with variables: age group, years of experience, sub-sector (acute, long term, community care), job status (fulltime, part-time), and occupation.

Results:

Younger workers, female workers, facility support service workers, lab assistants/technicians, maintenance and acute care facility workers are at a higher risk of allergy and irritation incidents. A larger proportion of the chemically induced injuries resulted in first aid care only, while non-chemical injuries required emergency room visits. Other major causes for allergy and irritation incidents included blood and body fluid, latex, air quality, and food/flowers/other objects.

Conclusions:

Workers in the health care industry are at a high risk of occupational allergy and irritation exposure in the workplace. Prevention policies should be developed to reduce the hazards present at their workplaces and promote safer working practices.

Key words: Occupational injury, allergy and irritation incident, healthcare worker, chemical exposure, hazard.