

Single Use Laundry Detergent Sacs: An Emerging Threat. Canadian Hospitals Injury Reporting and Prevention Program

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ABSTRACT

Background: Detergent pods, known as single use detergent sacs (SUDS), were introduced into the North American market in 2011. While harmful European experiences with detergent sacs have been well documented since the early 2000s, their potential dangers have only been recently noted in the North American setting. Specifically, packets have resulted in emergency department visits for eye injuries secondary to burns, erosive esophageal injuries and burns to the children's airway and lungs. Indeed, mortality associated with these sacs has been documented.

Objective: To determine the incidence of SUDS exposure causing injury amongst the paediatric population (age 0-17 inclusive) in three tertiary paediatric emergency departments over the past 5 years. Secondary objectives include: determining the difference in epidemiology and morbidity when comparing exposure to SUDS and traditional (liquid/powder) detergent, determining the type of exposure to SUDS and their prevalence (ingestion vs ocular vs skin), determining the type of exposure that is associated with the highest morbidity, and finally, examining factors associated with exposure including SUDS brand, location of exposure, and the location of the product in the household.

Methods: A retrospective chart review of all patients identified through the Canadian Hospital Injury Reporting and Prevention Program (CHIRPP) database as having a SUDS or traditional laundry detergent exposure will be conducted. Patients presenting to one of three tertiary care pediatric emergency departments and intensive care units between January 2009 and December 2014 will be included.

Timeline:

Chart reviews and data abstraction will take place January 2015 to April 2015. Data from all research sites will be entered into the Research Electronic Data Capture (REDCap) database. Statistical analysis will be performed April-May 2015. Overall descriptive statistics will be used to describe patient characteristics, clinical signs and symptoms, treatment and management practices, and outcomes. Final results will be submitted to the Public Health Agency of Canada and other health-based stakeholders to inform decision-making and advocacy initiatives.