

# Exposure to liquid detergent capsules

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### Highlights

- A one-time CPSP survey revealed 54 cases of children who were injured following exposure to liquid detergent packets in the past year.
- Forty-seven (87%) were injured following ingestion or exposure to the alimentary tract.
- Twenty-five (46%) of the injured children were admitted to hospital including six who were treated in intensive care units.

### Results

Since the 2012 introduction of single-load liquid detergent packets in North America, there has been a steady rise in child injuries associated with exposure to these products. A recent report from the United States Poison Control Centers reported that more than 17,000 children were exposed to laundry detergent packets over a two-year period, causing several hundred serious injuries and one death. The physical characteristics of liquid detergent packets – malleable, shiny, and brightly coloured – make them appealing to young children who mistake them for toys or candy.

A one-time survey through the CPSP was conducted to obtain more detailed information on child injuries following exposure to detergent packets in Canada. The survey was distributed to 2474 paediatricians and subspecialists. Thirty-seven of the 743 respondents (30% overall response rate) had treated a total of 54 children injured following exposure to liquid detergent packets in the past year.

Among the 54 exposed children, 30 (56%) were younger than 2 years of age, 23 (43%) were 2 to 4 years of age, and 1 was 5 years of age or older. All but two of the children were treated in emergency departments or inpatient settings. Forty-seven (87%) children were injured following ingestion or exposure to the alimentary tract. Six (11%) children sustained ocular injuries, 4 (7%) had dermal injuries, and 3 (6%) had airway exposure with pulmonary toxicity. Six children had multiple injuries. Adverse events included: nausea and vomiting (17); chemical burns to the mouth, esophagus or skin (15); pneumonitis (10); conjunctivitis (4); central nervous system depression (3); and corneal injuries (2). Twenty-five (46%) of the injured children were admitted to hospital including six who were treated in intensive care units. Six children (11%) were discharged from hospital with referral for medical follow-up and 21 (39%) children were discharged without need for follow-up (two cases were unspecified).

Forty (74%) cases involved exposure to detergent packets for laundry and 12 (22%) for dishwashers. Among the 34 incidents in which the point of access to the packets was known, two thirds (23) of the children took detergent packets directly from the manufacturer's original package or container and seven found a packet on the floor or lying around.

Exposure to liquid detergent packets can cause serious injury to children. Almost half of the children in this study required hospitalization with 11% having injuries so severe they required treatment in intensive care units. The results of this survey highlight the importance of educating parents and caregivers about the risks liquid detergent packets pose for young children, the safe storage and use of these detergent packets, and seeking medical attention should exposure occur.

### Conclusion

- Where point of access to the packets was known, two thirds of children took packets directly from the manufacturer's original package.
- Results of the survey highlight the serious injuries that can occur and the importance of educating parents and caregivers about the risks to young children.

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