

# Impact of the International Association for Soaps, Detergents and Maintenance Products (AISE) product stewardship programme on the number of liquid laundry detergent capsule exposures reported to the UK National Poisons Information Service (NPIS)

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## Background

Liquid laundry detergent capsules (LLDCs) were launched in Europe in 2001. These products typically contain anionic surfactants (20-35%), non-ionic surfactants (10-20%), propylene glycol (8-20%) and ethanol (2-5%), with a pH of 7-9.

The capsules release their contents when they come into contact with moisture and as a result, there have been a substantial number of exposures to their contents over recent years, primarily involving children (<5yr age).<sup>1,2</sup>

In December 2012, AISE established a voluntary product stewardship programme requiring safety measures to be implemented to reduce the visibility of and restrict access to LLDCs by small children.<sup>3</sup>

## Objective

To determine if the AISE product stewardship programme has had an impact on the number of LLDC exposures reported to the UK NPIS.

## Methods

Telephone enquiries to the UK NPIS relating to LLDCs were analysed for the period January 2012 to December 2014. The absolute number of exposures and number of exposures per million units sold in the UK were compared for the periods January-December 2012 against January-December 2014. Statistical analysis was performed (t-test, one-tailed).

## Results

There was no significant reduction in the absolute number of enquiries or exposures to LLDCs comparing 2014 against 2012 (Fig. 1). However, taking into account sales volumes, there were statistically fewer exposures per million units sold for 2014 (0.35) compared with 2012 (0.47);  $p=0.0044$ .

## Conclusions

The AISE stewardship programme appears to have reduced significantly the number of exposures to LLDCs per million units sold, as assessed by the number of reports made to the UK NPIS by doctors and other health care workers.

However, because in parallel the size of the LLDC market has increased, the absolute number of enquires or exposures to these products was not lower following implementation of the AISE product stewardship programme.

## References

1. Williams H, Bateman DN, Thomas SH, Thompson JP, Scott RAH, Vale JA. Exposure to liquid detergent capsules: A study undertaken by the UK National Poisons Information Service. Clin Toxicol 2012; 50: 776-80.
2. Williams H, Jones S, Wood K, Scott RAH, Eddleston M, Thomas SH, Thompson JP, Vale JA. Reported toxicity in 1486 liquid detergent capsule exposures to the UK National Poisons Information Service 2009-2012, including their ophthalmic and CNS effects. Clin Toxicol 2014; 52: 136-40.
3. AISE Product Stewardship Programme for Liquid Laundry Detergent Capsules – Status Reports April 2013. 2013

Fig. 1. LLDC exposures reported to the NPIS and UK sales reported to AISE 2012-2014

