



Association Internationale de la Savonnerie, de la Détergence et des Produits d'Entretien
International Association for Soaps, Detergents and Maintenance Products

A.I.S.E. PRODUCT STEWARDSHIP PROGRAMME FOR LIQUID LAUNDRY DETERGENT CAPSULES

Status Update – May 26, 2014

This report provides an interim update regarding the safety of liquid laundry detergent capsules in the first quarter of 2014. It builds on the in-depth status report issued on November 6, 2013, which is available on the A.I.S.E. web site: <http://www.aise.eu/documents/document/20131115130630-bsp-status-report-november-6-2013-final.pdf>.

For further background, which is not included in this status update, please refer to the above mentioned status report.

Summary

Following a number of accidental ingestion incidents with these products, especially by young children, A.I.S.E. has established a voluntary product stewardship programme (PSP) for liquid laundry detergent capsules. This programme aims to ensure safe use of this product form, to be achieved through consumer education (on-pack labelling as well as communication campaigns) and through packaging modifications (reduced visibility of capsules and restricted access to the capsules by small children). In addition, collaboration with Poison Control Centres (PCCs) is put in place, to enable better information exchange. Specifically, a harmonised product information sheet has been introduced and is being implemented, and a project to monitor accident circumstances is currently being initiated.

The programme was rolled out on December 15th, 2012. To date, six companies have subscribed (in alphabetical order: Henkel, McBride, Persan, Procter & Gamble, Reckitt-Benckiser, Unilever). These cover the very large majority of the liquid laundry detergent capsules market, and have progressed well with the implementation of risk reduction measures. Today, essentially all liquid laundry detergent capsule products on shelf are compliant with the PSP requirements.

A statistically confirmed favourable trend, with a – still ongoing – decrease by over 40% of the number of incident enquiries per million units sold, is observed in Italy, where similar measures had already been introduced to the market starting mid-2012. Also in the other studied countries, the current incident frequencies (first quarter of 2014) are lower than those prior to the introduction of PSP measures mid-2013 (allowing about 6 months for the new products to reach consumers' homes). The decrease in these countries is, at this point in time, not yet as prominent (ranging between 15 and 40%, and with no statistical significance demonstrated yet due to the limited size of the data set). Further data (at least over summer 2014) are needed to confirm whether the downward trend is sustained, and to better quantify the decrease.

Whereas incident counts do appear to follow a decreasing trend, the decrease is not as fast as anticipated. As such, the EU Commission and National Authorities (e.g. via the Detergents Working Group and CARACAL meetings) have emphasized the need for additional efforts, aiming to achieve a faster improvement of the situation. Furthermore, the need for a more effective education effort focused on the message “keep away from children” is also highlighted as the outcome of a recent consumer understanding study. In April 2014, Industry has committed to reinforcing its efforts to run consumer education campaigns, as well as to explore additional risk reduction measures to be taken.

The current status update (May 2014) focuses on the following aspects:

- Status of PSP implementation
- Expansion of the PSP commitment regarding the increased and improved consumer education effort
- Analysis of recent incident statistics data (end of 2013 and early 2014)
- PCC collaboration regarding the study of accident circumstances
- Consumer understanding regarding risk perception and child safety of detergents

Product Stewardship Programme

The A.I.S.E. Product Stewardship Programme (PSP) for Liquid Laundry Detergent Capsules entails commitments regarding the product / packaging; information and communication (both on-pack and consumer communication); and engagement with Poison Control Centres. To date, six companies have signed up to the PSP. Together, these represent the large majority of the market.

Implementation of packaging measures and on-pack labelling is close to, if not fully, complete – and essentially all products on the shelf comply with these PSP requirements.

Communication has mainly focused on labelling and on-line information, next to targeted industry association campaigns. The companies who undersigned the PSP have committed to further expanding the consumer education efforts – systematically and prominently implementing safe-use messaging in all brand communication (TV commercials, radio, print, digital), following pre-aligned guidelines by A.I.S.E.

Further (additional or improved) measures on the product and/or packaging are being explored – and will be communicated at a later date.

Commitment

The A.I.S.E. Product Stewardship Programme (PSP) for Liquid Laundry Detergent Capsules is a voluntary initiative, open to all companies (manufacturers as well as retailers) placing products on the European market, both members and non-members. The aim is securing safe use and storage of these products, and as a result thereof, a significant reduction of the incidence of accidental exposure, in particular with small children. The scope of the programme covers all liquid laundry detergent and laundry additive capsules

Companies who undersign the PSP commit to the following (formal details are provided in Annex 2 of the November status report):

- **Product:** implement safety measures to reduce visibility of and restrict access to liquid laundry detergent capsules (reduced visibility of capsules, restricted access to capsules by small children).
- **Product Information & Communication:** reinforce guidance on the safe use and storage of liquid laundry detergent capsules (on-pack communication, consumer communication campaign, communication activities reporting).
- **Engagement with Poison Control Centres:** engage with Poison Control Centres, including the European Association of Poison Centres and Clinical Toxicologists, to enable better information exchange and monitoring of accidents (harmonised product information sheet, 'accidentology').

Implementation Status May 2014

Companies

The following companies (in alphabetical order) have committed to the A.I.S.E. Liquid Laundry Detergent Capsules Stewardship Programme:

Henkel	✓
McBride	✓
Persan	✓
Procter & Gamble	✓
Reckitt Benckiser	✓
Unilever	✓

On shelf

Together, these companies represent the large majority of the liquid laundry detergent capsules market. Consequently in 2014, across Europe, the large majority (if not all) of these products on the shelf comply with the PSP requirements. Generally, the few exceptions tend to be limited to slower-moving products in small stores, i.e. where turnaround has been insufficiently fast to exhaust all older product supplies.

Especially the “yellow tags” have become very visible over time:



Communication

Company communication

Safe-use guidance is systematically provided on brand and company web sites and social media sites (e.g. facebook) - through web banners, educational graphics, and educational videos. In a number of brand advertising TV copies (across Europe, but most prominently in Italy), a warning has been included to keep capsules out of reach of children. The companies who undersigned the PSP have now committed to further expanding the consumer education efforts, as outlined below.

Joint industry communication

At the national level, in addition to the examples provided in the November 2013 report (e.g. UK, NL, IT), the Irish Cosmetics Detergents and Allied Products Association has joined forces with the National Poisons Information Centre of Ireland and the Health Service Executive Child Safety Awareness Programme to develop and spread leaflets, as well as fridge magnets, aiming to drive safer use habits with household chemicals.



Additional PSP Commitments

Taking into account of the comments of member states' authorities at the end of 2013 (Detergents Working Group and CARACAL meetings), A.I.S.E. and the companies who committed to the PSP are looking at continuously reinforcing their efforts to restrict access to the products by small children and secure reduction of incidents.

Product Information & Communication

Consumer education has been an integral part of the PSP from the beginning. The initial focus was on-pack labelling, to ensure that consumers be pointed to and reminded of the need for safe storage and use whenever they use the product. Further channels need to be exploited to fully convey the message and industry is willing to proactively engage with parents and children care givers towards the safe handling and storage of the products.

For immediate implementation, the A.I.S.E. Board (April 10, 2014) has approved additional consumer education measures that include the mandatory use of a harmonised safety message, with prominent use of the “keep away from children” warning, on each brand advertisement and communication relating to liquid laundry detergent capsules (i.e. TV, radio, web, print). This safety message will be used mandatorily by PSP signatory companies who will confirm their agreement and implementation will happen from Spring 2014 onwards. Specific guidelines were developed on how to implement this:

http://www.aise.eu/documents/document/20140512162123-aise_lldc_complan_mandatory_safetymessage_april2014.pdf

- Brand TV commercials
 - o A.I.S.E. “Keep Away From Children” safe use icon, at the end of each commercial, sufficiently big/visible, and then zooming back to where it actually stands on the pack/artwork.



- Oral disclaimer “Always keep away from children” or “Always keep [BRAND NAME] away from children” (*).
- The duration of the visual should coincide with the voice-over and be sufficiently visible and long enough to be understandable by consumers.
- Brand print ads, billboards, etc.
 - A.I.S.E. “Keep Away From Children” safe use icon must be displayed as a stand-alone advice in a corner of the ad. It should be sufficiently big/visible (minimum 2cm x 2cm on an A4 print ad, and proportionally in case of other ad sizes).
 - The icon must be accompanied the written sentence: “Always keep away from children” or “Always keep [BRAND NAME] away from children” (*).
- Brand radio commercials
 - Oral voice-over at the end of the commercial, saying “Always keep away from children” or “Always keep [BRAND NAME] away from children” (*).
- Brand websites
 - On the landing page, presence of the A.I.S.E. “Keep Away From Children” safe use icon as well as the text “Always keep away from children” or “Always keep [BRAND NAME] away from children” (*), and a link to www.cleanright.eu.
 - On the website (landing page or inner page): either the complete web banner with all relevant safe use tips available from A.I.S.E., or the panel of 6 relevant A.I.S.E. safe use advices including text – in addition to the link to www.cleanright.eu.



(* no other/different sentence allowed as consistency amongst companies is key).

Furthermore, industry will assist in educating consumers with the launch of an online education campaign. The campaign will aim at providing guidance and concrete advice to consumers on how to handle and store liquid laundry detergent capsules safely. The development of this targeted digital campaign is ongoing. Implementation is estimated around mid-2014. It is foreseen that this initiative should be subject to implementation following companies’ commitment on a country-by-country basis.

Product and Packaging

A.I.S.E. and the companies who committed to the PSP are currently investigating and evaluating additional measures regarding the actual product, as well as the packaging and the labelling.

It was agreed that not only direct member companies involved in the PSP, but also all other companies that have an interest in this dossier can provide feedback on potential new measures. Non PSP-participants and/or non-direct A.I.S.E. member companies can be contacted via National Associations.

The outcome of this assessment, as soon as a clearer view is reached on feasible measures, will be reported separately.

Incident Monitoring – Poison Control Centres

Incident Enquiry Statistics

The latest incident statistics show that, following the PSP measures introduction mid-2013, the incident enquiry counts (normalised to market size) are below the pre-PSP baseline in all monitored (5) countries. These reductions are in the order of 15-40% depending on the country. However, to date, only for Italy the decrease could already be confirmed as statistically significant, most likely due to the limited size of the post-PSP data sets in the other countries (only 3 data points per PCC).

Further monitoring for several months, at least until after summer 2014, will be required to assess whether the downward trend is sustained and to what extent.

Updated incident statistics until early 2014 are available for the United Kingdom, Ireland, the Netherlands and Italy. In addition, a data set from 2012 onwards until spring 2014 is now available for the Czech Republic. The incident statistics in this report were kindly provided by respectively the UK NPIS, the Dublin PCC, the Utrecht PCC (NVIC), the Milan Niguarda PCC, the Prague PCC, and the French Coordination Committee for Toxicovigilance.

Market volume data (estimates of the total market size) have been obtained from several companies, and these values have subsequently been averaged between the different data providers. *It should be noted that in some cases, compared to the November report, either more data sources, or different data sources, were available. As such, there may be deviations between market volumes reported here versus the charts in the previous report.*

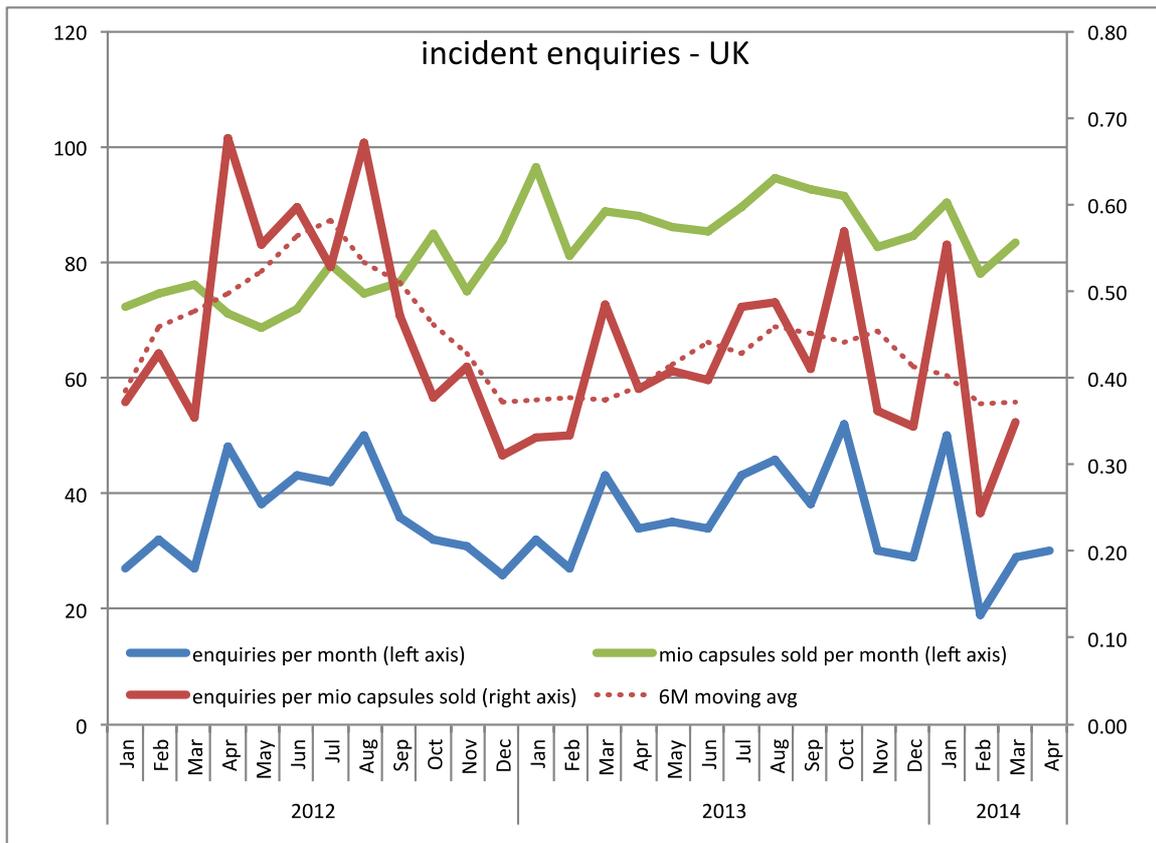
It should be noted that incident enquiry statistics are usually not comparable between different countries. In some countries, only medical professionals have access to the PCC - whereas in other countries the general public can also enquire directly, which leads to a higher number of calls. Furthermore, local cultural aspects may also determine the percentage of cases for which the PCC is involved.

United Kingdom

In absolute, the number of enquiries during the first quarter of 2014 (on average, 32 per month) was 13% below what was observed on average during 2013 (which was 37 per month).

Normalised, for the first quarter of 2014, there were 0.38 enquiries per million units sold. This is 24% below the pre-PSP baseline (2011-2012 period – cf. November report) of 0.5 cases per million units (or 0.48 per million for 2012 only). This decrease can be attributed to the lower total number of enquiries combined with a slight market growth.

The decrease is statistically not significant (ANOVA comparing 12 months of 2012 with the first 3 months of 2014, $\alpha=2\%$: $F=1.35 < F_{crit}=7.02$). As such, one cannot yet derive from the data whether this is the onset of a real decrease, driven by the appearance of the PSP measures on shelf during summer 2013, or rather an artefact due to variability and/or seasonality (with typically less incidents during winter). A further assessment including data from summer 2014 should allow a more conclusive interpretation.



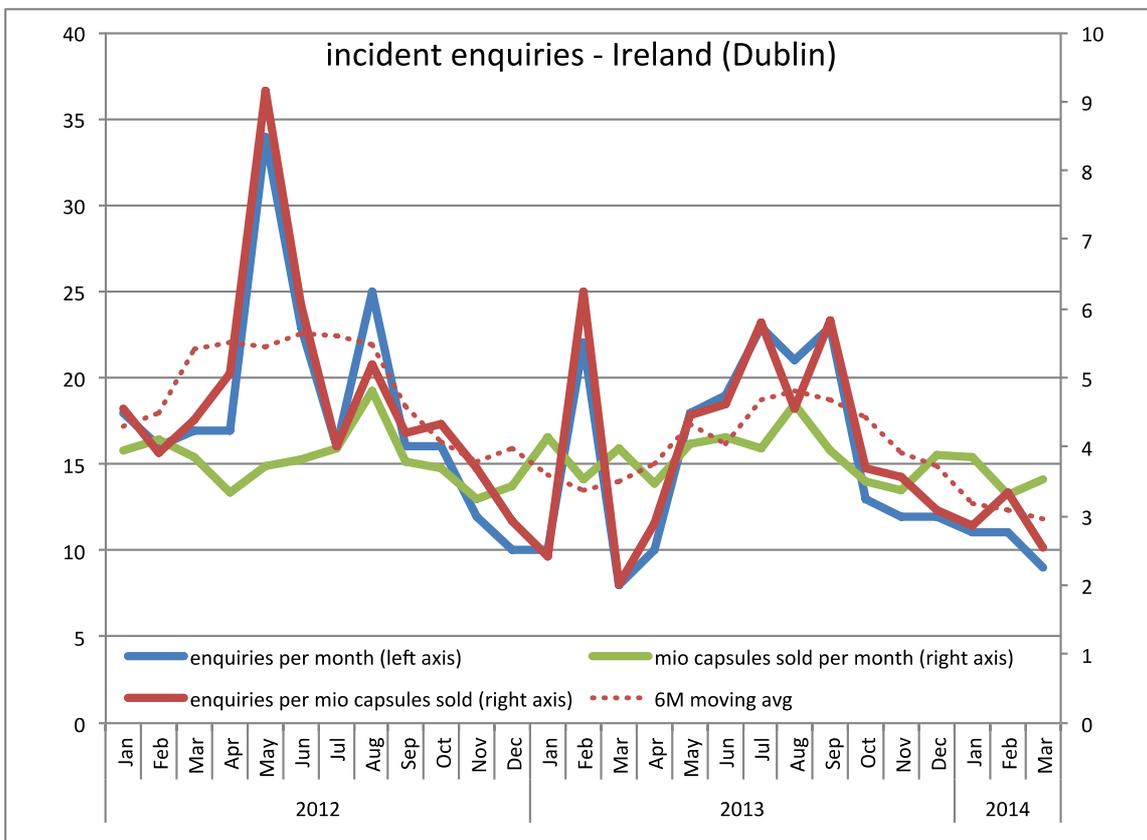
Ireland

The number of incident enquiries has gone down since mid 2013 – both in absolute as well as normalized to the size of the market (which has remained largely stable around 3.5-4 million capsules per month).

The pre-PSP baseline for Ireland was selected as the average situation over 2012 and the first half of 2013, prior to the introduction of PSP measures (cf. November 2013 status report). However due to the apparent seasonality it is preferential to use a full year (or multiples thereof) as baseline. Furthermore, due to the use of updated market volume data, the baseline had to be recalculated. Consequently, the average over 2012, 4.8 enquiries per million units sold, is applied as the pre-PSP baseline (instead of 4.3 as reported earlier).

During the first quarter of 2014, on average 10.3 incident enquiries were reported per month, compared to 15.9 cases per month on average over 2013 – this is a reduction by 35%. Per million units sold, 2.9 cases were reported during the first quarter of 2014 – which is a decrease of 29% versus the 2013 average of 4.1 cases/month, and 40% below the pre-PSP baseline (see above). It is 19% below the normalised number of cases during the first quarter of 2013 (which was 3.6 per million).

The decrease is statistically not significant (ANOVA comparing 12 months of 2012 with the first 3 months of 2014, alpha=2%: $F=3.93 < F_{crit}=7.02$). Whereas the data do suggest that a clear downward trend may have emerged since mid-2013, similar to the UK situation, whether this is a real sustained decrease, rather than an artefact driven by seasonality (as can also be seen the year before, between mid- and end-2012), will only become apparent in several months' time.

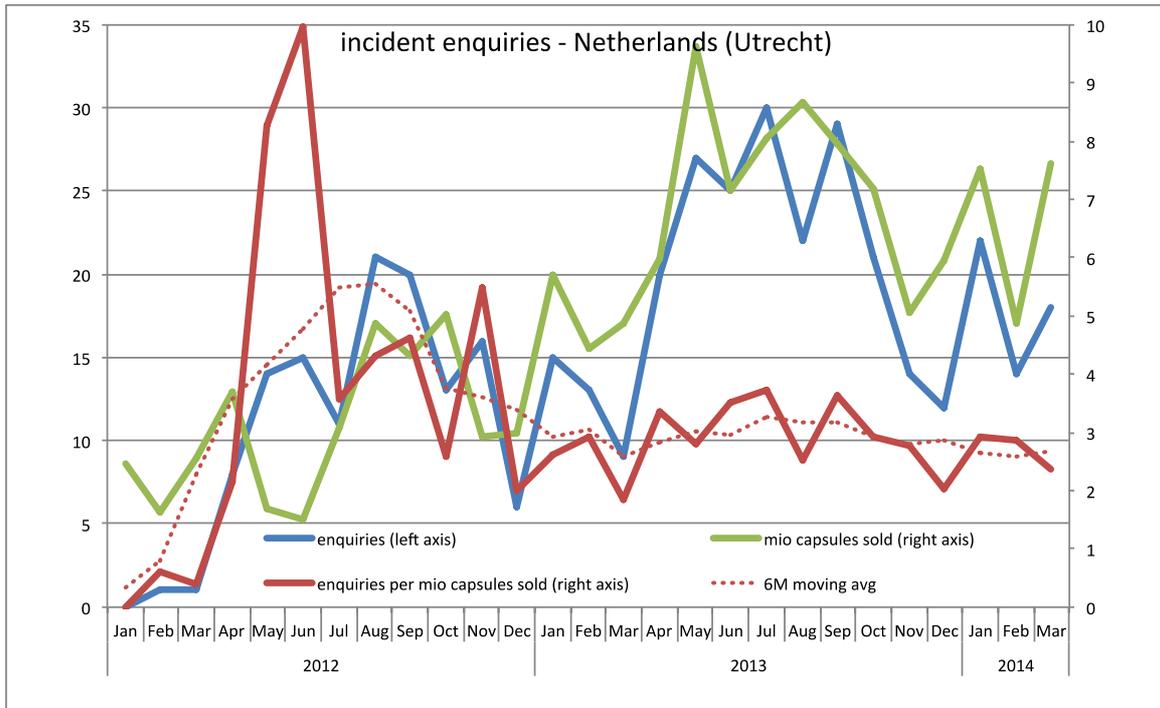


The Netherlands

As of October 2013, the incident enquiry count (in absolute) started to decrease, after a maximum had been reached over summer 2013 (with up to 30 cases in July). From October onwards, this has oscillated around an average of about 17 reported cases per month.

Since mid 2013 the market appears to have stabilized, following an initial ongoing growth over 2012 and early 2013. Normalized to these market dynamics, the first quarter of 2014 had 2.7 enquiries per million units sold – i.e. slightly lower than the 2013 average of 2.9 cases per million, and over 35% below the pre-PSP baseline (from April '12 to April '13 – cf. November status report) of 4.2 cases per million.

The decrease is statistically not significant (ANOVA comparing the Apr-2012 until Mar-2013 baseline with the first 3 months of 2014, $\alpha=2\%$: $F=0.93 < F_{crit}=7.02$). Hence, the current data do not allow judging whether the observed decrease versus the baseline is an actual trend that will be sustained.



Italy

In Italy, initial risk reduction measures were already implemented as of mid-2012, one year prior to the PSP, followed by additional measures as of early 2013. Hence, a longer data series (as of mid-2010) is shown than for the other countries.

Overall, a steady decrease of the number of incident enquiries can be seen since mid-2012. Although there was an increase (likely seasonally driven) during spring and early summer of 2013, the overall downward trend was continued over the second half of 2013. During the period from October 2013 to January 2014, on average 19 cases were reported per month, which is 42% less than the 33 cases per month during the same period one year before.

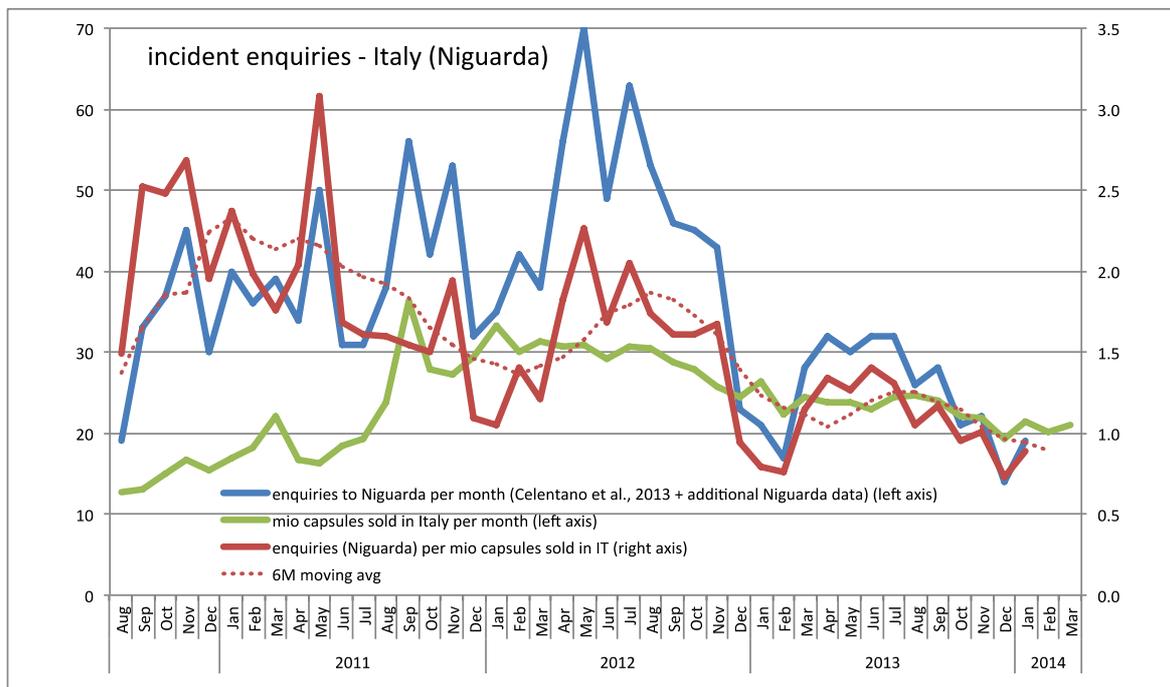
The liquid laundry detergents market size in Italy has grown steadily from the time of market introduction to mid 2011, reaching a sales volume of about 30 million units per month. Sales remained at this level for one year, after which a gradual decrease occurred, reaching an average of 21 million units per month during the last quarter of 2013. Overall sales across 2013 were 15-20% lower than the plateau that had been reached from mid-2011 to mid-2012.

As a baseline prior to the introduction of measures, it is proposed to use the year 2011 (i.e. 12 months) instead of the 18-month period from early 2011 until June 2012, as had been suggested in the November 2013 report. This is to avoid an impact of seasonal differences in the baseline. The average market-normalized incident count for the updated baseline period (2011) is however identical to what was derived before – i.e. 1.8 enquiries per million units.

The market-normalized incident enquiry count during the 12-month period from February 2013 to January 2014 was on average 1.1 reported cases per million units, i.e. 41% below the 2011 baseline. It is a statistically significant decrease (ANOVA comparing the 2011 baseline with the 12 month period from February 2013 onwards, $\alpha=2\%$: $F=23 > F_{crit}=6.3$). Furthermore, it should be noted that, with the exception of the seasonality effect mid 2013, the decrease has continued over 2013. For example, the average during the 4-month period from October 2013 to January 2014 was 0.9 enquiries per million units sold, which is 29% below the number for the same period one year before.

For Italy, a longer data series is available that reflects the situation after measures had been introduced and reached the consumer homes (one full year, compared to only one quarter for the other countries). This increases the statistical robustness of the data, which makes demonstrating significance of the difference less challenging. A similarly high degree of statistical robustness will be reached for the other countries once several additional months of data become available.

Nevertheless, even for the first quarter of 2013 in isolation (i.e. a 3 months period), the decrease in Italy was already statistically significant versus the 2011 baseline ($\alpha=2\%$: $F=9.7 > F_{crit}=7.02$). In other words, the measures in Italy appear to have been more effective more quickly than elsewhere. A key difference between Italy and the other countries may possibly have been a stronger emphasis on consumer education via advertising. This hypothesis reinforces the recent Industry decision to strengthen the focus on consumer education.



The Czech Republic

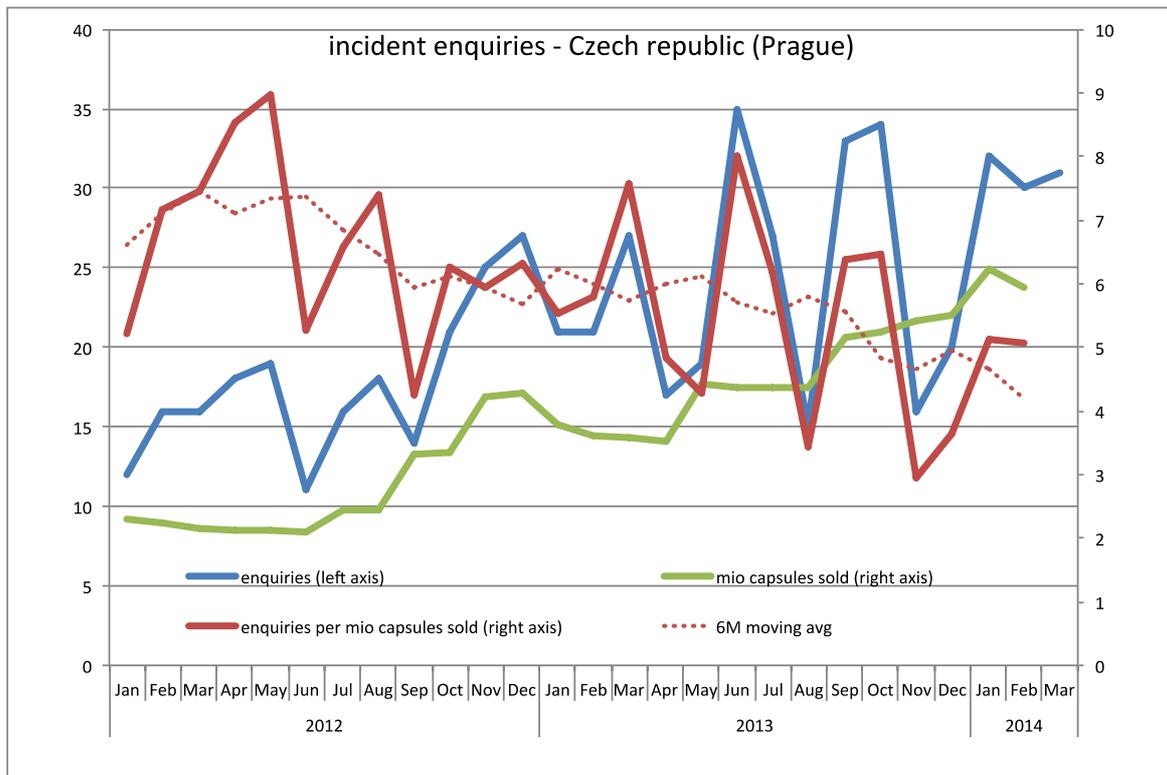
Data for the Czech Republic are now also available (these were not yet included in the November 2013 status report).

Like the Netherlands, the Czech Republic is a relatively new market for liquid laundry detergent capsules, with increasing sales volumes. With substantial oscillations, the number of incident enquiries has increased from about 15 per month early 2012, to on average 24 per month over 2013, and 31 per month during the first quarter of 2014. During this same time frame, the market size has also doubled from about 3 million units per month to 6 million.

In 2012, which can be taken as the pre-PSP baseline, there were on average 6.6 enquiries per million units sold. The situation early 2014, with 5.1 cases per million, is 23% below this baseline.

The decrease is statistically not significant (ANOVA comparing the 12 months of 2012 as baseline with December-2013 – February-2014, $\alpha=2\%$: $F=5.6 < F_{crit}=7.02$). Data from the coming months will be important to assess whether the decrease is sustained, and continued.

Interestingly, the data set from the Czech Republic does not show the seasonality (e.g. higher incident counts over summer) as observed in the other countries.

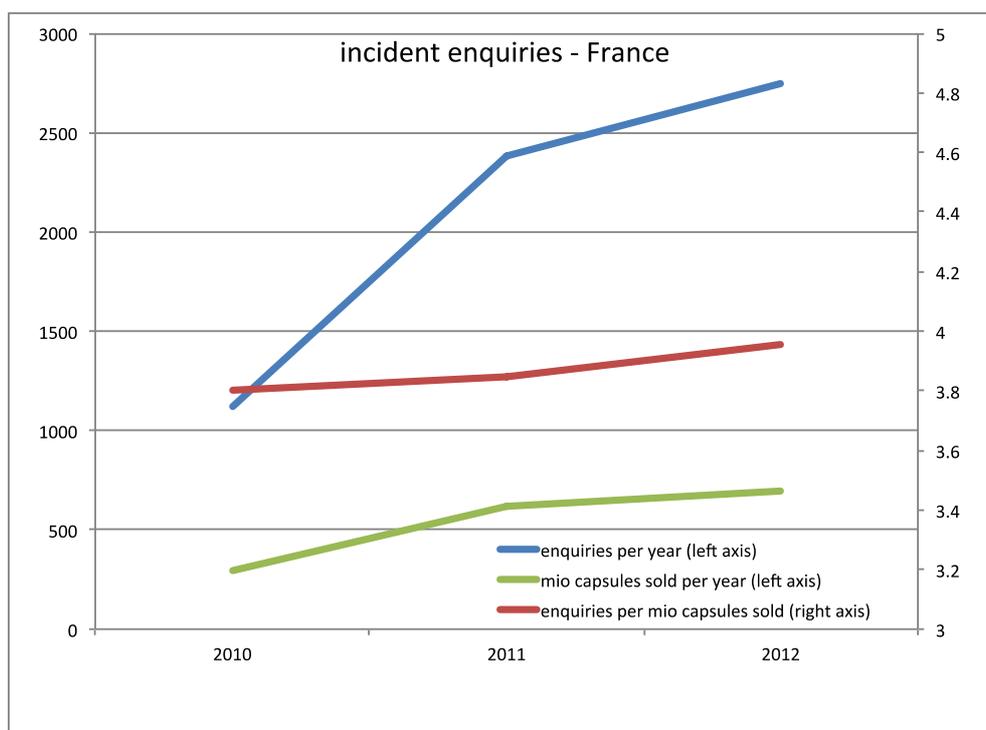


France

The Comité de coordination de toxicovigilance recently published a retrospective study on reported incidents with liquid laundry detergent capsules in France, from 2005 until 2012. This report is accessible online via the following link: [http://www.centres-antipoison.net/cctv/Rapport CCTV Dosettes Hydrosolubles vf.pdf](http://www.centres-antipoison.net/cctv/Rapport_CCTV_Dosettes_Hydrosolubles_vf.pdf)

The number of incident enquiries regarding liquid laundry detergent capsules has steadily increased in France as the market share of this product category grew. The three most recent reported years are shown in the below chart, together with the market volume.

The number of enquiries normalized by market size was, for these most recent years, stable - just under 4 cases per million units sold. This is in line with what is observed in other countries. The situation in 2012 can be used as pre-PSP baseline, to assess effectiveness of the measures as additional more recent data become available.



Accidentology

Instead of establishing a centralised project, which caused a number of practical issues that slowed down progress, A.I.S.E. will work together with individual PCCs on a 1:1 basis to better understand accident circumstances with liquid laundry detergent capsules. A detailed project proposal document was shared with interested PCCs in April. The potential collaboration and methodology is currently being evaluated by the PCCs. In terms of timing, a start-up during or shortly after summer is aimed for.

Purpose

To better understand the root causes of liquid laundry detergent capsules incidents, A.I.S.E. is collaborating with several national PCCs, to prospectively monitor accident circumstances. Guidance for this activity is also sought from the European Association of Poison Control Centres and Clinical Toxicologists (EAPCCT).

This “accidentology” project aims to improve the prevention of accidental exposures to liquid laundry detergent capsules, especially of young children, through a better understanding of the root causes and circumstances why such exposures occur. With these findings, the effectiveness of the risk mitigation measures and consumer education campaigns that are currently implemented through A.I.S.E.’s product stewardship programme will be assessed, and will be refined as appropriate. Furthermore, this information will also be used to help with the development of additional targeted measures as needed. A.I.S.E.’s objective is to effectively reduce the number of accidental exposures involving children with this specific product form. In addition, other forms of soluble unit dose detergent capsules (i.e. entirely or partially liquid, contained in a soluble film) are also within the scope of the study – to better understand the safety aspects of these forms, and because “accidentology” findings for these may also be relevant for laundry capsules.

Expected Outcome

The specific outcome expected from the accident circumstances data collection, is a data set containing a detailed description of the accident circumstances of exposures to detergent capsules, for a meaningful number of cases (i.e. at least several hundreds in total across all participating centres).

As a final deliverable of the project, A.I.S.E. will develop a Final Report in which the collected data are reported in an aggregated way, and in which A.I.S.E.'s interpretation is presented as well as its overall conclusions and recommendations regarding risk reduction measures.

Approach

At several participating Poison Control Centres across Europe, enquiries regarding accidental exposure to detergent capsules will be specifically monitored. In addition to laundry capsules, all other unit-dose capsules in a soluble film (e.g. for dishwashing or for floor cleaning) will be included, to develop a broader overall understanding. For each case, where possible, further follow-up will be conducted regarding the exact product involved and the circumstances under which the exposure occurred. Other potentially important aspects (e.g. regarding laundry habits, family situation, etc.) will also be included. The toxicological aspects (symptoms, severity, treatment and recovery) are strictly speaking not part of "accidentology", but should nevertheless be included in this exercise as much as possible.

A.I.S.E. will propose a standardised questionnaire, a simple follow-up "script", and a data collection format that can be used by the participating PCCs as the basis for their internal study protocol. During the preparatory work, PCCs will be approached by A.I.S.E. to exchange thoughts regarding these elements. For the protocol development, the different participating PCCs are encouraged to share information and expertise with each other to ensure homogeneity of the process and of the collected data.

The data collection will run for 6 months.

The data (with any personally identifiable information removed by the PCC) will be shared with A.I.S.E. using the standard template on a monthly basis. On an ongoing basis, A.I.S.E. will aggregate and interpret these data in order to assess, refine existing and/or develop new product stewardship measures, as well as for the purpose of status reporting to stakeholders such as the European Commission and National Authorities.

After the end of the data collection phase, A.I.S.E. will prepare a Final Report with an overview of the collected data, an overall interpretation, and conclusions regarding the correlation between capsule / packaging aspects and accident circumstances. The participating PCCs will be asked to review and to provide input on a draft of this report.

At all times, during and after this project, the participating PCCs keep the full ownership of their data, and may further present or publish their findings in the appropriate scientific forums without any limitations, and may use the data for other purposes e.g. to meet the needs of local authorities.

A.I.S.E. is open to discussing other ideas or means of cooperation that PCCs may have (e.g. setting up a discussion platform).

Timing

The aim is to initiate the data collection at individual PCCs as soon as possible. Realistically this should be possible during or shortly after summer 2014. This should allow interpreting the data and developing further recommendations on risk reduction measures in the first quarter of 2015.

Consumer understanding

A consumer study on the safety aspects of liquid laundry detergent capsules was commissioned by a major detergent producer (Unilever). The study assessed the perception, safe-use habits, and child behaviour around this product form in two key countries: Ireland and France. Key conclusions are that parents do not consider laundry products in general, nor capsules specifically, as a potential safety risk. Based on this, they do not tend to be very cautious when storing / handling the capsules. This reinforces the need for further consumer education in this area. Prominent labelling as per the PSP requirements is noticed, but leads to mixed reactions (often judged to be not really necessary). A majority of children, when exposed to laundry capsules packs, did not engage with the packs or lost interest quickly. Although a significant minority tried to open the packs, none of the children managed to open packs currently in the market. On the other hand, 6% did manage to open a prototype of a pack tested at the occasion of this survey.

Methodology

Ireland and France were selected based on the relative size of the laundry capsules market, and on the reported incidents in these countries. The sample design (52 households with children aged 1 to 3 years old) reflected the population that was found to be most at risk for accidental exposures. Interviews with 52 mothers were followed-up with 24 in-house observations. In terms of demographics, a broad cross-section of the social mix (parent education and professional activities) was covered.

Parents' risk perception and safe-use habits

Parents recognize that having young children in the home implies constant vigilance is needed. There is evidence of child proofing the home to some extent – but practicality tends to win out over time, especially as the children get a little older.

Laundry detergents are perceived as “less dangerous” compared to the overall household chemical product category (much less than bleach, medication, drain cleaners; and less than spray and floor cleaners, dishwasher tablets). This perception is driven by several factors: the product is associated with skin contact; the product is perceived to be soap-based, which is considered as mild; instinctively parents have the feeling that laundry detergents are not harmful (e.g. learned during childhood); no safety lock mechanisms on the packaging; no awareness of safety warnings on pack (typically the back label is not read: small print; expectation to find only general statements); the product looks and smells appealing.

Within the laundry category, the perceived risk of capsules is in the middle between powders and liquids (interestingly, the risk perception on powders versus liquids is opposite in F versus IE). Only the more anxious mothers (typically first time mothers) indicated they would store the product out of reach of their child.

Storage practice is in line with the low hazard perception, and is driven primarily by convenience (i.e. close to the washing machine, over half the time in an unlocked cupboard within children's reach, sometimes in an open box or other container). Child locks for cupboards are rarely used (contrary to claims by several mothers, especially those among the more highly educated subgroup).

In many households, children are actively involved in the laundry process – e.g. allowed to put the capsule into the washing machine.

Perception of labelling and packaging

The presence of additional warning icons (especially, the PSP's “keep out of reach of children” icon) was well picked up and was judged to be more evident on pack than before. In Ireland mothers appreciated the motivation for these icons. Still they did not really see the need for them. In France, on the contrary, mothers were not positive, the multitude of icons being judged as disturbing and even scary.

Large icons on the top of the lid are well noticed – much better than on the back of pack (which tends to be congested, and generally not read at all). Yellow / blue colours attract the attention (but also confuse to some extent, as they distract from the product's key messaging). Repetition of the icons on the front of pack was judged unnecessary. Other icons (e.g. related to the presence of a bittering agent) were often missed out. The safe use patch execution in the form of a temper seal was judged to be an almost guarantee to be noticed.

There were mixed opinions about the benefits of additional latches – whereas several mothers judged this was helpful to deter children (especially in France), many others still found it very easy to open.

Observation of Children

Children were allowed to play in a room with multiple toys laid out in the room. Once they were playing with the toys, four laundry capsules packs (a clear box, an opaque box, a doypack and a prototype of a pack) were placed in the room. (48 children in total, each time in pairs, i.e. 24 sessions)

Half of the children totally ignored the laundry product packs. After debriefing with the parents, this was explained by the fact that they had been taught to stay away from household chemical products – these items should not be touched. The other half visually noticed the packs, and of those who did, two-thirds physically engaged. For those who did not engage further, an explanation can be that they found the boxes unexciting and dull, or that had been taught to not touch. Of those who physically engaged, about half actually tried to open the packs (clear box, doypack and prototype). Children only managed to open the prototype pack. It is reassuring that none of the packs in the market were opened. The observations further showed that the children seemed less interested in pouches than in boxes, and that the absence of noise when handling a pack led to a loss of interest.