



Appendix I:

Section 4: Methodology for case studies

The case study examples that are included in this document are considered a 'first round'. We set out to provide case studies to illustrate implementation examples of good practice and a more detailed analysis of lessons learned to assist those considering implementing the strategy in their own setting. However the reality is that many programmes have not been examined with respect to their effectiveness and it is even less likely that they will have been evaluated using a rigorous research design that includes a comparison group and a look at behavioural and injury outcomes. As a result many programmes could not be included as case studies in this version, but it is anticipated that as more programmes receive adequate evaluation additional examples can be added.

Case studies were sought and selected based on the following criteria:

- Example programme addresses issues of priority within Europe (based on injury burden).
- Example programme met our definition of good practice.
- Example programme corresponds with one of the good practices identified.

- Example programme has been implemented and evaluated (both process and outcome evaluations completed) in a European setting and found to be effective.

In addition to the selection criteria, where possible we also attempted to select case study examples that reflected a range of resource intensities (e.g., a range of costs to implement) and implementation levels (e.g., national, regional or local). Case studies were also selected to try and reflect the efforts from as many areas of Europe as possible. Case study examples were sought in a snowball approach through various sources including members of the European Child Safety Alliance and other child injury prevention and safety promotion experts. In addition, internet searches and selective reviews of the recent literature were used to identify additional potential case studies.

For each potential case study selected, a contact person was identified and a research associate contacted him or her to ascertain that the potential case study met the inclusion criteria. Once this was established, available documentation was examined and a standardised interview was conducted that sought and summarised the following information:

- Implementation level (at what level was the strategy focussed – national, regional or local?)

- Strategy approach (which of the 3 E's was used – education, engineering, enforcement or a combination?)
- Setting of intervention (where did the intervention take place?)
- Target audience for the intervention (at who was the intervention aimed?)
- Resource intensity – an indication of the resource intensity required [€ = up to €20.000/year, €€ = €20-90.000/year, €€€ = €100-299.000/year, €€€€ = €300-999.000/year, €€€€€ = €1.000.000 plus/year]*
- Background for the initiative (including rationale, driving force, timeframe and major partners)
- Aim & objectives of intervention
- Key steps / actions in intervention
- Evaluation of intervention
- Lessons learned (including barriers and facilitators, advice to countries and issues around transferability)

*The resource implications provided should be interpreted carefully. First they do not include in-kind support which in many cases far outweighs the actual budget spent on the implementation of a strategy. Second although the resource intensity estimates provided come from the project personnel themselves, it is important to remember that costs vary by country for many things such as people's time, printing of resources, etc. As a result the resources required when looking at transferring a strategy from one setting to another may vary from what is reported here.





- References
- Contact information for intervention

Following each interview, the case study was written up in a consistent format, which included the addition of the evidence statement supporting the strategy. Case studies were then returned to the contact for confirmation and clarification before being added to the guide. Of note, three of the cases studies - Safe Road to School in Faro, Portugal; Bicycle Helmet Campaign, Denmark and Child Resistant Packaging for Chemicals, Netherlands - are enhanced expansions of case studies originally collected for the WHO for the Children's health and environment case studies summary book⁹³

Finally it is important to note that the cases studies included in the following section are an initial attempt to illustrate examples of existing good practice. The European Child Safety Alliance invites submission of additional case study ideas that meet the criteria described above for inclusion in future editions. Please forward case study ideas to secretariat@childsafetyeurope.org



Drowning Prevention

Iceland

IMPLEMENTATION LEVEL	National
APPROACH	Education, Engineering, Enforcement
SETTING	Community, pools
TARGET AUDIENCE	Parents, children, nurses, pool operators, general public
RESOURCE IMPLICATIONS	€€
EVIDENCE BASE:	Measures such as water and pool safety instruction, adult supervision, improved pool design have value as preventive actions. ¹

Background

In 1994, in reaction to high rates of drowning in Iceland, a drowning prevention programme was implemented in various pool settings. It consisted of the following aspects.

Public Swimming Pools:

- Voluntary regulation for public swimming pools (made mandatory in 1996)
- Intensive first aid training for staff
- Layout of pools (e.g., lifeguard watch towers with minimal blind spots, accessibility for emergency response)
- Better lighting (e.g., underwater lights)
- Security cameras
- On-going training of staff initially consisting of a 1-week training course and yearly 1-day refresher courses that include testing of fitness and life-saving abilities.

Spa Pools:

Enforcement:

- Regulations on:
 - o Drains

- o Covers
- o Building permission for pools

- Yearly checks to ensure that pools comply with all regulations.

Education:

- For nurses at health stations³, regarding the importance of drowning prevention and safety measures.
- For parents, regarding safety in public swimming pools and supervision of children – in the form of brochures provided at local health stations when parents access medical care for their children.
- For parents of young children, regarding shallow water drowning.
- On not using unsafe products (e.g., blow-up toys as swimming aids).

Mass media campaign:

- Three-day coverage of drowning research, with extended discussion of inadequacy of Icelandic laws and efforts by government departments to prevent drownings.
- Most drowning or near-drowning incidents covered in national newspaper, with comments how they could have been prevented.

- Coverage of unsafe products and toys, and safe swimming aids.

Policy Background/Driving Force

Swimming is a very popular activity in Iceland with over 200 swimming pools for a population of 286,000. In addition, fishing is a main industry, making up 70% of all exports.

The importance of drowning prevention gained early support in Iceland with a law passed in 1940 requiring that all Icelandic children must learn to swim and to save another person from drowning.⁴

Despite these measures, drowning incidents involving children appear to be more common in Iceland than neighbouring countries. Drowning data from 1984 to 1993 among children aged 0 to 14 years indicated 2 drowning incidents per 100,000 children per year. Boys represented 64.6% of these incidents and children aged 2 to 3 years and 6 to 8 years appeared to be most at risk, with swimming pools being a common setting (42%).

These data, combined with persistent lobbying and media coverage encouraged government to tighten regulations and enforcement

³Health stations represent the primary access points to the health system. Parents take their children to these stations for regular check-ups, immunisation, and any other health concerns. Parents also receive age-appropriate educational material regarding injury prevention.



Partners

- The Public Health Institute of Iceland
- Ministry of Education
- Reykjavik Children's Hospital
- Icelandic Red Cross

Aims & Objectives

To reduce the incidence of drownings among children 14 years and younger.

Evaluation

Counties around Iceland were surveyed in 2000 to determine whether swimming pool regulations were being followed. Results suggested that 28 of 98 (29%) counties were complying with regulations.

Data from 1994 to 2003 indicate a reduction in drowning from the previous ten-year period. From 1984 to 1993, there were 32 near-drownings, 3 children with brain damage and 13 deaths. From 1994 to 2003, there were 13 near drownings and 8 deaths. Six of the 8 deaths occurred in 1994 at the time that regulations were still being implemented. Only two deaths have occurred since then. One of these deaths resulted from non-compliance with 15 regulations.

Results of a more extensive evaluation will be available early in 2006.

Key Steps

- Collection of local data to act as driver for government policy makers, inform on types of interventions required, and provide on-going evaluation data.
- Investigation of international best practices around drowning prevention and the specific issues encountered in Iceland.
- Translation and implementation of rigorously evaluated lifeguard training course from American Red Cross for use in the local context.
- Inspecting pools to determine the changes required to upgrade them to building and safety standards. Negotiation with the local community to ensure minimal expense.
- Training of nurses at health stations and developing age-appropriate resources for parents and children regarding drowning prevention.
- Yearly pool inspections.
- Yearly lifeguard testing.
- On-going monitoring of every drowning and near-drowning incident to determine where prevention efforts failed, or new dangerous trends.

Lessons Learned

Barriers

- Lifeguard testing meant that many long-standing lifeguards were no longer qualified to remain in the position.
- Communities were required to fund the necessary changes to their local swimming pools.

Facilitators

- The national newspaper was very supportive and willing to provide prominent space to the issue.
- A high-profile couple whom had lost a child to drowning became active campaigners.
- The relatively small population size of Iceland makes implementing regulations and on-going surveillance relatively straightforward.
- Funding for a job position dedicated to implementing regulations and monitoring drowning-related injuries.
- Swimming pool operators originally resistant to regulations, but eventually took ownership of the issue and formed an association for self-monitoring.

Advice to Countries/Transferability

- Icelandic regulations were developed based on examination of best practice and effective legislations in other countries, adapted to the local context.
- On-going monitoring of drowning incidents is key to identifying trends that can be addressed immediately.

References, Additional Information

1. World Health Organization. Guidelines for safe recreational water environments. Volume 2: Swimming pools, spas, and similar recreational-water environments. Geneva: WHO. Available at http://www.who.int/water_sanitation_health/bathing/bathing2/en/



⁴Children are tested at 12 years to ensure they meet the requirements.

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