



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



Bicycle Helmet Campaign Denmark

IMPLEMENTATION LEVEL	Local
APPROACH	Education
SETTING	Schools, community
TARGET AUDIENCE	Children aged 10 to 12 years old (fifth grade students)
RESOURCE IMPLICATIONS	€€
EVIDENCE BASE:	Community-based education/advocacy programs around child helmet wearing lead to increased helmet wearing. ^{1,2,3,4}

Background

Bicycle helmets can reduce the risk of head injuries among children by at least 50%. Head injuries account for 40% of all injuries among cyclists and can be serious. Developmentally, fifth graders (ages 10-12 years) can cycle alone, concentrate on traffic, and indicate intentions of turning or stopping with their arms. However, children in this age group often resist wearing helmets because they are “not cool.”

The bicycle helmet campaign aimed to give children reasons to use bike helmets, know the dangers of not using them, and feel that they are “cool” when they use them. The helmet was portrayed as something attractive so that everybody felt like using it.

All the children participating in the campaign used helmets during the campaign period. Children with unfashionable or no helmets were able to borrow a new model of their choice from the county, and at the end of the campaign, could purchase the helmet for a reduced price.

Activities with students inside and outside the classroom took place from March through April and the campaign ended in May of each school year. Enrolled schools received free educational materials, bicycle helmets, questionnaires and materials for competitions between classes. The campaign encouraged children and teachers to have class discussions and sought to involve parents in supporting its goals. Educational material consisted of four booklets that explained danger in traffic and taught some simple rules on how to handle dangerous situations while cycling.

A separate package containing the teaching material explained the campaign process, provided ideas and proposals for class-based activities, as well as letters to parents that children were asked to take home. It also included contact information, questionnaires for the evaluation, and pre-stamped envelopes for submitting the evaluations to the county. Parents of fifth graders received information about the campaign that encouraged them to support the children in using the bicycle helmet.

Another part of the project was a helmet-exchange program where children and adults received new helmets after a crash if they submitted the damaged helmet and described the circumstances that led to the crash. These were used for a display of damaged helmets and narratives of children’s accidents. Schools and institutions were able to borrow the exhibition on request.

The program had recently been delivered by a practical course where the children practice cycling skills on a field area. The practical skill exercises include visibility from a truck, how to behave safety in an intersection (particularly when there is a truck in the intersection), braking exercises on a bike in wet and dry surface conditions, with and without carrying a load.

Policy Background/Driving Force

The most common type of injury events on bicycles in Denmark is the single bicycle accident, especially with children. Cycling related accidents are underestimated in the official police statistics but are captured through the healthcare system.

Partners

- Parents
- Teachers
- Traffic safety teachers
- Campaign secretariat
- Police
- Municipalities
- Truck driver education centre

Aims & Objectives

- To reduce the number of seriously injured children from bicycle accidents.
- To teach children to use bicycle helmets and to perform safely when biking in traffic.



Evaluation

A survey of helmet use was carried out at three points in time: before, during and after the campaign. In order to measure the effectiveness of the campaign, a questionnaire was distributed to children and teachers in all participating classes. The teacher distributed the questionnaires to students and carried out the survey of helmet use on days unknown to the children. In 2003, 55% of teachers said the campaign had increased students' use of bicycle helmets and 83% of teachers claimed students had safer traffic behaviour after the campaign. Among the students, 30% reported using helmets more after the campaign, 37% said their cycling skills had improved, and 68% were very or somewhat satisfied with their helmet.

Teachers were also asked how much time the class had spent on discussions about helmets and traffic safety as well as an estimation by parents of how much time they had spent discussing the campaign with their child.

The accident data indicates that the number of young cyclists wearing helmets has increased and the number of injuries has decreased by about 50% during the 10 year campaign period.

Key Steps

- Contacting schools to solicit participation
- Obtaining information from schools regarding number of classes and students
- Distributing campaign material and helmets to the schools
- Choosing winning classes and celebrating the winners
- Distributing press releases with accident data, winner class information and information on helmet effectiveness, etc.

Lessons Learned

The program should be designed as a long term intervention because changing traffic culture and bicycle helmet attitudes and behaviours takes a long time.

Barriers

- Traffic safety is only one of many topics teachers have to teach in their classes and sometimes they prioritise other topics over traffic safety.
- The program is dependent on funding from the technical administration in the county. The program received funding for 10 years, but due to reorganisation in the Danish public sector, the program is in danger of being closed.

Facilitators

- Strong political support to accident and injury prevention in Frederiksborg county.
- Teachers with experience in the campaign said parents were important partners for the campaign's success. As a result, the campaign secretariat prepared a brochure to inform parents of the goals of the campaign and how they could contribute by being good role-models for their children.
- Consistency of activities was important. Teachers knew that the campaign would be repeated yearly, so some planned the curricula to include the campaign as part of their classes.

Advice to Countries/Transferability

- This type of programme should be designed as a long-term intervention because changing attitudes and behaviours takes a long time.

- Mix theory and practice.
- Make it fun for the children to participate.
- Long term data collection and evaluation is necessary to establish whether there is an impact on deaths and serious injuries among cycling schoolchildren in the county.

References, Additional Information

1. Harborview Injury Prevention and Research Center. (2001). Best practices. Seattle: University of Washington. Available at <http://depts.washington.edu/hiprc/practices/index.html>
2. Klassen, T. P., MacKay, J. M., Moher, D., Walker, A., Jones, A. L. (2000). Community-based injury prevention interventions. *The Future of Children*, 19(1), 83-110.
3. Royal, S. T., Kendrick, D., Coleman, T. (2005). Non-legislative interventions for the promotion of cycle helmet wearing by children. *The Cochrane Database of Systematic Reviews*, Issue 3.
4. Towner, E., & Dowswell, T., Mackereth, C., & Jarvis, S. (2001). What works to prevent unintentional injury amongst children? An updated systematic review. London: Health Development Agency. Available at http://www.hda.nhs.uk/downloads/pdfs/prevent_injuries.pdf

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