

Nordic Case Studies on Good Practices in Environmental Health

Nordic working group on environmental health





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Foreword

During the Fourth Ministerial Conference on Environment and Health in Budapest 2004, the Children's Environment and Health Action Plan for Europe (CEHAPE) was adopted. This has been followed up in the Nordic countries with discussions on developing children's environment and health action plans at the national level. In 2005 a Work Group was established between Denmark, Finland, Norway and Sweden with the intention to exchange information related to the development of national action plans. This Work Group has been supported with funding for 2005–2006 from the Nordic Council of Ministers' Committee of Senior Officials for Social and Health Affairs. During the meetings of the Work Group it was decided to develop a catalogue of case studies on good practices in environmental health. These case studies should be seen as examples where there has been recent activity related to children's environmental health in the Nordic countries. Hopefully, the cases may give inspiration to additional activities aiming at providing the best possible environment and health for children.

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December, 2006

“Motionslangen” – A Multi-Use Trail for Physical Activity

Denmark case 1

Background

Rationale

Regular physical activity has been shown to reduce morbidity and mortality. Due to increasingly sedentary jobs and motorized transport, leisure time physical activity is important in fulfilling recommended physical activity levels. Leisure-time physical activity can be conducted in a variety of community environments, such as local parks, forests etc. Approaches that target structural factors could modify the community environment and make it easier for individuals to be physically active.

Partners

- The municipality of Nykøbing Falster
- The County of Storstrøm: The Public Health Center, Department of Nature & Planning
- The Danish Forest and Nature Agency
- Local sports clubs and associations
- Local landowners

Description of action/objectives

This project aims to improve the use of forests and recreational surroundings for physical activity. Intermediate aims are to:

- establish a multi-use trail for physical activity
- extend people’s knowledge of the importance of physical activity and inform about opportunities for being active in the forest
- develop and describe a model for nature and forests as a setting for health promotion.
- describe the effects of the multi-use trail on the local people’s exercise habits.
- ensure sustainability
- communicate experiences from the project to relevant interests.

Planning and implementation

Mechanisms used:

- The Danish Forest and Nature Agency took the initiative for establishing the multi-use trail – “Motionssslagen”. A working group was formed, with representatives from local sport associations. Subsequently, the Municipality of Nykøbing Falster, The Public Health Center and the Department of Nature & Environment in the County of Storstrøm were involved in the project. Local landowners participate in the project by providing private forests and land for the public.
- An information and communication group was formed. Their job was to design and prepare signs, maps, folders etc. In addition they arranged happenings and events.

Description of action/implementation

The “Motionssslange” is a trail in and in the surroundings of the town of Nykøbing Falster. The trail is approximately 22 km long and on the way you will pass urban environment, forests, the sea and fields. It is a combined foot and bicycle trail. Information boards about the area and signs with exercise advices are placed along the route together with different facilities for physical activity e.g. an activity-/playground, facilities for exercise, and orienteering and obstacle race.

Evaluation/Impact

An evaluation of the project will be carried out in the fall 2006.

Sustainability

A council that consists of users, partners and authorities was formed to ensure the sustainability of the project. The council will work for the continuously development of the multi-use trail. The council will be involved in the evaluation of the project.

Transferability

The “Motionssslange” can be transferred to other cities and countries. Physical inactivity is a major problem in many European countries. Using existing surroundings is an affordable way of making it easier for people to be physically active.

Lessons learned

Key factors leading to success

The cooperation between the voluntary sport clubs and associations, the private landowners, and the public authorities was the most important aspect leading to success of the project.

Challenges during planning/implementation

Barriers in the project are

- Complex owner relationships
- Traffic safety problems
- Physical circumstances in the environment that hinder the planning and design of trails etc.
- Biological/protectional considerations in the environment.

To oblige to these issues it is important to involve the different partners in the project from the beginning of the project.

It is important to have good cooperation with all sectors involved, to ensure a good coordination of the different activities and steps in the implementation process.

Advice to countries that want to do something similar

It is very important to involve the voluntary sport clubs and associations from the beginning of the project.

“Sundhedstegnet¹”

– A Tool to Focus on Children’s Health in Day Care Institutions and Schools

Denmark case 2

Background

Rationale

Most children in Denmark spend their day in day-care institutions or schools. It is thus important to promote the children’s health and well being in these environments. Children are vulnerable to environmental risk factors and it is important to include these factors in the general concern for creating a healthy environment. The physical, social and aesthetic environment influence the children’s health and wellbeing.

Partners

- The Ministry of the Interior and Health
- The National Board of Health
- The Danish Cancer Society
- The Danish Heart Foundation
- The Danish Diabetes Foundation
- The Danish Rheumatism Association
- The Danish Asthma and Allergy Association

Description of action/objectives

“Sundhedstegnet” – The Health Symbol is a tool for day nurseries, day-care centres, schools, after-school centres, and from October 2006 also athletic associations and sport centres. The idea behind it is to invite day-care centres, schools, athletic associations and sport centres to put focus on the different aspects of children’s health by suggesting a number of themes to address.

¹ “The Health Symbol”

The subjects included in the Health Symbol are:

- Making a health policy
- Wellbeing and health
- Physical activity
- The built environment – indoor and outdoor
- Dietary intake
- Indoor air pollution, noise and hygiene
- Tobacco and alcohol

The Health Symbol can be used as a check list for what has been done and what can be done to promote a healthy environment for the children. If the institution has covered the suggested themes they can print out the Health Symbol diploma. The environment related subjects are:

- The built environment – indoor and outdoor
- Indoor air pollution
- Noise
- Hygiene

Planning and implementation

Mechanisms used

All institutions and a number of schools received an inspiration catalogue. The catalogue consists of a list of the kind of activities related to the above mentioned subjects that in all constitute the health symbol (a “tick off”). If the institution has covered the suggested themes they can print out the Health Symbol diploma.

To get started with the Health Symbol the institution has to go through 3 steps:

1. Give information about the Health Symbol to the institution/school board, parents and personnel and select a contact person in the institution.
2. The contact person sets up the profile of the institution on www.sundhedstegnet.dk. On the webpage the institution can print a diploma indicating that the institution is working with health and environment issues.
3. The institution can tick off on the diploma when they have met the criteria for the Health Symbol.

Evaluation/Impact

No evaluation of the Health Symbol has been carried out so far. The administrators of the Health Symbol have access to see how many and what kind of institutions are using www.sundhedstegnet.dk and are printing the diploma.

Sustainability

Focus on children's health and environment is a continuous process, and to make the project a success the Health Symbol must be followed by action, meaning health promotion changes in the environment and behaviour not only when printing the Health Symbol diploma, but also in the everyday life afterwards.

Transferability

The Health Symbol is transferable to other institutions, schools and sport centres who want to focus on health and environments.

Lessons learned

Important aspects to be considered for future planning

It is important to have a massive information campaign along with the implementation of the Health Symbol. To make the Health Symbol a success continuous follow-up is needed.

The personnel in institutions and schools have much to do and limited time. They do not have much extra time for health promotion work. Education of the personnel about the importance of a healthy environment could also benefit to the success of the project.

Schools, Mould and Health – An Intervention Study

Finland case 1

Background

Rationale

An estimated 80% of school buildings in Finland are moisture damaged at least to some extent. Pupils and teachers in moisture-damaged schools are reported to suffer from respiratory symptoms and infections as well as general symptoms such as headache, tiredness and nausea more commonly than those in non-damaged schools. School-aged children spent about 20% of their time in school; therefore, good school indoor air is important with respect to their health.

Contribution of each sector

- Local authorities: planning and conduction of renovations
- Department of Environmental Health, National Public Health Institute: planning and conduction of the study, input during the renovation, feedback to the authorities and users of the schools during the whole study
- Headmasters, school nurses and parents: input in planning of renovations

Description of action/objectives

The project dealt with mould renovation of schools. The objectives of the intervention study were to find out whether the renovation of the school buildings has an effect on

- the exposure to indoor air pollutants in school environment
- the respiratory health of pupils

Planning and implementation

Mechanisms used

- The renovation was planned and implemented by the local authorities in close collaboration with school personnel, local health and environment authorities and the research team.
- This was a prospective controlled study carried out in four schools in Finland. Over 1,300 pupils aged 7–16 years were included.

Description of action/implementation

The full renovation measures in one school included:

- Opening and renovation of building structures
- Renewal of land-drains
- Renewal of drain, heating and water pipes
- Renewal of all coating materials
- Change of ventilation system from natural ventilation to mechanical exhaust and air supply
- Thorough cleaning of the school

Due to lack of resources in another school, minor, incomplete repairs included:

- Partial drying of structures and renewal of floor and wall coatings in one floor
- Renewal of land drains and external moisture barriers
- Mainly mechanical ventilation system, in some classrooms natural ventilation, thorough cleaning of ventilation ducts
- Thorough cleaning of the school

Other activities included:

- The sampling of indoor air microbes and health questionnaire of children were performed before any dismantling and repair work in two intervention schools.
- After the repairs were completed, the measurements on indoor air microbes and health status of the pupils were repeated.
- Two non-damaged schools served as control schools with identical sampling and questionnaire procedure as in damaged schools.

Evaluation/Impact

- After a thorough renovation in the intervention school, a clear decrease in concentrations of fungi was observed. No difference

compared with the reference school was seen anymore. Successful effects of the renovation were also indicated by lower number of different microbial genera or species or groups and also by higher frequency of samples with low levels of viable fungi.

- Before the renovation of the damaged school, prevalence of 10 symptoms out of 12 was clearly higher among its pupils than among pupils in its reference school. After the thorough renovation, a clear decrease in prevalence of all other symptoms but general symptoms was seen, and the differences in prevalence between the intervention and reference school disappeared.
- In the other intervention school with only minor, incomplete repairs of moisture damage, no decrease in microbial levels was observed. In this school, the prevalence of hoarseness and general symptoms was clearly higher than in its reference school at the beginning of the study, and no changes was seen after the repair measures. Rhinitis (spring term), sore throat (spring term) and cough with phlegm (spring term) were, however, less common than before any repairs.
- The findings have been reported locally to municipal authorities and to all users of the participating schools, nationally to health authorities, municipalities, to the scientific community and commonly in newspaper articles.

Sustainability

The findings of the intervention study have been utilized as a basis for developing new instructions for school health to be used by municipal health authorities.

Transferability

The success of the intervention study resulted in a lot of attention in media and contributed to an increased attention to importance of mould renovations of schools, and finally to development of the above mentioned instructions.

Lessons learned

Key factors leading to success

- Close collaboration between all parties involved
- Use of an research organization to give feedback during the renovation process and to evaluate the effects on exposure and health
- Sufficient financing for completing the renovation in a municipality

Challenges during planning/implementation

- Lack of resources in a municipality because of which the renovation of one school was not completed.

Important aspects to be considered for future planning

- Methods applicable to assessment of indoor air quality with respect to biological and chemical pollutants need to be developed and validated for everyday routine use for authorities and health inspectors
- Economic evaluation should be incorporated in future intervention studies to assess the costs and benefits of the school renovations from societal and also from municipal (payor) perspectives.

Advice to countries that want to do something similar

- Ensure that there is sufficient funding for completing the renovation. Failure to complete the renovation may lead to waste of scarce resources because of no improvement in exposure and health status of children.

National Survey of Children's Local Environment, Travel Habits and Activity Patterns

Norway case 1

Background

Rationale

Knowledge about children's local environment in general, and their school way and travel habits in particular, is limited, and the need to develop better knowledge about children's local environment, travel habits and activity patterns was considered crucial in order to identify efficient measures to improve these conditions and facilitate increased physical activity, among other things.

The Norwegian Centre of Transport Economics was hired to accomplish a national survey and analysis of these issues, by a multi-sectoral group of various actors at the national level.

Contribution of each sector

The following sectors/actors together initiated and supported the study, both financially and with their specific competencies, perspectives and questions of interest:

- The Directorate for Health and Social Affairs
- The Ministry of Children and Equality
- The Ministry of Transport
- The Directorate for Public Road Administration
- The Norwegian Council for Road Safety

Description of action/objectives

There is a substantial lack of knowledge with regard to younger children's travel habits and activity patterns, and under what environmental circumstances these take place. Several national and international studies show that increasing car traffic in general, including increasing transport of children back and forth to school and different leisure activities, negatively impact children's health and well-being.

Qualities of the local environment are also more important for children than for adults, among other factors because their radius of action is smaller, and more of their time is often spent in the local environment. Some of the most important questions behind the study/analysis were:

- What kind of local environments do children of today grow up in? And to what extent does traffic limit children's recreation and opportunities for outdoor play?
- How do children and parents perceive their residential environments? To what extent do parents impose restrictions for their children, and if so, what kind of restrictions are these?
- What kind of traffic situation characterizes the school way of today's children, and what kind of variations are there depending on type of residence? How do children get to school? To what extent are they being driven by private cars, and why does this happen?
- How do parents perceive the children's school way?
- How often do children play actively outdoors, and where does this activity take place? What kind of variations exists depending on type of residential area, age and social situation?
- How often, and at what level of intensity, do children participate in sports/physical activity? Are there significant variations depending on type of residential area, age and social situation?
- How do children get to different kinds of organized and unorganized activities? To what extent does children manage themselves, and to what extent are they being followed / driven by parents or other people? What significance does age and gender have in this context, and what do characteristics of their parents mean?
- What implications do patterns of following have for the traffic environment in the residential area?

Planning and implementation

Mechanisms used

The survey was carried out as a supplement to the national travel survey, which is carried out every fourth year in general. A well-developed questionnaire was used for a postal survey and linked up with background data related to the household the child belongs to (work/income, type of residence, social situation, mobility resources, etc).

Description of action/implementation

Recruitment of respondents was accomplished by asking households with one or more children between the age of 6 and 13 if they would like to participate in the survey. Interested people were then contacted with more information, and the questionnaire where three of four sections

were targeted at the parents and one section included questions aimed at the children (potentially in cooperation with their parents). 4,433 respondents in the main survey belonged to the target group, in other words had children in the specified age group. Close to half of these wanted to participate in the survey, and after a reminder, 62% of these accomplished the questionnaire (29% of the original target group). To improve the data for analysis, it was decided to expand the survey with an additional 500 respondents, being representative for the whole country. A prize was used as to increase the participation, and a response rate of 60 was achieved in this supplement survey.

Evaluation/Impact

The survey first of all provides valuable knowledge and documentation for further development of efficient policies, strategies, measures and actions to be taken within different sectors impacting children's environment and health. It is likely that the survey will be further developed and systematically carried out in the future, most probably directly in relation to the ordinary national travel survey, as the need for knowledge about children's travel habits and activity patterns will not decrease over time, but it is not yet clarified exactly how this will be accomplished. It will among other things depend on the future interests of cooperating parties behind the study. It is also worth underlining that the data and analyses of the survey might be highly valuable for cities and municipalities in benchmarking local progress, and that it will hopefully also contribute in positive ways to improve cooperation between transport, environment and health authorities further.

Sustainability

Better knowledge about children's actual local environments, as well as their travel habits and activity patterns, and trends within this field, is considered crucial with regard to all kind of work aiming at creating more sustainable local communities and contributing towards a more sustainable society in general.

Transferability

With regard to transferability, the approach and method of the survey might be of great interest for other countries. It might be looked upon as a core action of knowledge development in the intersectional field of transport and health, and it is considered crucial to centre the knowledge development around core actors in the core sector of action. The Norwegian Centre of Transport Economics is a high status research institute often used by both transport authorities and planning/ environment authorities (look up www.toi.no for further information).

Lessons learned

Key factors leading to success

A relatively balanced perspective on transport, environment and health was achieved because national actors from different sectors together supported the project. These actors participated quite actively during the period of design and analysis, but involvement could definitely have been even higher.

A renowned research institute was chosen to carry out the study, and this also made possible the very important link to the national travel survey for adults (that has great influence on high level transportation policies in Norway). The project also contributed to the development of important connections between the involved actors in different sectors, which are probable to be developed further in the future, as this field evolves further.

Spending enough time identifying and clarifying important questions for analysis in an early phase also seems to have been essential, as these discussions facilitated better understanding of different perspectives the various contributors had in the beginning, as well as it contributed to more mutual understandings of common goals, etc.

Challenges during planning/implementation

Recruitment and achievement of proper response rates represented some challenges, but as a supplemental survey was carried out, this was not really a big problem.

Involving and utilizing competencies from the different actors involved in efficient ways – both in the design phase and in the phase of analysis – was not without problems, but this aspect is still considered important in order to find the right focus and scope of the survey/analysis.

Important aspects to be considered for future planning

The supporting actors, who initiated the study, should also carry out a brief evaluation of the project, as a basis for future developments in this field, in addition to discussions of common and different goals within their respective fields of action.

Advice to countries that want to do something similar

Utilize existing data, methods and competencies to the greatest possible extent if these are of a high quality. Try involving actors from different sectors like transport, planning, environment and health, and find a relatively balanced and comprehensive perspective for the study – linked up to core goals and strategies of the different parties. Work units within the police engaged with issues related to creating safe school ways etc could possibly also be involved, as they might contribute with valuable practical experience and secure a “reality oriented” approach.

Helpful tools

- National travel surveys or other studies of daily travel activity
- Studies of children's activity patterns in general, and outdoor recreation and physical activity in particular
- Methods and experiences related to mappings and analyses of local environmental issues
- Existing indicators within the fields of transport, environment and health

“Sikkerhetsuka i Ski²“

Norway case 2

Background

Rationale

The most important health risk for children and young people is injuries and accidents. The safety week is a programme on prevention and training. One of the target groups is children in 9th grade in secondary school (14–15 years). One of the objects of the Safety-week is to initiate processes among individuals and groups to reveal their need for safety.

Partners

- Ski Council, Departments of School, Health-Services and Technical-Service
- The Fire Service
- The Ambulance Service
- Ski Police Service
- Sometimes local business and traffic organisations are also participating

Contribution of each sector

The expenses are shared between partners

Description of action/objectives

The topics of the teaching programme are:

- “The kiss of life”, mouth to mouth method, heart compression, practical exercise.
- How to prevent fire, how to putout a fire, practical exercise
- Behaviour in traffic and use of safety gear

Sets of pamphlets in all the topics are provided. The planning group has a preparation meeting with the head-teachers. The pamphlets are handed out to the teachers so they can prepare the students for the courses to come. After the courses it is expected that the students shall write an es-

² “Safety Week in the Ski Community”

say on a subject connected to the Safety-week. The head teacher will send their best texts to a jury. The best essays are awarded.

The topics taught in the courses are mentioned in the curriculum for the secondary school 9th grade. About 600 students attend the courses at the Safety-week every year.

Planning and implementation

Mechanisms used

Every year there is an organising team with representatives from all the partners participating. They are responsible for the programme, contact with the schools, reporting back to the politicians etc.

Evaluation/Impact

Sustainability

The Safety-week in Ski started in 1991 and is still on the agenda.

The week has developed to include all the population from 0–100 years. Parents with infants and young children get practical training on heart lung rescue, counselling on poisoning, nutrition, healthy diet, physical activity, safety gear and fire prevention. The local pharmacy gives lessons on their product for young children and babies.

Transferability

This project can easily be adapted in all local environments.

Lessons learned

Key factors leading to success

- The involvement of relevant sectors from the beginning of the process
- Political commitment
- Systematically attached to education schedule and the schedule for school health services

Challenges during planning/implementation

The measure needs a separate post in the economic plan.

Urging all partners to cover their own expenses connected to the Safety-week.

Important aspects to be considered for future planning

The project should expand to reach the children on 6th grade in primary school. Relevant additional topics for that age group would be safety gear in traffic, specially use of cycle helmet.

Advice to countries that want to do something similar

It is very important to get the measure incorporated in planning processes and documents

Cross-section and multidisciplinary cooperation are important.

Helpful tools

Teaching material and pamphlets from the fire brigade, police etc.

Support to schools both in preparing the children for the courses and the essay writing afterwards.

“Gøy og trygg på sykkel i Telemark³”

Norway case 3

Background

Rationale

The investigation “Children’s journeys to school” (TØI 616/2002) reveals that 40% of all the children in primary school are being driven to school (by car, public transport etc.) The overall aim is to give children the opportunity to walk or ride a bicycle safely to and from school.

All children 10/11 years old are given the opportunity to cycle to and from school. The aim for this project is that the children have the necessary training and feel safe on the bicycle and in the traffic.

Partners

- Grenland sykkelklubb (The Grenland Bicycling Club)
- Trygg trafikk i Telemark (The Organisation ‘Safe Traffic’ in the County of Telemark)
- Grenland-kommunene (Skien, Porsgrunn, Bamble og Siljan) (Counties in Telemark)
- Telemark fylkeskommune (The Telemark County Administration)
- Grenland politistasjon ved forebyggingsavsnittet (The Preventive Section of the Police Station in Telemark)

Contribution of each sector

Grenland Bicycling Club has a project leader 60% employed, who is responsible for carrying out the programme. This includes:

- assisting the school teachers both in theoretical and *leading* practical training
- organising the training of practical skills, bicycling journeys and traffic skills
- organising a bicycling test

Grenland Bicycling Club provides a coach as well. The role of the teachers:

³ “Have Fun and Stay Safe While Bicycling in Telemark”

- preparatory work within the class
- assistance on teaching theory in classroom and on practical skills,
- assistance on the bicycling journey and traffic training
- assistance on the bicyclin test

The role of the police:

- bicycle inspections, assistance on traffic training and the bicycling journey

The role of the parents:

- practical assistance on checkpoints during the bicycling test in week 4

Available material:

- Pamphlets and educational material:
- Trygg Trafikk program “*Trå til – ung på sykkel*” (‘*Go for it – young on bicycles*’)

Training of practical skills:

- Grenland Bicycling Club brings *gear* needed to the schools
- Bicycling journey/ traffic training: Grenland CC provides: – reflector coat for all, water supply for all, bicycles if necessary

Description of action/objectives

The objective of the project is to give all children sufficient skills and training on bicycling. All children shall know how to ride a bicycle, and all children shall be included in the training.

Planning and implementation

Description of action/implementation

10 hour programme per group over 4 weeks (4 x 2,5 hours) (4th grade).

Week 1:

- Presentation of the programme for the students
- Theoretical training with assistance from the teacher
- Control of bicycles at the school premises
- Training of practical skills at the school/open premises

Week 2:

- Theoretical training with assistance from the teacher
- Training of practical skills at the school/open premises
- Training in nearby premises with assistant

Week 3:

- Theoretical training with assistance from the teacher
- Training of practical skills in nearby premises/in the woods/at sports facilities
- Bicycling journey with assistance and traffic training on the way back to school

Week 4:

The *Bicycling Test* which involves:

- Testing of theoretical knowledge with assistance from the teacher
- Testing of technical skills
- Training in traffic with checkpoints (with assistance from parental class representative/parents)

Bicycling journey 1 day (4–5 hours) (5th, 6th and 7th grade)

Evaluation/Impact

The Project aims to include all the children on 4th and 5th grade. Some children with non-Norwegian ethnical background are not used to cycling, especially the girls.

Approximately 900 children have been part of the project in 2005, 2000 in 2006. There is also a focus on healthy food, nutrition connected to physical activity such as bicycle riding.

The project will end 15 November 2009 is planned to become a permanent offer for Telemark County and the rest of the country.

Annual reports are being submitted to the partners (regulatory authorities).

Intermediate evaluation in 2007 plus a final evaluation in 2009 will be undertaken in collaboration with Telemark College.

Collaboration with the Norwegian Institute of Public Health's project on children's eating and physical activity habits in Telemark.

Sustainability

The project started in 2004 in (a few schools) in Grenland area. During 2005 and 2006 the project has spread to the city of Skien and the county of Grenland, there are plans for extending to all of Telemark County 2007 and then all over Norway from 2008.

Transferability

The project will be transferable to countries with tradition for cycling.

Lessons learned

Key factors leading to success

- Transsectional commitment and cooperation.
- Financial support.

Challenges during planning/implementation

The project learned that not all 10 years-old children know how to ride a bicycle. It was revealed that some children have poor physical capacity due to inadequate stimulation. Some children do not have a bicycle, so it is important that the project provides bicycles and other equipment for everyone.

Important aspects to be considered for future planning

Most important

- Offer to everyone, they should all participate, i.e. inclusion of disabled students, integration with adapted equipment, assisting those children who cannot ride a bike (i.e. assessing children's motor skill and level of ability during Week 1, so that adapting for individual improvements can be undertaken during Week 2)

Other aspects

- Collaboration with the community authority (e.g. community financing is agreed upon with the school, culture, health and environment sections; development of a traffic safety plan)
- The skill level is uneven, among 2 000 participants in 2006, approx. 15–20% of 10-year old children feel unsafe on a bike due to poor motor skills, 2% cannot ride a bike although being healthy)
- From 2007 it is planned that a teacher shall undertake the theoretical part, i.e. the school knows about the school, the biking environment knows about biking
- Such a project is 'in' and well developed
- Logistics must be in place (equipment, bikes, instructor)
- Activities should be planned early should that they can be included in the school lesson schedule

Advice to countries that want to do something similar

- It is important to be goal oriented
- Establishment of network is essential for this type of project
- The budget comprised 2/3 from the governmental sector and 1/3 from private sources (bank, insurance company)
- 'Win-win' situation with satisfied students, teachers and parents
- Important to secure good quality, protocol and 'policy' are key words

Helpful tools

Control of bicycles were done with an internet-based tool, thereby the standard of the bikes were precisely assessed. The results were delivered to the school the next day. It is advised to have collaboration with a biking-repair shop. The students should be thought how to maintain their bikes. Collaboration with the school nurse is important when assessing disabled students and those with impeded motor skills, as well as for those students who have not learned to ride a bike.

Financing is sought in order to develop and produce a brochure and a DVD. Courses for kindergarten teachers are being planned for early 2007. Further networking will be carried out to central and local cycling associations.

National Surveillance Project – High Sound Levels from Music Sweden case 1

Background

Rationale

In 2003, the National Board of Health and Welfare evaluated, on request from the government, if the regulations on high sound levels were effective and followed. This evaluation showed that many discotheques and fitness centres had too high sound levels and that there was a need to review and strengthen the regulations on high sound levels. The evaluation also showed that the municipalities needed guidance for their surveillance work and that there was a need to develop a new method to measure high sound levels.

The overall aim was to reduce sound levels above the present guideline values by strengthening of the surveillance and increasing of the general knowledge on how to control high sound levels and why this is important. The project also aimed at: streamlining the surveillance between different municipalities; increase the information on internal quality control to organizers and executives; receive data at the national level for future evaluations of the regulation/guidelines in this area.

Contribution of each sector

The National Board of Health and Welfare financed the project, the local authorities carried out the sound measurements and the County administrative board summarized the local results and sent it to the NBHW.

The key players in the project were the municipalities (Environmental Health Boards), County administrative boards and the National Board of Health and Welfare.

The work on the project started in 2004. The report was published in March 2006.

Description of action/objectives

One objective was that at least 60 municipalities should participate. This objective was met: 130 municipalities participated, but only 90 carried out measurements. It was hoped that the ones that did not manage to perform measurements might improve their surveillance at a later stage.

A one-day course on health effects and measuring methods etc. was carried out at four different locations in Sweden. The target group was environmental health inspectors. We also had meetings with experts in the process of revising the guidelines on high sound levels and on the development of a new measuring method. The new measuring method can be found at the homepage; www.sp.se

Planning and implementation

Mechanisms used

The National Board of Health and Welfare invited all municipalities to take part in the project. A new method for measuring high sound levels was developed, a revision of the guideline on high sound levels was made, seminars were held, etc. The municipalities then carried out the surveillance. The intention was to reach all municipalities in Sweden (although not all of them participated in the project) and the music industry, music organisations and others arranging music events. The beneficiaries of the project are the Swedish population. Steering group meetings with representatives from the local and regional level were held during the planning phase of the project.

E-mails from the National Board of Health & Welfare were sent on a regular basis to the local authorities to let them follow the project. There were also memory notes from meetings at the central level/planning and a final report from the project, activities towards media (press seminar).

Description of action/implementation

Revision of the guidelines on high sound levels, the new measuring method, the high number of municipalities participating and the number of measurements that were made all contributed to an increased awareness of the risks with high sound levels among a vast number of people at all levels, mainly due to a very good press coverage during this project. The final report “High sound levels from music” – a national surveillance project” (in Swedish) attracted quite large interest from media.

Evaluation/Impact

The major innovative component of the project is that the National Board of Health and Welfare has not before tried to coordinate surveillance activities in the environmental health area. With joint efforts it is possible to receive results from a large number of objects with wide geographical distribution. This is also a way to improve surveillance (and reduce environmental risks) in low-activity areas. We now work on our third project of that kind (on drinking water). At the local level, surveillance of high

sound levels should be seen as a regular work within an existing structure, but prior to this project, the level of activity was low. The project will be repeated in approx. 5 years to see if sound-levels are lower.

Sustainability

By helping the local authorities with better guidelines the work with measuring sound levels and in this way reduce levels will continue. We have achieved increased knowledge and awareness of risks among surveillance bodies and people arranging musical events. But the actual risk-reduction needs to be evaluated at a later stage.

Transferability

The new method of measuring high noise levels used in this project might be transferred directly. The idea of coordination of measurements can also be transferred, but might need adjustments depending on national organisation.

Lessons learned

Key factors leading to success

Broad cooperation between different levels in society.

Challenges during planning/implementation

Actually, it all went very smoothly.

Important aspects to be considered for future planning

If we were to perform the project one more time, we would probably do it in a similar way. We can probably start at a slightly “higher level” since the awareness is much better today and concentrate more on how to reduce sound-levels, not so much on the actual measurements.

Advice to countries that want to do something similar

An advice to someone who wants to do something similar, is that it is important to involve the municipalities at an early stage.

Helpful tools

The municipalities could use some technical assistance, they do not have the same possibilities economically or technically (equipment for measuring sound-levels sometimes missing).

Children and Open Spaces in the City – Accessibility, Use and Influence

Sweden case 2

Background

Rationale

Reduction of open urban space available to children due to increase of building activities and traffic was the reason for this multidisciplinary research project taking place between 2002–2006, funded by the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, Formas.

Contribution of each sector

Collaborative efforts of participating schools and planning authorities were necessary for this multidisciplinary research project to take place. In the project, environmental psychologists worked with children and their teachers to collect qualitative information from the children about their uses and evaluation of the physical environment in their neighbourhoods; landscape architects developed a computerized planning tool for children to use in order to show places as used and evaluated by them. In addition, a questionnaire was sent to all parents of 12 year old children in the neighbourhoods involved inquiring about the child's and the family's use and evaluation of neighbourhood green space. The health factor was not particularly stressed in the setup of the project. However, to the adults participating in the study, health and children's outdoor activities were seen as closely related and described in interviews to be visible.

Description of action/objectives

1. To monitor the daily use by 12 year old children of their nearby physical environment, i.e. their dwelling areas, school yards and school routes in different geographical areas in a big city; one of which was an inner city area about to become more dense by building and traffic
2. To estimate 12 year old children's capacities to communicate their environmental experiences

3. To develop a children' GIS method (Geographical Information System) for planning

Planning and implementation

Mechanisms used

Close cooperation was from the start taking place with the local planning authorities in the Stockholm neighbourhoods involved in the project and with teachers and directors of the local schools involved; a cooperation that continued throughout the project in various feed back actions and interpretations of data gathered.

Description of action/implementation

Action took place in the following steps: contact with the local planning authorities, contact with schools, contact with school class with pupils, 12 year old, contact with parents, collection of data, communicating the results back to the local planning authorities as well as to researchers involved in similar research nationally and internationally in papers, presentations and workshops.

Evaluation/Impact

Sustainability

From written material, interviews, photography and walk-tours by the children in the qualitative part of the project, it was clear that the 12 year old children when possible used the nearby physical environment in their neighbourhoods and spent much of their free time outdoors in a multitude of age-related activities but that this was different in the different neighbourhoods investigated. Constraints were due to lack of space, traffic difficulties and parental restrictions, social and cultural background as well as to the absence of other children outdoors. The conclusions to be drawn are that physical environment to 12 year old children is of vital importance, being experienced by them in direct interaction as a natural and responding contact. This fact was most evident from the methods with strongest place value for the children, i.e. walk-tours and photography.

Children showed clear attitudes and strong concern about general environmental qualities. However, it was obvious that children of this age are dependent on adults not only for access to the physical environment but also for attitudes and evaluations of the physical environment as well as for communicating them. However, children's attitudes, experiences and evaluations must be seen in their own right as their environmental perspectives are different from those of adults. Children's perspectives of

the physical environment can be characterized as a close reading of place qualities, evaluating them positively or negatively. With their keen interest in and strong engagement for nature balances, 12 year old children can be said to have a kind of spontaneous sense of sustainability

The children's GIS method was successfully developed and made into a handy instrument for the children to use to show places used by them while at the same time expressing on the maps used with the GIS methods evaluative aspects of the places.

Transferability

The spontaneous sense of sustainability in 12 year old children as shown in this project can be investigated in other physical environments and socio-cultural contexts provided meaningful methods are used to stimulate communication with children on the issue. The question of children's self-reports of their well-being – and health – when outdoors, might developed along similar lines to those used in this project exploring further children's communicating competences.

Lessons learned

Key factors leading to success

Careful preparation of project, coordination of project efforts and communicating objectives of project to the many different parties involved with children as well as choosing good methods for communicating with children.

Challenges during planning/implementation

Evoking the interest for the project in all parties involved as well securing that they have time to participate.

Important aspects to be considered for future planning

Respecting children's age-related as well as socially and culturally dependent conditions when in dialogue with adults.

Advice to countries that want to do something similar

Before starting a new project, study the interesting literature that is accumulating in this field of research about children, physical space, nature and the variety of methods possible to use with children for communicating their environmental experiences.

Information Booklet – Reduce Noise Levels in Preschools

Sweden case 3

Background

Rationale

The reason for taking action on this issue was that noise levels indoors in preschools are experienced by children and personnel as being too high. Interviews and questionnaires to preschool teachers and other persons involved with children's environments have clearly indicated that the noise levels are a problem.

Contribution of each sector

The National Board of Health & Welfare put together a working group with representatives from the Board and three other authorities with a responsibility for these kinds of issues: the National Institute for Working Life, the Swedish Work Environment Authority and the Swedish National Agency for School Improvement. The aim with the working group was to produce an information booklet with concrete ideas on how to lower the noise levels in kindergarten/preschools through pedagogic and strategic work. The work with the information booklet, "Take away the noise – a booklet on healthy sound environments in preschools", started in spring 2005. The booklet was published in August 2006.

Description of action/objectives

The main objectives for the project were to give ideas and inspiration for kindergarten/-preschool personnel to work on lowering the noise levels indoors and to make the sound environment better for the children, and for the personnel. The target groups for the booklet are teachers and school administrators, while both children and personnel in kindergarten/preschools are beneficiaries of the project.

Planning and implementation

Mechanisms used

We had a good cooperation with a free-lance journalist, a free-lance photographer and preschool teachers in preparing the text. Also, all authorities involved wrote relevant text material to the booklet and furthermore, environmental- and health inspectors and headmasters also gave interviews, resulting in short texts in the booklet.

Description of action/implementation

The booklet has been published and sold in approximately 1500 copies during the first few weeks (prior to the information seminar). We have spread information at websites and are going to inform about the project at different seminars during the autumn. It has not been possible to measure the outcomes or impacts of the project yet, and it is too early to tell what numbers of target populations that were reached. The objective was to inspire people to take actions against noise problems in kindergarten/preschools. So, we could possibly evaluate the impact by new interviews in a few years' time. A major achievement with the project was to publish the booklet and to initiate the discussion on preschool noise levels between the responsible authorities.

Evaluation/Impact

The innovative components of the project are that through good examples inspire people to take action and start working with and solve the noise problem in kindergarten/preschools.

Sustainability

The booklet will probably be usable for a number of years. Hopefully, it will be used in the education of pre-school teachers.

Transferability

All parts of the project could be transferred to other countries, if the problem exists. None of the parts of the project are country specific.

Lessons learned

Key factors leading to success

To let professionals talk to professionals by means of an attractive publication with beautiful photos and well-written and interesting texts. A very competent journalist with long experience from similar projects was an important 'ingredient' in this project.

Challenges during planning/implementation

The main challenges faced during the project were to decide which authority that really should take the lead on this problem – everybody seemed to think that this is the responsibility of somebody else.

Important aspects to be considered for future planning

If we were to perform the project one more time, we would probably perform the project in a similar way. Perhaps plan for more information seminars and give a press seminar when the booklet was published.

Advice to countries that want to do something similar

An advice to someone who wants to do something similar, there is a lot of knowledge on how to tackle high sound levels among teachers – so listen to them!

Helpful tools

We would have enabled an interactive version of the booklet on internet, but this was not possible without extra funding.

National Surveillance Project – Radon in Preschools and Schools

Sweden case 4

Background

Rationale

Results from questionnaires and interviews with the local authorities showed that there is a lack of knowledge about the radon situation in many schools/preschools. Where radon has been measured, action has not always been taken, and radon levels are still to be measured in some schools/preschools.

Contribution of each sector

The National Board of Health and Welfare intend to collect radon data from schools/preschools in the municipalities of Sweden during 2006/7. The Board will encourage the municipalities and local authorities (health and environmental offices) to measure radon levels during the winter season 2006/7. The board will also encourage responsible parties to take actions if buildings with radon levels above the limit (200 Bq/m³) are identified.

Description of action/objectives

First of all, the project aims at reducing radon levels in schools and preschools. The project will also give useful information for the work with the national environmental quality objective *Good housing and dwelling*, semi-target number 7, which states that: Radon levels in schools and preschools should, before 2010, be lower than 200 Bq/m³ in all schools and preschools. The project result will also be used as an indicator at the central, regional and local level to follow the development of radon exposure in children.

Planning and implementation

Mechanisms used

During the autumn of 2005 the National Board of Health and Welfare invited the Environmental and Health offices of Sweden's municipalities to join this national surveillance project concerning radon in schools/

preschools. Before the project started, other authorities concerned with this issue at the central level, were informed about the initiative. They also had a chance to discuss and comment on the project.

Radon is normally measured on request from the owner of the building or as a result of campaigns by the local authority in areas with high radon levels.

Description of action/implementation

The National Board of Health and Welfare sent information to the local authorities.

The Environmental and health officers at the local authorities will use the information to encourage – or require – the owners of school or pre-school buildings to measure radon level. The owners will be responsible for reducing radon levels, if necessary.

The national Board of Health and Welfare will compile a report presenting the results and probably invite media to a press seminar. From our other projects with a similar set-up we know that this kind of information often attracts local media.

Evaluation/Impact

The National Board of Health and Welfare has not previously linked surveillance to work with the national Environmental Quality Objectives as clearly as within this project. The Board is responsible for normative guiding in surveillance and there was a request from the local level to do something on radon at a national level. This way of working gives results from the country as a whole. It also makes it possible to compare results from different geographical areas and to streamline the surveillance among the municipalities. National projects also give the work of the local authority strength, a better support for the inspectors and a higher status for these issues.

Sustainability

To encourage municipalities to reduce radon levels will eradicate the problem in the buildings where measures are made and levels reduced.

Transferability

All parts of this project could be transferred to other countries. The project depends to a certain degree on how responsibilities on indoor air quality are appointed, if there is a body responsible for surveillance and measures, etc.

Lessons learned

At the present time, it is too early to evaluate the project

National Radiation Protection Institute (SSI) – Children’s Book on How to Behave in the Sun

Sweden case 5

Background

Rationale

An increasing rate of skin cancer in Sweden, due to the behaviour of people in situations involving UV-radiation, is the background to the described case. In the efforts to make people behave in a wise way the radiation protection authority has prioritised children and adults connected with children such as parents, teachers etc. Several factors make children an important group in the preventive work: It is a well-known fact that childhood sunburn increases the risk of malign melanoma in adults, children have more sensitive skin and creating good habits in childhood, concerning sun exposure, is far easier than trying to break bad habits in adults.

Description of action/objectives

The objective was to increase the awareness of UV-radiation and its risks among children and give them the tools to develop good sunbathing habits from the start. Prior to this project we have not had any good information material directed toward children.

Planning and implementation

Description of action/implementation

A well-known author of children’s books was contacted to write “A book about the sun”. She has a style that is quite different when it comes to conveying sensitive subjects to children. She has written books on the subject of death, love, hair and other interesting topics. The book is written for children ages 5–7.

The author had full artistic freedom as long as the authorities could check facts and that the recommendations in the book were in line with ours.

During spring 2006 the book was sent to 8,000 pre-schools (approx. 300,000 children) in Sweden, together with a letter of introduction and a poster. The pre-schools could order up to five more books without cost, and today the authorities have sent out approximately 11,000 books.

It was important to work with timing and as the book was sent out during spring we also worked actively with media to get as much publicity as possible concerning the topics sun and skin cancer.

Evaluation/Impact

Sustainability

The book will have a considerable lifetime. The plan is to print more books for use over the coming years.

Transferability

It is possible for any country to do the same. It is also possible to translate the book.

Lessons learned

Key factors leading to success

The choice of author and the active media work.

Challenges during planning/implementation

It was a new task for a national authority to be involved in the creation of a book directed toward children.

Important aspects to be considered for future planning

The project is quite costly as far as money is concerned but not in the number of people involved.

Advice to countries that want to do something similar

We can highly recommend this project although the evaluation is not yet completed. The book itself has been very well received as far as we can see.

Sun, Children and OUTdoor Surroundings project (SCOUTS)

Sweden case 6

Background

Rationale

SCOUTS was a joint project 1999–2002 between the Department of Cancer Prevention (DCP), Karolinska Hospital, Stockholm, who at the time were in charge of a skin cancer control program in the county of Stockholm (Coastal metropolitan area in Sweden 59–60° N, population 1.8 million, 6,940 km²) and Haninge municipality (local authority of Haninge 20 km south-east of Stockholm city, population: 70,000), one of 25 municipalities in the county. Haninge municipality ratified UV radiation protection for children in its public health programme and became the test area and model for a community intervention and research project, the Sun Children, and OUTdoor Surroundings project (SCOUTS).

Contribution of each sector

The DCP committed approximately 20,000 SEK a year and the local government of Haninge approximately 140,000 SEK a year to local shade planning and related education on an overhead cost basis.

Description of action/objectives

The project targeted the prevention of unintentional overexposure to UV-radiation for children.

Planning and implementation

Mechanisms used

This is achieved through encouraging the construction of outdoor play areas in shaded environments and by regular pre-service education of pre- and primary school teachers.

Description of action/implementation

The planned outputs were guidelines for physical planning of UV-protective environments, adapted curricula for relevant student education and tools for evaluation.

Evaluation/Impact

For the whole Stockholm area, lectures were conducted for politicians, city planners, administrative heads for municipal health and environmental protection and pre- and primary school headmasters across all local authority districts to introduce the SCOUTS project.

Evaluation showed that messages relevant to UV protection of children were effectively communicated to 75–95% of the target group. By 2001, action for shade planning had also been taken or had been discussed in 15 of the 25 local authorities in Stockholm County.

Sustainability

The activities of the former DCP have been transferred to and continued in Stockholm County by the Centre for Public Health, Stockholm County Council, Stockholm, Sweden.

Transferability

Transferability is dependent on mandates of regional – local authorities.

Lessons learned

Key factors leading to success

Lectures, as opposed to just sending out written information, were considered the most effective method to gain high level support for the project.

Positive media coverage was also of importance for the success of the project.

Challenges during planning/implementation

To measure the sun protection effect on the children from environment surroundings considered to be in good conformance with the objectives.

Important aspects to be considered for future planning

Synergy effects of a UV-protective environment on other health-related parameters.

Helpful tools

National and local forecasts, measurements and reports of WHO's UV-index.