

Jaana Markkula
Erkka Öörni
(eds.)

Providing a Safe Environment for Our Children and Young People

Finland's national action plan for injury
prevention among children and youth

National action plan for injury prevention among children and youth was drafted and approved by the Steering group and Action group led by National Institute for Health and Welfare (THL). It was originally published in Finnish in September 2009. This process was supported by Finland's Ministry of Social Affairs and Health and two projects: the *Child Safety Action Plan* (CSAP) by the European Child Safety Alliance and *Community Action on Adolescents and Injury Risk* (AdRisk). Both of these projects are supported by the EC's Public Health Programme.

© Editors and National Institute for Health and Welfare (THL)

Layout: Jaana Markkula, THL

Translation: Henna Eronen, Ministry of Social Affairs and Health

Helsinki University Print
Helsinki, Finland 2010

Contents

Foreword	4
Introduction	5
Drafting of the action plan	5
Priorities.....	6
Vision	7
Health losses from injuries.....	8
More work needs to be done.....	8
Current situation	8
Common challenges.....	10
Traffic injuries	10
Falls and sports injuries	11
Poisonings.....	12
Drownings and water traffic injuries	12
Suicides and self-harm.....	13
Injury prevention in different kinds of environments.....	14
Home.....	14
Recreational and sports environments	15
Mother and child health clinics.....	16
Child daycare	16
Schools and educational institutions	17
Workplace.....	17
Defence Forces	18
Systems and structures supporting injury prevention.....	18
Coordination of activities and cooperation	19
Surveillance systems and research.....	19
Communication and training for professionals.....	20
Implementation and follow-up of the action plan	20
References	21

Foreword

Safety is very important to us all. Joy, courage, adventure, and risk taking are part of the life of children and young people. And so it should be. Everyone should, however, be able to enjoy life so that all unnecessary risks have been anticipated and eliminated. It is, therefore, important to understand that a safe environment can still challenge and stimulate to adventure. When it comes to children and young people, both the safety and the stimulating aspects of the environment should be considered at the same time, as is also stated in the vision in this National action plan for injury prevention among children and youth.

The Action Plan highlights how common injuries and other harm are in the lives of Finnish children and young people. Every year, over 300 children and young people die of injuries and over 14,000 are hospitalised. As for many European countries, also in Finland injuries are the leading cause of death among 1–25 year-olds. The Action Plan gives guidelines and concrete measures for the prevention of this internationally recognised public health problem.

We cannot accept that so many young lives are cut short or that so many children and young people are permanently injured. There are efficient and effective ways to prevent injuries. For instance, child restraint systems and bicycle helmets, smoke detectors, 24-hour Poison Information Centres, and diversified health guidance have proven to be cost-effective. The prevention of injuries requires broad-based cooperation, and the best results can be gained by combining practices, including legislation and changes in the environment, attitudes, and behaviour.

Alcohol-related problems in our country also reflect on youth mortality in Finland. A fourth of all the 15–24 year-olds who died from unintentional injury was intoxicated. More than 40 per cent of young people who died of violence or suicide were under the influence of drugs or alcohol. Fortunately, the incorporation of mental health and substance abuse work is becoming more and more efficient in our country, and it is important that this work is carried out in the everyday environments of children and young people and in the related service systems.

The treatment and costs of injuries are a particular burden on the health services. A study of the health promotion measures in municipal primary health care in Finland showed, however, that health centres had taken hardly any measures to prevent injuries. Our preventive efforts must be more efficient. Correspondingly, also other sectors should take part in the cooperation to prevent these health problems that play such a great role in the lives of our children and young people.

I call, therefore, all actors to cooperate so as to secure a safe life for children and young people. The cross-sectoral cooperation during the drafting process of this Action plan is continued also during the implementation phase. Children and young people are the best experts of their lives, and it is, therefore, vitally important that they can take part in the promotion of their own safety.

Helsinki, March 2010

Paula Risikko, Minister of Health and Social Services

Ministry of Social Affairs and Health

Introduction

Every child and young person has the right to a safe environment. The UN Convention on the Rights of the Child states that the child must have the opportunity of growing up and developing in an environment that is as healthy and safe as possible and that the child's parents should be provided information on, for example, injury prevention¹.

In 2007 there were 1,556,154 persons under the age of 25 in Finland. Annually, on average over 300 persons under 25 die and over 14,000 are hospitalised due to unintentional or intentional injuries. Although progress has been made since the 1970s especially regarding injuries, and even efforts to prevent suicides among young men have generated good results, injuries and violence (including self-harm) are still the most important factors threatening the safety of children and young people.

This cross-sectoral and comprehensive action plan is the first of its kind in Finland and it focuses mainly on unintentional injuries. Earlier, there was no holistic view on how the prevention of child and youth injuries should be developed.

With this national action plan Finland also responds to an international challenge. In Europe such national action plans have been considered a central way to ensure children and young people a safe life and to reduce the burden of unintentional or intentional injury^{2, 3, 4, 5, 6, 7}. Moreover, the action plan implements at the national level the reference to injury prevention (Regional Priority Goal 2) which the WHO/Europe Ministerial Conference on Environment and Health expressed in the *Child Environment and Health Action Plan for Europe (CEHAPE)*^{8, 9}.

During the drafting process, expert and financial support was received from two projects of the European Association for Injury Prevention and Safety Promotion (EuroSafe): the *Child Safety Action Plan (CSAP)*¹⁰ and *Community Action on Adolescents and Injury Risk (AdRisk)*¹¹. Both of these projects received part of their funding from the Public Health Programme of the European Commission.

Drafting of the action plan

In autumn 2008, a steering group was appointed at National Public Health Institute (KTL, since 2009 National Institute for Health and Welfare, THL) and assigned the task of drafting a National action plan for injury prevention among children and youth and of approving and furthering the action plan within their administrative fields. An additional action group participated in the drafting and producing of the contents. It was important to involve a wide range of experts from various sectors already at the drafting phase.

Steering Group members

- **Chair:** National Institute for Health and Welfare (THL)
- Association of Finnish Local and Regional Authorities
- Finnish Centre for Health Promotion
- Finnish National Board of Education
- Finnish Youth Co-Operation
- Ministry of Justice, Department of Criminal Policy
- Ministry of Education, Department for Cultural, Sport and Youth Policy
- Ministry of Education, Department for Education and Science Policy
- Ministry of Social Affairs and Health, Department for Promotion of Welfare and Health
- Ministry of Social Affairs and Health, Department for Occupational Safety and Health
- Ministry of the Environment, Department of the Built Environment
- Ministry of the Interior, Department for Rescue Services
- Ministry of the Interior, Police Department
- Ministry of Employment and Economy, Working Life and Markets Department
- Ministry of Transport and Communications, Transport Policy Department

Action Group members

- **Chair:** National Institute for Health and Welfare (THL)
- Finnish Youth Research Network
- Mannerheim League for Child Welfare
- Ministry of Social Affairs and Health
- National Rescue Association
- UKK Institute

Priorities

The drafting process focused on the primary prevention of injuries, i.e., the conditions preceding an actual injury. The Action Plan actively interlinks different kinds of approaches to injury prevention taking into consideration:

1. the safety of the physical and social environment as well as that of products and services;
2. the legislation and national guidelines that promote and support safety; and
3. safety-related education and upbringing.

The themes for the action plan were chosen and the proposed measures were targeted on the basis of the following questions:

1. What are the leading causes of health loss in this age group?
2. Which measures need extra input?
3. Which aspects have been excluded from earlier programmes?
4. What needs to be further developed at the systemic level?

The priorities were assessed on the basis of data from the national causes of death register and the hospital discharge register as well as earlier national programmes and strategies in various sectors regarding injury prevention. Moreover, interviews and a workshop with experts contributed to forming an idea of the current state of injury prevention in Finland. Also a number of young people expressed their views on safety and injury prevention in a workshop organised for the purpose. The proposed measures were drafted in cooperation with experts and on the basis of international recommendations, where applicable.

The drafting process and the proposed measures take into account the cross-sectoral nature of injury prevention, the gendered nature of injuries, the role of risk-taking behaviour, and the involvement of children and young people.

Vision

The steering group defined the future vision for the prevention of child and youth injuries as:

***Finnish children and young people live stimulating and safe lives.
Health losses due to injuries are significantly less frequent than today.***

Health losses from injuries

More work needs to be done

Recent decades have seen a decrease in deaths from injury among children and young people^{12, 13}. The prevalence of unintentional injury deaths among people under 25 has decreased from 18.2 to 4.3 per 100,000 for girls and from 57.1 to 16.4 for boys from 1972 to 2005¹⁴. This positive development shows that serious injuries can be prevented.

However, as injuries still are the leading cause of death among people under 25 in Finland, they pose a significant public health problem. Unintentional injury deaths account for 40 per cent of all deaths among 1–24 year-old boys and 30 per cent among girls (see Figure 1). It has been estimated that if the injury-related mortality rate for 0–19 year-olds in 2005 had been at the same level in Finland as it was in the Netherlands, where injury mortality is the lowest in Europe, 41 per cent of the children and adolescents who died of injuries could have been saved¹⁵. Moreover, future work is facing the challenge posed by the fact that hospitalisations due to injuries have not decreased correspondingly.

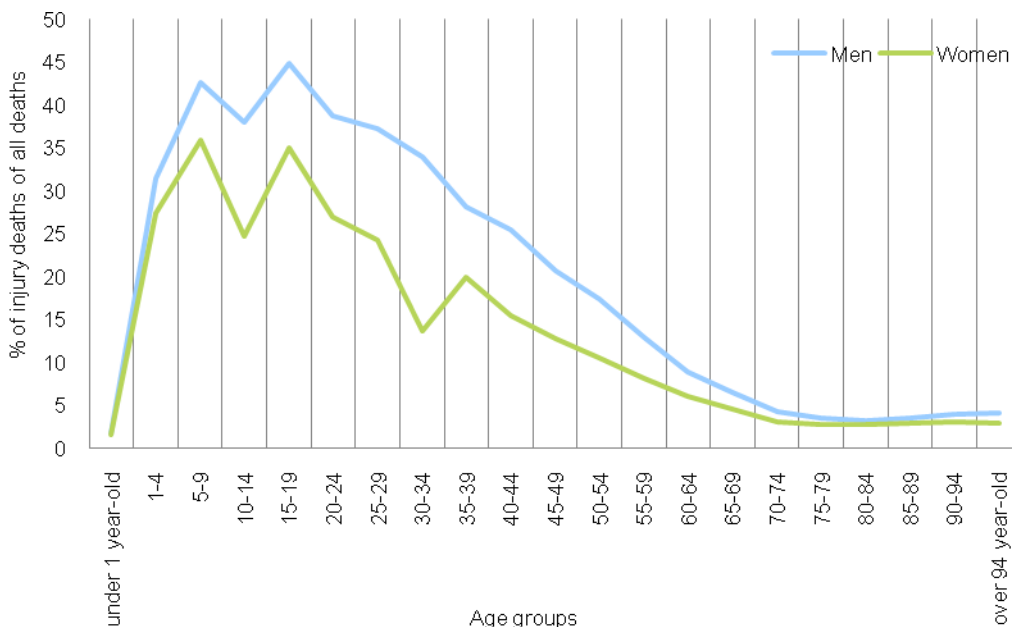


Figure 1. Proportion (%) of injury deaths of all deaths in different age groups by gender in 2003–2007¹⁴.

Current situation

In 2000–2007 unintentional injuries, violence, and suicide caused on an annual average around 330 deaths of people under the age of 25. Out of these, 190 deaths were caused by unintentional injuries (12.1 per 100,000), 19 by violence (1.2 per 100,000) and 127 by suicide (8.1 per 100,000)¹⁴. Unintentional injury deaths were most common among young people and boys (see Figure 2).

In 2000–2007, on an annual average around 14,300 persons under 25 were hospitalised due to unintentional or intentional injuries. Out of these, 13,400 cases were related to unintentional injuries (854.5 per 100,000), 440 violence-related (28.2 per 100,000), and 580 self-inflicted (37.5 per 100,000)¹⁴.

The most common type of injury varies by age as the typical risks change¹⁶. Traffic injuries are still the number one cause of death at all ages (see Figure 3), but the second most common injury type varies with age. For children under 7 it is drowning, for 7–15 year-olds other injuries and for young people over 15

poisonings. The most common injuries requiring hospitalisation at all ages are falls either on the same level or from one level to another¹⁴.

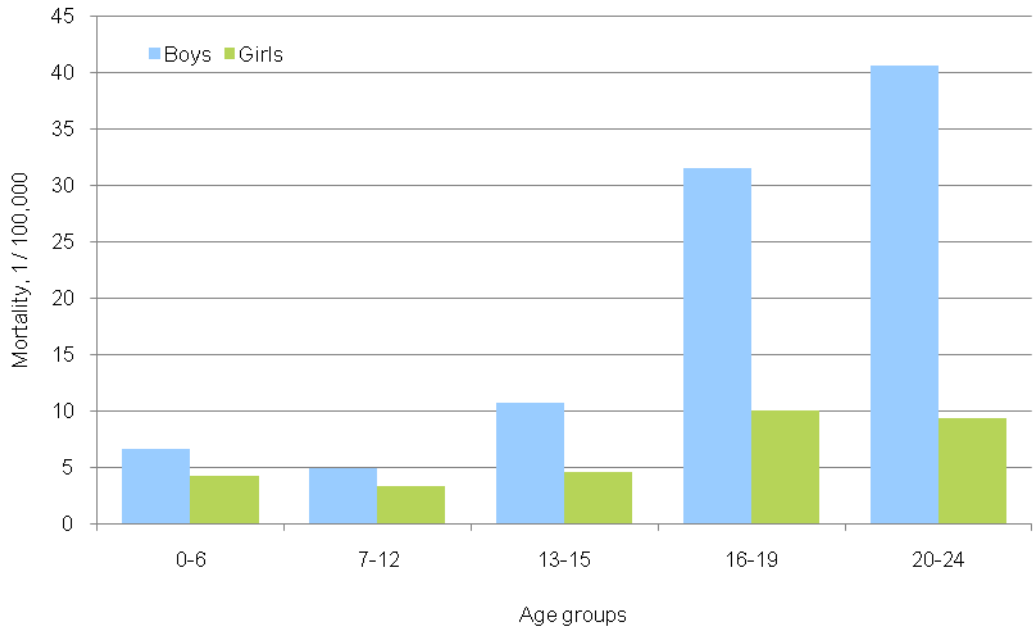


Figure 2. Unintentional injury-related mortality rate for 0–24 year-olds by age group and gender in 2003–2007 (Source: THL Injury Database¹⁴).

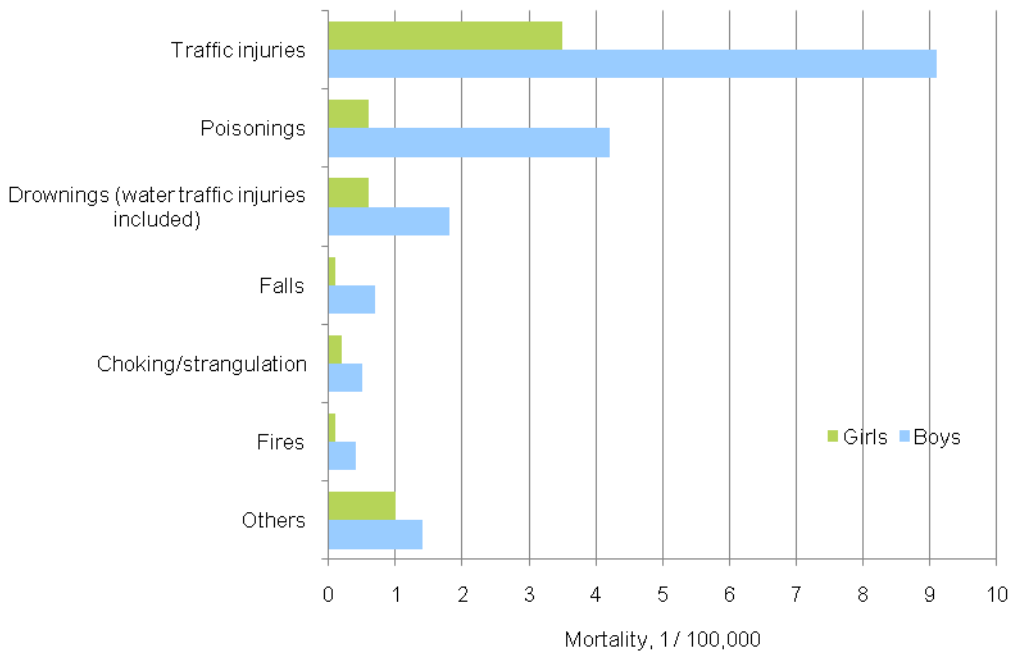


Figure 3. Unintentional injury-related mortality rate for 0–24 year-olds by injury type and gender in 2003–2007 (Source: THL Injury Database¹⁴).

Common challenges

There are **gendered differences** in injuries. The gender gap is at its narrowest among infants and gets wider with age. For small children, environmental factors explain a lot, while in adolescence the greater injury risks among boys are linked with differences in exposure, socialisation, and risk-taking behaviour¹⁷.

The chances of children and young people to live in a safe environment are affected by a number of factors which also increase proneness to injuries. Studies have linked higher risks for childhood unintentional injuries with poverty, single-parenthood, mother's low level of education and low childbearing age, poor housing conditions, large families, and parents' alcohol and drug use, among others¹⁷. For instance, parents' alcohol and drug use increases the injury risk for children, as the parents' abilities to care for their children decline.

Lifestyles bear also significance, as for example intoxication increases the risk for injury^{18, 19}. One fourth of all 15–24 year-olds who die of unintentional injury are intoxicated (see Figure 4). In violent deaths and suicides the role of intoxication is even greater. Young men are more often than women intoxicated when they fall victim to a violent or other injury death.

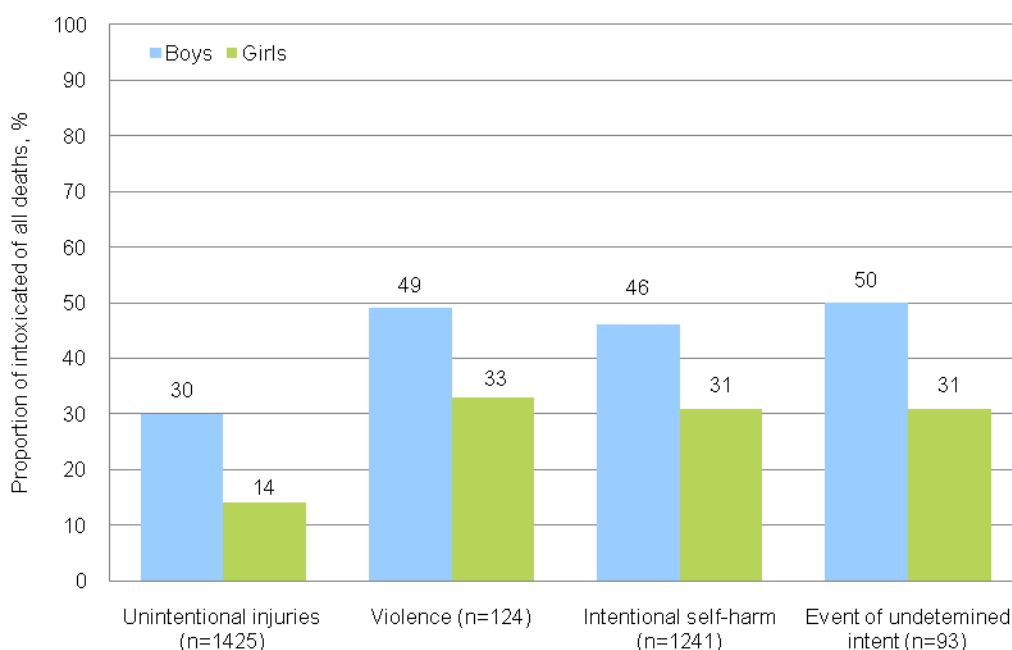


Figure 4. Proportion (%) of intoxicated of all deaths from unintentional injury, violence, or self-harm among 15–24 year-olds in 1998–2007²⁰.

Traffic injuries

Traffic injuries are the leading cause of injury-related health loss among Finnish children and young people. Overall, traffic injury mortality has been declining since the 1970s. However, for 15–24 year-olds it has increased between late 1990s and early 2000s²¹. The past decade has also seen a rise in hospitalisation due to road traffic injuries.

Serious accidents can happen to children and young people of all ages, both as passengers and drivers of different kinds of motor vehicles and as pedestrians and cyclists. Future challenges for injury prevention include the suitability of road traffic environments for children and young people, the number of risky vehicles (mopeds, scooters), the use of safety devices, and the risk-taking behaviour and lifestyles of young people.

Objectives

- No child or young person dies or is permanently injured in a road traffic accident.
- The road traffic injury trend among young people should turn to permanent decline from its level in 2007.

Examples of proposed measures

- A **good safety culture** is created in road traffic through a cross-sectoral model that takes into account the risk-taking behaviour among young people.
- **Road traffic environments** are developed by improving the traffic systems near children and young people, by increasing the safety of bicycle and pedestrian traffic, by intensifying the average speed control and electronic surveillance of travel time, and by introducing more road median barriers.
- **The use of safety devices** is promoted (including safety reflectors, bicycle helmets, seat-belts, and child car restraints (CRSs)).
- **Public transport** is developed in order to promote safe travel.
- The equality and long-term nature of **traffic safety education** is ensured, and contents and learning methods are developed for different kinds of environments (including driving lessons) and for professionals.
- **Alcohol- and drug-free road traffic** is promoted through various kinds of measures.
- The safety of **moped drivers** is improved through training and by developing the technical safety of mopeds.

Falls and sports injuries

Falls are the leading cause of injury-related hospitalisation in Finland. Falls become more common as the child becomes more active. Most falls requiring hospital care are sports injuries. Injuries due to falls from one level to another level are more common among children under 13 years of age than with older children. As a phenomenon, fall injuries have received fairly little attention in Finland especially with regard to children and young people.

Objectives

- The number of serious sports injuries and falls among children is reduced.
- The causes of fall-related injuries and their preventive measures are better understood.

Examples of proposed measures

- The safety of children and young people and the means of encouraging them to be physically active are *de facto* adopted as starting points for any municipal plans to design, build, and maintain **environments for children and young people**²².
- Attention is paid to the prevention of sports injuries in the **construction and maintenance of sports facilities**²³ and children, young people, and parents are actively involved in the process.
- **Safety education** for children, young people, and parents addresses fall-related risks at different ages and the ways to prevent them. The knowledge and skills of sports instructors, coaches, and teachers are improved with regard to sports injury prevention and the importance of diversified physical activity²⁴.

Poisonings

Child deaths by poisoning are very rare in Finland, while among 18–24 year-olds poisoning deaths are still relatively common. Children under 5 and adolescents run the greatest risk for hospitalisation due to poisoning.

Poisoning among small children is usually due to medicines or medicine-like substances and household chemicals. In adolescence, the first experiments with alcohol often lead to poisonings. Poisoning deaths among young people are most often the result of exposure to morphine derivatives or psychodysleptic drugs. In international comparison, alcohol plays a major role in poisonings in Finland²⁵. Alcohol causes nearly a third of all poisoning-related emergency room visits among children under 15 and around a half of all hospitalisations of 10–14 year-olds^{26, 27}.

Objectives

- Zero deaths by poisoning among small children.
- A near-zero level is pursued for young people by reducing poisonings due to alcohol and drug use and self-harm.
- Poisonings leading to hospitalisation continue to diminish.

Examples of proposed measures

- It is examined whether **child-proof medicine containers and blister packs** should be made compulsory by law^{15, 25, 28}.
- More **age-specific information** on poisonings is provided in various environments where children of different ages grow up.
- **Unofficial and official control of underage alcohol and drug use** is increased in leisure-time environments and certain activities and areas (e.g. sports events) are made alcohol free.
- More attention is paid to **the connection between young people's poisonings and mental health problems** within service provision and in health education for professionals²⁵.
- **The expertise of the Poison Information Centre** is marketed to professionals²⁵ and parents.

Drownings and water traffic injuries

Finland is called the land of thousand lakes. In effect, there are around 2,000–3,000 public beaches and tens of thousands private beaches in Finland. The promotion of water safety focuses, therefore, on different kinds of natural waterways as the majority of drownings, near-drownings, and water traffic injuries occur there.

Small children are at the greatest risk of drowning. Also, submersion in water leads to a number of hospitalisations annually. Boys and men are at a greater risk of drowning than girls and women. Nearly 70 per cent of all drownings and 50 per cent of all water traffic injuries involve alcohol or drugs.

Objective

Child and youth deaths by drowning are reduced from the level of the early 2000s.

Examples of proposed measures

- **Water safety legislation is specified.** In future everyone in water traffic should *wear* a lifejacket, flotation suit, or lifesuit of the right size²⁹. It is reviewed whether existing guidelines should be made into law with regard to the safety of beaches, swimming pools, and spas and the sufficient number of lifeguards and their retraining¹⁵.
- Lower secondary schools provide **sufficient skills in swimming and in how to escape and rescue from water.**
- Cooperation between NGOs and authorities in **water safety campaigns** is continued and supported.

Suicides and self-harm

Girls attempt suicide more often than boys, but suicide mortality is higher among boys: in 2003–2007, suicide mortality was 12.3 per 100,000 for boys under 25 and 3.9 for girls. Self-harm is more common among girls. In 1992–1996 the project *National Suicide Prevention Strategies in Finland* attained good results in suicide prevention, but work is still needed as in international comparison suicide mortality is high in Finland.

A substantial portion of suicides (over 40 per cent) are committed under the influence of alcohol or drugs – young people are more often intoxicated than adults. Also the socioeconomic background of the parents, single parenthood, and social assistance reciprocity are linked to self-inflicted injuries³⁰. The best indicator for suicide is an earlier attempt³¹ or expression of suicidal thoughts. Risk factors often accumulate and problems may continue for a long time, although even a single setback can trigger a young person to attempting suicide.

Objectives

- By 2025 the number of suicides among young people has decreased to 40 cases per year (as compared to 124 suicide deaths in 2007).
- The noticeable increase in self-harm-related hospitalisation is curbed.

Examples of proposed measures

- The **prevention of mental health problems** is allocated more **resources** and access to care is secured.
- The **knowledge and understanding** among professionals, children, and young people about the promotion and reinforcement of mental health and about problem identification is increased.
- After problems are identified, the daily-life³² of the child or young person is put in order and if necessary the need for more intensive care is charted and a clear care plan is drawn up³³.
- **Committing suicide is made more difficult:** attention to access to prescription drugs and firearms³³.

Injury prevention in different kinds of environments

The environments where children and young people grow up and develop should safeguard them against risks and promote the development of positive safety knowledge, skills, and attitudes. Agreements and legislation highlight the child's right to grow up and develop in a safe and stimulating environment and recognise the child's special need for protection^{1, 34, 35, 36}. A balance between safety and stimulation should be found.

The relationship children and young people have with their living environment varies with age. Small children explore their environments actively, but they do not yet master their environments and their safety depends on adults. The increasing independence in youth adds to the variety in their environments and the role of youth cultures and lifestyles grows more important. Age has also to do with the kinds of environments where children and young people spend their time in, which in its turn reflects on the prevalence of injuries in different environments (see Figure 5). The hospital discharge register is, at present, only indicative with regard to data on the location of injury as that information is not yet recorded actively enough in the register.

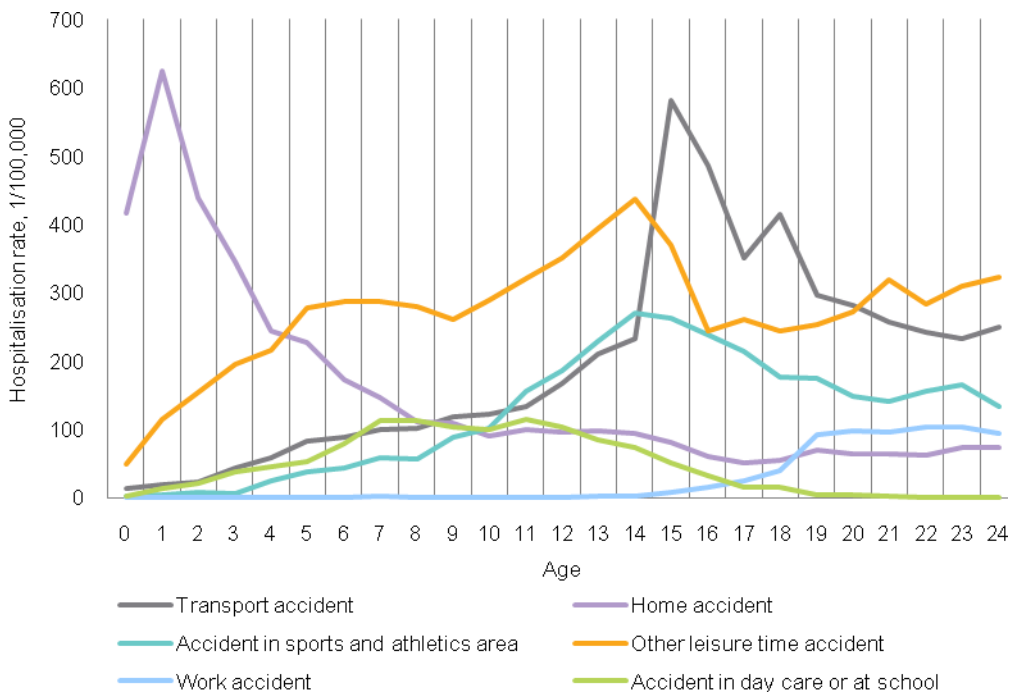


Figure 5. Unintentional injuries requiring hospitalisation among 0–24 year-olds in different environments (1 per 100,000 inpatient periods) in 2005–2007¹⁴.

Home

For a developing child, a safe home environment is of utmost importance, and that is primarily the responsibility of the child's parents and other adults responsible for the child. It has been noted that interventions targeting children's parents reduce injuries in childhood³⁷. Most injuries among children under the age of 5 take place at home. For older children, the share of home injuries decreases. **Objectives:** *The number of hospitalisations due to injuries at home decreases. Knowledge on injuries at home and on how to prevent them is increased.*

Examples of proposed measures

- **Upbringing and education as well as enhancing safety in home environment:** The importance of a safety culture and safety education at home is emphasised in health care and parents are encouraged to regularly chart the risks at home, act as examples, and acquire first-aid skills. The knowledge of parents as well as sports and toy stores is improved with regard to product safety and risk assessment.
- **Families with special needs:** possibilities to acquire safety devices are improved and families with mental health and substance abuse problems are supported.

Recreational and sports environments

Leisure time plays an increasingly important role for the wellbeing of children and young people. Also, most accidents occur in leisure time. The variety of recreational activities and environments pose challenges to injury prevention. An additional challenge is alcohol and drug use, which increases the injury risk for young people^{38, 39}. **Objectives:** *Increasing numbers of young people choose not to drink or do drugs. Social and emotional skills that reduce risk-taking behaviour are improved.*

Regarding the physical activity of children and young people, daily plays and games in courtyards and in the neighbourhood are being replaced by sports at a specific time of day. Indisputably, physical activity has positive health effects, which are, however, diminished by the increasing prevalence of sports injuries. The total amount of physical activity is at a low level even among young people active in sports clubs, and the result is poorer basic skills in physical activity (motor skills, body management)⁴⁰. At the same time, intensive sports training has gained ground, and young people choose their sport early on, which expose them to higher risk of repetitive strain injuries. Young people also lack the basic skills needed for safe physical exercise and tend to neglect rest, nutrition, and other “maintenance”. **Objective:** *The number of sports injuries decreases.*

Examples of proposed measures

- **Systematic cooperation** between local actors and actors in different fields of injury is increased.
- **Environment that takes children and young people into account:** measures for local planning and construction and the active utilisation of child impact assessment.
- **Modes of activity:** Service providers, especially those relevant to children, young people, and families are instructed to incorporate safety issues as part of their basic activities and management.
- Local authorities **encourage children and young people to take part** in the planning of recreational facilities.
- Models for **sports injury prevention** in schools, educational institutions, and sports clubs are unified and cooperation is increased. The prevention of sports injuries takes into account biological, social, and physical risk factors²⁴. Vocational training of professionals is reformed.
- **Alcohol and drugs:** Reductions in excise duties on alcohol are not targeted at mild alcoholic beverages often consumed by young people. Community-based models to prevent alcohol-related harm are introduced nationally⁴¹.

Mother and child health clinics

A key goal of the mother and child health services is to promote the physical and mental health of children and the wellbeing of families. In Finland, mother and child health services are very popular: only less than 0.2–0.5 per cent of families do not use the services. The child and the family visit the clinic on several occasions during the time most crucial for the child's development. Key working methods include visits to the clinic, family preparation courses, and house calls⁴². Safety education can have an impact on parents' attitudes and behaviours⁴³, and diversified ways of discussing injury prevention in connection with guidance to parents and home visits can reduce the risk of injury for children⁴⁴. **Objectives:** *Injury prevention is discussed in health education taking into account the child's age, development phase, and the whole family. Special attention is paid to families in need of support and to timely allocation of support to those most in need.*

Examples of proposed measures

- Health education in the clinics, during home visits, and family preparation courses provide **information** on the most common child injuries and on how to prevent them.
- The **participation of fathers** is increased by developing service contents and by improving the commitment of the health centre management⁴⁵.
- Health centres follow up actively the situation of **families in need of special support** and develop methods to identify and support such families.
- The injury-related contents of the **training of the staff in mother and child health clinics** are updated if necessary. It is ensured that the staff has access to up-to-date information and material on the prevention of injuries among small children.

Child daycare

In Finland, a majority of the children under the age of 3 are cared for at home, while most of the older children under 7 years of age attend either private or municipal daycare centres or family daycare⁴⁶. Daycare safety is at a good level in Finland. The right to safety is included in the curricula^{47, 48} and it is subject to several acts^{22, 49, 50, 51, 52, 53}. Moreover, a handbook on security planning in daycare gives guidelines for safety measures in daycare⁵⁴. **Objectives:** *Zero tolerance for serious injuries. Safety is incorporated into the assessment and follow-up of quality in daycare.*

Examples of proposed measures

- The management must support and encourage the creation of a **safety culture** by, for example, drafting and regularly updating the security plan, by arranging extension studies on safety for the personnel, and by following up the prevalence of injuries in the unit.
- Safety issues as well as the injuries and violence in daycare units are included as a **quality indicator** for daycare and are subject to monitoring.
- **Material and methods** enhancing safety education and psychosocial development of children are developed and actively introduced in practice.
- **Cooperation with families** is enhanced: common education goals regarding injury prevention are agreed upon.
- **Adequate resources** need to be guaranteed for day care so that positive development of children is not compromised.

Schools and educational institutions

The legislation on the core curriculum for schools and educational institutions safeguard the pupils's and student's right to a physically, mentally, and socially safe learning environment^{52, 55, 56, 57, 58, 59}. Injuries, however, undermine the experience of a safe learning environment. Studies show that every school year, around every fifth pupil in the 8th and 9th grades (aged 14–16 years) is injured at least once at school in a way that requires a visit to a student nurse or doctor⁶⁰. In primary and secondary schools, safety education is carried out through a set of themes which should be visible in the culture of schools and educational institutions and which should cross barriers between school subjects^{58, 59}. **Objectives:** *A comprehensive model for safety promotion is made national. Systematic surveillance of injuries and violence is established as a practice. Preparedness to safety promotion is improved. Zero tolerance for serious school injuries and bullying is enforced.*

Examples of proposed measures

- **A school culture** that is favourable to safety is created by developing clear safety management practices in municipalities, schools, and educational institutions⁶¹.
- The visibility of injury prevention themes is improved in **school teaching** by increasing teacher training on the issue, by producing teaching material, and by creating operational teaching methods.
- **The impact of the new decree** on maternity and child health clinics, school and student health care and oral health care for children and young people⁶² is assessed with regard to injury themes and sufficient personnel in schools and student health care.
- **Parents' associations** become more active in the promotion of health and safety at school.
- **School yards** are designed so that they take into account safety and stimulating aspects of the yards, and necessary repairs are executed.
- **Moreover**, attention is paid to the safety of breaks, commuting to school and home, lessons, excursions, camps, field trips, before- and after-school activities, and to creating common practices against bullying.

Workplace

On average 258,000 young people aged 15–24 years were employed in 2008, i.e., around 43 per cent of the age group. Death by injury at work is rare among young people. However, young people are, on average, more prone to other injuries at work. 15–24 year-old wage earners had a total of 2,817 work injuries per 100,000 wage earners (compared to 2,582 per 100,000 of all wage earners). The ratio of injuries for young men gives a work injury rate that is 14 per cent higher than for older men⁶³. Work injuries are more common among men than women. Young workers' health and safety is safeguarded by legislation in Finland^{64, 65, 66, 67}. **Objectives:** *Active efforts towards the Zero Injury target are enforced. Workplace safety training is included in the orientation of young workers. Occupational safety lessons in educational institutions are organised on an equal basis nationwide.*

Examples of proposed measures

- Barriers to **compliance with the statutory safety norms** are examined and measures are taken to introduce the norms in the field.
- Better commitment and motivation of **the workplace management** to the systematic organisation of orientation training for young workers is enhanced; national model and guidelines are created for the purpose.
- **A minimum amount of lessons on occupational safety issues** is defined for vocational schools; the lessons in occupational safety take place prior to on-the-job learning, practical training, or the summer job period.
- **Work injuries during vocational studies** are systematically followed up at the level of vocational schools. Also incidents and near-accidents are registered and analysed.
- Attention is paid to the level of safety at workplaces that offer opportunities to get acquainted with working life, practical training, or on-the-job learning.

Defence Forces

An increasing number of European countries have or are giving up compulsory military service. In Finland all 18–59 year-old men are still liable for military service. Accordingly, the Defence Forces reach a significant portion of young men. Around a fifth in every year-group, that is 6,600 men, do not serve in military. Since 1995, even women over 18 have had the opportunity of voluntary military service. The military service is, by and large, safe for the conscripts, and the Defence Forces report that the number of injuries has decreased in the 2000s. The Defence Forces have also carried out projects to promote health and prevent injuries during service. **Objective:** *Cooperation with the Defence Forces is increased in the prevention of injuries and suicides.*

Examples of proposed measures

- The Defence Forces are more actively included in projects to promote youth safety.

Systems and structures supporting injury prevention

Coordination of activities and cooperation

Efficient injury prevention and safety promotion require the input of all key sectors both at the national and the local level and in the third sector⁶⁸. In Finland, the field of actors is at present fragmented, and the modes of cooperation are chiefly based on short-term needs and assignments. This leads easily to a situation where no single actor takes responsibility on, for example, the overall situation with child and youth safety. The fragmented nature of the system has also the effect that prevention and resources have focused on a few sectors.

Injuries as a major public health problem should be more strongly highlighted in different fields and sectors of the society. Cross-sectoral approaches and cooperation play key roles due to the complex nature of the phenomenon.

Examples of proposed measures

- **Leadership:** Each ministry has a clear division of responsibilities in injury prevention, and one ministry takes charge of injury prevention across sectors.
- Local safety planning in municipalities and services for children and young people are developed based on a **cross-sectoral approach**.
- An obligation **to consult children and young people** is included in the safety plans.

Surveillance systems and research

Only reliable, up-to-date, and comprehensive statistics can form the basis for setting targets and for following-up prevention of injuries and health and safety policies. Both national and local information is necessary. In Finland national statistics and registers provide reliable data on unintentional injuries and violence leading to death or hospitalisation. Road traffic injuries and work injuries are followed up through separate statistics systems on road traffic and work injury. Register and statistics material is complemented with separate polls. In addition, there are ongoing development programmes aiming at improving the general surveillance systems for health care and, specifically, the basic information about injury prevention. However, Finland has no long-lasting tradition of academic research in the field and no established widespread research collaboration on injury and violence prevention.

Examples of proposed measures

- Surveillance systems are developed so as to better serve injury prevention professionals at the **national, regional, and local levels**. Development work pays particular attention to the specific nature of child and youth injuries.
- **Unintentional injuries and violence are increasingly followed up** in daycare, schools, and educational institutions as well as in specialised medical care and primary health care.
- **Networking of injury researchers** is promoted, training for researchers in the field is developed nationally, and international cooperation is increased.

Communication and training for professionals

The level of preparedness and know-how among professionals and citizens with regard to the prevention of injuries and violence forms the basis for preventive measures. Safety promotion and injury prevention among children and young people must be based on reliable research and evidence-based preventive measures. Information on the latest research results and preventive measures must be available to those who need them in their work or who work with children, young people, and families. The extent of the target group, the spread of basic training between a number of training institutions, and the multiple ways of organising continuing education must be considered when injury prevention training is designed for professionals in different fields.

Examples of proposed measures

- It is charted to what extent injury prevention issues are included in the **training of professionals** working with children and young people or in fields related to injury prevention in general.
- **More training on injury and violence prevention** (such as identifying borderline cases between injury and violence) is introduced and training materials are developed.
- **National safety campaigns** focus now and then on children and young people.

Implementation and follow-up of the action plan

When the action plan is implemented, the input of all the key actors is important, which highlights the importance of the extensive cooperation that started during the drafting phase. The National Institute for Health and Welfare (THL) coordinates the implementation and follow-up of the action plan. An extensive structure of cooperation and implementation is created for the practical introduction of measures and for the follow-up of the action plan. Young people are actively involved in the process. A forum focusing on the prevention of child and youth injuries follows up the implementation. The forum convenes every year, bringing together actors in the field of injury prevention as well as representatives for children and young people. Moreover, the progress of the action plan implementation is reported through the THL Injury Portal.

References

- ¹ Convention on the Rights of the Child (1989). A/RES/44/25, United Nations (20.11.1989).
- ² COM (2006a): Communication from the Commission to the European Parliament and the Council: On actions for a Safer Europe. Commission of the European Communities: Brussels.
- ³ COM (2006b): Council recommendation on the Prevention of Injury and the Promotion of Safety. 2006/329. Commission of the European Communities: Brussels.
- ⁴ UN General Assembly (2005): Improving global road safety. RES/60/5.
- ⁵ World Health Assembly (2003): Implementing the recommendations of the World report on violence and health. WHA56.24: Agenda item 14.15.
- ⁶ WHO Regional Committee (2004): Resolution on Children's Environment and Health Action Plan for Europe. Fourth Ministerial Conference on Environment and Health: Budapest.
- ⁷ WHO Regional Committee for Europe (2005): Injuries in the WHO European Region: Burden, challenges and policy response. EUR/RC55/10. World Health Organization.
- ⁸ Licari L, Nemer L & Tamburlini G (2005): Children's Health and Environment. Developing action plans. World Health Organisation: Copenhagen.
- ⁹ Erkkola M, Fogelhom M, Huuskonen M S, Komulainen H, Korhonen M, Leino T, Nevalainen A, Paile W, Pekkanen J, Sala E, Salonen R O, Suni J, Taskinen S, Tuomisto J, Vartiainen T & Viluksela M (2007): Children's Environment and Health. Publications of the National Public Health Institute B11: Kuopio. [Publication in Finnish, abstract in English].
- ¹⁰ MacKay M & Vincenten J (2007): Action Planning for Child Safety: a strategic and coordinated approach to reducing the number one cause of death for children in Europe. European Child Safety Alliance, Eurosafe: Amsterdam.
- ¹¹ Löwe U (2007): A Guide for initiating national action on adolescents and injury prevention in Europe. KfV: Vienna.
- ¹² Parkkari J, Mattila V, Niemi S & Kannus P (2003): Injury-related Deaths among Finnish Children, 1971–2001. JAMA. 289(6):702–703
- ¹³ Mattila VM, Parkkari J, Niemi S & Kannus P (2005): Injury-related deaths among Finnish adolescents in 1971–2002. Injury. Sep;36(9):1016–1021.
- ¹⁴ National Institute for Health and Welfare (THL): Accidents and Injuries Database (data available in 2008 from Statistics Finland Statistics on causes of death and THL's Hospital Discharge Register).
- ¹⁵ MacKay M & Vincenten J (2009): Child Safety Report Card 2009 – Finland. European Child Safety Alliance, EuroSafe: Amsterdam.
- ¹⁶ Markkula J & Råback M (2009): Lasten tapaturmat. [Unintentional injuries among children]. In Tiirikainen K (ed.): Tapaturmat Suomessa. [Unintentional injuries in Finland]. KTL, Edita: Helsinki.
- ¹⁷ Sethi D, Towner E, Vincenten J, Segui-Gomez M & Racioppi F (2008): European Report on Child Injury Prevention. World Health Organization: Rome.
- ¹⁸ Thomas J, Kavanagh J, Tucker H, Burchett H, Tripney J & Oakley A (2007): Accidental injury, risktaking behaviour and the social circumstances in which young people live: a systematic review. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London: London.
- ¹⁹ Impinen A, Lunetta P & Lounamaa A (2008): Injury Deaths and Alcohol in Finland 1987–2006. Publications of the National Public Health Institute B 11: Helsinki. [Publication in Finnish, abstract in English].
- ²⁰ Statistics Finland Statistics on causes of death: deaths due to unintentional and intentiona linjurien among 15–24 year-olds in 1998–2007.
- ²¹ Peltola H & Aittoniemi E (2008): Traffic safety compared to the safety of other human activities 2004–2006. Publications of the Ministry of Transport and Communications 38. [Publication in Finnish, abstract in English].
- ²² Act on the safety of consumer products and services (75/2004).
- ²³ Land Use and Building Act (132/1999).
- ²⁴ UKK-Institute website on Healthy Athlete Program: <http://www.terveiliikkuja.fi/index.php?id=159>.
- ²⁵ Kivistö J (2009): Poisonings in Finnish Children. Acta Universitatis Tamperensis 1378: Tampere.
- ²⁶ Kivistö JE, Mattila VM, Arvola T, Paavola M, Parkkari J (2008a): Secular trends in poisonings leading to hospital admission among Finnish children and adolescents between 1971 and 2005. J Pediatr.; 153:820–824.
- ²⁷ Kivistö JE, Arvola T, Parkkari J, Mattila VM (2008b): Paediatric poisonings treated in one Finnish main university hospital between 2002 and 2006. Acta Paediatr.; 97:790–794.
- ²⁸ Michael JB & Sztajnkrzyer MD (2004): Deadly pediatric poisons: nine common agents that kill at low doses. Emerg Med Clin North Am.; 22:1019–1050.
- ²⁹ Vesiliikenneasetus (124/1997) [Decree on Water Traffic].
- ³⁰ Reimers A & Laflamme L (2006): The neighbourhood socio-demographic context of teenage girls' deliberate self-harm. International Journal of Injury Control and Safety Promotion 13:4, 227–233.
- ³¹ Pelkonen M & Martunen M (2003): Child and adolescent suicide: epidemiology, risk factors, and approaches to prevention. Paediatr Drugs 5:4, 243–265.
- ³² Ministry of Social Affairs and Health (2009): Plan for mental health and substance abuse work. Proposals of the Mieli 2009 working group to develop mental health and substance abuse work until 2015. Reports of the Ministry of Social Affairs and Health 3: Helsinki. [Publication in Finnish, abstract in English].
- ³³ School Shooting Investigation Commission, Petäjaniemi T & Valonen K (2009): Jokela School Shooting on 7 November 2007 – Report of the Investigation Commission. Ministry of Justice Publications 2. [Publication in Finnish, abstract in English].
- ³⁴ The Constitution of Finland (731/1999).
- ³⁵ Child Welfare Act (417/2007).
- ³⁶ Nuorisolaki (72/2006) [Youth Act].
- ³⁷ Kendrick D, Barlow J, Hampshire A, Stewart-Brown S & Polnay I (2008): Parenting interventions and the prevention of unintentional injuries in childhood: systematic review and meta-analysis. Child: care, health and development 34:5, 682–695.
- ³⁸ Mattila V (2005): Injuries and Their Risk Factors in Finnish Adolescents. Acta Universitatis Tamperensis 1085: Tampere.
- ³⁹ Kumpula H & Paavola M (2008): Injuries and risk-taking among young people in Europe – The European Situation Analysis. EU-project AdRisk, KTL: Helsinki.
- ⁴⁰ Hakkarainen H (ed.) (2008): Lasten ja nuorten fyysis-motorinen harjoittelu. Nuori Suomi ry, Suomen Olympiakomitea, Suomen Valmentajat.
- ⁴¹ Holmila M, Warpenius K, Warsell L, Kesänen M & Tamminen I (2009): Local Alcohol Policy. Final Report of the PAKKA Project. National Institute for Health and Welfare, Report 5: Helsinki. [Publication in Finnish, abstract in English].

- ⁴² Hakulinen-Viitanen T, Pelkonen M, Saaristo V, Hastrup A & Rimpelä M (2008): Maternity and Child Health Clinic Activities 2007. Results and Development of Monitoring. STAKES, Reports 26: Helsinki. [Publication in Finnish, abstract in English].
- ⁴³ Lund J & Aarø LE (2004): Accident prevention. Presentation of a model placing emphasis on human, structural and cultural factors. *Safety Science* 42: 271–324.
- ⁴⁴ Kendrick D, Barlow J, Hampshire A, Polnay L & Stewart-Brown S (2009): Parenting interventions for the prevention of unintentional injuries in childhood (Review). The Cochrane collaboration: The Cochrane Library, issue 1.
- ⁴⁵ Ministry of Social Affairs and Health (2008): Support for fathers and fatherhood at maternity and child health clinics. Reports of the Ministry of Social Affairs and Health 24: Helsinki. [Publication in Finnish, abstract in English].
- ⁴⁶ Statistics Finland (2007): Statistics on finances of municipalities / joint municipal boards.
- ⁴⁷ Stakes (2005): Varhaiskasvatussuunnitelman perusteet. [Core curriculum on early childhood education and care]. *Stakes Handbooks* 56: 2003/2005, 2nd revised edition: Saarijärvi.
- ⁴⁸ Finnish National Board of Education (2000): Esiopetuksen opetussuunnitelman perusteet 2000. [Core curriculum for pre-school education 2000]. Finnish National Board of Education: Helsinki.
- ⁴⁹ Laki lasten päivähoidosta (36/1973) [Children's Day Care Act].
- ⁵⁰ Päivähoitoasetus (239/1973) [Children's Day Care Decree].
- ⁵¹ Laki yksityisten sosiaalipalvelujen valvonnasta (603/1996) [Act on the Supervision of Private Social Services].
- ⁵² Rescue Act (468/2003).
- ⁵³ Health Protection Act (763/1994).
- ⁵⁴ Saarsalmi O (ed.) (2008): Päivähoidon turvallisuussuunnittelu. [Security planning in daycare]. Handbook 71, Stakes and Ministry of Social affairs and Health: Vaajakoski.
- ⁵⁵ Basic Education Act (628/1998).
- ⁵⁶ Lukiolaki (629/1998) [General Upper Secondary Education Act].
- ⁵⁷ Ammatillisesta koulutuksesta annettu laki (630/1998) [Vocational education and Training Act].
- ⁵⁸ Finnish National Board of Education (2004): Perusopetuksen opetussuunnitelman perusteet. Määräys 1–3/011/2004. [Core curriculum for basic education. Ordination 1–3/011/2004]. Finnish National Board of Education: Vammala.
- ⁵⁹ Finnish National Board of Education (2003): Lukion opetussuunnitelman perusteet. Määräys 33/011/2003. [Core curriculum for general upper secondary education. Ordination 33/011/2003]. Finnish National Board of Education: Vammala.
- ⁶⁰ Website of School Health Promotion Study: Results from years 2007 and 2008. National Institute for Health and Welfare (THL).
- ⁶¹ Paavonheimo R (2008): Selvitys lasten tapaturmien ehkäisystä. Lasten turvaksi -hanke 2007–2009. [Study on injury prevention among children. For Safety of Children –project 2007–2009]. Mannerheim League for Child Welfare: Helsinki.
- ⁶² Asetus neuvolatoiminnasta, koulu- ja opiskeluterveydenhuollosta sekä lasten ja nuorten ehkäisevästä suun terveydenhuollosta (380/2009) [Decree on maternity and child welfare clinics, school and student health services and preventive oral health care for children and young people].
- ⁶³ Statistics Finland (2008): Työtapaturmat Suomessa vuonna 2006. Työmarkkinat 2008. [Work-related injuries in Finland in 2006. Labour Market 2008.]
- ⁶⁴ Young Workers' Act (998/1993).
- ⁶⁵ Valtioneuvoston asetus nuorille työntekijöille erityisen haitallisista ja vaarallisista töistä (475/2006) [Government Decree on work particularly harmful and dangerous for young workers].
- ⁶⁶ Sosiaali- ja terveysministeriön asetus nuorille työntekijöille vaarallisten töiden esimerkkiluettelosta (128/2002) [Decree of the Ministry of Social Affairs and Health on a list of examples of work that is dangerous for young workers].
- ⁶⁷ Työministeriön päätös nuorille sopivista kevyistä töistä (1431/1993) [Decision of the Ministry of Labour on light work suitable for young people].
- ⁶⁸ Sethi D, Racioppi F, Baumgarten I & Vida P (2006): Injuries and Violence in Europe: Why they matter and what can be done. Violence and Injury Prevention, WHO European Centre for Environment and Health, WHO Regional Office for Europe: Rome.