



# Policies to reduce unintentional injuries from falls, drowning, poisoning, fires and choking in children and adolescents

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## Extent to which 12 policies to reduce unintentional injuries are implemented

This fact sheet gives a comparative assessment of national policies on unintentional injuries (excluding road traffic injuries (RTIs)) based on responses to the ENHIS-2 survey of 23 countries in the WHO European Region. The indicator is defined as a score indicating the extent to which different policies are implemented. The results are interpreted in the context of public health and policy implications, followed by an assessment of the situation in the WHO European Region.

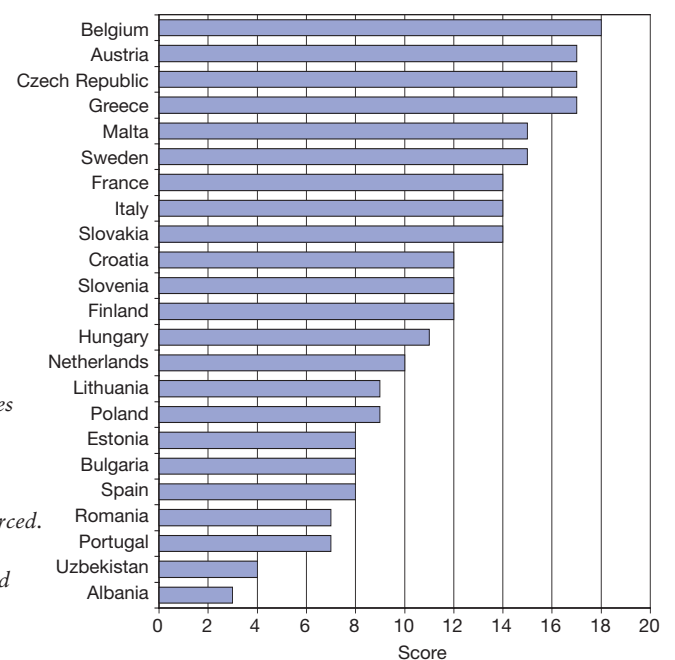
### KEY MESSAGE

☹ National policy efforts in the Region to reduce unintentional injuries in children and adolescents are moderate as measured by the indicator scores, i.e. the level of political commitment to reduce and prevent such injuries. All reporting countries have some policies but there is no consistent pattern and the level of implementation varies between them. The ultimate impact of policy measures can only be assessed through health outcome indicators, particularly mortality and morbidity data.

### RATIONALE

Unintentional injuries from falls, drowning, poisoning, fires and choking constitute a major cause of morbidity and mortality in children and adolescents. Protective measures can reduce this and the adoption and enforcement of adequate legislation and standards are likely to increase the effectiveness of such measures. This action indicator gives a snapshot of efforts to reduce unintentional injuries in children and adolescents, focusing on 12 policies considered effective in reducing the frequency and severity of unintentional injuries.

**Fig. 1. Degree of implementation of 12 national policies aimed at the reduction of unintentional injuries in selected countries, 2006**



*Note. See below under Description of data. The total score for degree of implementation is the sum of the scores for each policy:  
0 = no policy;  
1 = partly implemented or enforced;  
2 = substantially implemented or enforced.*

*Source: ENHIS-2 project countries and countries volunteering data.*

**Table 1. Proportion of countries implementing and enforcing 12 policies for preventing and reducing unintentional injuries across reporting countries, by mechanism of injury, 2006**

Mechanism of Injury	Key policies for preventing non-traffic related accidents	Proportion of countries implementing and enforcing the policy*
Drowning	Barrier fencing required for public pools	Low
	Barrier fencing required for private (domestic) pools	Low
	Water safety education (e.g. swimming lessons) compulsory in the school curriculum	Medium
Falls	Playground equipment and landing surfaces to meet safety standards	High
Burns and scalds (fires)	Safe pre-set temperature (54°C) mandatory for all water heaters	Low
	Building codes requiring working smoke detectors in all dwellings	Low
	Sale of fireworks to children under 18 years of age prohibited	High
Poisoning	Child-resistant packaging mandatory for pharmaceuticals	Low
	Child-resistant packaging mandatory for non-pharmaceutical products with the potential to poison or cause corrosive injuries (e.g. household cleaners)	High
Choking and suffocation	Informative warning labels mandatory on products to prevent choking, suffocation and strangulation	High
	Use of inedible materials prohibited in food products	High
	Use of drawstrings in children's clothing prohibited	Low

\* The proportion of countries was calculated for those scoring 2 for a given policy.

The percentages are grouped as: low = <50% of countries, medium = 50–69% of countries, high ≥ 70% of countries.

Source: ENHIS-2 project countries and countries volunteering data.

## PRESENTATION OF DATA

Figure 1 shows the total score for implementation of the 12 policies in the reporting countries. A higher index reflects wider scope and comprehensiveness of the policies.

Table 1 shows the proportion of the countries surveyed which have implemented and enforced each of the policies to a high (score of 2), medium or low degree. Policies that are most frequently implemented and enforced relate to (i) child-resistant packaging of non-pharmaceutical products with the potential to poison or cause corrosive injuries and (ii) prohibition on the sale of fireworks to children. Those least often implemented include legislation on child-resistant packaging of pharmaceuticals, working smoke detectors in all dwellings, a safe pre-set temperature for water heaters, barrier fencing for private and public pools, and the use of drawstrings in children's clothing.

## HEALTH – ENVIRONMENT CONTEXT

A review of the health and environmental context is provided in ENHIS-2 fact sheet 2.2 on mortality in children and adolescents from unintentional injuries (falls, drowning, fires and poisoning) (1). In brief, unintentional injuries cause a considerable burden of illness

in children and young people and are strongly linked to environmental conditions in the home and in recreational areas. The rates are particularly high among children and adolescents from poor or minority group backgrounds, which may be due to factors including: less awareness (or knowledge) about, or income available for the purchase of, safety devices such as smoke detectors; greater likelihood of living in older and sub-standard housing without proper play areas; and less supervision, with parents possibly not being able to afford to stay at home or pay for child care (2).

The number and severity of injuries in children can be greatly reduced. The policies in this indicator are recognized as effective measures to reduce injuries, particularly when linked to environmental/product modification and awareness campaigns (3,4).

## POLICY RELEVANCE AND CONTEXT

In 2004, the Fourth Ministerial Conference on Environment and Health adopted the Children's Health and Environment Action Plan for Europe, which includes four regional priority goals to reduce the burden of environment-related diseases in children. One of the goals (RPGII) aims at reducing mortality and morbidity from injuries, including from RTIs, and at the provision of

safe conditions which also facilitate more physical activity among children (5).

In the context of injury prevention, the WHO Regional Committee for Europe has adopted resolution RC55/R9 urging Member States: (a) to give high priority to the prevention of violence and unintentional injury by developing national action plans; (b) to develop injury surveillance; (c) to strengthen their technical and institutional capacities to address the issue of injuries, both in terms of prevention and along the whole continuum of trauma care; (d) to promote research on effective intervention measures and the implementation of evidence-based approaches; and (e) to promote the dissemination and sharing of experience in developing and implementing policies and action to reduce the burden of injury across the Region (6).

The European Union (EU) has introduced legislation to prevent unintentional injuries to children arising from unsafe products and equipment, food and clothing. The General Product Safety Directive creates a general obligation to place only safe products on the market. Some key product groups, such as toys, electrical and gas appliances and personal protective equipment are covered by specific Directives, such as Directive 88/378/EEC on the safety of toys for children aged under 36 months. Voluntary European standards specify technical requirements, such as for the construction, installation and maintenance of playground equipment and for the removal of drawstrings in children's clothing. Children

are protected from unintentional injuries from poisoning by Directive 67/548/EEC regulating the packaging and labelling of dangerous substances and EU Food Law 178/2002, which lays down the general food requirements (7).

Moreover, within the EU, a number of policy framework documents focus on injury prevention. Notably, the European Commission adopted the Communication on Actions for a Safer Europe in May 2006 (8). Following this, Council Recommendation on the prevention of injury and the promotion of safety was adopted, which recommends member states to: (i) develop a national injury surveillance and reporting system; (ii) set up national plans for preventing accidents and injuries by initiating interdepartmental cooperation; and (iii) ensure that injury prevention and safety promotion is introduced in a systematic way in the vocational training of health care professionals (9). The Injury Prevention Programme was established in 1999 and has been part of the Public Health Programme of the Directorate-General for Health and Consumer Protection since 2002 (10). A key tool in injury prevention is the EU injury database, which is a hospital-based surveillance system for injuries intended to provide information on morbidity and the circumstances of their occurrence. Further development of the injury database includes the improvement of the international comparability of data collected through it (11). Finally, the European survey on prevention of unintentional injuries has collected national injury data to improve understanding of existing national policy frameworks (12).

## ASSESSMENT

Some specific preventive policies have been implemented in all reporting countries but no country has adopted or is fully implementing and enforcing all 12 policies considered in this indicator: that is, no country scored the maximum of 24. Twelve of the countries have clearly stated and implemented half of the policies (Austria, Belgium, Croatia, the Czech Republic, Finland, France, Greece, Italy, Malta, Slovakia, Slovenia and Sweden). There are wide variations in this area.

There are five main mechanisms of injury: drowning, falls, burns and scalds (fires), poisoning, and choking and suffocation. The degree of policy implementation between and within each injury mechanism varies widely: some countries are fully implementing policies only recently adopted, while other policies

that were formulated and adopted years ago are not yet being enforced. For example, Belgium is fully enforcing the requirement for barrier fencing for public pools, for which the legislation was adopted during the last ten years, while in Albania this legislation is only being partially implemented even though it was adopted in 1989.

This indicator provides information on the level of policy attention given to unintentional injuries rather than to the impact on health of those policies. The final outcome of policy implementation should be assessed in terms of reduced mortality and morbidity (as in fact sheet 2.2 which recognizes accidental drowning and submersion and accidental poisoning as major causes of death from unintentional injuries). These health findings are not noticeable with this policy indicator: no consistent trend regarding the lack of preventive policies on drowning and poisoning is marked.

## DATA UNDERLYING THE INDICATOR

### Data source

Experts working in environmental health and public health institutions dealing with safety policies in the countries.

### Description of data

This indicator was developed in collaboration with the Child Safety Action Plan, a project of the European Child Safety Alliance (EUROSAFE). The 12 policies under scrutiny are:

1. legislation requiring barrier fencing for public pools;
2. legislation requiring barrier fencing for private (domestic) pools;
3. policy making water safety education (for example, swimming lessons) a compulsory part of the school curriculum;
4. policy requiring playground equipment and landing surfaces to meet safety standards;
5. legislation requiring a safe pre-set temperature (54°C) for all water heaters;
6. building codes requiring working smoke detectors in all dwellings;
7. legislation prohibiting the sale of fireworks to children under 18 years of age;
8. legislation requiring child-resistant packaging of pharmaceuticals;
9. legislation requiring child-resistant packaging of non-pharmaceuticals with potential to poison or cause corrosive injuries (such as household cleaners);

10. legislation requiring informative warning labels on products to prevent choking, suffocation and strangulation;
11. legislation prohibiting the use of inedible materials in food products;
12. legislation prohibiting the use of drawstrings in children's clothing.

The underlying data and descriptive information on existence and level of implementation and enforcement of the 12 policies are given in the ENHIS-2 database.

### Method of calculating the indicator

This indicator is computed as the sum of scores given to 12 policies. The score for each policy has a range from 0 to 2: 0 = no policy, 1 = existing legislation, clearly stated and partially implemented or enforced, 2 = existing legislation, clearly stated and substantially implemented or enforced. The maximum score is 24.

### Geographical coverage

Albania, Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Estonia, Finland, France, Greece, Hungary, Italy, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and Uzbekistan.

### Period of coverage

Snapshot in 2006.

### Data quality

The total score of this composite policy indicator needs to be interpreted with care. Countries with the same indicator score do not necessarily have the same policies and the same level of implementation. In addition, since the definitions are semi-quantitative, it is difficult to get a precise assessment of the actual implementation and coverage of the programmes. The administrative arrangements in countries may also have some effect (for example, whether there is a federal or unitary administration). As a result of these limitations it is important to examine each of the indicator's components in addition to the overall score when interpreting results and drawing conclusions. Direct comparisons of scores between countries without examination of the individual components are discouraged.

It would be useful to continue monitoring developments in EU policy framework documents and consequent national policy responses. A more objective measurement of implementation would be helpful, since the policy data in this fact sheet reflect the broad and subjective assessment of representative experts from each participating country. In addition, more structured assessments, focusing on specific determinants of implementation and enforcement, would help to make this process more objective.

## References

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### Further information

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### Good practice websites:

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