Safety of consumer products and services

Purpose

The purpose of this policy briefing is to give insight into injury risks related to products and services provided to consumers. It also presents the evidence-base as to appropriate regulatory measures for ensuring a high level of safety of products and services marketed to consumers.

This policy briefing has been prepared for decision makers responsible for consumer protection and public health as well as for decision makers in service industry such as in recreation and sports, education, and community services, both at national and at local level.

Key messages in this policy briefing are:

- about half of all fatal injuries and three quarters of all hospital treated injuries occur in home and leisure time;
- the vast majority of these accidents are related to consumer products and services;
- fires, electric current, or mechanical force of machinery are a major cause of fatal injuries, while non-fatal injuries are often related to building materials, sports equipment and domestic products;
- children, young adults and older people are among the most affected risk groups;
- national and EU-legislation - in particular the General Product Safety Directive (GPSD) - has resulted in a considerable body of regulations with regards to consumer product safety and in more systematic market surveillance;
- however, much more progress can be made in enhanced enforcement exchange among EU members and in legal provisions for the Commission to intervene more rapidly in case of emergencies;
- as to the safety of services - like on fairgrounds, in hotels or in recreational water and aqua parcs - there is an apparent loophole in European legislation;
- the provision of services should be regulated under similar requirements as consumer products and therefore be included as an integral component of the GPSD.

Facts and figures

The European Union and the member states are promoting the highest level of safety to be offered to European citizens, in the interest of health and safety of European consumers (articles 153 and 95 of the Treaty establishing the European Community). A wide range of sectoral legislation is in place that underpin the basic principles for ensuring safety of products and services provided to consumers.

Nevertheless, accidents involving consumer products and services do occur, resulting in fatal accidents and injuries that need medical treatment. The 'home and leisure' domain (which includes sports) is responsible for about half of all fatal injuries and three quarters of all hospital treated injuries, i.e. more than road traffic and occupational injuries together. This is the domain where the vast majority of accidents related to consumer products and services do occur.

More than 90% of all product related health risks are arising from injuries and accidents related to unsafe consumer products and services. However, other product related health risks such as the risk to develop allergies or cancer receive the major part of policy attention and research funding.

It is evident that effective and consistent implementation of safety requires a systematic and coherent assessment of the safety of consumer products and services. Such assessments
are usually based on indicators as to the severity of hazards that are intrinsic to the product or service, and the probability of consumers getting injured through such hazards. Amongst other sources, the EU Injury Database (IDB) provides valuable evidence for both of these aspects of risk assessment. The EU IDB provides basic information about the frequency of occurrence and the main circumstances of product related injuries and also on services related injuries.

**Fatal Injuries**
Almost 60% of fatal ‘home injuries’ (defined by ICD-10 place of occurrence code) are caused by mechanisms that are relevant for product safety: e.g. fires, electric current, tools, or hot tap water (Figure 1). This proportion of product safety relevant causes in ‘home injuries’ relates to an estimated 5,700 product related fatalities in the EU each year.

**Figure 1** Product related injury mechanisms in fatal home injuries in the EU-27

Older people (aged 60 and above) are disproportionately affected by injuries related to fires and also by hot water/liquids; small children on the other hand are disproportionately affected by accidental suffocation. 6% of fatalities in home fires are caused by ignition or melting of clothing, or highly flammable material.

**Non-Fatal Injuries**
As said, home and leisure accidents (HLA; including sports) are causing 74% of all hospital treated injuries in the EU. Among children and older people this share is even higher, as in general also these age groups have the highest incidence rates in home and leisure accidents (Figure 2). For children and young adults, the school and sports environments are important additional domains with an increased risk of injury due to deficiency in safety of products and/or services provided.
About 50% of the HLA segment are related to products (Figure 3): e.g. floor tiles (included in category 'buildings and fittings'), chainsaws ('tools'), bunk beds ('furniture'), or ride-on lawn-mowers ('mobile machinery').
As to the safety of services and taking into account the place of occurrence categories of the EU IDB, 17% of the ‘home, leisure and sports’ injuries seem to be clearly related to the provision of a service (Figure 4): e.g. injuries in homes for older people (category ‘residential institution’), in public swimming pools (‘sports area’), hotels/restaurant (‘commercial area’), or amusement park (‘recreational area’).

**Figure 4** Service related home and leisure injuries (including sports) by service area (place of occurrence)

![Figure 4](image)

Source: EU IDB, 2005-2007

**Good practices in regulating safety of consumer products**

The European Treaty gives every EU-citizen the right to be protected against threats to their health, safety and economic well-being. In an increasingly globalised economy, domestic product safety is also dependent on the effectiveness of international arrangements on product safety. Bilateral and multilateral agreements are a key element for maintaining high product safety internationally. The commitment of countries and the EU to reducing technical barriers to trade has led to a general harmonisation of standards, facilitating greater international trade while maintaining high levels of product safety.

In the past two decades, a substantial set EU regulations and standards has been developed and implemented in the EU, ensuring a more harmonised approach in Member states as to regulations, standards and enforcement practices related to the safety of products. The General Product safety Directive (GPSD) is in this respect the cornerstone for EU-region product safety legislation and enforcement, and provides also the basic framework for using technical standards as references for more detailed technical requirements.

**General Product Safety Directive**

The GPSD imposes a general safety requirement on any product put on the market for consumers or likely to be used by them, including all products that provide a service. The GPSD is intended to ensure a high level of product safety throughout the EU for consumer
products that are not covered by specific sector legislation (e.g. toys, chemicals, cosmetics, machinery). The Directive also complements the provisions of sector legislation which do not cover certain matters, for instance in relation to producers' obligations and the authorities' powers and tasks. The GPSD is at present fully implemented in all EU-member states' national legislations on consumer protection.

A 'safe product' is one which poses no threat or only a reduced threat in accordance with the nature of its use and which is acceptable in view of maintaining a high level of consumer protection. A product is deemed safe once it conforms to the specific Community provisions governing its safety. In the absence of such provisions, the product must comply with the specific national regulations of the Member State in which it is being marketed or sold, or with the voluntary national standards which transpose the European standards.

Manufacturers and distributors must put on the market products which comply with the general safety requirement. In addition, they must take the necessary measures to avoid any injury risk (e.g. withdraw products from the market, inform consumers and recall products which have already been supplied to consumers).

If the manufacturers or the distributors discover that a product is dangerous, they must notify the competent authorities and, if necessary, cooperate with them.

The Commission also takes into consideration the general safety requirement when defining mandates for the European standardisation organisations and when publishing European standardisation references in the Official Journal of the European Communities, which must conform to the general safety standard.

Compliance and enforcement
The Member States have the duty to enforce that the manufacturers and the distributors comply with their obligations. They put in place structures which are responsible for monitoring product compliance with the safety requirement and taking the necessary measures as regards risk products (e.g. prohibiting such products being marketed). Furthermore, they set out rules to punish offenders and ensure that consumers benefit from a system which investigates complaints.

The Commission has created a European coordinating network between the competent product safety authorities of the Member States in order to monitor the vast market of consumer products, to reinforce cooperation between these authorities and to promote the exchange of information and expertise.

The Commission also manages the Rapid Information System RAPEX and can adopt 'emergency measures' in cooperation with Member States in line with Article 13 of the GPSD. If a product poses a serious threat calling for quick action, the Member State involved immediately informs the Commission on the details of the product (including risk assessment) and the measures taken via the RAPEX system, a system for the rapid exchange of information between the Member States and the Commission.
Challenges for consumer product safety

In spite of all harmonisation efforts, countries are still not always accepting agreed international standards of safety, and still have inconsistent sanction regimes for breaches of product safety law. Therefore, product safety regimes in countries should be made more consistent and fully in line with EU-regulations.

The EU-regulatory framework should also be made more effective, by allowing quick market interventions co-ordinated at European level. The GPSD should also allow for the establishment of product-specific rules without limitations, either in terms of content or the period of applicability, as an alternative to standardisation.

Finally, there are quite some deficiencies in the rapid exchange of information through countries and in dialogue across borders on consumer product safety issues, at both the policy and enforcement levels. A more effective market surveillance system should be established through a European co-ordinated framework for market surveillance, which should be geared by an EU-funded statistical system for consumer related accidents and a European consumer complaints clearinghouse.

Box 1: Safety of draw strings

When EU consumers buy clothes for their children, as a principle they should not have to worry about safety risks. A recent EU market surveillance exercise, checked in particular, the safety of children's clothes with cords and drawstrings, with which there can be a risk of strangulation, especially for children up to 7 years. Market surveillance authorities in 11 Member States inspected more than 16,000 such garments between 2008 and 2010, and the results show that 1 in 10 items were in breach of safety requirements under the relevant European standard.

The main aim of the project was to reduce the amount of unsafe children's clothing on the EU market, whether produced in Europe or imported. It resulted in many RAPEX notifications and corrective measures have been taken. The European Commission has received more than 250 RAPEX notifications on dangerous children's clothes from January to August 2009. This compares with approximately 60 notifications in the same period of last year. Presumably, the increase is due to the focus on cords and drawstrings created by the joint action.

It also enabled Member States to gain experience in working together. National authorities will intensify their work to ensure compliance with the relevant safety requirements and to inform and educate economic operators and consumers.


Box 2: Hospital emergency department data as a source for risk assessment

Just like the U.S. emergency department based injury surveillance system (NEISS), the EU IDB provides detailed information on injuries treated in hospital emergency departments. These data are vital for identifying injuries associated with the thousands of different consumer products in the marketplace.

Although there may be still some deficiencies in data quality, timeliness and geographical coverage, the EU IDB - set up is comparable to the U.S. model.

The table to the right gives an example of an injury scenario derived from the EU IDB data elements and narratives. Each of these "accident scenarios" can be further analysed by the demography of the victims and severity of injuries. This illustrates the kind of analysis and EU IDB information can be requested from the EuroSafe Injury Data Services at [https://webgate.ec.europa.eu/idb/](https://webgate.ec.europa.eu/idb/).

<table>
<thead>
<tr>
<th>'Child bicycle' accident scenarios derived from EU IDB data</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falling from bike because of fast, wild driving; sudden breaking</td>
<td>13</td>
</tr>
<tr>
<td>Colliding with another (moving) person/object</td>
<td>6</td>
</tr>
<tr>
<td>Falling over a bike that is lying somewhere on the floor</td>
<td>4</td>
</tr>
<tr>
<td>Falling from bike because of improper ground surfaces</td>
<td>3</td>
</tr>
<tr>
<td>Falling from bike because of inappropriate, broken material</td>
<td>2</td>
</tr>
<tr>
<td>Colliding with a bike which is driven by another person</td>
<td>2</td>
</tr>
<tr>
<td>Injured while cleaning/repairing the bike</td>
<td>2</td>
</tr>
<tr>
<td>Lack of practice</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

Policy briefing: Safety of consumer products and services
Good practices in regulating the safety of services

The service sector accounts for around 70% of GDP in the EU. Services range from consumer directed services such as transport, recreation, tourism and the regulated professions, to business to business services such as consultancy, auditing and data processing. Some specific, consumer directed, services involve risks to the health and physical safety of the consumer, for example due to poor instruction or supervision of organised adventure sports activities or skin damage due improper sun tanning treatments. A recent Eurobarometer survey has indicated that European consumers perceive safety in recreation and tourism to be at a lower level in other countries than in their own homeland.

Piecemeal regulatory approaches

At present, a variety of safety rules for services are in force at national level. However, there is no uniform approach or policy in place on the safety of services within the EU. About half of the Member States have not yet defined ‘safety of services’ as a coherently unified policy category, focusing instead on safety aspects in specific sectors, buildings or locations, or on safety at work. Others have introduced general legislation defining general safety requirements supplemented by sector-specific legislation.

At EU level there is no horizontal legislation on service safety. Although the European Directive on services in the Internal Market recently entered into force, it aims only at improving the access to services across Member States, through the removal of administrative and legal barriers to trade for business. It does not address the safety aspects of services and provides only voluntary measures to ensure quality of services (through the promotion of standards). Only products used in the context of service provision are covered by the GPSD, provided that they are directly operated by consumers. However, this provision is vague and questions remain on whether it really covers any product that consumers use, or come into contact with, in the context of the provision of a service.9

However, a number of existing instruments in various policy areas contribute indirectly to the safety of certain services. In particular, Community legislation harmonising the technical rules for certain professional products is very relevant for the safety of the service in which those products are used. Community legislation has been established for transport safety (air, sea and terrestrial), within the framework of the Treaty provisions on transport policy.

Box 3: Risk assessment with hospital emergency department data

Last year the Product Safety Enforcement Forum Europe (PROSAFE) carried a EU-wide market surveillance out, with financial support from the European Commission. The results and the main conclusions from the survey have been recently reported by PROSAFE. More than 350 locations were inspected and more than 550 sunbeds were investigated. The great majority of these inspections were at service providers (tanning salons, wellness centres, etc) and concentrated on the safety information and advice provided to consumers, including the 18 years age threshold, on the labelling of the sunbeds, the availability of eye protection and the UV-radiation emitted by the sunbeds.

The percentage of artificial tanning service operators that claimed to provide sufficient information on safe use of the sunbeds to their customers varied considerably between the participating MSs and was between 13% and 94%. Similar percentages of the providers of tanning services indicate that they have intake interviews with new customers. People under the age of 18 years were often not refused when entering a studio to use a sunbed. Where proprietors did claim to provide guidance this could generally not be demonstrated.

Checks of 207 sunbeds at service providers on the compliance with the labelling requirements revealed that more than 20% of the sunbeds did not comply and the warning that UV radiation may cause injury was not present on 52% of the sun-beds.

The risks of artificial tanning are not only determined by the way consumers use the sun beds, but also by the amount of UV radiation emitted from the UV-tubes. Of the 84 sun beds that were tested 70 gave EWI values exceeding the limit of 0.3 W/m2 (83.3 %). The European Sunlight Association ESA has been informed about the results and is currently developing a European Code of Conduct for tanning ser-vices, training materials for tanning studios. It also organizes information seminars for stakeholders in cooperation with national associations in the Member States.

Better data needed
Systematic monitoring and data collection on accidents and injuries is limited to a few sectors like transport and health. Data for other sectors are scarce. Moreover, the available information is in general not reliable and detailed enough to identify the precise nature of service provided and risk factors involved. Therefore it is as yet unclear what are the precise risks involved in the respective service sectors and whether it is necessary to harmonise safety rules for services at EU level.

On 1 December 2003 the Council adopted a resolution which mandates Commission action to improve the safety of services for consumers and:
- To support the national policies and measures in order to contribute to their effectiveness and efficiency.
- To ensure that consumers can rely upon a consistent, high level of safety protection throughout the EU.
- To facilitate the information on cross-border services.

The Resolution urges Member States to give an immediate priority to improve the present knowledge base (including injury data) and to report systematically their policies and measures. It is suggested to use European standards for harmonising existing national measures related to specific service sectors or risks. It is proposed to focus on the sectors most relevant for consumers in a cross-border perspective, for example mass-accommodation services like hotels, campings or other tourist facilities as well as related sports and leisure activities, including amusement parks.

Specific areas of EU-interest
In the past few years the Commission has contracted out a number of studies with a view to develop a knowledge base on priority issues as those mentioned in the Council Resolution, in particular on the safety of fairgrounds and amusement parks, fire safety in hotels, and recreational water safety.

Fairgrounds and amusement parks

In the last 20 years, there has been a steady increase in the number of large amusement parks with ever more extreme rides. There are now rides that reach speeds of over 170 km/h, and some with falls of over 100 metres. The number of amusement parks in the EU are estimated at 180 up to 320, depending on the definition, receiving over 300 million visitors per year. The number of accidents at fairgrounds and amusement parks, are estimated at some 19,000 injuries per year. Most of the accidents involve children under the age of 15. (IDB based check with IDC).

At EU-level there is no legislation governing the safety of fairgrounds and amusement rides per se. However, some countries have introduced some sector specific legislation and other countries have promoted non-regulatory guidelines and/ or standards. These measures relate to the design and installation of equipment, operation and use of equipment, maintenance and inspection of equipment and qualification and training of personnel, guidance of and information to visitors, and emergency procedures.

As in other areas of safety concern, staff training and safety communications to visitors need significant improvement. Key stakeholders, such as regulators, industry and consumers, should be involved in measures to upgrade current practices in safety training and safety information provided to costumers.
Fire safety in hotels

On 22 December 1986 the Council adopted a Recommendation on fire safety in hotels. Its purpose was to define minimum safety standards for all hotels in the EU. People staying in hotels across Europe are entitled to adequate protection and to be informed of the extent of that protection. Where existing laws had not been sufficient, Member States were strongly advised to take all appropriate measures to guarantee the safety standards set out in the Recommendation. This could be done by implementing the appropriate technical guidelines set out in the annex to the Recommendation, including requirements for existing hotels as to:

- escape routes available and accessible;
- building structurally stable;
- the use of non-flammable materials;
- the safe operation of technical equipment and appliances;
- existence of alarms, safety instructions and plans of the premises;
- availability of emergency fire-fighting equipment; and
- staff training.

The Recommendation also specifies that compliance with the minimum recommended safety standards is essential for continued operation and that hotels must be subject to regular inspection.

Recreational water safety

Drowning is the second leading cause of injury death to children from infancy to 18 years of age. Water recreation locations have proven to be one of the most common settings for a wide variety of other types of injuries as well. However, most often these injuries are caused not by faulty equipment or unduly dangerous conditions, but rather by inappropriate behaviour of the users. Most injuries are preventable. By using common sense and an understanding of how injuries are caused, prevention measures can be put in place to reduce injuries.

With support of the EC, EuroSafe has established safety guidelines for the water recreation activity or service provided. These guidelines "Protecting children and youths in water recreation" and its recommendations are aimed at people working in the water recreation industry, whether as a hotel manager, a rental provider, or a tour leader.

The recommendations include: checking the risks linked to the water-related area and activity, particularly for vulnerable users such as children; providing the appropriate equipment, such as floatation devices; communicating the risks and hazards clearly; and having well-trained staff and an emergency plan in place. Specific recommendations are also set out for certain water-sports, including snorkelling, scuba diving, sailing, motor-boating and kitesurfing.

The intent is to provide information on hazards and injury risks that are specific to children, and to provide tips and tools to minimise those risks. Implementing good safety practices can save lives, improve business image, and raise profile and reputation to customers.

The guidelines were developed by combining available data, literature, and professional expertise in the area of water recreation. The activities presented were selected based on a combination of their frequency in tourist settings, their real and perceived injury risks, as well as the likelihood of participation by children. They pinpoint aspects of child injury risks which are often overlooked in standard operating plans and safety schemes.
Service safety regulation needed

There is an apparent loophole in European legislation as the safety of consumer services is not fully covered by any EU-regulation. In the GPSD, Article 2 states that the Directive also applies to products used or likely to be used by consumers in the context of providing a service.

However, this provision is vague and questions remain on whether it really covers any product that consumers use, or come into contact with, in the context of the provision of a service. The GPSD neither covers the safety aspects of the installation, operation and maintenance of such equipment or the competences of the personnel, which are important aspects in addressing for instance safety of fairgrounds or of waterslides.

References


Acknowledgements

This policy briefing has been developed as part of the work of the project PHASE (‘Public Health Actions for a Safer Europe’), more specifically its work package 4 (‘Injury information and reporting’). The PHASE project was coordinated by the European Association for Injury Prevention and Safety Promotion (‘EuroSafe’) and co-founded by the European Commission, Executive Agency for Health and Consumers in the framework of the European Public Health Programme 2003-2008 (Grant Agreement 2006123).

This policy briefing has been written by Wim Rogmans, European Association for Injury Prevention and Safety Promotion (EuroSafe, http://www.eurosafe.eu.com/) and has been reviewed by Rupert Kisser & Robert Bauer, Austrian Road Safety Board (KfV).