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Child Product Safety Guide

Potentially dangerous products



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The European Child Safety Alliance is hosted by the Royal Society for the Prevention of Accidents (RoSPA) in Birmingham, England and is a programme of EuroSafe, the European Association for Injury Prevention and Safety Promotion.

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Introduction

Every day children are hurt when interacting with products in their daily environments, even with products made especially for children. For example, annually in the EU 28 Member States approximately 19,000 injuries to children 0-14 years of age involve bunk beds and are serious enough to require a visit to the emergency department.

The purpose of this guide is to explore children's interactions with products and specifically to:

- inform consumers and professionals about the risks that a child encounters with products in and around the home;
- educate consumers and professionals in the purchase of child products;
- educate consumers and professionals regarding safe usage of products potentially dangerous to children;
- provide consumers and professionals with details of the safety standards that have been approved by CEN, the European standards organisation, that specify the safety requirements, tests and test methods for the products referred to in this guide.

Within this guide information on 26 child-related products are detailed to provide comprehensive information to assist parents, caregivers and injury prevention professionals with the reduction of child injuries related to these potentially dangerous products.

How was this information gathered?

The information in this guide was collected in two ways. First, we reviewed relevant literature and available data on child injuries involving products. Injuries and accidents data in Europe were obtained from the RAPEX system - the Rapid Alert System for Non-Food Products of the European Commission, from European Child Safety Alliance Country partners (including non EU Member States such as Israel and Norway) and the European Injury Database (IDB) co-funded under the EU-Health programme and managed by Eurosafe. For more information about the IDB: http://ec.europa.eu/health/data_collection/databases/idb/index_en.htm

To supplement the limited injury data available in Europe for certain products, the United States Consumer Product Safety Commission (CPSC) and Health Canada were also consulted. Second, we contacted key stakeholders and experts in Europe who are involved in product safety for children and asked them to advise on the products to be included and their detailed descriptions (see Acknowledgements section for a complete listing of experts consulted).

Thus, the products included in this guide are based on both evidence-based research as well as professional expertise.

This guide chose to highlight products that met the following criteria:

- products which are highly used by parents and caregivers,
- products which cause either frequent or severe injuries, and
- products which are considered 'safety' products for children, but are widely misused by consumers.

For each product included we present the following information:

- Why the product poses a problem
- How the product can be dangerous for children
- What to look for when buying or prior to using (including European standards when applicable)
- How to use the product safely

European safety standards

Products detailed in this guide are included within the scope of the European Commission's General Product Safety Directive (GPSD) 2001/95/EC. The Directive provides a generic definition of a safe product, which is assessed in accordance with European standards, community technical specifications, codes of good practice, state of the art and the expectations of consumers.

Sector-specific products such as toys have their own Directive. The Toy Safety Directive 2009/48/EC is a new Directive that came into force for Member States on July 20, 2011 and refers to toys as products that are used or intended for use in play by children up to the age of 14 years. The Directive lays down the safety criteria or "essential requirements" which toys must meet during manufacture and before being placed on the market. The safety criteria cover general risks (protection against health hazards or physical injury) and particular risks (physical and mechanical, flammability, chemical properties, and electrical properties).

For more information about the Toy Safety Directive we invite you to please visit the website of the European Commission, Directorate-General for Enterprise and Industry, Factsheet Toy Safety at <http://ec.europa.eu/enterprise/sectors/toys/documents/directives/>.





What is the European Union doing to make products safer for children?

For a number of consumer products, European standards play a crucial role in defining the level of safety to be found on the market. The aim of the European Commission's General Product Safety Directive is to achieve a high level of product safety throughout the EU for consumer products that are not covered by specific legislation (e.g., toys). Products must comply with the definition of a safe product to ensure that only safe products are available on the market. In addition to this basic requirement, producers must inform consumers of the risks associated with the products they supply, take measures to prevent such risks and be able to trace dangerous products. The Directive provides for an alert system (the RAPEX system) between Member States and the Commission in order to ensure national authorities in the Member States are informed quickly of dangerous products shared across markets. A weekly report of dangerous product notifications and recalls is published through the RAPEX system. To view the reports or to report an unsafe product, please visit the Europa website: <http://ec.europa.eu/consumers/safety/rapex/alerts/main/index.cfm?event=main.search>

Regarding toys specifically, the Toy Safety Directive 2009/48/EC was implemented into national legislation in 2011 and the parts of the Directive relating to chemical content came into force in July 2013. According to the Directorate-General for Enterprise and Industry, the Directive achieves high levels of health and safety standards, in particular related to the amounts of certain chemicals that may be contained in materials used for toys. In addition it improves the existing rules for the marketing of toys that are produced in and imported into the EU.

It is essential that the European Commission plays an active role in ensuring that products are safe for children, no matter where they live in the EU. This equity in product safety requires collaboration between the EC, the Member States and the Toy Industry of Europe. In order to better understand the different ways that the European Commission ensures safety in products, here is an overview of terms that are helpful when looking at product safety. ¹

Decision

A decision is a legal instrument of the European Union, which is binding upon those individuals to which it is addressed. Decisions can apply to Member States or individuals. The Council of the European Union can delegate power to make decisions to the European Commission.

Regulation

A regulation is a legislative act of the European Union that becomes immediately enforceable as law in all Member States simultaneously. Regulations are different from directives in that directives are not yet transposed into national law. Regulations can be adopted by means of a variety of legislative procedures depending on their subject matter.

Directive

A directive is a legislative act of the European Union, which requires Member States to achieve a particular result without dictating the means of achieving that result. Directives can be adopted by means of a variety of legislative procedures depending on their subject matter.

Standard

A standard is a technical document designed to be used as a rule, guideline or definition. It is a consensus-built, repeatable way of doing something. Standards are created by bringing together all interested parties such as manufacturers, consumers and regulators of a particular material, product, process or service. All parties benefit from standardisation through increased product safety and quality as well as lower transaction costs and prices. Standards play an important role in the regulation of consumer safety in Europe. A European Standard (EN) automatically becomes a national standard in all National Members. The European Committee for Standardisation, CEN, facilitates this process at the European level. For more information about European standardisation please visit www.cen.eu/cen/.

CE marking

According to the European Commission, CE marking signifies “a marking by which the manufacturer indicates that the product is in conformity with the applicable requirements set out in Community harmonisation legislation providing for its affixing” (Source: Article 2.20 of Regulation (EC) No. 765/2008, 9 July 2008). Thus, CE marking is a legal requirement. It is a message from the manufacturer that a product, such as a toy for example, conforms to the essential requirements of the Toy Safety Directive. Yet there is no obligation requiring manufacturers to ensure independent verification. Two other issues involved in CE marking are that only certain products are required (and allowed) to bear CE Marking, and the problem of falsely-affixed CE Marking. ANEC, the European consumer voice in standardisation, stresses that, “although CE Marking is not intended as a mark of safety or quality for consumers, its appearance on many consumer products (or their packaging) is misleading to consumers.”²

The table on page 8-9 provides the latest European standard for the products in this Guide.

¹ EU law and the balance of competences: A short guide and glossary.

<https://www.gov.uk/eu-law-and-the-balance-of-competences-a-short-guide-and-gloss>

² ANEC, the European Association for the Co-ordination of Consumer Representation in Standardisation. 2013, ANEC leaflet on CE Marking. <http://www.anec.org/attachments/CE%20Marking%20Leaflet%20final.pdf>



Product	Standard
Adult bed	EN 1725:1998 Domestic furniture - Beds and mattresses - Safety requirements and test methods
Baby walker	EN 1273:2005 Child use and care articles - Baby walking frames - Safety requirements and test methods
Bath seat or rings	Decision 2010/9/EU Safety requirements to be met by European standards for bath rings, bathing aids and bath tubs and stands for infants and young children pursuant to Directive 2001/95/EC of the European Parliament and of the Council
Bicycles	EN 14764 for City and Trekking bicycles; EN 14766 for Mountain bicycles; EN 14781 for Racing bicycles and EN 14872 for Bicycles – Accessories for bicycles – Luggage carriers. EN 14765:2008-06 Safety Standards for Bicycles for Young Children
Bunk beds	EN 747-1:2012 Furniture – Bunk beds and high beds – Part 1: Safety, strength and durability requirements
Changing tables	EN 12221-1:2008 Changing units for domestic use – Safety requirements
Child car seats	UNECE Regulation 44 and Regulation 129 restraining devices for child occupants of power-driven vehicles (Child Restraint Systems)
Child gate/ Safety barriers	EN 1930:2011 Child use and care articles - Safety Barriers.
Child sleep wear	EN 14878:2007 Textiles - Burning behaviour of children's nightwear – Specification EN 14682:2007 Safety of children's clothing — Cords and drawstrings on children's clothing — Specifications
Cots (baby/infant beds)	EN 716-1:2008 Furniture – Children's cots and folding cots for domestic use – Part 1: Safety requirements
Fireworks	EN 15947-3:2010 Pyrotechnic articles. Fireworks, Categories 1, 2, and 3. Minimum labelling requirements EN 15947-5:2010 Pyrotechnic articles. Fireworks, Categories 1, 2, and 3. Requirements for construction and performance
Goals for soccer/football or handball	EN 748:2013 Playing field equipment. Football goals. Functional and safety requirements, test methods EN 749:2004 Playing field equipment. Handball goals. Functional and safety requirements, test methods EN 15 312 is EN 15312:2007 Free access multi-sports equipment - Requirements, including safety and test methods.
High chairs	EN 14988-1:2006+A1:2012 Children's high chairs
Lighters: non-child-resistant	EN 13869:2002+A1:2011 Lighters - Child-resistance for lighters - Safety requirements and test methods
Pacifiers/soothers	EN 1400-1:2002 Child use and care articles EN 1400-2:2002 Child use and care articles. Soothers for babies and young children. – Part 2 Mechanical requirements and tests

Product	Standard
Plastic bags	EN 71-1:2011, Clause 6 Packaging, Safety of toys – Part 1: Mechanical and physical properties
Playground equipment	EN 1176-1:2008 Playground equipment and surfacing - Part 1: General safety requirements and test methods EN 1176-7:2008 Playground equipment and surfacing - Part 7: Guidance on installation, inspection, maintenance and operation EN 1177:2008 Impact attenuating playground surfacing - Determination of critical fall height
Playpens	EN 12227:2010 Playpens for domestic use - Safety requirements and test methods
Rattles	EN 71-1:2011 Safety of toys - Part 1: Mechanical and physical properties
Small Parts (magnets, marbles, small balls, batteries, etc.)	EN 71-1:2011 Safety of toys - Part 1: Mechanical and physical properties
Smoke and carbon monoxide detectors	EN 54-12:2002 Fire detection and fire alarm systems - Part 12: Smoke detectors EN 50291-1 Electrical apparatus for the detection of carbon monoxide in domestic premises
Strings, cords, and children's jewellery	EN 14682:2007 Safety of children's clothing. Cords and drawstrings on children's clothing specifications
Strollers/pushchairs	EN 1888:2012 Child care articles - Wheeled child conveyances - Safety requirements and test methods
Toy chests	EN 71-1:2011 Safety of toys - Part 1: Mechanical and physical properties
Toys	EN 71: 1-14 Safety of toys
Trampolines	EN 13219:2008 Gymnastic equipment - Trampolines - Functional and safety requirements
Window blind or drapery cords	EN 13120:2009 Internal blinds - Performance requirements including safety prEN 16433 Internal blinds - Protection from strangulation hazards - Test methods (under approval) prEN 16434 Internal blinds - Protection from strangulation hazards - Requirements and Test methods for safety devices (under approval) prEN 16433 Internal blinds - Protection from strangulation hazards - Test methods (under approval) prEN 16434 Internal blinds - Protection from strangulation hazards - Requirements and Test methods for safety devices (under approval)



Making life **safer** for children.



Is your child safe?

Potentially dangerous products



Adult Beds

In 2012 a six-month-old baby was fatally strangled when her head became trapped between the mattress and her parent's bed. The baby was sleeping in her parent's bed and it is unclear how her head became caught between the mattress and the bed. The parents noticed that their daughter was unconscious and removed her from the bed. She was taken to the hospital and was declared dead after three days of medical care.

Source: The National Center for Children's Safety and Health. BETEREM. Data from the Israel National Pediatric Injury and Safety Surveillance (NAPIS). 2013.

Why can adult beds pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 10,000 injuries to children 0-14 years of age involving adult beds are serious enough to require a visit to the emergency department.
- The United States Consumer Product Safety Commission has reports of more than 100 deaths of children under age 2 associated with adult beds over a three-year time period, mostly from suffocation. These deaths involved an entrapment, a fall, or a situation in which bedding or the position of the child was related to the death. Nearly all of the children, 98%, were babies under 1 year old.³

How can adult beds be dangerous for children?

Many parents and caregivers are unaware that there are hidden hazards when placing babies on adult beds. Consumers often think that if an adult bed is pushed against a wall, or pillows are placed along the sides of the bed, small babies will be safe as they sleep. However, research shows hidden hazards for babies on adult beds that include:

- Entrapment between the bed and the wall, or between the bed and another object.
- Entrapment involving the bed frame, headboard or footboard.
- Falls from adult beds onto piles of clothing, plastic bags, or other soft materials resulting in suffocation.
- Entrapment of the head, thorax, or abdomen by the body of a person sharing the bed or a blanket or pillow in the bed.
- Falls from adult beds onto the floor.
- Suffocation in soft bedding (such as pillows or thick quilts and comforters) and in waterbeds. Children sink in and if they are lying on their belly they are not able to bring up their head. The water mattress covers the whole face so there is a risk of suffocation.

SAFETY TIP:
The safest place for a baby to sleep is in an appropriate cot in the same room as the parents/caregiver.

What to look for when buying or prior to using:

- Check that the bed conforms to European Standard EN 1725:1998 - Domestic furniture. Beds and mattresses. This standard defines the mechanical safety requirements and testing for all kinds of fully erected domestic adult beds, including all component elements (e.g., bed frame, base and mattress).
- Check that the bed has a firm tight-fitting mattress.
- Buy a bed with the head and footboards as one solid piece rather than ones with gaps/spaces or bars.
- Buy a bed with one mattress rather than a bed with two separate mattresses

How to use adult beds safely:

- Never let a child under the age of two years sleep alone in an adult bed and always place the baby to sleep on his or her back, not on the stomach.
- If a caretaker chooses to be in an adult bed with a child, make sure to remove soft blankets and pillows as they may cause suffocation. Be sure that the mattress is firm.
- Place a carpet or mattress on each side of the bed in case the child falls off.

Recommendation:

The safest place for a baby to sleep is in an appropriate cot in the same room as the parents/caregiver.



³ U.S. Consumer Product Safety Commission, Document 5091, The United States Consumer Product Safety Commission Cautions Caregivers about Hidden Hazards for Babies on Adult Beds. Washington, DC: U.S. Consumer Product Safety Commission. <http://www.cpsc.gov/cpscpub/pubs/cribsafe.HTML>

Baby Walkers



A six-month-old boy in Austria was exploring the house with his new baby walker while his mother was cooking in the kitchen. Although the mother was trying to supervise her son, he moved quickly and fell down the stairs to the basement. The baby was admitted to the hospital with a fracture that required a weeklong treatment in the hospital. “I would never have thought that Luca could be so quick in his baby walker, he was actually speeding down the hall towards the staircase and all I could do was watch it happen,” the mother said after the injury.

Source: : Graz University Clinic for Pediatric and Adolescent Surgery. Data from the Department for Injury Research and Prevention. 2013.

Why are baby walkers a problem?

- There is a large quantity of emergency data from the EU and the US, which shows that baby walkers are the cause of thousands of accidents every year with children.⁴
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 580 injuries to children 0-4 years of age involve baby walkers, serious enough to require a visit to the emergency department.
- Many parents believe that baby walkers help to teach children to walk. Physiotherapists in the United Kingdom blame baby walkers for 4,000 injuries per year and also claim that baby walkers disrupt the ability of children to develop walking and visual skills and stop them from properly exploring their surroundings.⁵
- In Canada falls down stairs in baby walkers are the most frequent cause of serious head injuries for children under the age of two. From 1990 to 2002 there were 1,935 baby walker injuries reported among children aged 5-14 months. For this reason baby walkers have been banned in Canada since 2004.⁶

How are baby walkers dangerous for children?

Some parents believe that a baby walker is a safe place for their child, keeping their child safely entertained while they perform other tasks. However two features of baby walkers make them particularly dangerous, the increased mobility and speed they provide the child and the elevated height and reach the child obtains while seated in a walker.

Baby walkers are also a fall hazard. In a baby walker a child has increased speed, mobility, and reach. This can lead to a fall down a flight of stairs, a crash into a hot stove, against a table edge or into a glass door. They offer limited balance to a child not yet completely able to stand or walk. If unstable, walkers can easily tip over. Most of the injuries are caused by:

- **Falling down stairs:** children in baby walkers can quickly move to the edge of the stairs and fall. This kind of incident frequently happens when caregivers do not install a stair gate at the top of the stairs on a landing and can result in serious head injuries or death.
- **Tipping over:** baby walkers can tip over when children try to cross-uneven surfaces such as door thresholds or carpet edges.
- **Reaching risks:** Due to the expanded height and range offered by being seated in a baby walker, parents must be aware that many more household objects may now be within their baby’s reach, for example: electric cords on kettles that may contain boiling water, curtains, and objects on tables.

SAFETY TIP:
Do not use baby walkers.

- **Burns:** children in baby walkers can be burned when they touch hot surfaces such as oven doors, radiators, heaters, and fireplaces. Children can also be burned when they reach and spill hot liquids such as soup, coffee, or cooking oil. Further, a child's upright position in the walker means that many of the scalds are on the face and head.
- **Poisoning:** Baby walkers have been identified as increasing the risk of poisonings and toxic ingestions. As with burns and scalds, this is due to the extended reach a child achieves while in a walker resulting in increased exposure to potentially poisonous products such as plants, alcoholic beverages, household chemicals, and perfumes and cigarettes.

What to look for when buying or prior to using:

The European Child Safety Alliance does not recommend buying or using a baby walker due to the high risk of injury they pose to children. This is also stated in the joint position statement⁷ of the Alliance in collaboration with ANEC - the Consumer Voice in Standardization, which recommends that parents and caregivers choose safer alternatives to baby walkers and urges health care providers not to promote baby walker use. Voluntary standards have been introduced as well as injury prevention strategies including parent education and warning labels. In many countries design modifications have been introduced to try to make baby walkers "safer" by having a wider base and caster blocks to prevent falling down stairs. It is too early to establish whether the EN 1273: 2005 – Baby walking frames standard has led to a reduction in the number or severity of baby walker injuries.⁸

If despite this recommendation a baby walker is purchased, it is important to buy one that has safety features to help prevent falls down stairs and other injuries:

- Check that the baby walker conforms to European Standard EN 1273: 2005 – Baby walking frames – Safety requirements and test methods.
- Check that the baby walker is too wide to fit through doorways to prevent the baby roaming room to room.
- Check that it has a gripping mechanism to stop the walker at the edge of a step.

How to use safely:

- Buy a gate and make certain it is in use at the top of the stairs. Close all doors.
- Do not use a baby walker in the kitchen. Keep children away from hot surfaces and containers. Keep hot containers away from table and countertop edges
- Beware of dangling appliance cords and other objects a baby can grab onto while in a baby walker.
- Do not use baby walkers in rooms with open fireplaces or other exposed heating systems.
- Keep the child in a walker away from toilets, swimming pools and other sources of water.
- Stay with the child when he or she is in the walker, and use a walker only on smooth surfaces. Assist the child over thresholds or carpeting.
- Be aware of objects within reach of a baby in a baby walker: cigarettes/ashtrays, alcohol, medicines.

⁴ PROSAFE (the Product Safety Enforcement Forum of Europe). Joint Action on Baby Walkers 2009. <http://www.prosafe.org/default.asp?itemID=66&itemTitle=undefined>

⁵ RoSPA. Should my child use a baby walker? <http://www.rospa.com/faqs/detail.aspx?faq=217>.

⁶ Health Canada. Child and Youth Injury in Review, 2009 Edition - Spotlight on Consumer Product Safety. <http://www.phac-aspc.gc.ca/publicat/cyi-bej/2009/index-eng.php>.

⁷ ECSA/ANEC. Position Statement on Baby Walkers. <http://www.childsafetyeurope.org/publicationspositionstatements/baby-walkers.html>

⁸ ANEC, Newsletter number 98, Nov 2008. <http://www.anec.org/anec.asp?rd=3735&ref=02-01.01-01&lang=en&ID=236>





Bath seats or rings

“In the United Kingdom a nine-month-old girl drowned after slipping out of a bath seat while left unattended. A child can drown in a bath very quickly and quietly. We have heard of many tragic cases in which a parent or caregiver has gone to get a towel or to answer the door or telephone and their child has drowned in the time they were away. In some cases, parents had believed a bath seat would hold their child securely while they were out of the room, but we cannot overstate the fact that seats must not be used in this way – not even for just a moment.”

RoSPA head of leisure safety

Source: The Royal Society for the Prevention of Accidents (RoSPA) Re-issues baby bath seat advice following latest tragedy. <http://www.rospa.com/news/releases/detail/default.aspx?id=768>

Why are bath seats/rings a problem?

- In the United Kingdom between 2003 and 2007, ten children aged two years or under drowned accidentally in the bath. Four of these incidents involved a bath seat.⁹
- In the United States each year at least 8 babies die as a result of drowning associated with bath seat use.¹⁰
- The European Decision 2010/9/EU was developed for these products in 2010 to set specific safety requirements for bath seats/rings, bathing aids and stands for children. This indicates that the European Commission has recognised the injury hazard that these products represent.¹¹

How are bath seats/rings dangerous to children?

- Many bath seats/rings have a base of three or four legs with suction cups that attach to the bottom of the tub. However, the suction cups may suddenly release allowing the bath ring and baby to tip over. A baby may also slip between the legs of the bath ring and become trapped under it or submerged below the water. There are also bath seats that are integrated into the bathtub where the danger is of slipping out of the seat.
- Parents often fill the bath with more water when using a bath seat/ring as the baby is slightly raised when placed in the product; this increased amount of water in the bath creates a greater drowning hazard if a child were to slip or fall out.
- In numerous cases the parent/caregiver turns away for a moment or leaves to answer the doorbell or telephone and the baby slips off or gets trapped in the seat, resulting in death due to drowning.

SAFETY TIP:
NEVER, even for a moment, leave a child alone or under another child's supervision in the bath or bathtub, even when the child is in a bath ring or seat.

What to look for when buying or prior to using:

The European Child Safety Alliance does not recommend buying or using a bath seat/ring. If despite this recommendation a bath seat/ring is purchased, it is important to buy one that has safety features to help prevent drowning and other injuries:

- In this case, safety depends not only on the product design or standard, but also on the caregivers and the product information. The main hazard, drowning cannot be addressed in a standard.¹²
- If suction cups are part of the seat or ring, check that they grip well.
- Be sure that all caregivers bathing the child are aware that constant touch is recommended while bathing an infant in a bath seat.

How to use baths seats/rings safely:

- **NEVER**, even for a moment, leave a child alone or under another child's supervision in the bathtub, even when the child is in a bath ring or seat.
- Always be at arm's distance from the baby at all times. If it is necessary to leave the room to answer the phone or the door, take the child along.
- Check periodically that the bath seat or ring suction cups are gripping well as suction cups will NOT stick to textured, ridged, appliqued, or factory designed non-skid bathtub surfaces. Suction cups will also not stick to scratched, chipped, or repainted tub surfaces. Further after repeated use, the suction cups can become ineffective.
- Bath seats and rings are intended for use as bath aids while washing the child, they are **NOT SAFETY DEVICES!**

⁹ The Royal Society for the Prevention of Accidents. Product safety: Bath seats for babies can give a false sense of security with fatal outcomes. Birmingham: The Royal Society for the Prevention of Accidents. <http://www.rospa.com/leisuresafety/Info/WaterSafety/bathseats.pdf>

¹⁰ U.S. Consumer Product Safety Commission. Document reference HP 00-4. Dated 30.03.01

¹¹ Official Journal of the European Union. European Decision 2010/9/EU. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:003:0023:0029:EN:PDF>

¹² ANEC, newsletter number 100, June 2009. European Commission proposes draft safety requirements for mandates for child care articles and window hasps. <http://www.anec.org/anec.asp?rd=8626&ref=02-01.01-01&lang=en&ID=248>





Bicycles

In 2010 a 14-year-old boy in Denmark was riding his bike home from school when he crashed into a car. The boy was thrown 10 meters into the air and landed on the pavement. The boy suffered from bruising, a punctured lung, spleen haemorrhage and spinal cord injuries. The doctor treating him stated that had he not been wearing a helmet, he would probably not have survived the crash. The boy explained afterwards that he was tired and his thoughts were elsewhere at the time of the crash.

Source: TJEK. Store børn lader cykelhjelmene hænge. 4 September 2010.
<http://politiken.dk/tjek/forbrug/familieliv/ECE1050832/store-boern-lader-cykelhjelmene-haenge/>

Why can bicycles pose a problem?

- Between 2008 and 2010 there were annually, on average 113 children aged 14 and under who died while riding a bicycle in Europe, amounting to approximately 1.5 deaths per million child population.¹³
- Approximately 25% of cyclists killed or injured in the United Kingdom are children. Cycling accidents increase as children get older, with 10 to 15 year old riders being more at risk than other age groups.¹⁴
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 13,000 injuries to children aged 5-14 years involving bicycles are serious enough to require a visit to the emergency department.

How can riding bicycles pose a risk?

- Injuries involving child cyclists are often the result of the child playing, doing tricks, riding too fast or losing control. For teenagers, injury incidents are more likely to involve collisions with motor vehicles. However, about 16% of fatal or serious cyclist incidents reported to the police do not involve a collision with another vehicle, but rather are caused by the rider losing control of their bicycle.¹⁴
- Cycle helmets decrease the risk of head and brain injury by 65% to 88%, and decrease the risk of facial injury by 65%, including accidents involving collisions.¹⁵
- There are cases of young children suffering death or severe brain damage as a result of hanging by the straps of their bicycle helmets or helmet entrapment while playing on or near bunk beds, trees, clothes lines, play equipment etc. (Barnehage, Medical Tribune Austria) The European Standard EN 1080, which uses a weak retention system designed to open under load, was published in 1997 to address this problem. However it is still recommended that children should remove their bicycle helmets immediately after cycling.

What to look for when buying or prior to using:

- Buy a properly fitted cycle helmet to wear at all times when riding a bicycle.
- Ensure that the bicycle is the right size for the child. A child does not have the skills and coordination needed to handle a bike that is too big for them and may lose control. The child should be able to sit on the seat, with hands on the handlebars, and place the balls of both feet on the ground.
- A child's first bike should be equipped with footbrakes, since a child's hand muscles and coordination are not developed enough to control hand brakes.
- Check that reflectors are located on the front and rear of the bicycle. In order to increase visibility, consider adding reflectors to the tires as well.

SAFETY TIP:
 Children should always wear a helmet when cycling.

How to use bicycles safely:¹⁶

- **Adjust the Bicycle to Fit.** The child should stand over the bicycle and there should be 2.5 to 5 cm between the child and the top bar if using a road bike and 7 to 10 cm if a mountain bicycle. The seat should be level front to back. The seat height should be adjusted to allow a slight bend at the knee when the leg is fully extended. The handlebar height should be at the same level with the seat.
- **Check Equipment.** Before riding, inflate tires properly and check that the brakes work.
- **See and Be Seen.** Whether daytime, dawn, dusk, foul weather, or at night, a child needs to be seen by others. Wearing white has not been shown to make one more visible. Rather, children should always wear neon, fluorescent, or other bright colours when riding day or night. Also they should wear something that reflects light, such as reflective tape or markings, or flashing lights.
- **Control of Bicycle.** Children should always ride with at least one hand on the handlebars. Books and other items should be carried separately in a bicycle carrier or backpack.
- **Watch for and Avoid Road Hazards.** Children have to be on the lookout for hazards such as potholes, broken glass, gravel, puddles, leaves, and dogs. All these hazards can cause a crash. If riding with friends the child in the lead should yell out and point to the hazard to alert the other riders.
- **Avoid Riding at Night.** It is far more dangerous to ride at night than during the day because children are harder for others to see. Also, night riding requires special skills and special equipment that few young children are equipped with. If children have to ride at night, they should wear something that makes them more easily seen by others and use a front and back light.
- Children should be taught the basic safety rules:
 - Wear a helmet.**
 - Ride on the right side, with traffic (in the UK on the left side, with traffic).**
 - Use appropriate hand signals.**
 - Respect traffic signals.**



¹³ European Transport Safety Council (ETSC). Bike Pal project. Pedalling toward safety. Brussels, ETSC 2012.

¹⁴ ROSPA – Cycling Accidents Facts and Figures – July 2012. <http://www.rospa.com/roadsafety/adviceandinformation/cycling/facts-figures.aspx>

¹⁵ Thompson DC, et al. Helmets for Preventing Head and Facial Injuries in Bicyclists (Cochrane Review). Issue 1, 2003.

¹⁶ National Highway Traffic Safety Administration (NHTSA). Traffic Safety Facts 2012. <http://www.nhtsa.gov/Bicycles>



Bunk Beds

In July 2013 an eight-month-old baby sleeping in the bottom bunk of a set of bunk beds became wedged between the mattress and the ladder of the bunk bed. Her parents had placed a bed brace to ensure that the baby could not fall out of the bottom bunk, but she managed to wriggle between the bars of the ladder leading to the top bunk and the mattress. The following morning she was found suspended from the bed by her neck. The baby was rushed to hospital by ambulance but was pronounced dead despite attempts to revive her.

Source: Daily Mail. <http://www.dailymail.co.uk/news/article-2381789/Eight-month-old-baby-girl-died-got-wedged-mattress-ladder-bunk-bed-health-visitor-advised-room.html#ixzz2fvMJbNbu>

Why can bunk beds pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 19,000 injuries to children 0-14 years of age involving bunk beds are serious enough to require a visit to the emergency department.
- In Canada between 1990 and 2007, 5,403 cases of injuries associated with bunk beds were identified. Children who sustained injuries involving a top bunk were almost twice as likely to be admitted to the hospital.¹⁷
- Many bunk bed related injuries are minor and occur when children fall from the beds. Play wrestling frequently contributes to these incidents. However, there are other less obvious yet potentially very serious risks associated with bunk bed structures that have entrapped children and resulted in suffocation or strangulation deaths.

How can bunk beds be dangerous?

- The leading causes of bunk bed injuries are falls from the top bed while sleeping or playing and falls off the ladder while climbing,¹⁸ Slipping from the ladder can result in severe falls or even death due to strangulation, especially for smaller children. Children have died from strangulation when entrapped in the guardrail and from collapse of the mattress foundation. Guardrails that are attached to the bed by hooks and remain in place only by their own weight can dislodge, allowing a child to become entrapped under the guardrail or fall.
- Deaths have also occurred when very young children rolled off the bed and became entrapped between the wall and the side of the bed not having a guardrail. This hazard is not unique to bunk beds. Regular beds can present the same hazard. Bunk beds are also a collapse hazard. Suffocation deaths have occurred when mattress foundations fell on children playing on the floor or occupying the lower bunk.
- Children have also been hung when playing with ropes on the upper bunk.

SAFETY TIP:
Ensure guardrails are available on the bunk bed and provide a night light for children to see at night if they need to get out of bed.

What to look for when buying or prior to using:

- Check that the bunk bed conforms to the European Standard EN 747-1:2012.
- Guardrails: Make sure guardrails are on both sides of the top bunk. Bunk beds are usually used with one side against a wall and are often sold with only one guardrail.
- Mattress foundation: The mattress foundation on some bunk beds merely rests on small ledges attached to the bed frame. They can dislodge, particularly if a child underneath the bunk, pushes or kicks upwards on the mattress. Check that the mattress foundation is secured through a series of slats, cross ties or lattices.
- Correct mattress size: Make sure there is no opening between the mattress and headboard or footboard. Strangulation deaths have occurred when children fell through openings created between the mattress and headboard or footboard when a regular length mattress was used in an extra long bed frame.

Choose bunk beds that have:

- Guardrails on all sides that are screwed, bolted or otherwise firmly attached to the bed structure to prevent falls.
- Spacing between bed frame and bottom of guardrails that is no greater than 7.5 cm and distance between rails that is no greater than 7 cm.
- Guardrails that extend to a minimum of 16 cm above the mattress surface to prevent a child from rolling off.
- Cross ties under the mattress foundation that can be securely attached.
- A ladder that is secured to the 'long' side of the bed frame and will not slip when a child climbs on it.
- A feature that permits the beds to be separated to form two single beds if children are too young to sleep safely on the upper bunk.

How to use bunk beds safely:**Use**

- Always use two side guardrails on the upper bunk. Keep guardrails securely in place at all times no matter how old the child is. Children move about during sleep and may roll out of bed.
- Do not permit children less than 6 years of age to sleep in the upper bunk. This is because the safety standards for bunk beds are based on average measurements of children of this age. The spaces between the bars and around the mattress have been tested to make sure that a six year old could not get trapped in any part of the bed.
- Be sure cross-ties are under the mattress foundation of each bed and that they are secured in place even if bunks are used as twin beds.
- Instruct children to use the ladder and not chairs or other pieces of furniture to climb onto or off of the top bunk.





- Teach children that it is unsafe to play around and on beds and other furniture. Due to the frequency of small children falling when attempting to climb bunk bed ladders it is recommended that they should not be allowed into a room with a bunk bed and ladder.
- Consider using a night-light so that children will be able to see well if they get up during the night.
- Only use bunk beds on a carpeted floor to reduce the severity of an injury in case of a fall.
- Make sure that the area at the side of the bunk bed is clear of objects or other furniture, in order to minimise the severity of injuries should a fall occur.
- Be careful to not have any lamps near the bunk bed. If needed, lamps should be placed high enough that large pillows used cannot touch the lamp and create a fire hazard. Alternately use LED lamps which do not produce heat. Additionally, electrical cords for lamps can be hazardous and should be attached to the wall.
- Clamp lamps are not suitable for use on bunk beds as they pose a fire hazard if they fall down because children will move them and may not re-attach them properly. In some instances, the lamp may even be placed under the quilt on purpose to create a “cosy tent feeling”. Clamp lamps also have an electrical cord which is dangerous especially in a bunk bed as it is semi loose and can create a loop which is a strangulation hazard.
- Ropes, cords and decorative ribbons create an extra hazard in bunk beds. Do not tie any such things to the bunk bed for playing purposes.

Maintenance or safety repair

- Keep guardrails in good repair and securely in place.
- Replace loose or missing ladder rungs immediately.
- Repair or replace loose or missing hardware, including cross ties immediately.

¹⁷ Public Health Agency of Canada. Child and Youth Injury in Review, 2009 Edition - Spotlight on Consumer Product Safety. 2009.

¹⁸ RMayr J, Seebacher U, Lawrenz K et al. Bunk beds-a still underestimated risk for accidents in childhood. Eur J Pediatr 2000;159: 440 -443.

Changing tables

In 2011 a 10-month-old baby was injured after falling from a changing table. The mother started diapering her baby and only then noticed that there were no more diapers on the changing table. She turned around to get diapers that were in front of the dresser placing her hand on the baby to ensure the baby would not fall. However, the baby turned quickly and fell forward despite the mother's grip on her.

Source: The National Center for Children's Safety and Health. BETEREM. Data from the Israel National Pediatric Injury and Safety Surveillance (NAPIS). 2013.

Why can changing tables pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 5,500 injuries to children 0-4 years of age involving changing tables are serious enough to require a visit to the emergency department.
- In the United States an estimated 4,500 emergency department treated injuries involving changing tables occurred in 2009 to children 0 to 5 years of age.¹⁹

How can changing tables be dangerous for children?

- Most injuries associated with changing tables occur when children fall from the changing table to the floor. This occurs when the children are not strapped on the changing table or when the child is unattended because the caregiver has turned away for a brief moment, or is answering the telephone or the doorbell. The majority of these injuries occur in the child's first year of life.

What to look for when buying or prior to using:

- Check that the changing table conforms to the European safety standard EN 12221-1:2008 - Changing units for domestic use.
- Look for a table with a wide base for stability, elevated side and front panels, and safety straps that are easy to use.
- Check that the changing table will allow all needed supplies to be positioned nearby.

How to use changing tables safely:

- Always use safety straps on a changing table. But know that children in secured straps can wiggle out of the straps over time. So have all supplies within arm's reach prior to changing the baby.
- Keep within arm's reach of the baby on the changing table.
- Take the baby along if it is necessary to leave the room, even for a phone call or to answer the door.
- Alternative: change a child on the floor to prevent falls from heights while changing.



SAFETY TIP:
Safest is to change the baby on a pad on the floor. Have all supplies within arm's reach prior to changing the baby and do not step away while the child is on the table.



¹⁹ U.S. Consumer Product Safety Commission. Nursery Product-Related Injuries and Deaths Among Children under Age Five. 2010.



Child restraint systems (CRS)

In 2013 a 2-year-old boy sustained a serious head injury in a car crash in Vilnius, Lithuania. The boy was in a child car seat at the time of the crash but was reported as not being properly restrained by the harness of the car seat.

Source: Alfa. Vilniuje susidūrus divem automobiliams nukentjo vaikas. 01 January 2013. http://www.alfa.lt/straipsnis/15074896/Vilniuje.susidurus.dviem.automobiliams.nukentejo.vaikas=2013-01-12_14-44/

SAFETY TIP:
Remove bulky clothing before strapping a child into the car restraint. Check that the harness or seat belt is snug enough by running one finger under it. More than one finger should not fit in the space.

Why can a Child restraint system (CRS) pose a problem?

- Increased use of CRS in most countries has assisted in the reduction of child road deaths over the last decade. However, misuse of CRS is common, whether by using the wrong kind or not fitting it properly into the vehicle. Several surveys show that only 33% to 56% of children are correctly restrained.²⁰
- Using the wrong size CRS, installing it incorrectly, or improperly fastening the child reduces safety. One aim of the new EU guidelines for CRS under Directive 2003/20/EU and UN-ECE R129 is to make selection and use simpler.²¹ Included in these requirements is a longer mandatory use of rear facing CRS, which are much safer for young children. In many Member States, drivers have the legal responsibility to ensure that all passengers age 17 and under are properly restrained in the vehicle.
- When installed correctly CRS can reduce child injury by 71% to 82%. Compared to using no CRS, a forward facing CRS reduces injuries by 60%. Rear facing CRS perform even better, reducing injuries by 90%.²²
- In a 30 km/h crash, children who are not properly restrained are thrown forward with a force 30 to 60 times their body weight. This is not only dangerous for the child, but for all other passengers who might be seriously injured if an unrestrained passenger strikes them. An unrestrained child is also more likely to be ejected from the car through one of the windows.²³
- European police road traffic incident reports showed that 32% of children killed in frontal impact crashes had not been restrained at all, and another 23% were restrained incorrectly with the wrong type of CRS or not properly fastened. Thus 55% of these child deaths could have been avoided with proper restraints.²⁴
- CRS greatly reduce the chance of ejection from the car. An unrestrained child has a 49% chance of ejection, a child incorrectly fastened in an age appropriate CRS has a 35% chance of ejection, a child correctly fastened in the wrong size CRS has a 10% chance, but a child properly fastened in the correct size CRS has only a 3% chance of ejection.²⁵

How can CRS be dangerous for children?

The most common problems with CRS are their misuse through either use of the wrong size category of CRS for the child's age and height, not installing the CRS properly in the car, or failure to properly fasten the child into the CRS.

These scenarios generally include:

- Switching a toddler to a forward facing CRS too soon. New regulations require children to remain rear facing until a minimum of 15 months of age. However, experts urge continued use of rear facing seats for up to four years of age.
- Switching to a seat belt alone (no booster seat) too soon. Children under 150 cm height (and in some countries 135 cm) must still use a booster seat so that the seat belt fits them properly.
- Not installing the CRS properly in the car, or not fastening the child properly in the CRS.
- The CRS not being compatible with the seat design and seat belts of the car.
- Making “homemade” adaptations to the CRS to accommodate special needs children.

What to look for when buying or prior to using:**Types of CRS**

From birth to approximately 12 years of age, a child will grow through 4 stages of car seats. Depending on the type of model selected this will likely mean the purchase of at least 2 or 3 different types of CRS.

Stage 1: Rearward facing infant seat

Rearward facing seats are portable CRS that use most commonly a 3-point safety harness to help secure the infant. There are also bigger rearward facing CRS with a 5-point safety harness. Some models click into a car base for safer installation, others rely on strapping the CRS into the car with the seat belt. A rearward facing seat should be used until the infant is at least 15 months of age. Do not use a rear facing CRS in a front seat with an active airbag. Some models incorporate the infant seat into a larger CRS (not appropriate for premature or newborn babies) that can be used up to 4 years of age, making purchase of a second stage seat unnecessary.

Stage 2: Rearward or forward facing child seat

Rearward or forward facing child seats have a 5 point harness and are designed to be used between 15 months and 4 years of age. While both rearward and forward facing car seats are available for this age span, rear facing seats are up to five times safer than forward facing seats.²² Rear facing seats reduces the risk of neck, spinal and abdominal injuries that could occur in a forward facing seat. We strongly recommend the use of a rear facing seat for children up to 4 years of age.





SAFETY TIP:
Rear facing seats must be used for children younger than 15 months of age and are further recommended for children up to four years of age.

Stage 3: Forward facing booster seat with back and side wings

Once a child has outgrown the infant and child seats, a forward facing booster seat with a back and side wings can be used for a child up to the height of 150 cm. Some new models have a base to click the seat into in addition to the seat belt, while others rely solely on the seat belt to secure the child.

Stage 4: Booster seat or booster cushion

A booster cushion (a booster seat without a back and side wings) can be used with a seat belt, however, the back and side wings can still offer extra protection against side impacts and seat belt injuries so it is a good idea to use the full booster seat until the child has grown past the height restrictions on the label. In most Member States, a booster seat or booster cushion is required until the child has reached 150 cm in height, however, in some use is only required until a height of 135 cm is attained. After this stage, a child can switch to using a normal seat belt without additional support.

Conformity with latest regulations

When selecting a CRS check that it meets safety requirements. Currently, two regulations are in place: UNECE R44 and the newer R129. Many CRS on the market are labelled as approved under R44 and are categorised by weight. These models are still allowed to be sold and used. However, the newer CRS regulation, R129, which entered into force in 2013 strengthened safety standards and added 4 new provisions:²¹

- **The most important new provision is that children must now be restrained in rear facing CRS from birth until at least 15 months of age.**
- New CRS size classifications, referred to as “i-size”, categorise a CRS using the height of the child rather than the weight as age or weight categories have been found to be more confusing for consumers.
- CRS must now be tested for side (lateral) impacts. Previous standards only required frontal impact tests.
- New CRS will have 2 lower anchorage points and an additional top tether or “support leg” which easily affixes to the car for improved stability. This type of anchorage system is referred to as “Isofix”. Not all car models older than 2011 have “Isofix” anchorage points built in (see note below).

A note on Isofix CRS

CRS with Isofix differ from traditional CRS which depend on a seat belt to connect them to the car. CRS with Isofix are fastened to the vehicle seat directly through 3 anchorage points that are built into the car. Two of the points connect the CRS to the car directly. The third point is either a top tether, which connects to the top of the car seat and acts as a stabilising cord, or a support leg from the bottom which serves the same purpose. Check to see if the car has such anchorage points installed, older car models may not. One of the advantages of the Isofix system is that it helps reduce misuse when installing the CRS in the vehicle. It also helps reduce the forces on the child in a collision.

Compatibility between a CRS and a car:**The vehicle:**

- Check the vehicle's owner manual for any indications on the type of CRS that will work with the car model.
- Determine how many seats need to fit in the car, and how much space is available in the back seats to achieve this.
- If the car has Isofix anchorage points, check to see in which seating positions they are located.
- If it is necessary to use a rear facing CRS in the front seat, this should only be done if the seat's front airbag can be deactivated and does not impede the sight or movement of the driver. Using a rear facing car seat in a seat with a frontal airbag can be fatal and is not permitted. Ensure the airbag has been deactivated.

The CRS:

It is important to have the retailer assist in trying to fit models into the car before purchasing. At the moment with both R44 and R129 approved models being sold, their labels and categories can be confusing to the consumer because they use different terms and different categories for age/weight/height.

Some guidance on the various terms that might be found on CRS labels includes:

- CRS models approved under R44 use a weight based classification with different weight ranges up to 36 kilograms. These classifications are considered more confusing than the height based classifications used under R129.
- CRS models approved under R129 use a height based classification and have an "i-size" symbol indicating it should fit in vehicles that are "i-size" ready, which have Isofix anchorage points.
- All models under both R44 and R129 which are approved for restraining children with special needs will have an "S" symbol. Adaptions should not be made to a CRS, as this may compromise the protection of the child in a collision.
- A "R44 Universal" model should in principle fit in all cars that have a 3 point seat belt.
- A "semi-universal, restricted or vehicle specific" model will not fit in every car and its compatibility should be checked prior to purchase and use.
- An "Isofix Universal" forward facing CRS will only fit in cars which have Isofix anchorage and top tether points installed.
- "Isofix semi-universal" CRS are forward or rear facing CRS equipped with either a top tether or a support leg but may not fit every car.
- "Isofix semi-universal" CRS are also available for use in the front seat if necessary. These CRS are only compatible with vehicles that have an Isofix front seat anchorage point in the passenger side of the dashboard. These CRS may NOT be used with a frontal airbag, and whenever possible the back seat is the safer location for a CRS.

Second hand CRS

If a second hand CRS is being considered, ensure that it:

- is labelled as conforming to safety standard / regulation UN ECE R44.04 or R129,
- comes with the original instructions,
- has no visible damage or missing parts,
- has never been in a crash (if the car seat's history is not known then it should not be bought or used).



How to use a CRS safely

Fastening a child in a CRS:

- For rearward facing CRS check that the harness is snug over the child's body, and that for infants the harness is slightly below or at shoulder height. For forward facing CRS the harness should be at or slightly above the shoulder height. CRS should have multiple shoulder slots to accommodate a growing infant thus finding the correct height may involve adjusting the CRS harness.
- Test if the harness is snug enough by running a finger under it at their shoulder or upper leg area – not more than one finger should fit. Alternately, try pinching the harness – if it can fold within the fingertips it is too loose.
- Remove winter coats or bulky items from the child before adjusting the harness or fastening the seat belt. Bulky clothes can cause a child to slide out of the restraint in the event of a collision. A blanket or jacket can be placed over the child for warmth after fastening.
- A R44 approved seat which can be used either rear or forward facing will have colour coded guides for where the seat belt straps should go depending on which direction it is facing. Rear facing seat belt paths will be coded blue and forward facing will be coded red.
- If the CRS is secured with a seat belt, be sure there is no slack in the belt and that the CRS cannot be shaken.
- When possible, place the CRS in the rear middle seating position, which is the safest seat in the car. However, only do so if the seat belt or Isofix anchorage points are compatible with the CRS. Some older car models only have a lap belt in the rear middle seat.
- Warning, if using a seat with ISOFIX be sure to use all three attachment points: the two vehicle anchorages which connect the CRS to the car, and either a top tether or a support leg. Check the vehicle manual if the support leg is compatible with the car floor.
- When using a booster seat or cushion be sure the lap belt fits low across a child's thigh area, the belt should not rest across the abdomen.

Airbags

- Never place a child in the front seat of the vehicle if the airbag is on. If using a CRS in the front seat ensure the airbag is turned off. Check the vehicle instructions for how to switch off the airbag and follow the manufacturer's instructions for safe installation.

Using the car seat outside the car

- When using a Stage 1 infant seat outside the car, always place the child car seat on the floor to avoid falls; keep the child buckled up at all times when carrying the CRS, and remove the child from the CRS when no longer in transport.

²⁰ Lesire et al. CASPER – improvement of child safety in cars. *Procedia, Social and Behavioural Sciences* 48 (2012) 2654 – 2663.

²¹ United Nations Economic Commission for Europe. UN Regulation 129 : Uniform provisions concerning the approval of enhanced Child Restraint Systems used on board of motor vehicles (ECRS). <http://www.unece.org/fileadmin/DAM/trans/main/wp29/wp29regs/2013/R129e.pdf>

²² ANEC, ECSA and EuroNCAP. Public Statement: Child Safety in Cars. ANEC, ECSA and EuroNCAP Joint Statement, June 2012. <http://www.childsafetyeurope.org/archives/news/2012/info/anec-ecsa-euroncap-child-safety-in-cars.pdf>

²³ World Health Organization. World Report on Road Traffic Injury Prevention. World Health Organisation. Geneva, 2004.

²⁴ International Technical Conference on the Enhanced Safety of Vehicles (ESV). Safety Benefits of the new ECE Regulation for the Homologation of CRS- an estimation by the EC Casper project consortium. <http://www-nrd.nhtsa.dot.gov/pdf/esv/esv23/23ESV-000431.pdf>

²⁵ Lesire P., Johannsen H. Priorities for the protection of children in cars: available data from the field. GRSP-49-25. 49th GRSP, 16-20 May 2011. <http://www.unece.org/fileadmin/DAM/trans/doc/2011/wp29grsp/GRSP-49-25e.pdf>



Child gates/ safety barriers

Why can child gates pose a problem?

- Child gates are designed to be used at the top and bottom of stairs or in open doorways to prevent toddlers from falling down stairs or entering unsafe areas. However due to design or unsafe installation some child gates themselves are dangerous.
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 75 injuries to children 0-4 years of age involving child gates/safety barriers are serious enough to require a visit to the emergency department.



How can child gates be dangerous for children?

- An entrapment and strangulation hazard exists with accordion-style child gates (a style with large V-shaped openings along the top edge and diamond-shaped openings between the slats). Though this design is no longer on the market, they can be passed down or found in second-hand stores. Deaths have occurred when children's heads became entrapped in the V-shaped or diamond-shaped openings while they attempted to crawl through or over the gates.

What to look for when buying or prior to using:

- Check that the child safety gate or barrier conforms to the European Standard EN 1930:2011. These gates are only designed to provide protection for children under 24 months old.
- Do not buy a pressure gate to use at the top of the stairs. This type of gate operates by using an expanding pressure bar and is not bolted to the wall so it has a higher risk of tipping over when a child pushes against it, allowing the child to fall down the stairs.
- For installation at the top of stairs buy a gate that fixes to the wall and opens fully without a bar at the base.
- Follow installation instructions carefully to ensure proper fit. If installed too high from the floor a child can get trapped in the space between the floor and the base of the gate/barrier. Many gates are provided with a fixing template that is placed at floor level to site the gate correctly for this reason.
- Nonflexible vertical slats or rods should be no more than 6.5 centimetres apart.
- Check for entrapment points, sharp edges and protrusions when a gate is open.

How to use child gates safely?

- A pressure gate can be used at the bottom of stairs and in doorways. A wall fixed gate should be used for the top of the stairs.
- Check to make sure that gates are always closed when the child is in the home.
- Make a habit of inspecting all locking mechanisms and the stability of the gate at each use, including that it is securely anchored in the doorway or stairway it is blocking. Children have pushed gates over and fallen down stairs.
- Do not repair damages to a gate. Have a professional repair damages or discontinue usage and buy a new gate.
- Discontinue using the gate when the child is 24 months old as a child this age may be able to climb over or dislodge the gate and injure themselves



Children's sleepwear

Why can children's sleepwear be a problem?

- In the United Kingdom there are an estimated 750 clothing flammability accidents each year; 11% are fatal and 30% require in-patient treatment.²⁶ Girls are at higher risk group due to the greater chance of loose fitting/flowing garments coming in contact with flames. This is why the United Kingdom has set a national safety standard for children's sleepwear flammability, specifically designed to protect children from burn injuries caused by contact with an open flame, such as a match or stove burner. A flame resistant garment does not continue burning when removed from an ignition source.
- In the Netherlands there is voluntary labelling regarding the flammability of clothing; however, even with this precaution about 10 children aged 0-9 years are admitted to hospitals each year after their clothing catches on fire. About the same number are treated at the accident and emergency department (30 persons in the age group 0-24 years), although the proportion wearing sleepwear at the time of the injury is unknown.²⁷

How can children's sleepwear be dangerous for children?

- Children are most at risk from burn injuries that result from playing with fire (matches, lighters, candles, burners on stoves) while in their sleepwear, just before bedtime and just after rising in the morning. Children are prone to panic when their sleepwear catches on fire and cannot react as quickly to put out the flames as an adult might. In a burn emergency, each second counts, so this small response lapse increases severity of children's burns compared to adults.
- In addition sleepwear may have long strings/cords, which create a potential strangulation hazard, along with buttons becoming loose and causing a choking hazard.

What to look for when buying or prior to using:

- Check that the sleepwear conforms to European standards EN 1103: 2005 and EN 14878: 2007 - both of which cover issues of textile flammability.
- Buy children's sleepwear that is either snug fitting or flame-resistant.
- Flame-resistant garments are made from inherently flame-resistant fabrics or are treated with flame-retardants and do not continue to burn when removed from a small flame. However, there are health and environment issues with some flame retardant chemicals. It is best to choose sleepwear which uses non-toxic chemicals as flame-retardants.
- Snug-fitting sleepwear is made of stretchy cotton or cotton blends that fit closely against a child's body. Snug-fitting sleepwear is less likely than loose T-shirts to come into contact with a flame and does not ignite as easily or burn as rapidly because there is little air under the garment to feed a fire.
- Do not buy sleepwear with buttons or long strings/cords as these present a choking and strangulation hazard.

How to use children's sleepwear safely:

- Loose-fitting T-shirts and other loose-fitting clothing made of cotton or cotton blends should not be used for children's sleepwear as they catch on fire easily. Only use child sleepwear that is flame-resistant or snug fitting.
- Supervise children carefully just before bedtime and just after rising in the morning as this is when children are at most risk from burn injuries that result from playing with a candle, a lighter, etc. while in sleepwear.

²⁶ United Kingdom Department of Trade and Industry, 1994, Clothing flammability accidents study. URN 94/549. London: Department of Trade and Industry.

²⁷ Consumer Safety Institute. The Netherlands EHLASS Data. Amsterdam: Consumer Safety Institute, 2003.



Cots (baby/infant beds)

In 2009 a 1-year-old boy in Scotland was placed in his new cot at around half past eight in the evening. The mother checked on the baby at half past ten and found him no longer breathing. The baby boy had pushed the side of the cot causing a gap to occur between the mattress and the side of the cot through which he slipped. He became trapped between the drop side and the cot base with his face against the mattress. This resulted in death due to asphyxia and mechanical upper airway obstruction. The coroner's office stated the death may have been avoided. After this accident the manufacturer of the cot made a modification to the cot bed whereby owners are provided with a metal strap that connects the two halves of the foot end of the cot bed in order to remove the dangerous defect, which caused this death.

Source: Gaunt A. Trading Standards. Fife, Scotland. CUPAR, 11 April 2013
<http://www.scotcourts.gov.uk/opinions/2013FAI9.html>

Why can cots be a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 3,500 injuries to children 0-4 years of age involving cots are serious enough to require a visit to the emergency department.
- In the United States 110 incidents were reported with cots that had drop-sides. Entrapments and falls occurred due to plastic drop-side hardware that had broken, missing, or deformed claws, connectors, tracks, or flexible tab stops; loose or missing metal spring clips; stripped screws; and/or drop-sides installed upside-down. This resulted in 2.1 million drop-side cots being recalled from the market.²⁸
- In the United States more children die every year in accidents involving cots than with any other nursery product. Thousands of children are injured seriously enough to require treatment in hospital emergency rooms. Since 2011 new safety standards exist for cribs in the United States to prohibit the traditional drop-side design, strengthen crib slats and mattress supports, improve the quality of hardware, and require more rigorous testing of cots.²⁹

How can cots be dangerous for children?

- Cot design: cot design may be a strangulation/suffocation hazard as it can create openings that can entrap a child. If there is more than two fingers' width between the mattress and the side of the cot, an infant's head could get caught in between and the infant could suffocate.
- Cot toys: cot toys are also a strangulation hazard. Remove all cot toys which are strung across the cot or playpen area when a child is beginning to push up on hands or knees or is 5 months of age, whichever occurs first.
- Never hang long strings, cords, loops or ribbons in cots or playpens. Pacifiers should never be attached to strings or ribbons around a baby's neck.
- In 2010 the European Commission recognised the danger of cots and adopted a decision on setting safety requirements for cot mattresses and bumpers, sleeping bags for babies, suspended baby beds and duvets.³⁰

²⁸ European Transport Safety Council (ETSC). Bike Pal project. Pedalling toward safety. Brussels, ETSC 2012.

²⁹ U.S. Consumer Product Safety Commission, 2013, Crib Information Center. Washington, DC: U.S. Consumer Product Safety Commission. Available online at: <http://www.cpsc.gov/Safety-Education/Safety-Education-Centers/cribs/>

³⁰ Official Journal of the European Union. 6/7/2010. 2010/376/EU.
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:170:0039:0048:EN:PDF>



SAFETY TIP:
 Before placing a child in the cot, check the cot for any loose or missing parts, such as screws, bolts or mattress support hangers and make sure all screws or bolts are securely tightened.





SAFETY TIP:
 Regularly
 check that
 the fastenings
 are tight and
 are working
 satisfactorily.

What to look for when buying or prior to using:

- Check that the cot conforms to the European Standard EN 716-1:2008 - Children's cots and folding cots for domestic use.
- A safe cot is designed to make sure that the baby cannot easily fall or climb out or get his or her head trapped between the bars. Spacing between crib slats should be no more than 6 cm in width.
- If buying a second-hand cot or receiving one from a friend or family member, check the following important measurements: the cot should be at least 50 cm deep (i.e. from the top of the mattress to the top of the cot rails), and the base without the mattress should be at least 60 cm deep. To make sure the baby cannot climb out, bars should be vertical with spacing of 6.0 cm between them.
- Do not buy or use cribs that are older than 10 years, broken or have been modified in some way. Infants can strangle to death if their bodies pass through gaps between loose components or broken slats while their heads remain entrapped.
- Cots should have a firm base and any swinging mechanism should be lockable.
- Look for a cot mattress that is smooth, firm and fits the cot –there should not be a gap of more than 2 fingers width anywhere between the edge of the mattress and the bars of the cot. If the gap is bigger than this the baby's head may become trapped, causing suffocation. Be sure the mattress conforms to flammability safety standards.
- Do not purchase or use second hand cots with a drop-down mechanism as these are unsafe.
- Avoid older cots with headboard and footboard designs that may allow an infant's head to become caught in the openings between the corner post and the top rail, or in other openings in the top edge of the headboard structure. These openings may lead to strangulation.
- Do not use a cot that has decorative knobs on corner posts as this may pose a strangulation hazard. If the cot has knobs, the knobs should be unscrewed or sawed off flush with the headboard or footboard. Sand off splinters and sharp corners.

How to use cots safely:³¹

- Make sure there are no gaps larger than two fingers between the sides of the crib and the mattress.
- Keep the cot away from any object that could pose strangulation risk, such as window curtain, blind cords, and baby monitor cord.
- When the child reaches 89 cm he/she has outgrown the crib and should sleep in a bed.
- Remove all soft bedding and pillow-like items, quilts, comforters, bumper pads, sheepskin blankets, etc. from the cot as they may cause suffocation. Bumper pads cause additional risks not only due to suffocation risks, but they also could be used to climb on once the baby is crawling, increasing the risk of the baby falling from the cot.
- Only use the mattress pad provided; do not add extra padding.
- Always lock the side rail in its raised position whenever the child is placed in the cot.
- Once the baby is able to sit up by him/herself, move the baby mattress to a lower position. When the baby can stand, be sure to lower the mattress to its lowest position; then when she/he is 90 cm or higher or when the side rail is up to the level of the nipples, move the child to a child bed.

Maintenance of cots

- Check the cot and replace or repair any missing or loose parts, such as screws, bolts or mattress support hangers, before placing the child in it. For cots where the mattress support is suspended by hangers attached to hooks on the end panels, check frequently to be sure they have not become disconnected or weakened. Open hooks may allow the mattress to fall. Never use a cot with broken or missing parts.
- Check the mattress support frequently to make sure it hasn't become unhooked from the end panels.
- Whenever the cot is moved, be sure all mattress support hangers are secure.
- Never use a cot that has loose or missing slats. Be sure that all slats are securely fastened in place and the space between slats is no more than 4.5 cm to 6.0 cm to avoid head entrapment /strangulation.
- If a cot is to be painted or refinished, use only high quality household lead-free enamel paint and let it dry thoroughly so there are no residual fumes. Check the label on the paint can to make sure the manufacturer does not recommend against using the paint on items such as cots.



³¹ U.S. Consumer Product Safety Commission, The U.S. Consumer Product Safety Commission Warns Parents About Infant Strangulations Caused by Failure of Crib Hardware. Washington, DC: U.S. Consumer Product Safety Commission. <http://www.cpsc.gov/cpscpub/pubs/5025.html>

Fireworks

In 2011 a 13-year-old boy was seriously injured by a self-made firework 'bomb' that was ignited by someone else during the New Year's celebrations in the Netherlands. The bomb was made of several illegal firework devices put together. The boy was taken to the hospital with severe wounds and died a few hours later. That same night a second boy aged 17 years also died while making an illegal self-made firework bomb. The self-made bomb exploded prematurely and the fireworks struck his face and head. He was taken to the hospital with serious injuries and died later that night.

Source: NOS. Twee jongeren dood door vuurwerk. 1 January 2011.
<http://nos.nl/artikel/208770-twee-jongeren-dood-door-vuurwerk.html>

Why can fireworks pose a problem?

- In the United Kingdom over the past five years over 350 pre-school aged children, some as young as one year of age, have received hospital treatment for fireworks injuries. Each year, over half of all firework injuries are suffered by children.³²
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 2,900 injuries to children 0-14 years of age involving fireworks are serious enough to require a visit to the emergency department.
- All countries of the European Union have a law controlling the sale of fireworks to children, but the laws vary widely and are reported as not well enforced in Bulgaria, Greece and Portugal.³³

How can fireworks be dangerous for children?

- In a study of all firework-related injuries around the New Year in Denmark in 2006/2007, it was found that the eyes, head/neck and hands are the body parts most likely to be injured.³⁴
- In Norway it is forbidden to shoot off fireworks within the central part of the capital Oslo and since 2008, certain forms of fireworks are banned. Siri Hagehaugen, head of the Section on Hazardous Substances & Transportation of Dangerous Goods for the Norwegian government stated that since the ban was enacted the number of injuries to children under the age of 18 years has declined from approximately 50% to 16% during the New Year's celebrations of 2012/13.³⁵
- In 2013 the European Commission has established a classification system for fireworks in order to require manufacturers to have clearer labels and instructions:³⁶
 - Category F1: Age limit 12 years** - fireworks that present a very low hazard and negligible noise level and which are intended for use in confined areas, including fireworks that are intended for use inside domestic buildings;
 - Category F2: Age limit 16 years** - fireworks that present a low hazard and low noise level and which are intended for outdoor use in confined areas;
 - Category F3: Age limit 18 years** - fireworks that present a medium hazard, which are intended for outdoor use in large open areas and whose noise level is not harmful to human health;
 - Category F4: Age limit 18 years** - fireworks which present a high hazard, which are intended for **use only by persons with specialist knowledge** and whose noise level is not harmful to human health.



SAFETY TIP:
 Supervise children, keeping them within eye distance when fireworks are being used and do not wear flammable clothing when near fireworks.

What to look for when buying or prior to using:

- The European Child Safety Alliance does not recommend the use of fireworks for private use due to the risk of injury and the pollution effect. If fireworks are legal, only purchase them from commercial stores that reference the standard EN 15947 that outlines requirements for sale of fireworks.
- Fireworks made illegally (including those made using directions found on the internet) may not be properly constructed and may explode improperly, resulting in a higher risk of injury.
- After buying, store fireworks in a metal box out of the reach of children until ready to use.

How to use fireworks safely:

- Be sure to follow these important safety tips when using fireworks:
- Never allow children to play with or ignite fireworks.
- Have a marker, like a rope, at a safe distance from the display for the children to stand behind.
- Sparklers should not be given to children under the age of five years. Should a young child come in contact with a lit sparkler, the heat from it is equivalent to the heat from a welding torch.³⁷
- Supervise children and keep them within eye distance when fireworks are being used nearby.
- Read and follow all warnings and instructions on purchased fireworks.
- Be sure all observers are out of range before lighting fireworks.
- Only light fireworks on a smooth, flat surface away from the house, dry leaves or other flammable materials.
- If having a bonfire along with fireworks ensure it is at least 18 metres away from the house, surrounding trees and hedges, fences or sheds.
- To light a firework, hold the firework at arm's length. Be careful of windy conditions
- Never try to relight fireworks that have not properly functioned.
- Keep a bucket of water or sand handy in case of a malfunction or fire.
- Do not hold fireworks in your hand after lighting unless the instructions specifically allow this.
- Wear clothes without hoods or cords.
- Do not carry fireworks in pockets of clothing as friction with the clothes can cause them to explode.
- After the fireworks display is finished, make sure that anyone who is helping to clear up debris uses tongs or gloves to avoid burning themselves.
- Never throw used fireworks onto a bonfire.

³² UK Fire Service Resources. Firework Safety. <http://www.fireservice.co.uk/safety/fireworks>.

³³ Child Safety Report Card 2012. Europe Summary for 31 countries, page 36. <http://www.childsafetyeurope.org/reportcards/index.html>

³⁴ Foged T, Lauritsen J, Ipsen T. Firework injuries in Denmark in the period 1995/1996 to 2006/2007. Ugeskr Laeger. 2007 Dec 3;169(49):4271-5.

³⁵ Hagehaugen, S. Section on Hazardous Substances & Transportation of Dangerous Goods, Directorate for Civil Protection and Emergency Planning. www.dsb.no.

³⁶ European Commission. Making fireworks in the EU safer. Reference: IP/13/448 Event Date: 22/05/2013. http://europa.eu/rapid/press-release_IP-13-448_en.htm?locale=en

³⁷ RoSPA. Firework Safety Advice. <http://www.rospa.com/homesafety/adviceandinformation/fireworks/advice.aspx>





SAFETY TIP:
Securely anchor portable goals at all times and instruct players on the safe handling of and potential dangers associated with portable soccer goals.

Goals for soccer/football and handball

In 2012 a 12-year-old boy in Portugal died when a goal fell on him as he was playing with a friend in a recreation park. The goal had been affixed to the ground but the boy and his friend removed the anchoring and moved the goal to the middle of the field. He suffered severe brain and facial injuries that resulted in a coma and death 3 days later.

Source: Diário de Notícias. 26.01.2012 and 27.01.2012. www.dn.pt/arquivo/

Why can goals pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 7,000 injuries to children 5-14 years of age involving goals are serious enough to require a visit to the emergency department.
- A survey completed in Portugal by the Portuguese Association for Child Safety Promotion (APSI) checked the safety of 310 goals selected at random from all over the country. They found that 15% were not anchored to the ground during playtime, and when they were not in place for a game, that 82% of goals were not anchored. Of the anchored goals tested for stability, 12% of them failed tip over tests.³⁸ This study was the basis for the implementation of a Portuguese law in 2003 that specifies that all goals must be anchored at all times.
- There are European standards for soccer/football goals (EN 748:2013) and handball goals (EN 749:2004), but they only deal with organised training and competition and not school and leisure use. Nevertheless, as a result of the work of APSI, who brought the issue to the attention of ANEC, new standards are being developed for portable and fixed goals used in recreational play and in both indoor or outdoor areas, including educational establishments and public recreational areas. One of these new standards will include requirements for lightweight goals (less than 10 kg).

How can goals be dangerous for children?

- In most cases the serious injuries and deaths are a result of blunt force trauma to the head, neck, chest, and limbs when the goal tips over and hits or lands on the victim. In one case an 8-year-old child was fatally injured when the movable goal he was climbing on tipped over and struck him on the head. In another case, a male died from a massive head trauma when he pulled a goal down on himself while attempting to do chin-ups. In a third case, a 3-year-old child received a fatal head injury when his father caused the goal to tip over when he lifted the back base while attempting to tighten a net to its goal post.

What to look for when buying or prior to using:

- Check to see that the goal complies with the European Standard for that specific type of goal (example: EN 748 for soccer/football goals and EN 749 for handball goals for training and competition; EN 15 312 for free access multi-sports equipment).
- In addition some countries such as the United Kingdom, Ireland and France have national standards for other types of goals not specifically intended for training and competition that can be used for certification of goals while the new standards are under development in CEN.



Buy a stable goal:

- One effective design alternative uses a counterbalancing strategy by lengthening the overall depth of the goal to effectively place more weight further from the goal's front posts (more weight at the back of the goal).
- A second design uses lightweight materials for the goal's front posts and crossbar and much heavier materials for the rear ground bar and frame. This then requires much more force to tip the goal forward, making it much safer.
- Another design uses a heavy rear framework that folds flat when not in use, making the goal much less likely to tip over.

How to use goals safely:

- Follow the manufacturer's instructions for assembly, installation, storage and maintenance. If it is not possible to assemble the goal according to the manufacturer's instructions, do not use it.
- Securely anchor portable goals at all times.
- Never climb on the net or goal frame.
- Always instruct players on the safe handling of, and potential dangers associated with, portable soccer goals.
- Before every use make sure the goals are securely anchored and that there are no signs of deterioration in the goal frame, anchorages or net fixings. Check all connecting hardware and replace any damaged or missing fasteners immediately.
- Ensure safety labels are clearly visible.
- When moving a full-sized goal use the assistance of at least four adults to lift the goal clear of the ground. Or if wheels are attached, be careful to watch for potential toppling.

When portable goals are not in use:

- Store goals out of the reach of children in a secure room. The majority of the injury incidents to date have not occurred during a match, but rather when the goals were unattended. Therefore, it is imperative that all goals are securely stored when not in use.
- Place the goal frames face to face and secure them at each goal post with a lock and chain. Check that the locks are not easy to remove and that the storage room is not accessible by children and adolescents.
- Lock and chain to a suitable fixed structure such as a permanent fence if a secure storage room is not available.
- Fully disassemble the goals for seasonal storage, or alternately if applicable fold the face of the goal down and lock it to its base.

³⁸ Menezes H. Goalposts Crushing Children – How Effective Are Goalpost Anchorages? Proceedings of the 7th World Conference on Injury Prevention and Safety Promotion; 2004 June 6-9; Vienna, Austria.



High Chairs

In 2009 a 15-month-old baby in Israel managed to stand up in her highchair while eating dinner as she was not strapped in tightly enough. Upon standing she lost her balance and fell to the floor, hitting her head.

Source: The National Center for Children's Safety and Health. BETEREM. Data from the Israel National Pediatric Injury and Safety Surveillance (NAPIS). 2013.

Why can high chairs pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 7,700 injuries to children 0-4 years of age involving high chairs are serious enough to require a visit to the emergency department.
- During the period 2008- 2013, there were 43 RAPEX alerts related to high chairs from 13 different Member States. The risks identified were chemical risks of the surface material where children could place their mouths; choking risks due to detachable / breakable parts of the high chair in reach of the child; and fall risks due to a lack of stability of the high chair, non-compliant folding / locking mechanisms, lack of effectiveness of the restraint system or finger entrapment.³⁹

How can high chairs be dangerous for children?

- High chairs are a fall hazard. The majority of the injuries related to high chairs result from falls that occur when restraining straps are not used or are used improperly and children are not closely supervised. Children can slip out of a high chair in an instant if not properly strapped in or if the strap between the legs is missing.
- The most severe cases, those resulting in death, have occurred when children slipped down under the tray and were strangled. Most often, these children were either unrestrained or were restrained only by a waist belt (i.e. strap between the legs was not used).
- An unstable high chair can tip over with the child in it. High chairs may tip leading to head injuries if an active child pushes off from a table or wall, stands up in the high chair, or rocks it back and forth. Tip overs can also occur when children try to climb on it.
- High chairs with sliding trays can result in injuries to fingers when they are caught when sliding the tray into place.

What to look for when buying or prior to using:

- Check that the high chair conforms to European safety standard EN 14988-1:2006+A1:2012 – Children's high chairs.
- High chairs must have a waist strap and a strap that runs between the legs. If a high chair is without an integral five-point harness, have one fitted. When buying a separate harness check that it conforms to EN 13210.
- Since the restraining straps must be used every time a child is placed in the chair, look for straps that are easy to use and are independent of the tray. If the straps are difficult to use or take too much time to fasten, they are less likely to be used. A five point integral harness is the safest option.



- Examine the straps to ensure that the waist belt has a buckle that cannot be fastened unless the crotch strap is also used.
- Check that the buckle, waist strap and the strap that runs between the legs will secure the child safely in place in the high chair and that the high chair is unlikely to tip over should the child start to rock the high chair or attempt to climb out of it.
- Select a high chair that has a wide base for stability and is heavyweight. The most stable high chairs have a wide metal or wooden frame; those made of only plastic are not recommended.
- Check that the tray locks securely and that caps or plugs on tubing are firmly attached and cannot be pulled off by a child.
- If buying a folding high chair, check that it has an effective locking device.
- Look for high chair designs with a post between where the child's legs will go. This will help prevent the child from slipping down and becoming trapped under the tray. Even with the post always use the safety strap.
- Do not use high chairs with wheels.

How to use high chairs safely:

- Keep the high chair away from walls, doors, windows, blind cords, and appliances. Do not leave the child unsupervised in the high chair, even if safety belts are in use.
- The crotch strap alone will not be sufficient to hold the child securely. Without two straps (i.e. a waist strap and a crotch strap) children can stand in the chair seat and topple from the chair, or slide under the tray and strangle on the waist strap or when their heads become trapped between the tray and the chair seat.
- Make sure that all safety belts or straps on the high chair are adjusted to the size of the child and securely fastened and that the tray is properly secured. The tray should not be used as a restraining device in place of the straps.
- Check the condition of straps and their attachments often to make sure they are securely attached and work properly. Only safety straps keep the child from climbing out or sliding down and strangling.
- Make sure there are no sharp edges on the tray and check regularly to see that there are no loose nuts or other small parts. Do not use a chair if the plastic has split or if any foam is exposed.
- If the chair is foldable, keep children away from the chair while folding to prevent finger entrapment.
- Be sure that the locking device on a folding high chair is locked each time the chair is set up.
- Never allow a child to stand up in a high chair as this can cause tipping.
- If using a table mounted chair be aware that these chairs should not be used on glass or single pedestal tables and should not be attached over a tablecloth.
- Do not let a child climb into the high chair unassisted.
- Do not let older children climb on or hang off a high chair while a child is in it as this can result in a tip over.



³⁹ Prosafe. Joint Follow-up Market Surveillance Action on GPSD Products. Meeting No. 2. Child care articles-High Chairs. 26 June 2013.

Lighters: non-child resistant

In 2010 a 5-year-old girl in Israel suffered 2nd and 3rd degree burns over her entire body while playing with a lighter. The injury occurred on Saturday morning when her family was sleeping. The girl woke up early, found a lighter and while playing with it ignited her clothes.

Source: The National Center for Children's Safety and Health. BETEREM. Data from the Israel National Pediatric Injury and Safety Surveillance (NAPIS). 2013.

Why are non-child-resistant lighters a problem?

- According to the European Commission, up to 40 deaths and 1,900 injuries are caused by lighters each year in the EU and the victims are often children.⁴⁰
- Statistics for the United Kingdom from 1999 to 2003 show that an average of five deaths each year were caused by children playing with lighters.⁴¹
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 340 injuries to children 5-14 years of age involving lighters are serious enough to require a visit to the emergency department.

How are non-child-resistant lighters dangerous for children?

- The European Commission recognises the danger of cigarette lighters to children and since 2008 has required governments to ensure that common cigarette lighters placed on the EU market are child-resistant. Also forbidden are lighters that resemble objects that are particularly attractive to children (i.e. novelty lighters).⁴²
- Unfortunately a study, conducted by ProSafe in 2011, found that 76% of lighters failed to meet the requirements of EN ISO 9994 due to poor compliance and lack of enforcement.⁴³
- Children as young as two years old are capable of operating lighters, but the majority of the children who start fires by playing with lighters are three or four years old. At these ages, children are curious about fire but don't understand the danger. In fact sometimes when children start a fire they will hide somewhere in the room (under the bed or in a cupboard and suffocate) or leave the room without telling anyone about the fire.

What to look for when buying or prior to using:

- Purchase a lighter that states on the packaging that it is child-resistant (i.e. conforms to EN ISO 9994). This standard forbids the sale or purchase of disposable lighters that do not have a child-resistant mechanism and also forbids all child-appealing novelty lighters.
- Remember, child-resistant lighters are child resistant but not childproof.

How to use child-resistant lighters safely:

- Keep lighters and matches out of the reach of children.
- Never use a lighter as a source of amusement for children as this may encourage children to think of lighters as a toy or to try to use a lighter on their own.
- Install smoke detectors throughout the house, preferably optical (photoelectric) alarms that are hard-wired where possible. If battery operated smoke alarms are used, select sealed units containing long life batteries to avoid having to frequently change them.

⁴⁰ European Association for the Co-ordination of Consumer Representation in Standardisation (ANEC). Three years on from the European Decision, millions of lighters are STILL potentially dangerous. Press Release. 11 March 2011. ANEC-PR-2011-PRL-006.

⁴¹ RoSPA. Victim's Mother Backs RoSPA Plea to EU on "killer" lighters. 06 February 2006. <http://www.rospace.com/news/releases/detail/default.aspx?id=494>

⁴² European Commission. Decision on lighters. http://ec.europa.eu/consumers/safety/prod_legis/prod_legislation_lighters_en.htm

⁴³ PROSAFE. Technical Background Report – Facts and Figures. Significant Improvement in Cigarette Lighter Safety in the EU PROSAFE 2012.

SAFETY TIP:
Keep lighters and matches out of the reach of children and purchase only childproof lighters.

Pacifiers/soothers and rattles

In 2013 a one-year-old girl in Romania died as a result of strangulation with her pacifier cord. The little girl tried to reach a toy and the cord tangled around her neck and cut off her air supply. The mother called a nearby neighbour who is a nurse to perform resuscitation until emergency services arrived on the scene and transported her to the hospital. Resuscitation efforts were performed for almost an hour but the child was in cardiopulmonary arrest upon arrival to the hospital.

Source: Mediafax.ro. Suceava: O fetiță de un an a murit strangulată cu șnurul de la suzetă. 25 February 2013. <http://www.mediafax.ro/social/suceava-o-fetita-de-un-an-a-murit-strangulata-cu-snurul-de-la-suzeta-10598035>

Why can pacifiers/soothers and rattles pose a problem

- The use of pacifiers involves both benefits and risks. The benefits are found in shorter hospital stays for preterm infants and a reduction in the risk of sudden infant death syndrome. Risks associated with pacifier use, particularly with prolonged use, include negative effects on breast-feeding and dental health. In terms of injury risks, pacifiers can cause choking or result in suffocation.⁴⁴
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 44 injuries to children 0-4 years of age involving pacifiers and 850 involving rattles are serious enough to require a visit to the emergency department.

How can pacifiers/soothers and rattles be dangerous for children?

- Pacifiers/soothers are a suffocation/strangulation hazard. There are reports of infants strangling on pacifiers/soothers cords, ribbons, and key cords tied around their necks. Children have caught pacifier/soother cords on cot corner posts, cot toys and gyms, pieces of furniture, and even doorknobs.
- Rattles can be a choking/suffocation hazard. To date, the largest rattle known to have lodged in an infant's mouth/throat had an end about the size of a golf ball. Squeeze toys and soothers have been involved in similar choking incidents. Rattles, "mini-maracas," squeeze toys and soothers involved in incidents had handles or ends small enough to enter a baby's mouth and lodge in the throat, blocking the airway.

What to look for when buying or prior to using:

- Ensure that the pacifier/soother conforms to European Standard EN 1400:2002 Soothers for babies and young children and that pacifier/soother holder conforms to EN 12586:2011- Soother holders - Safety requirements & test methods.
- Pacifiers/soothers should be strong enough to not separate into small pieces on which a baby could choke or suffocate.
- Pacifier/soother guards or shields must be large enough and firm enough to prevent the pacifier from being drawn entirely into a baby's mouth.
- Pacifier/soother guards or shields must have ventilation holes.
- Do not buy a pacifier/soother with a ribbon, string, cord, or yarn attached as these items present a strangulation risk.
- Check that rattles are manufactured to the European Standard EN 71-1:2011 – Safety of toys.
- Do not buy rattles; squeeze toys; teethingers and other toys with ball-shaped ends or small pieces that might become loose. Choose handles too large to lodge in a baby's throat.



SAFETY TIP:
Do not buy a pacifier/soother with a ribbon, string, cord, or yarn attached as these items present a strangulation danger.





- Test the noise the rattle makes, as rattles can be too loud for the sensitive ears of small children.
- Check regularly to ensure the rattle is in good repair (e.g., no small pieces that could be swallowed are coming loose).

How to use pacifiers/soothers and rattles safely:

- Remember, NEVER HANG a pacifier/soother AROUND a child's NECK. Use pacifiers/soothers that have a short string and clip to the child's clothing. However, be aware that the clips can also detach from the clothing and also pose a choking risk.
- Pacifiers/soothers may deteriorate over time or with exposure to food, sunlight, etc. Inspect them frequently and discard immediately if a change in texture, tears, holes or weakening is noticed.
- Do not use a pacifier/soother if the child has suffered a lip injury.
- Use a teething ring if the baby starts to chew on the pacifier/soother.
- Check that a rattle is large enough so that it cannot enter the child's mouth to prevent the rattle from becoming lodged in the back of the throat.
- Check all rattles, squeeze toys and teething rings for small ends that could extend into the back of the child's mouth and be swallowed or inhaled.
- Take rattles, squeeze toys, teething rings, and other small objects out of the cot or playpen when the baby sleeps.

⁴⁴ Sexton S M, Natale R, Risks and Benefits of Pacifiers, American Academy of Family Physicians, 2009 Apr 15;79(8):681-5.

Plastic bags

In March 2013 a seven-month-old baby in the United Kingdom was found dead as a result of suffocating on a nappy sack. The nappy sacks were stored within the baby's reach, close to the baby's cot. The nappy sack was across his mouth and it is assumed that this constricted his breathing, causing fluid to build up in his lungs.

Source: Daily Mail Online. News. Baby pulled nappy sack through his cot's railings then suffocated on the bag after putting it on his face. 5 July 2013. <http://www.dailymail.co.uk/news/article-2356874/Baby-pulled-nappy-sack-cots-railings-suffocated-bag-putting-face.html#ixzz2fu9uEAI7>

Why can plastic bags pose a problem?

- Nappy sacks are disposable, often perfumed, plastic bags into which soiled nappies (diapers) are placed after use and prior to permanent disposal. Nappy sacks are bags made from thin plastic that can cling to a baby's face. Babies are unable to pull them away again as their instinct is to go rigid. In the United Kingdom 14 deaths have been associated with nappy sacks in the past 10 years. Each case was thought to be an isolated, one-time incident.⁴⁵
- In the United States an average of 25 deaths of children who suffocated due to plastic bags are reported each year. Almost 90% of them occurred in children under one year of age.⁴⁶

How are plastic bags dangerous for children?

Plastic bags are a suffocation hazard. Children have suffocated when plastic bags (dry-cleaning, garbage or trash bags, and bags from packaging of toys or produce shopping) have blocked the nose and mouth and prevented breathing.

Cases reported include:

- Child pulled plastic dry-cleaning bag over face while lying on adult bed.
- Plastic garbage bag (filled with clothes) fell over child's face and mouth while the victim was on an adult bed.
- Child crawled into plastic garbage bag.
- Child rolled off mattress onto plastic bag filled with clothes.
- Child slept on mattress covered by plastic bag.
- Child suffocation due to a nappy sack, that was stored within the baby's reach.⁴⁷

What to look for when buying or prior to using:

Check for the standard EN 71-1:2011 which contains requirements for flexible plastic sheeting, toy bags and packaging in Clause 6 Packaging, Safety of toys – Part 1: Mechanical and physical properties

How to use plastic bags safely:

- Store plastic bags out of the reach of children in a secure storage area or discard them immediately. Use cloth or paper bags to make it safer for children and better for the environment.
- Do not allow children to play with plastic bags.
- Do NOT use a plastic mattress cover.
- Never put children to sleep on or near plastic bags, e.g. nappy sacks.

⁴⁵ ANEC. Deaths associated with nappy sacks. Discussion paper. ANEC-CHILD-2012-G-002rev1. 2 February 2012

⁴⁶ U.S. Consumer Product Safety Commission, 2001, Children Still Suffocating with Plastic Bags. Washington, DC: U.S. Consumer Product Safety Commission. Available online at: <http://www.cpsc.gov/cpsc/pub/pubs/5064.pdf>

⁴⁷ Royal Society for the Prevention of Accidents. Choking and suffocation risk to babies from nappy sacks. <http://www.rospa.com/homesafety/currentcampaigns/nappysacks/>



SAFETY TIP:
Store plastic bags out of the reach of children in a secure storage area.





Playground equipment

In December 2009 a six-year-old child in Romania died on a playground due to severe head injuries. The boy was playing with other children on a swing set when, due to a lack of proper anchoring, the swing set tipped over and trapped the little boy underneath it. An emergency team tried to resuscitate the boy but the head injuries he suffered were too severe. The doctor on site stated: “We found the boy in cardiopulmonary arrest and tried to resuscitate him for at least 30 minutes, but we failed to notice any cardiac activity.”

Source: Mediafax.ro. Un copil de șase ani a murit după ce un leagăn s-a prăbușit peste el. 2 December 2009. Available online: <http://www.mediafax.ro/social/un-copil-de-sase-ani-a-murit-dupa-ce-un-leagan-s-a-prabusit-pestel-el-5148995>

Why can playground equipment be a problem?

- Serious playground-related head injuries have decreased due to increases in impact absorbing surfacing of playgrounds, but arm fractures have remained constant at approximately 30% of all playground injuries.⁴⁸
- A survey performed in 2004 in the Netherlands of 149 kindergartens found defects or examples of non-compliance in 41% of all inspected playground equipment and playground activity toys. In many cases the problems were due to a lack of maintenance.⁴⁹
- In the United Kingdom it is estimated that there are 40,000 injuries to children on playgrounds each year that result in a hospital visit. Approximately 40% of those injuries are related to playground equipment. One of the most dangerous items on playgrounds is rotating overhead bars.⁵⁰
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 137,000 injuries to children 0-14 years of age involving playground equipment are serious enough to require a visit to the emergency department.

How can playground equipment be dangerous for children?

- Deaths have occurred when a child's head is caught in an opening or net mesh in playground equipment either because of bad design, incorrect installation, lack of maintenance or because the child was wearing a helmet or had drawstrings on their clothing (e.g., jacket hoods).
- Approximately 50% of playground equipment related injuries are caused directly by the equipment.⁵¹
- Lack of regular inspections and maintenance has resulted in equipment collapsing and killing or severely injuring children; equipment supported by one post has a higher risk of collapsing.
- Approximately 50% of playground injuries occur when a child falls from the equipment onto a surface.
- Surfacing in the falling area of equipment can lose its impact absorption properties over time, in particular if poorly installed or maintained.⁵²
- In hot weather conditions, there have been cases of children getting 2nd degree burns on their bare feet from hot rubber or on their thighs from the metal surface of slides exposed to the sun.

SAFETY TIP:
To avoid collapsing of equipment ensure it has been properly anchored when first installed and that foundations or anchorages are periodically inspected and maintained to maintain safety conditions.

What to look for when buying or prior to using:

- For public playgrounds, playground equipment must conform to the European standard on playgrounds, EN1176:2008, Part 1: General safety requirements and test methods; Part 2 to 6 and 11: additional requirements for specific types of equipment and Part 7: Guidance on installation, inspection, maintenance and operation.
- For playgrounds in domestic use in a home garden, playground equipment must comply with the toy safety standards EN71-8.
- Check that the playground equipment is age-appropriate.
- Check that there is enough space to safely install the playground equipment, taking into account the extension of the falling space and impact area. Check installation instructions before buying.
- For elevated play structures ensure there is enough room for a falling space free from obstacles of at least 1.5 metres all around the equipment; for equipment with a fall height more than 1.5 metres, this space increases gradually up to a minimum of 2.5 metres.
- When choosing the playground surface material (e.g., rubberised, wood chips, sand), check that the material matches the free fall height of the equipment in terms of impact absorption performance. It is acceptable to have grass as the surface material for play equipment up to one metre in height as long as the grass is maintained in good condition.

How to use playground equipment safely:**Operators / owners are responsible for the following:**

- For public playgrounds a professional design and layout is needed and the equipment should be installed by a professional in accordance with the EN1176:2008 standard. These playgrounds should have a programme for improvements and updating on an annual basis. An independent specialist who with specific training should carry out the annual inspection. Playground inspection and maintenance training courses, such as the one offered by the Royal Society for the Prevention of Accidents in the United Kingdom, are available for training playground inspectors.
- Select playground equipment which conforms to the EN1176:2008 standard.
- Install and maintain a shock-absorbing surface around the play equipment such as rubber, sand or wood chips to prevent head injuries. Rubberised impact absorbing surfaces are more effective than bark. Use at least 30 cm of wood chips, sand or mulch underneath play equipment.
- Once the playground equipment has been installed, perform a post-installation inspection.
- Inspect the playground and equipment on a regular basis - weekly/quarterly/annually.
- Have an effective maintenance programme in place to repair defects quickly.
- Ensure swings and equipment with heavy movement is installed away from entrances and with no main paths crossing their falling space.
- Remove tripping hazards, like exposed concrete footings, tree stumps, and rocks in the equipment impact areas and on paths.





How to use playground equipment safely:

Playground users should do the following:

- Remove clothing strings, necklaces, earrings and all loose items in pockets before the child enters the playground. Loose hanging strings and jewellery can get caught in play equipment.
- Remove bike or skate helmets before climbing on nets and other playground equipment.
- Check that children are using good shoes for climbing and running.
- On hot days check for hot surfaces on the tops of rubber and metal playground equipment before allowing young children to play on it. Ensure children have shade and plenty of water during peak heat hours of 11:00 to 15:00.
- If any sharp edges, broken parts or other damage is found when playing on the equipment, inform the operator or owner of the playground.
- Do not attach or allow children to attach ropes, jump ropes, clotheslines, or pet leashes to play equipment as these items can result in strangulation.
- Carefully supervise young children on play equipment to make sure they do not get in the way of moving equipment.
- Children's plastic climbing equipment should not be used indoors on wood or cement floors, even if covered with a carpet. Carpets do not provide adequate protection to prevent injuries such as fractures.
- Regularly check play equipment, surfacing and anchorages to make sure all pieces are still in good condition for safe usage.

For more information view:

<http://www.rospa.com/leisuresafety/adviceandinformation/playsafety/accidents-childrens-playgrounds.aspx>:

- Assessing Risk on Children's Playgrounds (3rd Edition), RoSPA
- Guide to the European Playground Equipment and Surfacing Standards, 4th Edition /5th Edition coming soon, RoSPA
- Routine Inspection of Playgrounds, RoSPA
- Developing the Children's Playground – A Basic Management Guide, RoSPA

⁴⁸ Sibert, JR. Welsh Paed J 2010; 33: 14-15.

⁴⁹ van Leent J, Wind R. Safety of Playground Equipment: Developments in the Netherlands between 1993 and 2007. Food and Consumer Product Safety Authority. October 2007. Available online: http://www.playgrounds.uokik.gov.pl/download/en_playgrounds_in_the_netherlands.pdf

⁵⁰ RoSPA. Accidents on Children's Playgrounds. Available online: <http://www.rospa.com/leisuresafety/adviceandinformation/playsafety/accidents-childrens-playgrounds.aspx>

⁵¹ Ball, D. Playgrounds - risks, benefits and choices. HSE Contract Research Report 426/2002.

⁵² Russold, A. Children falls – last European injury investigations- Revision of European playground standards. International Conference Playground Fall impacts: Are our standards providing adequate safety? Vienna, 22 October 2013.

Playpens

In 2011 a one-year-old boy in Germany was playing in his playpen and succeeded in loosening a large 3 cm screw from the playpen. He placed the screw in his mouth and it fell back into his throat and blocked his breathing. The emergency doctor revived him upon arrival to the scene and following this event he spent eight months in the hospital. The playpen was given to the family used and had no manufacturer information on it.

Source: Personal testimony from the victim's mother. BAG Mehr Sicherheit für Kinder e.V. Bonn, Germany.

Why can playpens pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 760 injuries to children 0-4 years of age involving playpens are serious enough to require a visit to the emergency department.
- Since 2013 playpens in the United States must meet new safety standards:
 - 1) side rails that do not form a sharp V when the product is folded as this prevents a child from strangling in the side rail;
 - 2) stronger corner brackets to prevent sharp-edged cracks and to prevent a side-rail collapse;
 - 3) sturdier mattress attachments to the play yard floor to prevent children from getting trapped or hurt.⁵³

How can playpens be dangerous for children?

- Mesh-sided playpens are a strangulation hazard. A child's head may become trapped if the playpen collapses.
- Some playpens have a hinge at the centre of each top rail with a latching mechanism that locks automatically when the rail is lifted into the normal use position. To fold these products, a button or other release mechanism must be used to release the latch and has been involved in fatal entrapment incidents.
- Folding playpens can cause strangulations and other injuries should they accidentally collapse due to improper use or due to a child activating the folding mechanism.

What to look for when buying or prior to using:⁵⁴

- Check that the playpen conforms to the European safety standard EN 12227: 2010 Playpens for domestic use - Safety requirements and test methods.
- Look for a playpen or travel cot that has top rails that automatically lock when lifted into the normal use position.
- Look for mesh netting with a very small weave (less than 7 mm) in order to prevent buttons on a baby's clothing or other small parts from being caught in the netting.
- Spaces between slats on a wooden playpen should be no more than 6 cm in width.
- Avoid using playpens that are constructed with hinges at the centre of the top rails if the hinge must be turned toward the inside and into a downward locked position to prevent the cot from folding and collapsing on the child.



SAFETY TIP:
Check the playpen prior to each use to ensure there are no loose parts or holes.



**How to use playpens safely:**

- Check the playpen prior to each use to ensure that there are no loose parts or holes.
- Never use a pad that does not fit snugly in the bottom of the playpen and never add a second pad, mattress or pillow. Babies have suffocated when trapped between the playpen side and a pad that was too small or between two mattresses. Playpens are intended for brief periods of play, and are not designed or intended for sleeping.
- Always show the babysitter/caregiver how to properly set up the playpen according to the manufacturer's instructions. Improper setup can cause the playpen to collapse resulting in injury or death to the child. Check prior to each use that the playpen is securely locked into the open position so it cannot collapse.
- Never leave an infant in a mesh playpen with the drop-side down. Infants can roll into the space between the mattress and loose mesh side and suffocate. Even when a child is not in a playpen, leave the drop-side up. Children may try to climb back into a playpen and cut or pinch their fingers on the unlocked hinge mechanism.
- Remove large toys, bumper pads, and boxes from inside the playpen. They can be used for climbing out.
- Avoid tying any items, including toys with strings or cords across the top or corner of the playpen; they can be a strangulation hazard.
- Children may try to use the top rail of the playpen for teething. Check vinyl or fabric-covered rails frequently for holes and tears. A teething child can chew off pieces and choke.
- If staples are used to attach the mesh side to the floor plate, make sure none are loose or missing.
- Examine the mesh and its attachment to the top rail and floor frequently for loose threads. There have been reports of child entanglements in threads (stitching) that had unravelled.
- Never use a playpen with holes in the mesh sides. These could entrap a child's head and result in strangulation.
- Never use a playpen with a hinge in the centre of each of the four top folding rails if the top rails do not automatically lock when the rail is lifted into the normal use position.
- Do not place objects with cords, such as electrical cords for lamps or baby monitors, within reach of the playpen. Cords can pose a strangulation risk.

⁵³ U.S. Consumer Product Safety Commission. CPSC Blogger Play Yards: New Safety Rule to Take Effect. By on February 19, 2013.

⁵⁴ U.S. Consumer Product Safety Commission. Deaths Associated with Playpens. 2001. www.cpsc.gov/PageFiles/108029/playpen.pdf

Small Parts (e.g. balloons, batteries magnets, marbles)

In 2010 a 2-year-old-boy in Romania died after he choked on a balloon. The child was left unattended for a few minutes at which time he swallowed the balloon and could no longer breathe. The child was transported to the hospital and resuscitation efforts were performed for 40 minutes but the child remained in cardiopulmonary arrest.

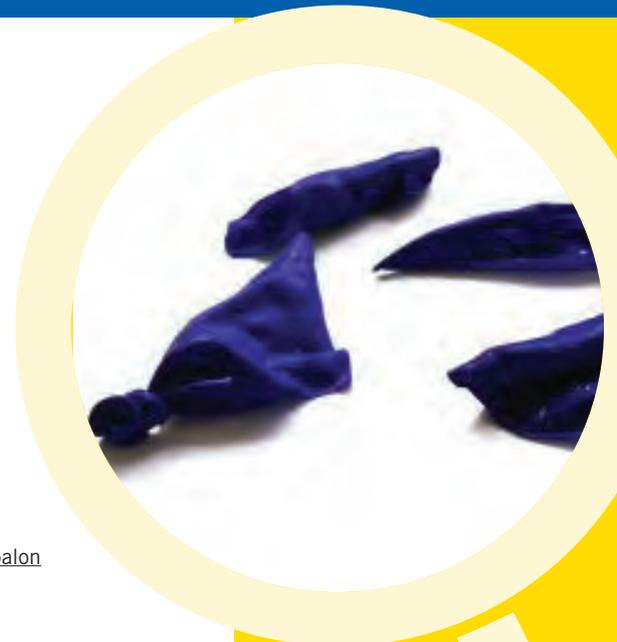
Source: Gazeta de Sud. Copil de doi ani, mort după ce a înghițit un balon. 23 July 2010. <http://www.gds.ro/Eveniment/2010-07-23/Copil+de+doi+ani,+mort+dupa+ce+a+inghitit+un+balon>

Why are small parts a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 7,000 injuries to children 0-14 years of age involving marbles alone are serious enough to require a visit to the emergency department.
- In the 2011 Annual Rapid Alert System Report, 13 Member States took part in a joint enforcement project looking at the safety of toys. Approximately 35% of the toys selected for laboratory testing failed to comply with the mechanical requirements related to small parts and magnets.⁵⁵

How are small parts dangerous?

- Small parts are a choking/suffocation hazard. Smooth round objects present the highest risk of choking by lodging in the stomach, lung or ear.
- Children between the ages of 4 and 36 months are at risk from suffocation by hollow, cylinder objects through suction formation and complete airway obstruction. Shallow containers with dimensions ranging from approximately 6.0 to 11.0 mm have been reported to be especially hazardous as they increase the risk of suction-type suffocation.⁵⁶
- Of all children's products, balloons are the leading cause of suffocation death in the United States. A child can suck an un-inflated balloon into the mouth while trying to inflate the balloon. This can occur when a child who is blowing up the balloon inhales or takes a breath to prepare for the next blow, and draws the balloon back into the mouth and throat. A child may also swallow an un-inflated balloon or balloon pieces lying on the ground after the balloon has exploded while sucking or chewing on it.⁵⁷
- Small toy magnets have caused serious injuries and fatalities to young children when swallowed. These toys are made of powerful magnetic pieces. If more than one piece is swallowed, the pieces can be pulled toward each other inside the child's body, causing twisted/knotted intestines, intestinal perforation or blockage, which can ultimately lead to death.
- Check the size of any surprise toys in food packages for children as these toys may result in airway obstruction and suffocation.
- Look for age appropriate labels when purchasing items.



SAFETY TIP:
Supervise children playing with balloons. Collect the pieces of broken balloons immediately and dispose of them out of the reach of young children.





How to use small parts safely:

- Keep small parts such as batteries and smooth round objects such as toys, marbles, magnets, small balls and coins off the floor and out of reach of children under 3 years of age, as that age group has the tendency to put such objects in their mouths.
- Separate toys that are for children less than 3 years old from those for older children and store them apart.
- Check the eyes and noses of stuffed animals, the wheels or tires of cars and trucks to ensure they are properly secured.
- Regularly inspect toys and children's play areas for missing or dislodged magnets.
- Supervise children playing with balloons. Collect the pieces of broken balloons immediately and dispose of them out of the reach of young children.



⁵⁵ European Commission. Keeping European Consumers Safe. 2011 Annual Report on the operation of the Rapid Alert System for non-food dangerous products RAPEX.

⁵⁶ Nakamura S, Pollack-Nelson C, Chidekel A. Suction-type suffocation incidents in infants and toddlers. *Pediatrics* 2003; 111(1):e12-e16.

⁵⁷ U.S. Consumer Product Safety Commission. CPSC Warns Consumers of Suffocation Danger Associated with Children's Balloons Pub. 5087 012012.

Smoke and carbon monoxide detectors

In 2012 a family in the United Kingdom was referred to the Royal Society for the Prevention of Accidents (RoSPA) Be Gas Safe Programme in order to receive carbon monoxide detectors and safety education through a local safety practitioner. One of the detector alarms went off at a later point in time and a gas engineer was called in. A leak was detected from the boiler and according to the engineer the family could have died if it had not been for the carbon monoxide detectors.

Source: Royal Society for the Prevention of Accidents (RoSPA). Be Gas Safe Programme. 2011-2013.

Why can smoke and carbon monoxide detectors pose a problem?

- While smoke and carbon monoxide detectors are an important safety device, about two thirds of house fire deaths occur in homes with either no smoke alarms or no working smoke alarms.
- Properly installed and maintained smoke alarms are considered to be one of the best and least expensive means of providing an early warning of a potentially deadly fire and could reduce the risk of dying from a fire in the home by almost half.⁵⁸
- Carbon monoxide is known as the silent killer because it cannot be seen, heard, smelled or tasted. Typical symptoms are headache, nausea, dizziness, vomiting, chest pain and confusion. There are approximately 50 accidental deaths per year in the United Kingdom from carbon monoxide poisoning, and over 1,100 cases of recorded admissions to hospital. Children under 14 years are most at risk.⁵⁹
- In the United States there are an estimated 10 unintentional non-fire carbon monoxide poisoning deaths each year amongst children 0 to 14 years, with 80% occurring in the home.⁶⁰

How can smoke and carbon monoxide detectors be dangerous?

- Smoke and carbon monoxide detectors can be dangerous if not properly installed or maintained.

What to look for when buying or prior to using:

- Check that smoke detectors meet standard EN 54-12:2002, Fire detection and fire alarm systems - Part 12: Smoke detectors and carbon monoxide detectors meet standard EN 50291.
- Buy and install interconnected detectors so that when one sounds, all sound throughout the home; these are also available with wireless connection.
- Buy detectors powered by house wiring that also have a battery back-up in case of a power outage.
- Buy a combined smoke alarm detector that has both ionization and photoelectric/optical sensors. Ionization detectors may respond slightly faster to flaming fires and are therefore best suited for rooms that contain highly combustible materials that can create flaming fires, such as flammable liquids, paint cleaning solutions, and newspapers. Photoelectric/optical models may respond slightly faster to smouldering fires and are thus best suited for living rooms, bedrooms and kitchens as these rooms often contain large pieces of furniture (sofas, chairs, mattresses, etc.), which burn slowly and create more smouldering smoke than flames.⁶¹



SAFETY TIP:
Have a working carbon monoxide detector placed on each level in the home.





- Buy a detector that gives a warning when it needs to be completely replaced. Many detectors do not provide a warning when they reach the end of their lives, giving a false sense of protection. Yet most carbon monoxide detectors currently on the market only last between 5 and 7 years

How to use smoke and carbon monoxide detectors safely:⁶¹

- Install smoke or carbon monoxide detectors by screwing them into the ceilings and as close to the center of the room as possible, but at least 30 cm away from any wall or light fitting.
- Detectors may be installed into a plug-in receptacle or high on the wall. Avoid locations that are near heating vents or that could be covered by furniture or draperies.
- Install audible detectors near each of the separate sleeping areas of the home, such as in the hallway outside the bedrooms. This doubles the chances of getting out alive if a fire starts at night.
- Do not install detectors in kitchens or above fuel-burning appliances.
- Make sure to test detectors periodically according to the manufacturer's instructions. A detector with a dead battery provides no protection.
- Never disconnect batteries from detectors.

Maintenance:

- Battery-operated detectors should be checked every month to make sure they're working properly. Designate one person to test the smoke alarms monthly. Test the battery by pushing the test button. If there is no button, press the centre of the cover.
- Replace batteries in battery-operated detectors according to the manufacturer's instructions; once a year, every five years and when they "chirp" indicating low battery.
- Replace the detectors every 5 years.

⁵⁸ U.S. Consumer Product Safety Commission. Consumer Product Safety Commission Smoke Alarms – Why, Where, and Which. CPSC Pub. 559. www.cpsc.gov/PageFiles/119009/559.pdf

⁵⁹ Royal Society for the Prevention of Accidents. Carbon monoxide – the silent killer. <http://www.rosipa.com/homesafety/adviceandinformation/carbonmonoxide/>

⁶⁰ U.S. Consumer Product Safety Commission. Non-fire carbon monoxide deaths associated with the use of consumer products. 2008 Annual Estimates. Dec. 2011. <http://www.cpsc.gov/PageFiles/108308/co11.pdf>

⁶¹ UK Fire Service Resources. Fire Safety. <http://www.fireservice.co.uk/safety>

Strings, cords, and children's jewellery

The following are typical scenarios involving strings and cords. All have occurred in at least one Member State in the European Union:

- A child descends down a slide when the toggle or knot at the end of a hood drawstring is caught in a small space or gap at the top of a slide. As the child continues to descend, the cord pulls taut strangling the child.
- A child alights from a bus when the waist drawstring toggle on their jacket is caught in the doors unobserved by the driver. The bus pulls off and the child is dragged along the road and under the wheels of the bus.
- A child is riding a bike when a drawstring on a trouser leg becomes entangled in the spokes of the bicycle wheel. The child is pulled to the ground sustaining head injuries.

Source: EUROPA Press Release. Ref. MEMO/10/98. Questions and Answers on Cords and drawstrings. Brussels, 23 March 2010.

Why are strings/cords/necklaces a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 700 injuries to children 0-14 years of age involving strings/cords/necklaces are serious enough to require a visit to the emergency department.
- Between January and August 2009 the European Commission has received more than 250 RAPEX notifications on dangerous children's clothes, almost five times more than the same period in the previous year.⁶²
- Announced in 2010, 11 EU Member States have taken joint action through market surveillance activities to decrease the exposure of children to dangerous cords and drawstrings on children's clothing by removing dangerous clothes from the market. In the majority of cases, 10 to 20% of children's clothing examined did not meet the safety standard and to date measures have been taken against more than 1,400 garments. The most common non-compliance, accounting for almost 60% of cases, was related to cords and drawstrings in the hood and neck area. Cords and drawstrings in the chest and waist area accounted for another 20%.⁶³

How are strings/cords/necklaces dangerous? ⁶⁴

- Strings, cords and necklaces are a strangulation hazard. Many injuries have been caused when the string, cord, or necklace got caught on a product such as a cot or playpen. In other cases, the string or cord became tightly wrapped or twisted around the child's neck while playing on playground equipment (leading cause of death), playground slides, ski lifts, or while climbing trees.
- Elastic cords near the face of a child represent a risk of injuries to the eyes, if the cord is caught and slaps back. Therefore cords in hoods or around the neck on clothes for children should not be elastic (except for shoulder straps and halter necks).⁶³



SAFETY TIP:
Do not buy clothes with cords or drawstrings in hood and the neck area and do not buy toys with cords or chains with a length exceeding 22 cm.





What to look for when buying or prior to using:

- Do not buy clothes with cords or drawstrings in hood and the neck area for children 0 to 7 years of age (below the height of 1.34 m). Consider other closures, such as snaps, buttons or Velcro, instead.
- For older children avoid buying clothes with cords longer than 7.5 cm in the hood and neck area, as they can quickly be caught in bus or car doors.
- Avoid having tied belts or sashes longer than 36 cm in children's clothes intended to be tied at the front. If too long, the child can get trapped while playing.
- Long strings in the back of children's clothes also pose risk of injuries, as they can get trapped in doors of buses or other vehicles. Avoid cords and drawstrings trailing below the sleeve or hem of the garment. Drawstrings and cords at the bottom hem of long-legged trousers shall be totally on the inside of the garment
- Do not buy any toy that has cords or chains with a length exceeding 22 cm. This is the length specified as a strangulation hazard in the requirements of EN 71-1:2011 – Safety of Toys.
- Do not buy any toy that has electrical cables (attached or supplied) longer than 30 cm as they could be a strangulation hazard.
- Necklaces used by children under the age of 14 are considered to be toys and should both conform to the requirements of EN 71 - Safety of Toys and be 'CE' marked.
- Check that a pacifier/soother holder conforms to EN 1400:2002 Child use and care articles. Soothers for babies and young children. – Part 2 Mechanical requirements and tests.
- Check that children's clothing with drawstrings conforms to EN 14682:2007- Safety of children's clothing. Cords & drawstrings on children's clothing. This standard includes disguise costumes and skiwear for children up to the age of 14 years.
- Purchase children's outerwear with alternative closures to cords or drawstrings, such as snaps, buttons, or Velcro.

How to use strings/cords/necklaces safely:

- Never tie pacifiers or other items around the child's neck. Use a pacifier that is hung on a short string and can be clipped to the child's clothing.
- Never leave cords of any kind near an infant. If a piece of clothing has cords, remove the cords before dressing the child in this clothing. Take off bibs, necklaces or other clothing tied around a child's neck before putting the child in a cot or playpen.
- Necklaces are not recommended for young children, especially those under 2 years of age, due to the strangulation hazard.
- Keep baby monitor cords away from cribs or playpens. Babies can and have been strangled by baby monitor cords. Use a wireless baby monitor to avoid risk of strangulation.
- Check to make sure no other cords (on lamps, nightlights, radios, and window coverings) are near a baby's sleep environment.

⁶² European Commission. Keeping European Consumers Safe. 2009 Annual Report on the operation of the Rapid Alert System for non-food consumer products RAPEX.

⁶³ European Commission. Questions and Answers on Cords and drawstrings. Reference: MEMO/10/98. Event Date: 23/03/2010. http://europa.eu/rapid/press-release_MEMO-10-98_en.htm?locale=en

⁶⁴ RoSPA. Blind Cord Safety Campaign. Case Studies. <http://www.rospa.com/about/currentcampaigns/blindcords/default.aspx>

Stroller/pushchairs

A 3-year-old boy in Austria was in his stroller shopping with his parents at a supermarket. As his parents were walking down a grocery aisle he leaned out of his stroller to reach for an interesting product, lost his balance and fell on the hard tiled floor and suffered a skull fracture. His father reported that “Unfortunately we didn’t use the buckle up equipment in the stroller – we will never, ever forget it again.”

Source: Graz University Clinic for Pediatric and Adolescent Surgery. Data from the Department for Injury Research and Prevention. 2013.

Why strollers can be a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 5,900 injuries to children 0-4 years of age involving strollers are serious enough to require a visit to the emergency department.
- In the United States 23 incidents of fingertip amputations involving strollers among young children under the age of 5 years were reported between 2008 and April 2012. In many cases, children 3 years or younger suffered full or partial amputations when their fingers got caught in a hinge. The company, Maclaren, recalled 1 million strollers in 2010 as the stroller’s hinge mechanism posed a fingertip amputation and laceration hazard to children when unfolding/opening the stroller. Another company, Graco Children’s Products Inc., recalled approximately 1.5 million strollers in the same year due to amputation/laceration hazard when opening or closing the canopy feature.⁶⁵
- One RAPEX notification in 2011 concerned a stroller parasol that exposed a child to a superficial abrasion.⁶⁶

How are strollers dangerous?

- Strollers may pose a strangulation/suffocation hazard. Deaths have resulted when infants were left to sleep in strollers with the backrest reclined to the carriage position. The infants moved (wiggled) feet first towards the front of the stroller and, when their bodies passed through the opening between the hand rest (grab bar) and front edge of the seat, their head became entrapped and they strangled. Children have also strangled in loose or partially buckled harness straps and there has been one case of a child suffocating on a stroller rain cover.
- Strollers are a fall hazard. The stroller may fall backwards when the handles are overloaded with parcels, or when a child stands in the stroller.
- Children’s fingers have also been amputated in parts of the folding mechanism of folding strollers.

What to look for when buying or prior to using:

- Check that the child’s pram, stroller or pushchair conforms to European safety standard EN 1888:2012 – Child care articles - Wheeled child conveyances - Safety requirements and test methods.
- All new strollers come with a five-point harness. Check the harness to make sure it is strong and durable, fits snugly around the child, and can be easily fastened and unfastened.
- If buying or using a second-hand stroller it may be necessary to buy a harness separately. If so, check that the harness conforms to EN 13210: 2004 - Children’s safety harnesses, reins & similar type articles - Safety requirements and test methods.



SAFETY TIP:
Always use the harness each time a child is placed in a stroller.





- Make sure that there is a brake and that it is convenient to operate and actually locks the wheels. Brakes on two wheels are obligatory.
- Check that the stroller cannot fold up when the baby is in it – there should be a safety locking device to prevent this from happening.
- Make sure the baby's feet cannot trail on the ground. Guards or shopping tray below the footrest can help prevent this.
- If a stroller has a shopping tray for carrying packages, it should be low on the back of the stroller and in front of (or directly over) the rear wheels for appropriate stability.
- If buying or using a second-hand stroller check the fabric areas to make sure that no sharp pieces of metal or plastic have worn through and that the brakes work properly.

How to use strollers safely:

- Check the overall condition of the stroller every few months.
- Do not overload the stroller. In particular avoid hanging bags on the handles as this can unbalance the stroller and cause it to tip backwards even when the child is sitting in it.
- Use the harness each time the child is placed in the stroller.
- Do not leave a sleeping child unattended in the stroller. If the child falls asleep in the stroller, transfer him or her to the cot upon returning home.
- Regularly test the brakes on a slope as well as on a flat surface and make sure they work well with the weight of the baby in the stroller.
- To avoid incidents of entrapment ensure that the child's hands and feet are clear when making adjustments to the stroller and never leave a child unattended in a stroller. This is especially important if the stroller seat's backrest is in the flat "carriage" position, as infants only a few weeks old can creep or move when asleep. The youngest victim of entrapment reported was an infant just seven weeks old.
- Keep children away from the stroller when folding or unfolding it. Children's fingers have been amputated in parts of the folding mechanism. Some manufacturers now offer hinge protectors in response to recalls.
- A stroller is not a toy. Never allow children to use one as a plaything and do not allow young children to stand in the stroller as this can cause tipping and result in serious head injuries.
- Never use a pillow, folded quilt, or blanket as a mattress in a stroller as they can cause suffocation.
- If using a 'ride-on platform' or "kiddie board" (a product attached to the stroller for a toddler to stand on) make sure it is secured properly to the stroller and test that it can take the weight of the child standing on the platform. Adult supervision is required and the child should always keep his or her hands on the stroller bar while standing on the platform.



⁶⁵ U.S. Consumer Product Safety Commission, 2011, 2011 CPSC Annual Report. Washington, DC: U.S. Consumer Product Safety Commission

⁶⁶ European Commission. Keeping European Consumers Safe. 2010 Annual Report on the operation of the Rapid Alert System for non-food consumer products RAPEX.

Toy chests

Why are toy chests a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 500 injuries to children 0-14 years of age involving toy chests are serious enough to require a visit to the emergency department.
- In the United Kingdom for example, toy boxes cause nearly 4,000 injuries each year. Over 70% of these accidents involve children between one and four years of age.⁶⁷
- The U.S. Consumer Product Safety Commission has reported 45 children in the United States who died when lids of containers used for toy storage fell on their heads or necks and there have been at least three incidents of permanent brain damage. These chests include those specifically manufactured for toy storage, as well as trunks, wicker chests, wooden storage chests, and other similar items, which are also available in Europe.⁶⁸



How are toy chests dangerous?

- Toy chests may pose a strangulation/suffocation hazard as the child or child's head can become trapped within the chest. Fatal suffocation incidents have also happened when children climbed into storage containers such as cedar chests to play, sleep or hide and became trapped. Because the toy chests were not adequately ventilated, the children suffocated in the enclosed space.
- Toy chests are also a head/neck injury hazard. Typically, these incidents occurred when children use the chest to pull themselves up, causing the lid to fall from the upright, open position, and when young children attempted to open the lids themselves. Children were reaching over and into the chest when the lid dropped and either fell on their heads or trapped them at the neck between the lid and the edge of the toy chest.
- Children's fingers can also be injured from heavy lids dropping on their fingers while opening or closing the lid.

When buying/ prior to using, what to look for:

- Check that the toy chest conforms to standard EN 71-1:2011: Safety of toys - Part 1: Mechanical and physical properties.
- The use of a toy chest or other container that has a hinged lid that can fall freely is not recommended.
- Look for a toy chest that has a support that will hold the hinged lid open in any position in which it is placed or buy one with a detached lid or doors.
- Look for a toy chest with ventilation holes that will not be blocked if the chest is placed against the wall, or a chest which, when closed, has a gap between the lid and the sides of the chest. Many chests are ventilated by a space between the underside of the lid and sides or front of the box to prevent suffocation.
- Make certain that the lid of the toy chest does not have a latch.
- Look for a lid that is lightweight and if intended for children choose one that is easy to open for children.

**How to use toy chests safely:**

- If it is a toy chest or trunk with a freely falling lid, it is recommended that the LID be REMOVED to avoid possible injury.
- Alternately, install a lid support device designed to hold the lid open in any position. Buy a spring-loaded lid support that will not require periodic adjustment. A spring-loaded lid-support device can keep a lid from falling on a child's neck or from closing and trapping a child playing inside the chest. This device should be used on all chests. Once a support is installed, it is important to check it frequently to make certain that it is working properly. Some supports may need to be adjusted or tightened periodically so that they continue to hold the lid open.

⁶⁷ Child Accident Prevention Trust, 2002, Factsheet: Toys and Accidents. London: Child Accident Prevention Trust. <http://www.capt.org.uk/FAQ/default.htm>

⁶⁸ U.S. Consumer Product Safety Commission, 2004, The U.S. Consumer Product Safety Commission Warns Consumers of Dangers With Toy Chest Lids. Washington, DC: U.S. Consumer Product Safety Commission.

Toys

A 2-year-old boy in Austria placed a toy block in his mouth and started to run around in the living room. The boy lost his balance and fell against the door frame. The toy caused deep cuts on the roof of his mouth and the wounds had to be sutured by a doctor under anaesthetic.

Source: Graz University Clinic for Pediatric and Adolescent Surgery. Data from the Department for Injury Research and Prevention. 2013.

Why can toys be a problem?

- The rapid alert system of the European Commission, RAPEX, reported that the second most frequently identified category of serious risk notifications in 2011 was toys and sixth was childcare articles and children's equipment. The main risks with unsafe toys were choking (often related to small parts) and reactions to chemicals (due to significant amounts of chemical substances such as certain phthalates, lead and other heavy metals).⁶⁹
- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 52,000 injuries to children 0-14 years of age involving toys are serious enough to require a visit to the emergency department.

For example, the following toys are associated with particularly high numbers of injuries in the United Kingdom:

- Each year there are over 5,500 injuries related to toys that children ride on such as cars or rocking horses. These toys can cause cuts, bruises or fractures if children fall from them.
- Toy boxes cause nearly 4,000 unintentional injuries each year. Over 70% of these injuries involve children between one and four years of age.
- Model cars, planes and trains are responsible for nearly 4,000 visits to emergency departments each year. Many of these incidents involve children under three and are choking related to the small parts in these toys.
- Soft toys such as teddies, dolls or action figures cause more than 1,500 injuries each year. As with other toys, children under 3 years of age are most at risk, and small parts which become loose such as eyes, buttons or pieces of stuffing cause many of these incidents.
- Toys that fire objects, such as toy guns or bows and arrows, water pistols, or catapults, cause over 1,000 accidents each year.⁷⁰



SAFETY TIP:
Children should not be allowed to walk or run with toys in their mouth.



Why can toys be dangerous?

- As well as injuries associated with the toys themselves, they also happen when children – and adults – trip over toys. The most serious of these incidents occur when toys are left on stairs or steps.
- For toy-related deaths and injuries, it is important to note that many of the incidents were associated with a toy but not necessarily caused by the toy.
- Many caregivers fail to adhere to the age range restrictions that are often posted on toys.
- Loose magnets (especially super batteries) and button batteries found in certain toys can be hazardous if swallowed.

What to look for when buying or prior to using:

- Toys are required to be 'CE' marked and have to meet the requirements of the Toy Safety Directive 2009/48/EC. This Directive strengthened provisions on enforcement and added new safety requirements, which in turn has improved the existing rules for the marketing of toys produced in or imported into the EU with a specific aim of reducing toy related injuries. The Directive targets apply to products designed or intended for, whether or not exclusively, use in play by children under 14 years of age.
- It is very important to choose the right toy for the age of child. Most toys have a suggested age range on the packaging. A warning symbol that a toy is not suitable for children under 36 months is important because it means that the toy may contain parts on which a very young child could choke.
- Any toy for a child under three years of age can become a choking hazard if pieces come apart or break off. Be aware of small objects such as buttons or beads that are not suitable for young children.
- Toys intended for children under eight years of age should be free of sharp glass and metal edges.

In addition to these basic requirements the following issues should be considered:

- If the toy has moving parts, ensure fingers will not be trapped in the mechanism.
- If the toy is made out of wood make sure it is smooth and will not cause splinters
- Will the toy have to bear a child's weight?
- If the toy has paint, varnish or other coatings ensure it is nontoxic, free of lead and phthalates and designed for use with children.
- If the toy has strings or straps, ensure they are not long enough to fit around a young child's neck and pose a strangulation hazard.

Use of the toy:

- Check toys regularly. Toys that have been broken may have dangerous points or prongs. Stuffed toys may have wires inside the toy that could cut or stab a child if exposed.
- Caregivers should always re-install the screw locking the battery container lid on battery operated toys, especially for button batteries, as these pose a potential choking hazard if swallowed.
- Teach children to put their toys safely away on shelves or in a toy chest after playing to prevent trips and falls and teach older children to help keep their toys away from younger brothers and sisters.
- Some toys such as toy caps and some noisemaking guns can produce sounds at noise levels that can damage a child's hearing. These toys should not be used within close range of the ear and some should only be used outdoors.
- Keep potentially flammable soft toys away from stoves, fireplaces, heaters and other sources of heat.
- Make sure batteries in toys for young children are installed properly and are not accessible to children.
- Remember also that children are likely to play with toys in ways that are not expected. Watch children playing and see how they use their toys to identify misuse.

Specific risky toys:

- Projectiles, such as guided missiles and similar flying toys, can be turned into weapons and in particular can injure eyes. Children should never be permitted to play with adult lawn darts or other hobby or sporting equipment that has sharp points. Arrows or darts used by children should have soft cork tips, rubber suction cups or other protective tips intended to prevent injury. Check to be sure the tips are secure. Avoid dart guns or other toys which might be capable of firing articles not intended for use in the toy, such as pencils or nails
- Certain toys, such as balloons, marbles, and other small parts can cause suffocation. Balloons, when not inflated or broken, can result in choking and suffocation if young children try to swallow them. Infant toys, such as rattles, squeeze toys, and teething should be large enough so that they cannot enter and become lodged in an infant's throat.
- Electric toys that are improperly constructed, wired or misused can shock or burn a child. Electric toys with heating elements are recommended only for children over eight years of age. Children should be taught to use electric toys properly, cautiously and under adult supervision.



⁶⁹ European Commission, 2012, Keeping Consumers Safe - Annual Report on the operation of the Rapid Alert System for non-food consumer products (RAPEX) 2011. Luxembourg: European Commission.

⁷⁰ Royal Society for the Prevention of Accidents. Toy Safety. <http://www.rospa.com/homesafety/adviceandinformation/product/toy-safety.aspx>



Trampolines

Two siblings in Austria aged 6 and 11 years were playing on the trampoline at home. While trying out new stunts they collided with each other. The younger child was catapulted off of the trampoline and fell onto the hard stone floor of the terrace. She broke her elbow, which required two operations and several weeks of her arm in a cast.

Source: Graz University Clinic for Pediatric and Adolescent Surgery. Data from the Department for Injury Research and Prevention. 2013.

Why are trampolines dangerous?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 51,000 injuries to children 0-14 years of age involving trampolines are serious enough to require a visit to the emergency department.
- In the United Kingdom a report 2005 indicated that 4,200 children under the age of 15 went to hospital after an incident involving the use of a home trampoline.⁷¹

How are trampolines dangerous for children?

- Injuries and deaths due to trampoline use are caused by colliding with another person, landing improperly while jumping or doing stunts on the trampoline or falling or jumping off the trampoline/springs or frame.
- Most of the trampolines associated with injuries occur at private homes.
- Approximately 75% of trampoline injuries occur when more than one person is on the trampoline. The person weighing less is five times more likely to be injured.
- Children under six years old are particularly vulnerable to injury when using a trampoline.
- Injuries can occur to all parts of the body, including the neck, arms, legs face and head. Head and neck injuries are the most serious injuries associated with trampoline use.
- Adult supervision is no guarantee of safety. More than half of all trampoline injuries occur while under supervision. However a trained 'spotter' can greatly reduce this risk.

What to look for when buying or prior to using:⁷²

- Check that the trampoline conforms to the European Standard EN 913: 2008 and to EN 13219: 2008- Gymnastic equipment. However, there is no similar standard for domestic, home and garden trampolines.
- Look for an enclosed netted trampoline as they can help prevent falls, or purchase a safety cage when buying the trampoline to reduce the chance of a child falling off and striking the ground.
- Check that hard metal frames and poles are padded and that there are no spaces or webbing in the mat where toes or fingers can get caught.
- Buy safety pads, or ensure that the model comes with safety pads that completely cover the springs, hooks and the frame. The pad should be a contrasting colour to the mat.



SAFETY TIP:
Only use an enclosed netted trampoline and place the trampoline on level soft energy absorbing ground. Only one child should be on the trampoline at a time.

How to use a trampoline safely:**Positioning the trampoline**

- Place the trampoline away from structures such as fencing or garden furniture, trees, concrete surfaces and other play areas.
- The trampoline should be placed on level, soft, energy absorbing ground (i.e. soft and springy lawn or bark wood chip, sand or cushioning materials).
- Never place the trampoline on a hard surface (i.e. concrete, hard packed mud) without some form of crash matting or safety netting.
- Springs or spaces should be covered so they do not pinch fingers, toes or skin.
- Access to a trampoline should be via a fenced gate that is locked when no adult is present to supervise, in order to prevent children using the trampoline unattended.
- Do not allow children to use a ladder to get on the trampoline because it provides unsupervised access to small children.

Before using the trampoline

- Set and discuss rules for using the trampoline with children who will use it. Tell them about the risks of not using the trampoline properly.
- Have children remove necklaces and any clothing that may catch in the trampoline or safety net.
- Inspect the trampoline before each use to make there are no holes and that the frame has not become damaged. Also check the padding is correctly and securely positioned and the leg braces are locked.

Using the trampoline

- **Never allow more than one person on the trampoline at a time** to reduce the risk of injuries. Instead, encourage them to take turns.
- Do not allow children to attempt somersaults because landing on the head or neck can cause paralysis, paraplegia and spine fractures.
- Do not use the trampoline without shock-absorbing pads that completely cover its springs, hooks, and frame.
- Children under 6 years of age should only use trampolines designed for their age range and size; trampolines are not suitable for very young children and toddlers.
- Never allow the use of bouncing to exit the trampoline.
- Always supervise children using a trampoline by spotting at the side of the trampoline.

⁷¹ The Royal Society for the Prevention of Accidents, 2005, Trampoline Safety Factsheet. http://www.rosipa.com/waterandleisuresafety/info/trampoline_safety.pdf

⁷² RoSPA. Trampoline Safety. <http://www.rosipa.com/leisuresafety/adviceandinformation/leisuresafety/trampoline-safety.aspx>.





Window blind or drapery cords

In 2008 a two-year-old girl died at her home in the United Kingdom after becoming entangled in the looped cord of a window blind. It's thought the toddler climbed level with the operating cord of a window blind before becoming caught up in its loop, banging her head and falling unconscious. She is one of at least 26 children who have died in similar circumstances across the United Kingdom since 1999 (with 13 deaths occurring since the beginning of 2010). Many more near-misses are suspected. The toddler's father, said: "Though nothing will ever bring my beautiful daughter back, we can at least try to prevent other families being devastated in the same way by spreading the word about this 'hidden' hazard."

Source: RoSPA. Blind Cord Safety Campaign. Case Studies. Available online: <http://www.rospa.com/about/currentcampaigns/blindcords/default.aspx>

Why window blinds/drapery cords pose a problem?

- Estimates using EU Injury Database (IDB) data indicate that annually in the EU 28 Member States approximately 100 injuries to children 0-14 years of age involving window blind/drapery cord are serious enough to require a visit to the emergency department.
- The U.S. Consumer Product Safety Commission (CPSC) has identified window coverings with cords as one of the top five hidden hazards in the home. About once a month in the USA a child between 7 months and 10 years old dies from window cord strangulation and another suffers a near strangulation. In recent years, CPSC has recalled over five million window coverings because of safety issues.⁷³
- In the United Kingdom two children die annually after becoming tangled in blind cords and many more have near misses. Research shows that children between 16 and 36 months of age are at highest risk, with the majority of injuries occurring around 23 months.⁷⁴
- The current European safety standard, EN13120: 2009 Internal blinds - Performance requirements including safety, is currently being strengthened and its scope broadened. A revised standard is anticipated and will take effect sometime during 2013/2014.

How are window blinds/drapery cords dangerous?

- Window blinds/drapery cords are a strangulation hazard.
- Children become entangled in the pull cords or in the inner cords that are used to raise the slats of blinds. These entrapments occur when a young child pulls on an inner cord and it forms a loop that a child can hang in. The reported deaths included children in cots or playpens placed next to windows. In most cases, the outer pull cords were placed out of reach, but the children still strangled when they pulled on the inner cords of the blinds. Children were found hanging by the neck in the loop of the cords.

SAFETY TIP:
Buy blinds or draperies with no loops or cords, or shorten the cord so that a child cannot reach it.

What to look for when buying or prior to using:

- Reconsider the window covering options – is a blind really necessary? If yes, buy blinds without a blind cord/chain and without a concealed cord.
- Do not buy looped blind cords. It is hoped that a voluntary agreement among manufacturers and retailers in Europe will eventually see an end to looped blind cords altogether.

How to use window blinds/drapeer cords safely:

- Examine every blind in the home. Discard blinds with looped control chains or cords and install blinds that do not have a cord, particularly in a child's bedroom.
- Keep all blind cords out of the reach of children ...
- Do not place a child's cot, bed, playpen or highchair near a window as children can climb on top and open the window and/or reach the cords.
- Cutting the cords is not recommended, even as a short-term solution. Cutting the cord in the wrong place can make the blind inoperable; and it may also lead to one cord becoming a lot longer which increases the risk of entanglement. Cut cords can also become tangled up resulting in the reformation of a loop. It is recommended that any action taken with respect to the blind cord is a permanent one that ensures the cord is out of the reach of children.

⁷³ U.S. Consumer Product Safety Commission. Petition for Rulemaking Eliminating Accessible Cords On Window Covering Products. 2013. <http://www.cpsc.gov/PageFiles/114922/5009a.pdf>

⁷⁴ Royal Society for the Prevention of Accidents. Blind Cord Safety. 2010. <http://www.rospa.com/homesafety/Info/blind-cord-safety.pdf>



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full contact details for ECSA country partners can be viewed at:

<http://www.childsafetyeurope.org/aboutus/member-list.html>

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Kid Rapt Ltd are suppliers of child safety equipment direct to local authority schemes and we also support our customer base by the dissemination of information on accidental injury prevention; so being a sponsor of this valuable document was important to us. We have been incorporated since 1992 and in that time have been privileged to have been the chosen partner in many schemes within the UK, including the pivotal English Home Safety Equipment Scheme which was delivered by RoSPA between 2009 and 2011. Carol Ainge, who is the Managing Director of Kid Rapt, is also the Chair of the Institute of Home Safety. www.childsafety.co.uk/

The Consumer Safety Commission (CSC) is an independent administrative authority in France created in 1983. It has three main missions: to give recommendations on hazardous products or services, to inform consumers about the potential risks when using certain products or services, and to collect information on unintentional injuries. Since its creation the CSC has released nearly 450 opinions on various topics, such as health and body care, housing, sports and leisure, transportation, chemicals, and also childcare and toys, whether everyday items such as a child car seat, a stroller or more specific ones, like sunglasses for children. www.securiteconso.org/



Child Product Safety Guide

Potentially dangerous products

Each day children are hurt when interacting with products in their everyday environment; even with products made especially for children. This guide was written in order to reduce child injuries related to products that are in regular use by children and their caregivers, by providing comprehensive information on 26 products that child safety experts in Europe identified as posing injury risks to children.

This guide is meant to raise awareness and education consumers and professionals to recognise the hidden hazards that a child encounters with products in their daily life and ways to prevent injuries with these products. For each product the reader learns why the product may pose a safety problem, why it can be dangerous for children, what to look for when buying or prior to using the product and lastly, advice on how to use the product safely.

By enhancing the awareness and knowledge of consumers and professionals on safe interaction with products, children in Europe may lead safer lives.

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