

Childhood Choking, Strangulation and Suffocation

- Airway and breathing-related injuries occur less frequently than other injury causes, but are often fatal¹.
- Choking is defined as blockage of the airway due to round and cylinder shaped food products such as candies, nuts, grapes and also non-food products such as coins, buttons, small toy parts, under-sized pacifiers, uninflated latex balloons and inedibles in food products.
- Suffocation is defined as death due to oxygen deprivation from external causes like plastic bags, entrapment in sealed containers (i.e. toy chest) and spaces².
- Strangulation is defined as death due to lack of oxygen from pressure on the trachea from items such as clothing drawstrings, crib bars, window blinds and drapery cords.
- In England and Wales, 61 children died in a two-year period due to choking, strangulation or suffocation, with the majority being boys, under 3 years of age³. A further 5,000 children aged 15 or under were brought to accident and emergency units in the United Kingdom because of choking, with the majority of these injuries occurring in the home³.
- Studies in Greece, Germany and Israel all confirm that food products containing inedibles are inherently unsafe and that labelling is not an adequate protection. It is estimated that 2,000 injuries occur annually in the European Union due to inedibles in food products alone⁴.
- It has been identified that four main product characteristics should be considered when evaluating products for safety: size/diameter, compressibility, flexibility and configuration². Another factor that has emerged as potentially dangerous is magnetic strength.
- Recently there have been a number of accidents and incidents happening with children swallowing small toy magnets. They pose a risk to the health and safety of children as they are made of small and often powerful magnetic pieces. If more than one piece is swallowed the magnetic pieces can be attracted to each other and cause twisted/knotted intestines, intestinal perforation or blockage which may be

fatal. Several such incidents involving children between one and 10 years of age have been reported around the world. The European Commission has published a Decision requiring magnetic toys to display a specific warning about the safety risks and it is anticipated that this issue will be covered by an amendment to the Toy Safety Directive⁵.

- Children placed in adult beds are at increased risk for airway obstruction injury. In the United States for example since 1990 at least 296 children aged 2 and under have died in adult beds as a result of entrapment in the bed structure⁷. During this same period at least 57 children, nearly all aged 3 and under, have died due to entrapment in bunk beds alone. Additionally, 209 children in this age group died in adult beds from suffocation as a result of being covered by another person's body.
- Strangulation is the leading cause of deaths on playgrounds and deaths have been related to both playground equipment design and as a result of cords and drawstrings on children's clothing getting caught in the equipment⁹. Since 2007 there have been onerous restrictions on the use of cords and drawstrings on children's clothing in the European Union to address this risk⁶.
- The total annual cost of airway obstruction injury among children ages 14 and under in the United States is estimated to be nearly \$3.7 billion. Children aged 4 and under account for more than 78% of these costs⁷.

Prevention Effectiveness

The following product requirements, modifications and legislation have proved to be successful in reducing deaths from choking, suffocation and strangulation:

- **Warning labels** - labels placed on products that explain the hazard, not just a label stating "for children aged 3 years and up", have raised carers' awareness of the dangers they pose⁸.
- **Product bans** – the United Kingdom banned clothing drawstrings in 1976 and no known deaths from drawstring-related injuries have been reported since then⁹. Thus regulations and/or standards that



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restrict cords or drawstrings on clothing and inedibles in food products are effective in reducing hazards.

- **Product modification** – product requirements for slat spacing for crib designs, balconies, and outdoor fencing have been effective in reducing strangulation. But older crib models that do not meet the requirements need to be removed from homes and not passed to other families, especially immigrants and poorer families purchasing used cribs². Another issue is the need to lower the minimum force required to open a lid or door to a sealed container in order to allow children to escape when trapped (i.e., lids on toy boxes)².
- **Product safety commission** – National consumer safety organisations in Europe have improved the safety of consumer products in their country. In the United States it is estimated that the work done by the Consumer Product Safety Commission has contributed to a 30 percent decline in the rate of deaths and injuries associated with consumer products over the past 30 years¹¹.

Recommended Policy Actions

Legislation

- For the European Commission to improve the requirements relating to warning labels placed on products so that labels explain the hazard in addition to identifying it.
- For the European Commission to adopt a mandatory standard to lower the minimum force that is required to open a lid or door to any toy or container that a child can enter.

- For the European Commission to ban latex balloons, inedibles in food products and drawstrings in clothing.
- For the European Commission to adopt a mandatory standard for bunk beds to address entrapment hazards. The standard would restrict opening sizes, require guardrails and specify company identification and age-specific warning labels to be present on all new bunk beds.
- For the European Commission to adopt, as a mandatory standard, the EN 1176 series of standards relating to playground equipments and surfacing.

EU Collaboration

- For the European Commission to support an educational campaign to the public regarding safety practices to prevent choking, suffocation and strangulation injuries in children.
- For the European Commission to establish a European Product Safety Commission whose purpose would be to provide a clearinghouse of child product safety information for consumers and a hotline for consumers to report unsafe products and to ensure the collection and review of data on product related injury incidents to assess the need for product recalls.
- For the European Commission and Member States to support a Europe-wide surveillance system for injury data related to product involvement on a population level that is accessible online and updated monthly.



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