Preventing unintentional injuries in children

In this article...
- Who is most at risk of experiencing an injury
- What types of injury are most common
- How to reduce unintentional injuries to children under five

Key points
1. More than a third of admissions in those aged 0-25 years are children aged under five.
2. There are more unintentional injuries and deaths in areas of deprivation than in wealthier areas.
3. Parents and carers may not realise which household objects are hazards.
4. Most injuries fall into one of five categories.
5. Multi-agency working is crucial to make homes safer for children.

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Abstract

Parents and carers try to keep children safe but accidents do occur, particularly in children aged under five years, and many take place in the home. Although it is rare, some of these may even result in death. In an effort to reduce the incidence of these injuries and deaths, Public Health England published a report earlier this year that identifies who is at risk and how professionals involved in children’s early years care can help tackle the issue. This article summarises the key findings of that report.

Keeping children safe in and around the home is every parent’s and carer’s priority but we know, from the moment a new baby is home, an infinite number of hazards and risks can lead to unintentional injuries. So what more can be done to keep children safe, and what is the role of health and early years staff? This article draws on a report by Public Health England, published in the summer, which looks specifically at children aged under five in the home (Public Health England, 2014).

Why focus on unintentional injuries and deaths?
As part of its priority work on child and family health, PHE identified unintentional injuries as a major issue for the following reasons:
- The numbers of children affected each year. Between 2008-09 and 2012-13, on average, 450,000 attended accident and emergency, 40,000 were admitted, and 60 under-fives died;
- The particular impact on poorer households. Our analysis shows that unintentional injury rates were 45% higher for children from the most deprived areas compared with children from the least deprived;
- Many of these injuries are avoidable.

The work undertaken led to a collaboration with the Child Accident Prevention Trust (CAPT), supported by the Royal Society for the Prevention of Accidents and the Association of Directors of Public Health, to identify the scale of the issue and what action could be taken. PHE published its findings earlier this year along with data tools and more detailed analysis for local authorities, health services and injury prevention partnerships. The work focused on children aged under five years because this age group accounts for more than one in three of all hospital admissions for injuries in 0-25-year-olds (PHE, 2014).

Research involving child survivors and their families has also shown that there can be significant psychological trauma (CAPT, 2014) to those involved in serious injuries beyond the physical harm caused. A serious burn or scald potentially has consequences that last a lifetime, as do injuries leading to a loss of function.

Key findings
Our analysis of injury and mortality data of under-fives found that in England, for each of the five years between 2008-09 and 2012-13, there were almost 40,000 emergency hospital admissions – this equates to 110 admissions each day of the week. Between 2008-09 and 2011-12 an analysis...
Reducing injuries in the home

Health professionals, and those with whom they work in early years settings, have a central role to play in helping parents take action to reduce injuries in the home. This applies across professions, and includes health visitors and nurses, as well as other health, play and education services – in effect, making every contact count with parents of young children (PHE, 2013).

We identified five factors that influence the occurrence of accidents. Professionals should be aware of each of these following points when working with parents and visiting homes:

- The child’s development – we can easily underestimate how quick and curious new crawlers and walkers can be and, as children become more mobile, their exposure to new risks changes, requiring health and early years professionals to adapt their advice to families;
- The physical environment in the home – including any overcrowding;
- The knowledge and behaviour of parents and other carers – do they understand the vulnerability of young children as they become more mobile? Are they aware, for example, that behaviour such as leaving children unattended (even for a moment) when they are being changed from a height could be a hazard? Do they realise that nappy sacks, if not disposed of safely, could be a suffocation hazard?;
- Safety equipment – are these available and are they being used correctly?;
- Consumer products in the home – products such as hair straighteners and irons, as well as newer products such as e-cigarettes and liquid refills, can pose a risk if left unattended (Chatham-Stephens et al, 2014). Among all this safety awareness, the last thing we want is for families to become so anxious that they unnecessarily restrict their child’s movements and opportunities for exploration. These are important elements of every child’s development, and are crucial for learning, socialising and building a child’s confidence and independence.

There is a balance to be struck, which many professionals and parents do successfully every day – for example encouraging “rough and tumble” play in the home on rainy days, but keeping this as safe as possible through supervision.

Our report (PHE, 2014) highlighted three key points that can help reduce the number of unintentional injuries in children aged under five and the corresponding actions that local leaders can take. These are:

- Providing leadership and mobilising

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<tr>
<th>TABLE 1. ACCIDENTAL DEATHS OF 0-5-YEAR-OLDS IN AND AROUND THE HOME, 2008-09–2012-13</th>
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<tbody>
<tr>
<td><strong>Cause of death</strong></td>
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<tr>
<td>Accidental threats to breathing</td>
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<tr>
<td>Accidental drowning and submersion</td>
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<tr>
<td>Falls</td>
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<tr>
<td>Exposure to smoke, fire and flames</td>
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<td>Exposure to inanimate mechanical forces</td>
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Source: PHE (2014)

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<th>TABLE 2. MAIN TYPES OF ADMISSIONS FOR 0-5-YEAR-OLDS, BY INJURY IN AND AROUND THE HOME, 2008-09–2012-13</th>
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</thead>
<tbody>
<tr>
<td><strong>Injury type</strong></td>
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<tr>
<td>Falls</td>
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<tr>
<td>Impacts, entrapments, lacerations</td>
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<tr>
<td>Accidental poisoning</td>
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<tr>
<td>Thermal injuries</td>
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<tr>
<td>Stuck, bumped into by a person, dog bites</td>
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<tr>
<td>Suffocation and strangulation</td>
</tr>
</tbody>
</table>

Source: PHE (2014)
There are compelling reasons why we need to do more to reduce unintentional injuries. Working with families is a multi-agency responsibility, so working collaboratively is essential to make homes safer;

- The early years workforce needs support and training to enable it to strengthen its central role in helping to reduce unintentional injuries. Make sure that all key staff are familiar with the main injury prevention messages and that services are helping to provide equipment and support for the most vulnerable families;
- Focusing on five kinds of injuries for the under-fives makes sense. Our analysis, and that of others, has shown that there is a case for focusing on choking/suffocation, falls, poisonings, burns/scalds and drowning. We chose not to focus on impacts, entrapments and lacerations even though they are responsible for a large number of injuries. The general view among accident prevention specialists is that these injuries are more part and parcel of growing up and harder to prevent.

Local areas can do this most efficiently and effectively by working through injury prevention partnerships where they exist, alongside local emergency health services, commissioners, and community groups to identify any local issues. Plans to improve safety levels would include targeting education programmes to areas that would benefit most, working closely with early years settings, as well as, where possible, home safety checks, which might include safety equipment, such as stair gates.

**Conclusion**

There are compelling reasons why we need to do more to reduce unintentional injuries to under-fives. Our analysis shows that for this age group, each year approximately 450,000 attended A&E, 40,000 were admitted, and 60 died, just from home-based injuries. There is a significant social inequality, with children from poorer areas having an injury rate 45% greater than children from the least deprived areas. We know that with the right support, such as education, information and safety equipment, we can keep children safer.

**Box 1. More Resources**

- For more information about Public Health England’s (2014) report: www.chimat.org.uk/earlyyears/injuries
- For epidemiology and information for parents and professionals: Injury Epidemiology and Prevention Research, University of Nottingham – tinyurl.com/injuryresearch
- How to childproof your home, NHS Choices – tinyurl.com/childproof-home

Being focused on our interventions, in terms of the types of injuries and vulnerabilities of the family, is likely to be an effective use of limited resources. Our report gives more details about the crucial role of the early years workforce in supporting parents to keep children safer. A key part of this work is in relation to education. For example, giving information and guidance to parents of very young children in a positive way that recognises the daily pressures families are under. In many areas this will be supplemented by practical aids, such as safety gates, smoke alarms and door catches.

Combined with an approach that sees injury prevention as the responsibility of all local agencies working in partnership with families, we can collectively help to keep children safer to give them the best start in life. **NT**

**References**


This article has focused on what we know about under-fives and the relatively simple steps we can take to have a beneficial impact on the incidence rates of unintentional injuries and accidental death in this group.

**Quick Fact**

- **110**: Number of admissions each day of the week for unintentional injuries to under-fives

- **For more on this topic go online...**

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  - Bit.ly/NTPersonalisingHP