Preventing unintentional injuries

A guide for all staff working with children under five years
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Choking, suffocation and strangulation</td>
<td>5</td>
</tr>
<tr>
<td>Falls</td>
<td>6</td>
</tr>
<tr>
<td>Poisoning</td>
<td>7</td>
</tr>
<tr>
<td>Burns and scalds</td>
<td>8</td>
</tr>
<tr>
<td>Drowning</td>
<td>9</td>
</tr>
<tr>
<td>Fire</td>
<td>10</td>
</tr>
<tr>
<td>Roads</td>
<td>11</td>
</tr>
<tr>
<td>Conclusion</td>
<td>12</td>
</tr>
<tr>
<td>Hazards and safety practices poster</td>
<td>13</td>
</tr>
<tr>
<td>One Step Ahead wall chart</td>
<td>14</td>
</tr>
<tr>
<td>Resources</td>
<td>15</td>
</tr>
<tr>
<td>References</td>
<td>17</td>
</tr>
<tr>
<td>About Public Health England</td>
<td>21</td>
</tr>
</tbody>
</table>
Introduction

The problem
- each year in England, an average of 60 children under five years die from injuries in and around the home. Seven children died on the roads in 2014 1,2
- there are also approximately 40,000 emergency hospital admissions and 450,000 visits to A&E departments 3,4
- admission rates in the most deprived areas (home injuries) are 45% higher than the least deprived areas 5
- national and local health needs assessments provide data which enables practitioners to tailor safety messages to the needs of the local population 6

Policy context
- the Public Health Outcomes Framework (PHOF) indicator (2.7) covers reducing hospital admissions from unintentional injuries for children and young people 7
- preventing accidents is one of the six ‘high impact areas’ for health visiting and part of PHE’s priority area Giving Children and Young People the Best Start in Life 6,9,10
- the National Institute for Health and Clinical Excellence (NICE) guidelines cover quality standards and evidence based action and strategies to reduce unintentional injuries among children and young people under 15 11,12,13,14

Making the most of all contacts
- the Healthy Child Programme (HCP) (0 to 5 years) provides a framework in which advice and support is provided to families, and in which key messages on preventing harm from injuries can be given
- for children up to 2/2.5 years, universal reviews present structured opportunities to reinforce safety issues, as well as making every count through, for example, contact with practice nurses in primary care settings
- as children get older, and approach pre-school and school, there are a range of settings in which parents and carers, and children, can become more safety aware – for example nursery settings, childminders, and play groups
- as children get ready to make the transition to school, school nurses can provide support to help prepare for school entry 15,16
- home visits are the ideal opportunity to discuss effective safety practices. A home safety checklist is a practical tool that can help empower parents 17
- education is more effective when combined with ‘engineering’ eg providing and fitting equipment like smoke alarms and safety gates 18
- the Ages and Stages Questionnaire (ASQ) and the Red Book can help linking discussion about injuries with child development in a natural way – slotting in safety messages while covering other issues 19,20

Intensive support
- in more intensive work, including the Universal Plus and Universal Partnership Plus aspects of the core health visiting service, the Making Every Contact Count (MECC) approach is suitable for working on injury prevention 21,22,23
- for some families, unintentional injuries can signal wider safeguarding concerns 24
Introduction

Early years settings – education, children’s centres, nurseries, childminders, day care and clinics
• settings can run specific safety sessions and integrate messages into routine interactions eg one-to-one meetings with parents and during ‘stay and play’
• displays can highlight topical safety issues in settings where there are fewer opportunities to engage directly with parents

Community programmes, campaigns and policy development
• practitioners can also promote community involvement via local/national campaigns and influence policy and strategies
• partnerships with fire and rescue services, umbrella organisations for private landlords, community and voluntary organisations will strengthen community programmes

Developing knowledge and skills
• the most effective home safety interventions are delivered by health care and social care professionals who have had specific training on injury prevention
• the Public Health Skills and Knowledge Framework (PHSKF) provides a framework that is applicable to injury prevention
• the Institute of Health Visiting (iHV) has published a framework for the continuing professional development for health visitors which includes standards for reducing accidents. CAPT, iHV and RoSPA offer specialist training

Priority areas for action
• PHE has identified five of the most common and serious types of injuries for under-fives which services and professionals should focus on: choking/suffocation/strangulation; falls; burns and scalds; poisoning; and drowning. This resource also covers fire and road injuries. The following pages will cover each of these injury types in more detail
• the data in the following slides all relate to England
Choking, suffocation and strangulation

**THE DATA**
- The leading cause of accidental death among the under-fives
- On average, 28 children die each year
- 50% of the children who die are under one year – suffocation/strangulation in bed is the main cause (60%)
- Main causes of death for one to four year olds:
  - Hanging and strangulation (36%)
  - Inhalation and ingestion of food (28%)
  - And inhalation of gastric contents (17%)
- Hospital admissions are very rare

**WHAT TO DO**
- For babies – education about safe sleeping and storing plastic bags/nappy sacks out of reach
- For toddlers – the importance of cutting up food; supervising eating; keeping small objects out of reach; and ensuring window blind cords are safe

**Antenatal, new birth and at 9 to 12 month health review**
- Always place your baby on their back to sleep with their feet to the bottom of the cot
- Don’t use a duvet, pillow or cot bumper
- Place your baby to sleep in a separate cot or Moses basket in the same room as you for the first six months
- Don’t cover baby’s face or head
- Place nappy sacks out of reach
- Keep blind cords away from cots/changing units
- Don’t leave toys where the baby/child is sleeping
- Never prop up a bottle for your baby to feed alone (‘prop feed’)

**2 to 2 ½ year universal health review or earlier**
- Keep small objects out of reach
- Look out for small parts in older children’s toys
- Cut food into batons not balls e.g. grapes, tomatoes
- Supervise your child when eating
- Use blinds without cords, or tie up cords/use winders
Falls

SAFETY MESSAGES FOR PARENTS AND CARERS

Help parents to anticipate the risks – looking ahead as their child develops

• falls are the main cause of injury-related admissions for under-fives (20,000 per year)
• most admissions are from furniture falls
• falls from stairs and steps are also significant
• deaths are rare, about five a year
• children under one mostly fall from beds or highchairs, or while being carried
• falls from height can be serious – window, balcony, stairs, furniture, work surface and highchair
• the risks change as the baby/child gets more mobile
• combining education about hazards and safety for babies and children on raised surfaces with the provision and fitting of safety gates and window locks

THE DATA

• change nappies on the floor
• don’t put baby chairs/seats or car seats on raised surfaces
• don’t leave babies unattended on a raised surface (eg bed, changing table)
• always use the harness correctly for a child in a highchair
• use safety gates until age 24 months to help prevent stair falls
• use correct safety gate for location and always close them
• carpets and handrails can make stairs safer

SAFETY MESSAGES FOR PARENTS AND CARERS

WHAT TO DO

Antenatal, new birth and at 9 to 12 month health review

• supervise and teach children where not to climb
• use window locks, restrict access to balconies
• ensure nothing aids climbing to windows or from balconies

2 to 2 ½ year universal health review or earlier

• change nappies on the floor
• don’t put baby chairs/seats or car seats on raised surfaces
• don’t leave babies unattended on a raised surface (eg bed, changing table)
• always use the harness correctly for a child in a highchair
• use safety gates until age 24 months to help prevent stair falls
• use correct safety gate for location and always close them
• carpets and handrails can make stairs safer
Poisoning

THE DATA

- the third most common cause of injury-related hospital admissions for under-fives (4,000 per year)
- 70% of the admissions are poisonings from medicines and 20% are from household/garden chemicals
- deaths are very rare
- other poisoning hazards include:
  - carbon monoxide (CO)
  - button batteries (also chemical burn)
  - certain plants
  - e-cigarette refills
- carbon monoxide is produced in the home when fuel in a flame burning appliance doesn’t burn fully
- mouthing, climbing and improved motor skills increase the risk of accidental poisoning
- the risks change as the child develops – able to open cupboards and containers

WHAT TO DO

- make sure carbon fuel appliances are serviced at least annually
- a working CO alarm could save lives
- fit cupboard locks where medicines and household chemicals are stored
- if locks are not possible, store items up high – at or above adult eye level and put them away straight after using them
- don’t leave button batteries within reach of babies and children

SAFETY MESSAGES FOR PARENTS AND CARERS

Antenatal, new birth, 9 to 12 month health review and also 2 to 2 ½ year universal health review

- safe storage, education plus safety equipment (eg cupboard locks, CO alarms) and home safety checks are most effective
**Burns and scalds**

---

**THE DATA**

- the fourth highest cause of hospital admissions for under-fives
- the injuries can be disabling and disfiguring and are expensive to treat
- hot drinks cause the majority of the injuries – admissions peak at age 12 to 23 months. Drinks can still burn after 15 minutes
- hot bathwater causes the most serious injuries
- 21% of admissions from bathwater scalds are for more than three days
- other significant causes of burns/scalds are hot water on cookers, kettles, radiators and pipes, and hair straighteners
- the risks change as the child develops eg reach extends

---

**WHAT TO DO**

- education plus fitting a thermostatic mixing valve (TMV) is the most effective approach for preventing bathwater scalds
- children who are taught kitchen safety behaviour are significantly less likely to attend hospital from a scalp

---

**SAFETY MESSAGES FOR PARENTS AND CARERS**

**Antenatal, new birth and at 9 month health review**

- consider getting a thermostatic mixing valve (TMV) fitted to regulate bathwater temperature
- put cold water in first when running a bath and check the temperature before bathing a baby
- don’t leave another child in bath to care for baby
- keep hot drinks well out of reach of babies
- keep the baby away from cookers, kettles etc
- be aware that scalding risks increase when babies are able to climb (especially in kitchen)

**2 to 2 ½ year universal health review**

- teach children kitchen safety rules about hot things, not climbing and what to do/not do when adults are cooking
- keep toddlers away from hot drinks, cookers, kettles, barbecues etc
Drowning

THE DATA

• drowning is the second leading cause of injury-related death for under-fives
• on average 13 children die each year
• 90% of the children that die are aged one to four years
• 40% of deaths (where cause is known) are in the bath
• hospital admissions are very rare
• pond, paddling pool and swimming pool risks increase as children get older and more mobile

WHAT TO DO

• education about water risks and the importance of adult supervision are key together with preventing access to hazards such as garden ponds/pools
• immediate resuscitation significantly increases the likelihood of a good outcome

Antenatal, birth and at 9 to 12 month health review

• warn about babies being unable to lift their faces from water face down
• stress need for constant adult supervision of babies in the bath
• remember that bath seats are not safety devices
• explain that drowning is quick and silent

2 to 2 ½ year universal health review or earlier

• discuss drowning risks related to children’s desire to explore their environment
• advise on the need for supervision and limiting access to water at home, eg baths, paddling pools and garden ponds, including those of neighbours
• explore swimming pool risks, especially when on holiday abroad – adults relaxed, children excited etc
• consider developing first aid skills including CPR
Fire

- smoke, fire and flames kill four under-fives each year
- smoke kills, but burns can be very serious injuries requiring long periods of treatment
- the main causes of accidental house fires (2014 to 2015) were cooking appliances and misuse of equipment/appliances. But smoking materials lead to the most deaths
- 50% of house fires attended by the fire and rescue service are homes without a working smoke alarm
- the highest death rates are among the most disadvantaged families
- fire and rescue services carry out free fire safety checks and some families are eligible for free alarms

**THE DATA**

- education about fire risks, providing and fitting free/low cost smoke alarms and carrying out a home safety check
- education about how to make a family fire escape plan

**WHAT TO DO**

- Antenatal, birth and 9 to 12 month health review and also 2 to 2 ½ year universal health review
  - a working smoke alarm and a family fire escape plan could save your life
  - fire and rescue services provide free fire safety checks and will advise about alarms
  - don’t leave pans unattended when using fat or oil
  - make sure cigarettes, candles and tea lights are put out, especially at night
  - keep matches and lighters away from children
  - don’t put clothes or furnishings near fire
  - check for signs of overloaded sockets – hot plugs, scorch marks, fuses often blowing
  - use reputable mobile device chargers and do not leave charging on beds or furniture
  - take extra care around fire when drinking alcohol, using medication or drugs

**SAFETY MESSAGES FOR PARENTS AND CARERS**
Roads

• seven children aged 0 to four were killed and 231 seriously injured on roads in 2014
• 69% of the children injured were pedestrians
• 70% of children travel in incorrectly fitted car seats
• risks change as children develop and become more mobile – they cannot judge car speed, distance or extent of road dangers

• education about pedestrian safety and in-car safety
• the value of understanding the risks to children and the significance of providing a good example of how to act on the roads

Antenatal, birth and at 9 to 12 month health review
• never allow a child under five out alone
• use a correctly fitted rear-facing seat on every trip, ideally on the back seat
• deactivate the passenger air bag if the child seat is ever used in the front
• use a rear-facing seat for as long as possible, based on the manufacturer’s recommended height/weight
• avoid distractions, including mobile devices

2 to 2 ½ year universal health review or earlier
• never allow a child under five out alone
• hold your child’s hand when near or crossing roads
• explain traffic and its dangers to your child
• model safe behaviour around roads
• use a correctly fitted car seat for every trip progressing to a high-backed booster seat
• avoid distractions, including mobile devices
Conclusion

Personal and economic costs

Serious unintentional injuries can disable and disfigure children for life and in some cases kill them.

The economic cost to the children and their families can be high, as is the cost to health and social care services.

The short-term average healthcare cost of an individual injury (all types) is £2,494.1

The wider cost of a serious home accident for a child (0 to 4) has been estimated at £33,200.2

Making a difference

Staff working with children under five years are ideally placed to help reduce deaths and hospital attendances and admissions.

There are opportunities to integrate safety advice within all contacts with parents.

Equipping parents with an understanding of how a baby and young child will develop can help them to stay ‘one step ahead’ – anticipating future risks. See page 14.

This resource highlights the principal safety messages for parents and carers (pages 5 to 11 and 13 to 14).

Specialist training is available to strengthen practitioners’ knowledge and skills. 3,4
# Staying safe: Key messages for the under 5s

<table>
<thead>
<tr>
<th>Age</th>
<th>Choking</th>
<th>Suffocation and strangulation</th>
<th>Falls</th>
<th>Poisoning</th>
<th>Burns and scalds</th>
<th>Drowning</th>
<th>House fires</th>
<th>Road accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 6 weeks</td>
<td>Babies can choke if they’re prepped up to feed – always hold them when feeding</td>
<td>Babies can suffocate on duvets and pillows. Keep a clear out with no loose bedding, pillows, cot bumpers or toys. Keep nappy sacks out of reach</td>
<td>Take extra care when carrying a baby on the stairs</td>
<td>Fit carbon monoxide alarms wherever there is a flame burning appliance or open fire. Have appliances serviced annually</td>
<td>Hot drinks can scald in seconds even when they seem cool – put yours down, out of reach, before picking up a baby</td>
<td>Never leave your baby alone in the bath</td>
<td>Fit smoke alarms and test them regularly. Plan and practise a fire escape route with every family member and carer</td>
<td>Use a correctly fitted rear-facing seat on every journey. Deactivate the air bag if the seat is ever used in the front</td>
</tr>
<tr>
<td>6 weeks to 6 months</td>
<td>Cut food into small pieces and keep small objects like coins and button batteries out of reach. These batteries can also cause life-threatening chemical burns to the intestine</td>
<td>Tie up blind cords or install cordless blinds to prevent strangulation, especially in children’s bedrooms</td>
<td>A baby could roll or wriggle off a raised surface – change nappies on the floor</td>
<td>Make sure medicines are kept out of reach. Keep cleaning products locked away. Keep e-cigarettes and refills out of reach.</td>
<td>Keep hot drinks, kettles and pans away from curious hands</td>
<td>Never leave a baby alone in the bath</td>
<td>Keep matches and lighters out of reach</td>
<td>Use a correctly fitted seat that’s right for your child’s weight, age and height</td>
</tr>
<tr>
<td>6 months to 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Put hair straighteners in a safe place to cool</td>
<td>Supervise children near garden ponds and paddling pools</td>
<td>Make sure candles and cigarettes are extinguished at night</td>
<td>Use a rear-facing seat for as long as possible, based on the manufacturer’s recommended height/weight</td>
</tr>
<tr>
<td>1 - 3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Put cold water into the bath first</td>
<td></td>
<td></td>
<td>Use a correctly fitted child car seat for every journey progressing to a high backed booster seat</td>
</tr>
<tr>
<td>3 - 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fit a TMV to the bath hot tap to prevent rapid and severe scalds</td>
<td></td>
<td></td>
<td>Never allow a child under five out alone. Encourage children to hold your hand when near or crossing roads</td>
</tr>
</tbody>
</table>
One Step Ahead: keeping your child safe at home (0-24 months)

0-3 months
- When you carry me, clear toys away so you don't trip.

0-9 months
- If I roll off the bed, change my nappy on the floor.

6-24 months (and over)
- If I climb the stairs, use safety gates.
- From my highchair or pram, use a five point harness.

10-24 months (and over)
- If I climb on my cat, take big toys out.
- If I'm in the garden, tie up blind or curtain cords so there's no hanging loop.

0-12 months
- In duvets and pillows, don't use them on my bed.

7-24 months (and over)
- If I put medicines in my mouth, put them out of my reach.

15-24 months (and over)
- If I drink cleaning products, keep them out of reach and sight, ideally locked away.

0-24 months (and over)
- In only 5 cm of water, don't leave me alone in the bath.

6-24 months (and over)
- On food that's too big or odd shape, please cut it up small.

8-24 months (and over)
- If you prop me up to feed, hold me when I feed.

4-24 months (and over)
- If I touch your hot hair straighteners, keep them and iron out of my reach.

0-8 months
- If I pull hot water in the bath first, always put the cold in first.

7-24 months (and over)
- If I grab hot drinks, pots or kettle, keep them out of my reach.

0-18 months
- On hot drinks, put me down before you pick up yours.

4-24 months (and over)
- If I grab hot drinks, pots or kettle, keep them out of my reach.

0-24 months (and over)
- If I pull hot water in the bath first, always put the cold in first.

7-24 months (and over)
- If I grab hot drinks, pots or kettle, keep them out of my reach.

0-18 months
- On hot drinks, put me down before you pick up yours.

4-24 months (and over)
- If I grab hot drinks, pots or kettle, keep them out of my reach.

Check our smoke alarms are working.

Plan how we'll escape in a fire and practise what we should do.

Remember not all children do the same things at each age
Resources

The Chief Medical Officer

Child Accident Prevention Trust (CAPT)
CAPT’s website is designed for everyone interested in reducing serious unintentional injuries to children and young people, including, parents, carers, frontline staff, senior staff and commissioners: www.capt.org.uk

Department of Health (DH)
Children's health: www.gov.uk/government/policies/children-s-health

Department for Education (DfE)
Early years: www.gov.uk/topic/schools-colleges-childrens-services/early-years

European Child Safety Alliance
An alliance of more than 30 countries across Europe working together to reduce child injuries: www.childsafetyeurope.org/index.html

Institute of Health Visiting (iHV)
iHV works closely with its members, the public health workforce and wider community to develop and implement a wide range of policy and projects to educate and empower individuals, effect change and celebrate excellence. The website includes Practice Points on injury prevention and e-learning modules: www.ihv.org.uk

Local Government Association (LGA)
The LGA works with local authorities, including lead members for children's services to deliver better health and wellbeing outcomes for children and young people: www.local.gov.uk/childrens-health
Resources

National Institute for Health and Care Excellence (NICE)

Public Health England (PHE)
Public Health Outcomes Framework data tool: www.phoutcomes.info
PHE data resources: www.chimat.org.uk/earlyyears/injuries
https://fingertips.phe.org.uk/profile-group/child-health/profile/child-health-injuries
Rapid review to update evidence for the Healthy Child Programme 0-5: www.gov.uk/government/publications/healthy-child-programme-rapid-review-to-update-evidence

Royal Society for the Prevention of Accidents (RoSPA)
RoSPA’s website includes specific sections on home safety and child injuries: www.rospa.com

University of Nottingham
Keeping children safe at home research programme. A programme identifying effective ways of passing on advice to parents on preventing injuries via children’s centres. The site includes practical tools and guides: www.nottingham.ac.uk/research/groups/injuryresearch/projects/kcs/index.aspx

World Health Organization (WHO)
References

Slide 3 – Introduction

3. Hospital Episode Statistics (HES). Copyright © 2014. Re-used with the permission of The Health and Social Care Information Centre. All rights reserved
13. NICE. Strategies to prevent unintentional injuries among children and young people aged under 15. Evidence update February 2013
References

29. Ibid
30. PHE et al. Public health skills and knowledge framework (2016). PHE
33. Institute of Health Visiting (iHV) Child Accident Prevention e-learning: www.ihv.org.uk/for-health-visitors/resources/e-learning

Slide 5 – Choking, suffocation and strangulation


CAPT’s advice on choking: www.capt.org.uk/resources/choking
References

Slide 6 – Falls


Slide 7 – Poisoning


Slide 8 – Burns and scalds


References

Slide 9 – Drowning


Slide 10 – Fire


Slide 11 – Roads

www.capt.org.uk/resources/road-safety


Slide 12 – Conclusion
About Public Health England

Public Health England exists to protect and improve the nation’s health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit: www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or email: psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published: February 2017.
PHE publications gateway number: 2016608.