

Local Authority Child Public Health Briefing (9): The Health Visiting contribution to Child Accident Prevention

Health visitors have a central role to play in reducing unintentional injuries in the under-fives, along with the associated high personal and financial costs to children, families, communities and society. Health visitors will require ongoing updating through formal CPD provision in order to evolve their skills and knowledge to continue working effectively using person-centred approaches with families; to further enhance their capabilities to interpret and use CHIMAT and Early Years Profile data; and to strengthen existing opportunities to pursue and lead multi-agency collaborative approaches in the community. Full implementation of NICE (2010a) guidelines [PH29] 'Unintentional injuries: prevention strategies for under 15s' would capitalise on the assets that the health visitor workforce brings to this public health priority area.

The Public Health Challenge of unintentional injuries in early childhood

Unintentional injuries in and around the home are a major cause of death and disability among the under-fives in England. An average of 62 children died each year between 2008 and 2012 and home-related injuries accounted for 8% of deaths in the 1 to 4yr age group (Office for National Statistics, 2008-12). Emergency hospital admissions are also very high among the under-fives, roughly 40,000 a year, which is approximately double that of the age 5-9yr group (Hospital Episode Statistics (HES), 2014). There are also an estimated 450,000 visits to Emergency Departments (Department for Trade and Industry, 2002). Children who have sustained one injury are at increased risk of further injuries. The majority of events resulting in injury to preschool children occur in predictable patterns that allow opportunities for intervention and possible prevention of recurrence by health visitors (Mytton et al, 2014). Hazards change as babies become young children. There are some weaknesses in the data about injury causes, but the following are the most significant (Public Health England, 2014):

1. Choking, suffocation and strangulation – causing the highest number of deaths.
2. Falls – resulting in the highest number of hospital admissions.
3. Poisoning – leading to high numbers of short hospital admissions.
4. Burns and scalds – which can be disabling in the longer term and expensive to treat.
5. Drowning – causes around 100 child deaths a year.
6. Other causes – including slips, trips and bumps.

There is a persistent social gradient for unintentional injuries, and inequalities have widened (Green et al, 2006; Siegler & Al Hamad, 2010; Audit Commission, 2007). Analysis in 2014 by Public Health England (PHE), shows that the hospital admission rate for unintentional injuries among the under-fives is 45% higher for children from the most deprived areas compared with children from the least deprived (PHE, 2014). Other research indicates that this inequality may be much larger for some injury

types such as fire-related burns and scalds (Hippisley-Cox et al, 2006). This evidence when combined with local data on levels of deprivation provides health visitors with an excellent opportunity to engage in public health activity to improve outcomes for children and families at a community level.

- Accidental injury is one of the biggest killers of children in the UK. It is second only to cancer.
- Childhood accidents cost the NHS over £275 million a year.
- Children from the poorest UK families are 13 times more likely to die in accidents. They are also more likely to be admitted to hospital with accidental injuries.

Child Accident Prevention Trust

<http://www.capt.org.uk/who-we-are> Accessed 04.08.2016.

'Shifting the curve' for greatest impact

The prevention paradox, as outlined initially by Geoffrey Rose (2008), explains that the greatest impact will be achieved by addressing needs across the population as a whole in order to improve health as well as reducing the severity and number of cases with the greatest needs that make the greatest demands on public services over the long term. While there is a clear 'social gradient' and unintentional injuries are more common in adverse social circumstances, the greatest numbers are not in the most extremely needy circumstances. Accidents can and do occur in any household. This requires 'proportionate universalism' in the foundation years for which health visiting is a core component as it reaches every home and community.

Personal and economic costs of unintentional injuries

Personal cost

The most obvious reason to work to reduce unintentional injuries is the benefit to children and their families. The personal costs of an injury can be devastating. For example, a toddler's

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bathwater scald will require years of painful skin grafts. The injuries can have major effects on education, employment, emotional wellbeing and family relationships (Contact a Family, 2011).

Financial costs

There are also high financial costs. The short-term average healthcare cost of an individual injury (all types) is £2,494 (Polinder et al, 2008) and the wider costs of serious accidents averages £33,000 (Walker, 2010). There are also significant costs to local authorities and to society as a whole. For example, a traumatic brain injury to a child under five from a serious fall may result in acquired disabilities which lead to high education and social care costs as well as loss of earnings to families and benefit costs to the state. The approximate lifetime costs for a three-year-old child who suffers a severe traumatic brain injury is £4.89m (CAPT, 2011). The Chief Medical Officer has made a powerful economic case for preventing unintentional injuries (Davies, 2013). Injury prevention can be low-cost and there is a tremendous return for young children in terms of preventable years of life lost and disability adjusted life years. Health visitors and their early years' colleagues have significant opportunities in their contacts with parents around injury prevention. Health visiting teams with their unique access to the home environment have the greatest insight into individual risks to the under -fives in families in their care.

How injuries can be reduced:

There is a pressing need for statutory and voluntary organisations to work together with communities, since the background to unintentional injuries is so complex and so many organisations are involved. Local authorities and their partners can strengthen their existing work by prioritising the issue and mobilising existing programmes and services through leadership, co-ordination and training.

Guidance from the National Institute for Health and Care Excellence (NICE) – PH29 and PH30 plus the evidence update offers a valuable framework for shaping the work. (NICE, 2010a; NICE, 2010b; NICE, 2013). Effective approaches to prevention are sometimes referred to as 'the 3 Es': education for awareness and empowerment; engineering or environmental modification; and enforcement – often in combination. These approaches are readily incorporated by health visiting practice. For example, evidence shows that the provision of free or low cost home safety equipment is much more effective when coupled with accessible advice and support from a trusted professional who empowers parents to change behaviours (Kendrick et al, 2012). This will require multi-agency collaboration led by a professional who may be a health visitor. Key approaches for health visiting practice includes targeting the households at greatest risk, building positive professional relationships and providing informed advice in a non-judgemental way (NICE PH29). PHE has identified three action areas for local authorities and their

partners to help reduce unintentional injuries among the under-fives:

1. Providing leadership and mobilising existing services, to include partnership working with health, education, social care, housing, homeless departments and fire and rescue.
2. Strengthening the early years' workforce through support and training.
3. Prioritising five injury causes – the leading, preventable causes of death and serious long-term harm: choking, suffocation and strangulation; falls; poisoning; burns and scalds; and drowning (PHE, 2014).

It has emphasised that these strategies are particularly relevant to health visiting given the opportunities afforded through the leadership and delivery of the Healthy Child Programme (DH, 2009) and constitute one of the six High Impact Areas for Children's Public Health in the early years sensitive to health visiting intervention (Department of health, 2014).

High Impact Area 5: Case Study of integrated working

West Sussex Child Health Improvement Team includes Reducing Childhood Accidents as part of its strategy through its Health4Families Programme (H4FP).

Improvement in health outcomes is achieved by a team supporting the integrated Children's Workforce of health services, early years, private and voluntary sector, to deliver the Health4Families Programme (H4FP); an evidenced based framework of standards drawn from government and local public health policy. The H4FP also includes locally developed Action Plans that focus on improving locally identified public health outcomes that most affect young children and their families – the reduction of unintended injuries being one.

Specific resources developed include:

- 'Growing up with Safety Checklist' – implemented by the Children's Workforce at key stages of child development
- Hot Drinks Policy
- Key Health Messages – to support the Children's Workforce deliver consistent health advice including accident prevention
- Annual Campaigns Calendar – 'Child Safety Week' campaign was circulated to the Children's Workforce via an Early Years Bulletin and social media
- H4FP Resource List, Section 1 – identifies accident prevention resources - leaflets, posters, web links and other resources agreed by local health leads to support the Children's Workforce
- West Sussex Children's Workforce JSNA Data Profile (Dec 2015) _ Provides information on health.

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So, what is the health visiting contribution?

Here Kevin Lowe from the Child Accident Prevention Trust (CAPT) talks about the incidence of accidents, their impact and how health visitors are well placed to support parents to reduce accidents within their own homes

<http://ihv.org.uk/for-health-visitors/cpd-directory/reducing-accidents/>

Health visiting service model

The Health Visitor Implementation Plan (Department of Health, 2011) defined the health visiting service model for England as four levels (community, universal, universal plus, and universal partnership plus) that are based on sound epidemiological analysis of health inequalities and 'proportionate universalism' (Marmot, 2010). This is particularly well tailored to prevention of unintended injuries as the service reaches every home, is non-stigmatising, and is well trusted (Early Intervention Foundation, 2015), particularly by parents experiencing multiple disadvantages whose children are most at risk to accidents and who are least likely to access formal centre-based sources of support and advice (Scottish Government, 2015). Furthermore, the 'community' level of service explicitly addresses the environmental risks to children's safety and mobilises resources to promote children's safety as a community issue.

Health visiting leads and delivers the Healthy Child Programme (HCP), the 'key universal public health service for improving the health and wellbeing of children through health and development reviews, health promotion, parenting support, screening and immunisation programmes' (PHE, 2015). The HCP, the evidence for which has recently been reviewed (PHE, 2015), includes five child health and development reviews mandated by the commissioning of 0-5 services by local authorities. These and other contacts are used by health visitors to promote child safety and the focus of child development provides a critically powerful opportunity to provide anticipatory guidance to parents so that they can meet the emergent safety needs of their growing children.

The six high impact areas <https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children> for public health outcomes in the early years are those for which there is evidence of sensitivity to health visiting interventions and for which the health visiting workforce is well equipped to deliver interventions. Accident prevention is one of the High Impact Areas (Area 5), with safeguarding being a thread throughout all of the six areas ranging from identification of risk and need, to early help and targeted work, through to child protection and formal safeguarding.

The four levels of service delivery, five mandated reviews and six high impact areas combine to form the 4/5/6 service model of health visiting https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/407645/overview2-health-visit.pdf thus providing the bedrock for leading delivery of local strategy for reduction in unintended injuries and the burden of suffering and costs that they impose.

Health Visiting Interventions

i. Exploring Child Development with all parents of children 0-5

Having regard for and particularly anticipating child development and its consequences for safety cuts across virtually all safety programmes, regardless of the injury topic being addressed... Exploring child development, provides a foundation for the other(s) [preventative activities].

[In research interviews] *Another significant element, given that parents mentioned the lack of safety advice at different stages of development as a barrier to injury prevention strategies, is the fact that many of the interviews describe a child doing something they had never done before or being able to do more than the parent(s) thought they could.*

Keeping Children Safe at Home (Hayes, Kendrick and Deave, 2014).

Exploring child development is a key component of every health visitor contact with families carried out on a universal basis through the Healthy Child Programme

GPs, midwives and health visitors should:

- Recognise the importance of measures to prevent unintentional injuries in the home among children and young people aged under 15, particularly among those living in disadvantaged circumstances.
- Provide child-focused home safety advice. If the family or carers agree, refer them to agencies that can undertake a home safety assessment and can supply and install home safety equipment.
- This clearly depends on the availability of agreed partnerships with such agencies and equipment.
- Encourage parents, carers and others living with children and young people aged under 15 to conduct their own home safety assessment. They should use an appropriate tool, as outlined in 'Coordinated delivery' in carrying out home safety assessments and providing equipment in this pathway.

(NICE, 2010a).

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ii. NICE recommendations:

Only health visitors initiate home visits to all families from pregnancy through to pre-school entry to explore with parents their growing child's health, developmental and safety needs. They are consistently rated by parents as their most trusted and preferred source of advice and support, particularly by those who are most disadvantaged, most at risk of unintended injuries and least likely to access group or centre-based programmes (Early Intervention Foundation, 2015; Scottish Government, 2015).

iii. Parenting programmes:

Parenting programmes are a key area in which health visitors can incorporate unintentional injury prevention, working in partnership with early years' colleagues. A feasibility study by Mytton, et al (2014) reviewed whether parenting programmes delivered by health visitors (combining parenting skills, injury prevention and first aid advice) could be delivered effectively. First aid and home safety advice was incorporated into the programme to reduce potential stigma or feelings of inadequacy associated with injury prevention.

The Darlington Social Research Unit (not dated) points out 'what works' in achieving outcomes for children is the presence of sufficient correct 'mechanisms' in combination. The health visiting service model as a whole illustrates how health visitors are able to bring this combination of mechanisms to bear combining, in this case, a parenting programme with partnership working, specific safety elements, universal access and acceptability, community capacity building and a strong relational ethos that builds trust and social capital.

Challenges and Barriers to Action

1. Home Safety Equipment Schemes (HSES)

Health visitors are able to use these to help families access and utilise developmentally appropriate safety equipment in a timely way through their universal contacts delivering the Healthy Child Programme from before birth. The funding and availability of these schemes has come under pressure requiring innovative ways to commission and resource this vital part of the accident prevention pathway.

2. Strategic Leadership

There are significant variations in the inclusion of strategic plans and leadership to reduce childhood injuries. (Hayes and Kendrick, 2016). Health visitors provide clinical leadership through their span of activity across NHS and Children's Services and universal access to families and communities. NICE (2010a) guidance recommends 'there is a local injury prevention coordinator'. Institute of Health Visiting Champions for Child Accident Prevention will be trained to cascade knowledge and skills across the workforce as well as to offer leadership to develop integrated multi-agency approaches.

3. Child Accident and Emergency Attendance Data

The availability and quality of data are variable. High quality, valid and reliable data helps to inform a strategic approach as well as to support development of effective prevention pathways on a multi-agency basis. Health visitors are able to bring short time-scale educative and supportive interventions to families attending A&E or GP services to mitigate risks from unintended injuries when they are informed of attendances.

4. Multi-agency working

Multi-agency working at every level is key to success in reducing unintended injuries, from 'Team Around the Child' where there are other concerns, to implementing pathways for integrated children's services. An example of the latter is Cheshire East's 'Parenting Journey'. Accident prevention and safety are key throughout the 'journey', with a specific 'stop' at 4-7 months discussing home safety. http://www.cheshireeast.gov.uk/children_and_families/early_years_and_childcare/parent-journey.aspx

This is supported by 'Catch App.' <http://www.catchapp.co.uk/>

5. Funding

The economic costs of failure to prevent accidents need to be aligned with investment in preventative strategies, as outlined above.

Success factors

Including reduction of unintentional injuries as a formal strategic commitment mobilises local leadership and resources to support families and communities, driving down the incidence of injuries and indicators such as hospital admissions (Hayes and Kendrick, 2016).

The role of the Institute of Health Visiting

The strategic guidance published by NICE (NICE, 2010) and the NICE quality standard, QS107, (NICE, 2016) highlight the need for suitably trained staff and opportunities for initial and ongoing multi-agency training and development as important elements of any services commissioned to prevent childhood injuries.

- The iHV has established *National Standards for CPD* for the knowledge, skills and attitudes required for effective practice to realise the 6 high impact areas for public health in the early years;
- iHV Child Accident Prevention Health Visitors one day *Champions Training* is available to support local leadership: <http://ihv.org.uk/training-and-events/training-programme/courses/child-accident-prevention-health-visitors-champions-training/>
- The iHV and the CAPT also developed *two e-learning modules* as part of a wider programme commissioned by Health Education England (HEE). They are designed especially for health visitors, and are underpinned by

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research, policy and practice guidance for reducing unintentional injuries to children under the age of 5 in and around the home, as well as existing NICE guidelines on this topic.

<http://ihv.org.uk/news-and-views/press-releases/new-e-learning-on-child-safety-for-health-visitors-launched-in-childsafetyweek/>

References

- Audit Commission/Health Care Commission (2007). *Better safe than sorry: preventing unintentional injury to children*. Audit Commission.
- Child Accident Prevention Trust (CAPT)(2011) *The costs of head injuries*. Available from: <http://www.makingthelink.net/costs-head-injuries> [Accessed 20.09.2016].
- Child Accident Prevention Trust (CAPT) (2012) *Accidents and child development. Guidelines for practitioners*. CAPT.
- Contact a Family (2011) *Forgotten families. The impact of isolation on families with disabled children across the UK*. Contact a Family.
- Dartington Social Research Unit (nd) *What works: An overview of the best available evidence on giving children a Better Start*. http://dartington.org.uk/inc/uploads/What_works_Overview.pdf [Accessed 09.08.2016].
- Davies, S. C. (2013) *Annual report of the Chief Medical Officer 2012. Our children deserve better: prevention pays*. Available from: <https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2012-our-children-deserve-better-prevention-pays> [Accessed 20.09.2016].
- Department for Trade and Industry (DfT) (2002) *24th (Final) Report of the home and leisure accident surveillance system: 2000, 2001 and 2002 data*. London. DfT.
- Department of Health (2009) *Healthy Child Programme: Pregnancy and the First Five Years of Life*. London. Department of Health.
- Department of Health (2011) *Health Visitor Implementation Plan - a call to action*. London. DoH.
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213759/dh_124208.pdf [Accessed 06.06.2016].
- Department of Health (2012) *Developing the Culture of Compassionate Care: Creating a New Vision for Nurses Midwives and Health Care Staff*. Available from: <https://www.england.nhs.uk/wp-content/uploads/2012/10/nursing-vision.pdf> [Accessed 20.09.2016].
- Department of Health (2014) *Overview of the six early years high impact areas*. London. DH / LGA. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/413127/2903110_Early_Years_Impact_GENERAL_V0_2W.pdf [Accessed 06.06.2016].
- Early Intervention Foundation (2015) *The best start at home: a report on what works to improve the quality of parent child interactions from conception to age 5. (Final Overview)*. London. Early Intervention Foundation. [file:///C:/Users/Robert/Downloads/Final-Overview-Best-Start-at-Home%20\(1\).pdf](file:///C:/Users/Robert/Downloads/Final-Overview-Best-Start-at-Home%20(1).pdf) [Accessed 06.06.2016].
- Edwards, P., Green, J., Lachowycz, K., Grundy, C., (2006) *Deaths from injury in children and employment status in family: analysis of trends in class specific death rates*. *BMJ*, 333, 119-121.
- Hayes, M, Kendrick, D, and Deave, T. (2014) *Injury Prevention Briefing. Preventing unintentional injuries to the under-fives: a guide for practitioners*. Nottingham: University of Nottingham. <http://www.nottingham.ac.uk/research/groups/injuryresearch/documents/ipb-2.pdf> [Accessed 09.08.2016].
- Hayes M, and Kendrick D (2016) *A guide for commissioners of child health services on preventing unintentional injuries among the under-fives*. Nottingham. University of Nottingham. <https://www.nottingham.ac.uk/research/groups/injuryresearch/documents/kcs-guide-for-commissioners.pdf> [Accessed 09.06.2016].
- Hippisley-Cox, J., Groom, C., Kendrick, D., (2002). Cross sectional survey of socioeconomic variations in severity and mechanism of childhood injuries in Trent 1992-7. *BMJ*, 324, 1132-1134.
- Hospital Episode Statistics (HES) Copyright © 2014. Re-used with the permission of The Health and Social Care Information Centre. All rights reserved. Not publicly available.
- Institute of Health Visiting (2015) *National Standards for the knowledge, skills and attitudes required for effective practice to realise the 6 high impact areas for public health in the early years*. London. iHV. http://ihv.org.uk/wp-content/uploads/2015/09/iHV_Framework-for-CPD_-HIA-Revision-AW-WEB.pdf [Accessed 09.08.2016].
- Keeping Children Safe (2014) *Injury prevention briefing: preventing unintentional injuries to the under-fives: a guide for practitioners*. Available from: <http://www.nottingham.ac.uk/research/groups/injuryresearch/projects/kcs/index.aspx> [Accessed 06.06.2016].
- Kendrick, D., Young, B., Mason-Jones, A.J., (2012) Home safety education and providing safety equipment for injury prevention updated. *Cochrane Database of Systematic Reviews* 2012; 9.
- Marmot, M. (2010) *Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010*. www.ucl.ac.uk/marmotreview [Accessed 17.08.2015].
- Mytton, J., Ingram, J., Manns, S., Stevens, T., Mulvaney, C., Blair, P., et al (2014) The feasibility of using a parenting programme for the prevention of unintentional home injuries in the under-fives: a cluster randomised controlled trial. *Health Technol Assess*, 18(3).
- NICE (2010a) *Strategies to prevent unintentional injuries among children and young people aged under 15*. NICE public health guidance 29. Available from: <https://www.nice.org.uk/guidance/PH29> [Accessed 20.09.2016].
- NICE (2010b) *Preventing unintentional injuries in the home among children and young people aged under 15*. NICE public health guidance 30. London: NICE. <https://www.nice.org.uk/guidance/ph30> [Accessed 09.08.2016].
- NICE (2013) *Preventing unintentional injuries in the home among children and young people aged under 15: evidence update February, 2013* http://eprints.uwe.ac.uk/20889/1/NICE_Evidence_Update_Feb2013.pdf [Accessed 20.09.2016].
- NICE (2016) *Preventing unintentional injury in under 15s. (Quality standard QS107)*. London: NICE. <https://www.nice.org.uk/guidance/qs107> [Accessed 09.08.2016].
- Office for National Statistics (ONS). *Mortality Statistics: deaths registered in England, 2008, 2009, 2010, 2011, 2012*. Crown copyright reserved. (Not publicly available).
- Polinder, S., Toet, H., Mulder, S., van Beeke, E., (2008) *APOLLO: The economic consequences of injury – Final report*. Consumer Safety Institute. (Not publicly available).
- Public Health England (2014) *Reducing unintentional Injuries in and around the home among children under five years*. Available from: <https://www.>

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gov.uk/government/publications/reducing-unintentional-injuries-among-children-and-young-people [Accessed 20.09.2016].

Public Health England (2015) *Healthy child programme: rapid review to update evidence*. London. PHE. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/429741/150520_RapidReviewHealthyChildProg_UPDATE_poisons_summary.pdf [Accessed 06.06.2016].

Rose, G. (2008) *Rose's strategy of preventive medicine*. Oxford. Oxford University Press.

Scottish Government (2015) *Tackling inequalities in the early years: Key messages from 10 years of the Growing Up in Scotland study*. Edinburgh.

Scottish Government. Siegler V and Al-Hamad A. (2010) Social inequalities in fatal childhood accidents and assaults: England and Wales, 2001–03. *Health Statistics Quarterly*. 48 Winter, 2010. <http://www.gov.scot/Resource/0048/00486755.pdf> [Accessed 09.08.2016].

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