NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

PUBLIC HEALTH GUIDANCE

DRAFT SCOPE

This is the scope for one of five pieces of NICE guidance on how to prevent unintentional injuries among children and young people aged under 15.

1. ‘Preventing unintentional road injuries among under-15s: education and protective equipment’ is the subject of this scope. The guidance will cover educational interventions for road users and protective equipment for under-15s, such as helmets and high visibility clothing. It will be developed using the public health intervention process (final scope expected August 2010, publication of the guidance is expected December 2011).

2. ‘Preventing unintentional injuries among under-15s in the home’. This guidance will focus on the supply and/or installation of home safety equipment and home-risk assessments. It is being developed using the public health intervention process (publication expected November 2010).

3. ‘Preventing unintentional injuries among under-15s: outdoor play and leisure’. This guidance will focus on sports and leisure activities. It is being developed using the public health intervention process (publication expected November 2010).

4. ‘Preventing unintentional road injuries among under-15s: road design’. This guidance will focus on different aspects of road design. It is being developed using the public health intervention process (publication expected November 2010).

5. ‘Strategies to prevent unintentional injuries among under-15s’. This guidance will focus on legislation, regulation, standards, enforcement, monitoring, evaluation and workforce development. It is being developed using the public health programme process (publication expected November 2010).
1 Guidance title

Preventing unintentional road injuries among children and young people under 15: education and protective equipment

1.1 Short title

Preventing unintentional road injuries among under-15s: education and protective equipment

2 Background

a) The National Institute for Health and Clinical Excellence (NICE) has been asked by the Department of Health (DH) to develop guidance on public health interventions aimed at preventing unintentional road injuries among children and young people aged under 15. Two pieces of guidance are being developed in response to this referral. The first, ‘Preventing unintentional road injuries among under-15s: road design’, will be published in November 2010. This document is the scope for the second piece of guidance to arise from the referral.

b) NICE public health guidance supports the preventive aspects of relevant national service frameworks (NSFs), where they exist. If it is published after an NSF has been issued, the guidance effectively updates it. Specifically, in this case, the guidance will support NSFs on the following:

- children, young people and maternity services (DH 2004a)
- long-term (neurological) conditions (DH 2005) (the focus is on brain and spinal injury and damage to other parts of the nervous system).

c) This guidance will support a number of related policy documents including:
‘PSA target 5 (technical note)’: Reduce the number of people killed or seriously injured in Great Britain in road accidents by 40% and the number of children killed or seriously injured by 50%, by 2010 compared with the average for 1994–98, tackling the significantly higher incidence in disadvantaged communities (www.dft.gov.uk/about/howthedomtworks/psa/psatarget5)

‘PSA 12: Improve the health and wellbeing of children and young people’ (HM Government 2008a)

‘PSA 13: Improving children and young people’s safety’ (HM Government 2008b)


‘Child road safety strategy 2007’ (Department for Transport 2007a)

‘Choosing health: making healthy choices easier’ (DH 2004b)

‘Every child matters: change for children programme’ (HM Government 2004)

‘Preventing accidental injuries: priorities for action. Report to the Chief Medical Officer from the Accidental Injury Task Force’ (DH 2002)

‘Saving lives: our healthier nation’ (DH 1999)

‘Second review of the government’s road safety strategy’ (Department for Transport 2007b)

‘Staying safe: action plan’ (Department for Children, Schools and Families 2008)


‘The children's plan: building brighter futures’ (Department for Children, Schools and Families 2007)


d) This guidance will provide recommendations for good practice, based on the best available evidence of effectiveness, including
cost effectiveness. It is aimed at commissioners, managers and professionals with public health as part of their remit working within the NHS, local authorities and the wider public, private, voluntary and community sectors. This includes road safety professionals and those working in schools. It is also aimed at parents and carers and may be of interest to all other road users.

e) The guidance will complement other NICE guidance on preventing unintentional injuries among children and young people. For further details, see front page and section 6.

This guidance will be developed using the NICE public health intervention process.

3 The need for guidance

a) Unintentional injury is a leading cause of death among children and young people aged 1–14 years (Audit Commission and Healthcare Commission 2007). In 2008 in Great Britain, 105 young people aged under 15 were killed, more than 17,000 were injured and 2332 were seriously injured on the road. Of those who were killed, more than half (63) were pedestrians or cyclists (Department for Transport 2009a). Deaths and injuries aside, the perceived dangers – and the psychological consequences of near misses – on the road may prevent children and young people from using physically active forms of travel. Perceptions of danger may also prevent them from developing social skills and learning to be independent (Department for Transport 2008).

b) Young people aged under 15 whose parents are from a lower socioeconomic group are 20 times more likely to be killed as a result of walking or cycling along or beside a road. (This is compared to those from higher socioeconomic groups.) This is mainly due to the fact that those from lower socioeconomic groups tend to live in neighbourhoods with unsafe roads and high-speed
traffic (Edwards et al. 2006). As an example, more than a quarter of child pedestrian injuries happen in the most deprived tenth of wards (Greyling et al. 2002).

c) Children and young people are less visible to motorists and, in the case of a crash, are more likely to be injured (Organisation for Economic Cooperation and Development 2004). That is why it is important to identify elements of interventions that prevent or reduce the severity of these injuries. Approaches to preventing collisions (primary prevention) may focus on altering the behaviour of road users. (For example, by educating pedestrians, cyclists and drivers about the dangers on the road and how to keep safe.) Primary prevention can also involve ensuring vehicles and road surfaces are equipped to deal with emergencies (for instance, by using anti-lock brakes or anti-skid road surfaces) (Racioppi et al. 2004). Approaches to reducing the severity of injury (secondary prevention) include the use, provision and promotion of safety equipment (such as helmets) and car design features (such as seat belts or restraints).

d) It is important to ensure pedestrians and cyclists can cope with what is a complex traffic environment and educational interventions are an essential component of any injury prevention strategy (Duperrex et al. 2009). These include Kerbcraft (www.kerbcraft.org) and Bikeability (www.bikeability.org.uk) which both provide support to help people understand and interpret the complex visual information they face on the road.

e) Hospital episode statistics (HES) (1999–2005) highlight that cyclists aged under 16 receive most injuries to the head (approximately 6642) and to the arm (approximately 6630). Cycle helmets which are fitted and worn correctly and adhere to current European standards should help reduce head injuries from accidents that do not involve a collision with another vehicle, such as simple falls and those caused by another vehicle ‘glancing’ or
tipping the cyclist over (Hynd et al. 2009). However, if a cyclist is wearing a helmet, a car driver might not give them as much room as they might have otherwise, because they do not appear to be so vulnerable. (This is described as ‘risk compensation’.) In addition, making cycle helmets compulsory could lead to a decrease in cycling rates (Unwin 1996) and this may reduce physical activity levels.

f) The late detection of other road users by drivers is one of the reported reasons for collisions (Rumar 1990). However, even when a driver detects an object (such as a child) on the road, this does not necessarily result in a timely reaction. The ‘Highway code’ states that pedestrians and cyclists should wear or carry materials to improve their visibility at night. This includes high visibility clothing, lights and reflectors (Department for Transport 2009b). It is suggested that these could also be used during the day to help drivers detect and recognise pedestrians and cyclists – and so reduce road casualties (Kwan and Mapstone 2009). However, the effectiveness of visibility aids is dependent on where – and by whom – they are being used.

4 The guidance

Public health guidance will be developed according to NICE processes and methods. For details see section 5.

This document defines exactly what this guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on a referral from the DH (see appendix A).

4.1 Who is the focus?

4.1.1 Groups that will be covered

- Children and young people aged under 15: stakeholders, is this focus sufficient or should the guidance consider other age groups?
4.1.2 Groups that will not be covered

- Everyone aged 15 and over.

- Children and young people aged under 15 who are passengers in motor vehicles.

4.2 Activities

4.2.1 Activities/measures that will be covered

a) Educational interventions for drivers, cyclists and pedestrians on roads: stakeholders, should driver education be covered in this guidance?

Educational interventions could include:

- cycle proficiency testing and training schemes such as ‘Bikeability’
- pedestrian-awareness schemes such as ‘Kerbcraft’.

b) National and local media campaigns, leaflets and promotional activities aimed at:

- raising road safety awareness among drivers, pedestrians and cyclists, in particular, among the under-15s
- raising awareness – and promoting the use – of protective equipment by young people aged under 15. This includes visibility aids such as bicycle reflectors and lights and high visibility clothing and cycle and pedestrian helmets.

c) Other interventions to promote and increase the use of protective equipment on the road by cyclists and pedestrians aged under 15.

4.2.2 Activities/measures that will not be covered

a) Mandatory education and protective equipment covered by legislation.

4.3 Key questions and outcomes

Below are the overarching questions that will be addressed, along with some of the outcomes that would be considered as evidence of effectiveness:
**Question 1:** Are educational interventions with under-15s an effective way to prevent or reduce the number of unintentional road injuries among them?

**Question 2:** Are educational interventions with parents and carers of children and young people aged under 15 an effective way to prevent or reduce the number of unintentional road injuries among under-15s?

**Question 3:** Are educational interventions with drivers an effective way to prevent or reduce the number of unintentional road injuries among under-15s?

**Question 4:** Are national and local media campaigns an effective way to prevent or reduce the number of unintentional road injuries among under-15s?

**Expected outcomes:**
- A change (or no change) in the number of road injuries and deaths among under-15s.
- A change (or no change) in injury severity rates.
- A change (or no change) in vehicle speeds and other dangerous behaviours.
- A change (or no change) in road safety knowledge and attitudes.

**Question 5:** Does the promotion of protective equipment such as cycle helmets, high visibility clothing and lights prevent or reduce the number of road injuries or deaths among under-15s?

**Expected outcomes:**
- A change (or no change) in the number of road injuries and deaths among under-15s.
- A change (or no change) in injury severity rates.
- A change (or no change) in the use of protective equipment on the road by this group.
**Question 6:** Are there any adverse effects associated with promoting or using protective equipment to reduce unintentional road injuries among under-15s?

**Expected outcomes:** A Change (or no change) in levels of physical activity, for example, in rates of walking and cycling and independent mobility.

**Question 7:** What are the barriers and facilitators to implementing interventions that seek to reduce unintentional road injuries among under-15s using education or protective equipment?

**Question 8:** How do children, young people and their families and the wider public view interventions that seek to reduce unintentional road injuries among under-15s using education or protective equipment?

**Expected outcome:** An understanding of how acceptable the interventions are, how easy it would be to implement them and any potential barriers and facilitators to implementation.

### 4.4 Status of this document

This is the draft scope, released for consultation on 23 June 2010 until 21 July 2010, to be discussed at a public meeting on 8 July 2010. Following consultation, the final version of the scope will be available at the NICE website in August 2010.

### 5 Further information

6 Related NICE guidance

Published


In development

Preventing unintentional injuries among under-15s in the home. NICE public health guidance (publication expected November 2010).

Preventing unintentional injuries among under-15s: outdoor play and leisure. NICE public health guidance (publication expected November 2010).

Preventing unintentional road injuries among under-15s: road design. NICE public health guidance (publication expected November 2010).

Strategies to prevent unintentional injuries among under-15s. NICE public health guidance (publication expected November 2010).

Preventing unintentional road injuries among young people aged 15–24. NICE public health guidance (publication date to be confirmed).

Transport policies that prioritise walking and cycling. NICE public health guidance (publication date to be confirmed).
Appendix A Referral from the Department of Health

The Department of Health asked NICE to produce guidance on:

‘Public health interventions to reduce accidental injuries to persons under the age of 15 on the road’.

NICE is producing two pieces of guidance based on this referral. The first, ‘Preventing unintentional road injuries among under-15s: road design’, will be published in November 2010. The second is the subject of this scope.
Appendix B Potential considerations

It is anticipated that the Public Health Interventions Advisory Committee (PHIAC) will consider the following issues:

- Do individual factors (such as gender, age, ethnicity and religion) influence the effectiveness of interventions?

- What impact do interventions have on disadvantaged groups, for example, people with disabilities?

- What impact do interventions have on inequalities in health?

- What are the general barriers and facilitators to implementation?

- What factors affect whether or not an intervention is acceptable to children and young people aged under 15 and their parents?

- What impact do the following have on effectiveness and cost effectiveness:
  - provider
  - setting
  - who delivers the intervention, their level of training and competence
  - format of advice and information (for example, is it better to give advice verbally or in printed format)?

- Are targeted services and interventions more effective and cost effective than generic services or interventions?

- Is it more effective and cost effective to combine interventions or to provide them in isolation?

- How do these interventions interact with other types of injury prevention activities?

- What is the comparative effectiveness of different types of protective equipment in reducing unintentional road injuries among under-15s?
• Which types of educational intervention are most suitable for pedestrians and cyclists aged under 15?

• Does the intensity of the intervention influence its effectiveness or duration of effect?

• Does the effectiveness of interventions change over time?

• What is the role of public health practitioners?
Appendix C References


Preventing unintentional road injuries among under-15s: education and protective equipment draft scope for consultation 23 June – 21 July 2010


