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## Department of Health's accidental injury research initiative

Heather Ward  
Centre for Transport Studies  
University College London  
Gower Street  
London WC1E 6BT

### Background and context

In 1999 the Government's White Paper, *Saving Lives, Our Healthier Nation* identified accidental injury as a priority for action. It set national targets to reduce the rates of death associated with accidental injury in England by 2010 by at least one fifth; and to reduce the rate of serious injury by at least one tenth.

In 2000 Heather Ward and Nicola Christie were invited by the Department of Health (DH) to undertake a strategic review of research priorities for accidental injury (Ward and Christie 2000). In our review we looked at the policies and research programmes of Government Departments with responsibilities for reducing accidental injury or of activities that might lead to injury such as sport. We also looked at the research programmes and spend profiles of research councils and charitable trusts.

Two of our main conclusions were:

- There is a small amount of injury research aimed at a large injury problem. Multi-disciplinary research is therefore needed to bring about greater understanding of the context in which accidental injury occurs.
- Different funders/Departments commission research in different ways which tends to mean that methodology cultures grow up amongst different groups of researchers depending on the style of research methodology favoured by the funder. This tends to lead to little overlap in research methodology and

dissemination practice between different groups of researchers engaged in injury prevention work, which is a barrier to increasing the capacity to take forward a multi-disciplinary research agenda.

## The burden of injury

Accidental injury is a leading cause of death and disability in the UK. The following figures illustrate the scale of the problem and the room for improvement; the fact that the burden of accidental death and injury is disproportionately heavy on the most disadvantaged in society; and that the costs to individuals, to the NHS, and to society of these deaths and injuries are considerable (DH 2002).

- Injury is the leading cause of child death in England and Wales. In the period 1998–2000 in England, 1003 children aged 0–14 years died as a result of accidental injury.
- Falls (62%), road traffic accidents (12%), fire (3%) and suffocation (3%) cause the largest number of fatal injuries in older people.
- There were 320,283 road accident casualties in Great Britain in 2000, of whom 16,184 were child pedestrians (0–15 yrs), and 5,832 were older pedestrians (60yrs and above).
- There were some 4,000 accidental deaths in the home in 1999. Half were adults of working age (15–64 yrs).

The burden of accidental death and injury is disproportionately heavy on the most disadvantaged in society.

- Residential fire deaths for children are 15 times greater for children in social class V compared to those in social class I.
- Child pedestrian deaths are 5 times greater.

There is a variation between the sexes for falls with the female death rate being 1.5 times the male death rate for older people. There is little evidence that rates of falling increase with deprivation.

The death rate in domestic fires is 2.7 times the death rate for all ages where there is evidence of a social gradient with fires more likely to occur in lower income and rented households (Measuring and Monitoring Injury Working Group report, DH 2002).

The cost to individuals, to the NHS, and to society of these deaths and injuries is considerable.

- The estimated cost to the NHS in England of injury in 2000–1 (including poisoning and intentional injury) is £2.2 bn.

- The estimated value of preventing road traffic accidents in Great Britain in 2000 was £12.2 bn.
- The cost to society of home accidents in the UK was estimated in 1996 as £25 bn pa.

## The accidental injury task force

Arising from a commitment in the white paper, *Saving Lives, Our Healthier Nation*, an Accidental Injury Task Force was set up to advise on how the targets within it should be achieved. Its report to the Chief Medical Officer, *Preventing Accidental Injury – Priorities for Action*, was published in October 2002 (DH 2002). It was endorsed by five Government Departments, in addition to Health, reflecting the spread of responsibilities across Government for preventing accidental injury and the need for co-ordinated action:

- Department for Transport (DfT) responsible for road safety;
- Office of the Deputy Prime Minister (ODPM) responsible for fire safety;
- Department of Trade and Industry (DTI), responsible for consumer safety;
- Department for Work and Pensions (DWP) responsible for health and safety at work; and
- Department for Culture, Media and Sports (DCMS) responsible for sport.

The Task Force Report identified a number of key programmes already in place across Government to improve safety on the roads, at home and at work, but recommended that more concerted effort was needed to achieve sustained reductions in injury.

In line with Department of Health priorities the Task Force focused on children and young adults (0–15 and 16–24 years), and older people (defined as 60 years and over for the purposes of the Task Force's remit), and recommended that interventions to prevent accidental injury should be targeted, in particular, at areas of health inequalities.

The Task Force adopted two population groups for priority attention:

- Children and young adults, and
- Older people.

The burden of injury is greatest for falls by older people. The next highest burden is road accidents followed by dwelling fires; both affect the young and the old. In

headline terms, the intervention areas which have the scope to make the biggest impact in the short-term are as follows:

Priority Areas	Headline Interventions
Falls at or near home	<ol style="list-style-type: none"> <li>1. Referral of individuals to a falls prevention programme</li> <li>2. Targeted exercise programmes for falls prevention</li> <li>3. Prevention and treatment of osteoporosis</li> <li>4. Home safety checks*</li> </ol>
Road accidents	<ol style="list-style-type: none"> <li>1. 20 mph speed limits in areas of higher pedestrian activity</li> <li>2. Local child pedestrian training schemes and safe travel plans</li> <li>3. Systematic road safety intervention in inner city areas</li> <li>4. Advice and assessment programmes for elderly car drivers</li> </ol>
Dwelling fires	<ol style="list-style-type: none"> <li>1. Installation of smoke alarms by fire brigades</li> <li>2. Home fire risk assessments, safety checks and escape plans*</li> <li>3. Target deprived groups, particularly children and older people in privately rented and temporary accommodation, and households in which people smoke</li> </ol>
Play and recreation	<ol style="list-style-type: none"> <li>1. Increase number of children undertaking cycle training and wearing cycle helmets</li> <li>2. Produce guidelines for safety in children's sports</li> <li>3. Strengthen risk and safety education in schools</li> </ol>

\* scope to combine the two.  
Source: (DH 2002)

The report recommended that these interventions should be targeted in particular at areas of health inequality.

The report also identified priority areas for action in the longer term. These included young car drivers and passengers, sports injuries, injuries at work, and home and leisure injuries.

## The need for research into accidental injury and its prevention

The research gaps identified in the Task Force Report have been supplemented by more recent work. This includes the reports of Towner et al (2004) and the Task Force's own Working Group Reports into children and young people, older people, and measuring and monitoring injury.

In 2003 Heather Ward produced a scoping report on a possible accidental injury research programme for the Department of Health's Policy Research Programme. The research agenda developed for injury prevention took into account:

- the burden of injury;
- Government priorities and initiatives;
- possible opportunities for cross-Departmental collaboration;

- research capacity within Britain; and
- budget.

Many gaps in existing knowledge were identified over a wide range of subjects. Three main themes were identified and suggestions made for research topics that might form the basis of a research programme in injury prevention.

- Inequalities in deaths and injuries from accidents
- Staying healthy, protecting health and reducing risk
- Framework for delivery and developing infrastructure

During 2003 discussion were held with people within the Department of Health with various policy responsibilities in the priority areas. In October 2003 the following research programme worth about £2 m over about four years was put out to tender.

## The research programme

Across the initiative as a whole two population groups were prioritised:

- Children and young adults [0–14 and 15–24 years];
- Older people [primarily 60 years and over, but the most appropriate age ranges to be determined by specific research questions].

*Overarching Issues* There were three overarching issues that the DH wanted addressed within the initiative:

*Inequalities* in accidental injury and death within these population groups

The burden and cost to society and individuals of accidental injury are important to estimate. Interventions to prevent accidental injury not only need to work but they have to be of a *cost* that is commensurate with the burden of injury and the ability of the intervention to reduce it.

The DH was interested in drawing out any lessons for public policy on increasing *physical activity* for children and young adults, and older people, in ways that do not increase the level of injury.

Ten topics were identified under three streams and the academic community was asked in open tender to bid for work under these headings. The next section has a brief description of each topic areas the DH wished to be covered.

## Stream 1: Children and young adults

### Topic 1: Injury trends and social gradients

More information and analysis of injury trends and social gradients is fundamental to our understanding of the problem of inequalities in accidental deaths and

injury among children and young adults, and where interventions need to be targeted.

Research is needed to examine trends over time in accident mortality and morbidity rates among children and young adults aged 0–24 years by social and ethnic group, with respect to a range of causes of accidental death and injury and a range of injury severity. There is a need to identify where social gradients are steep, where they are not and where they can be levelled. There is also a lack of knowledge about geographic variations in accidental injury rates.

**Topic 2: Developing the evidence base on interventions that are effective in reducing inequalities in childhood injury**

There is a gap in existing knowledge about interventions that are effective in reducing inequalities in childhood injury.

Research is needed which develops and evaluates the acceptability and effectiveness of new interventions for reducing inequalities in childhood injury, or evaluates existing ones that have proved effective with different target populations.

**Topic 3: Reduction of risk for young children in the home environment**

In order to inform interventions for risk reduction greater understanding is needed about the relationship between exposure to risk, social disadvantage and injury occurrence for young children in the home environment. This includes gaining better understanding about parents' perceptions of child risk and the examination of ways in which children are supervised in the home environment and the effects of this on accidental injury occurrence (e.g. falls, burns and scalds, poisoning, drowning, farm accidents).

An assessment framework needs to be developed for professionals to use in assessing environmental and personal risk of accidental injury in a more systematic way; and strategies need to be devised for risk reduction that professionals can develop into programmes for working with families to reduce risk (e.g. reducing exposure to the hazard and increased supervision).

**Topic 4: Systematic review of 12–14 and 15–24 year olds in relation to accidental injury and risk taking behaviour**

There is an urgent need to update existing knowledge of the relationship between accidental injury occurrence and risk taking behaviour amongst young people. This information is needed to inform the development of intervention strategies that are more appropriate to these age groups, and sub-groups within them, and to allow strategies to be tailored to the different patterns of risk taking behaviour. Of interest is the drawing out any findings that will help address inequalities in injury amongst young people and where interventions need to be targeted.

A key research question relates to how the pattern of risk taking behaviour, especially outside the home, changes across the years, including the effects of impairment through the use of alcohol, illicit drugs and volatile substance abuse (VSA) on unsafe behaviour and injury occurrence. Little is known about the views and perceptions of young people themselves in terms of how they define, perceive, assess and manage risk taking behaviour in relation to accidental injury.

## Stream 2: Older people

### **Topic 5: Inequalities**

There is little research evidence available in the area of older people and inequalities in injury occurrence, mainly because information on factors such as social class, deprivation and ethnicity is not routinely collected. Also, because there is debate about the concept of social class amongst groups that are largely retired from paid work. More information and analysis of trends is fundamental to our understanding in this area of accidental injury and to focusing our preventive efforts.

Research is required to examine trends in accident mortality and morbidity rates and to investigate the association (if any) between accidents and factors such as social class, deprivation and ethnicity amongst older people aged 50 years and over. One of the areas in which some methodological work is needed is around the concept of social class for those who have retired from paid work.

### **Topic 6: Compliance with effective interventions to reduce falling and fractures**

The aim of Standard Six of the National Service Framework for Older People is to reduce the number of falls which result in serious injury and ensure treatment and rehabilitation for those who have fallen. To help achieve this aim a greater understanding is needed of why individuals may resist acceptance of, or fail to comply consistently with, falls injury prevention strategies and programmes (all types, including environmental modification) together with the identification of opportunities and barriers to implementing successful and acceptable falls injury prevention programmes.

### **Topic 7: Development of acceptable and effective strategies to reduce falling and fractures for older people with cognitive impairment and/or dementia**

A greater understanding is needed about how to reduce falling and fractures for older people with cognitive impairment and/or dementia. Those in hospital, nursing and residential home settings are especially at increased risk for falls and of sustaining a major injury, such as a fracture, as a result.

There is a need to review the evidence base for evidence of interventions shown to be effective in terms reducing the incidence of falling and the incidence of fractures for individuals with cognitive impairment and/or dementia. This can then lead to the development and testing of effective and acceptable prevention strategies to reduce the risk of falling and incidence of fractures in older people with cognitive impairment and/or dementia in hospital, nursing and residential home settings.

## Stream 3: Developing the infrastructure

### **Topic 8: Definition of severity of injury**

The lack of an agreed definition of severity of injury is hampering progress on developing evaluation methodologies for injury prevention programmes. Without an agreed definition it is difficult to assess adequately the burden of injury except for death. National and international collaboration work is in progress on developing an agreed definition of severity of injury. What is needed is to draw on this to identify a

suitable definition of severity for use in UK injury prevention programmes that is independent of length of stay in hospital.

Any definition of severity would involve consultation with leading practitioners, surveillance agencies, Government policy officials and academics in the UK and would need to be applied to routinely collected data sources (e.g. DH's Hospital Episode Statistics [HES] database), based on the information currently collected by these sources.

#### **Topic 9: Assess the burden of accidental injury**

One of the reasons why accidental injury is not given the attention commensurate with its size as a problem is because we do not have an adequate account of the burden of injury to compare with other public health threats. Broad estimates would be helpful to policy makers and practitioners for decision-making, planning and prioritising at both the national and local levels.

New research is required to assess the burden of accidental injury on the basis of its occurrence, longer-term consequences, and its costs to individuals and society including the NHS and Personal Social Services. Broad estimates are needed of the burden of injury to the young (0–24 years), to adults (25–59 years) and to older people (60 years and over) using internationally recognised methods, including Quality Adjusted Life Years (QALYs), as this would aid comparison with other major public health threats in England.

#### **Topic 10: Injury related disability**

We have insufficient knowledge about the types of accidental injuries that lead to disability, and the level and extent of disability that follows. This includes needing to know more about the proportion of injuries that lead to significant disability as opposed to those that do not. It is important to increase knowledge in these areas so that preventive interventions can be targeted at injury types that result in long term disability.

Research is needed to increase the evidence base about the types of accidental injuries that lead to disability and the level and extent of disability that follow. We also need to know about the proportion of injuries that lead to significant disability as opposed to those that do not. This increased knowledge should lead to recommendations about practicable ways of improving the capture and quality of injury related disability data.

## **Projects funded under the accidental injury prevention initiative**

### **STREAM 1 CHILDREN AND YOUNG ADULTS**

#### **Injury trends and social gradients**

This project will be a secondary analysis of existing data sets including ONS mortality data, Hospital Episode Statistics and the Health Survey for England morbidity data and DfT travel survey data. These will be analysed using census denominators to identify social classes, regional, and (where possible) ethnic group injury rate trends.



**Application:** Through identifying where gradients have narrowed or widened over the last 10 years, findings from this project will contribute to our understanding of how recent health and social policies have successfully addressed inequalities in injury rates, where work still needs to be done, and what priorities for action should be identified. Work on relating injury rates to exposure to risk in the area of transport injuries will inform the debate about the most appropriate interventions to develop. In tandem with outputs from the other projects in the programme (in particular those reviewing interventions), the findings from this study will help inform evidence based policy to address both the burden of accidental injury to the population and those areas of continuing inequalities.

### **Accidental injury, risk taking behaviour and the social circumstances in which young people live: a systematic review**

This study will employ the standard methodology for undertaking systematic reviews: searching; keywording and mapping; data extraction and quality assessment; synthesis and recommendations.

Three syntheses will be conducted:

- 1) describing how young people define, perceive, assess and manage risk taking behaviour in relation to accidental injury and the social context in which they live ('qualitative' synthesis);
- 2) examining the factors or behaviours which are associated statistically with injury amongst young people ('qualitative' and 'quantitative' synthesis);
- 3) a cross-study synthesis which: combines the results from 1) and 2) in order to identify strategies for future interventions; identifies the strategies in key areas which have been evaluated and where there are research gaps; quantifies the need and extent of injuries in these areas.

**Application:** This systematic review will provide greater clarity about who is most at risk, what they are at risk of, the factors which are associated with increased or decreased risk and how social, cultural, material and psychological factors interact. Gaining insights from the perspectives of young people themselves offers the potential to develop new strategies for acceptable and relevant interventions.

### **Neighbourhood and household influences on injuries to preschool children**

Injuries caused by accidents are a particular problem in young children and children's injury rates vary considerably from place to place. Low-income neighbourhoods have higher child injury rates than high-income neighbourhoods, and recent research suggests that only part of the difference is due to variations in the social, economic and demographic composition of local populations.

The Avon Longitudinal Study of Parents and Children (ALSPAC) will be used which relates to about 14,000 children born in 1991 and 1992 and subsequently followed up to track their progress, health and changes in their family circumstances. Multilevel modelling will be used to identify family and neighbourhood characteristics that explain variations in injury rates between children and between different parts of the Bristol region. Family characteristics include housing characteristics and safety behaviour together with income, the number of children and adults in the household and the age of the parents. Neighbourhood characteristics will include the average level of poverty or affluence in the locality, the strength of local social networks and

the amount of green space. Neighbourhoods in Bristol and its surrounding region will be defined by identifying adjacent small areas with similar social, economic, demographic and ethnic characteristics.

**Application:** A better understanding of how neighbourhoods influence injury risk would enable a more coherent development of policy on both child accident prevention and health inequalities, and help determine whether policy innovations should be focused on families or neighbourhoods.

Local services require this information in order to enable a more cost-effective combination of individual and area based interventions and to guide the design of specific interventions. For example, knowledge of the housing features or community characteristics that confer protection in otherwise poor neighbourhoods would inform community development projects tackling childhood injury.

### **Environmental and personal risk of accidental injury to young children**

The study will examine these effects both cross-sectionally and longitudinally in a contemporary representative sample – the Avon Longitudinal Study of Parents and Children (ALSPAC) birth cohort. Data on accidents and the use of accident prevention measures in the ALSPAC cohort have been collected when the children were 6, 15, 24, 38 and 54 months of age, and provide a rich dataset to investigate the parental factors which may influence monitoring and supervision (e.g. economic deprivation, family adversity, alcohol/drug use and parental mental health) alongside the child's temperament, development and behaviour, and environmental factors such as housing. To improve our understanding of contemporary parenting, a series of socially representative focus groups will be held in Bristol and surrounding rural areas to gain insight into parent's views on child safety and supervision in the home.

**Application:** Although accidents are the most important cause of mortality and morbidity to young British children, the evidence base is inconclusive with regard to the effectiveness of preventative measures initiated on home visits. An effective UK policy on accident prevention needs more evidence of what actually happens in our homes and how young children are supervised. This research will provide up to date detailed information from a large contemporaneous cohort (ALSPAC), supplemented by the views of parents on current practice in supervising their children, which will be used to develop an assessment framework for use by health professionals on home visits. This framework will be of considerable utility, as it will enable a quick assessment of environmental and personal risk, to target interventions on families most at risk. The final report will incorporate the views and experience of families from ethnic minorities and from deprived urban and rural areas, in recommending relevant and practical strategies for reduction of risk of accidental injury in the home.

## **STREAM 2 OLDER PEOPLE**

### **Systematic review on injury prevention programmes and strategies for older people with cognitive impairment and dementia in hospital and care home settings**

Established Cochrane Methodology will be used for Systematic Review, Where evidence exists of effective interventions to prevent falls or injuries (e.g. medication review, bone strengthening), evidence will be reviewed of interventions which have

improved process in these aspects of care without *per se* reducing falls. Literature review will incorporate legislation, legal precedent and ethical/consent issues around interventions to prevent falls in this group. Cost and cost-effectiveness analysis of interventions will be carried out.

**Application:** The majority of older persons reside in their own homes and the emphasis both on services and on research for falls and injury prevention has been on this population. Nonetheless, the incidence of falls in care home and hospital setting is high. Such falls lead to considerable physical and psychological morbidity for individuals, anxiety, complaint and litigation from relatives, concern, financial and opportunity costs for institutions – currently lacking guidance on best practice in falls and injury prevention. Cognitive impairment – whether dementia or delirium – has consistently been shown to be a major risk factor for falls in these settings. However, relatively few fall prevention studies have focused on care home or hospital settings, fewer still specifically on persons with cognitive impairment and dementia.

### **Facilitators and barriers to older people accepting and complying with interventions to reduce falling and fractures**

The first phase consists of a systematic literature review. Through inclusion of all available studies, including grey literature, the views, preferences and experiences of older people in relation to falls prevention strategies will be assessed alongside the effectiveness of interventions to promote falls injury prevention. The second phase, informed by the review, will involve focus groups and interviews to provide an in-depth investigation of older people's perceptions of fall injury prevention strategies. This will cover a broad range of interventions and will include the recruitment of attendees, non-attendees and non-completers.

**Application:** Despite the many existing guidelines and reviews on fall and fracture prevention, more information is needed to further the understanding of how older people perceive the prevention strategies. This proposed project will bridge that gap by exploring the views of older people, and so help shape fall prevention service development and delivery locally, and nationally.

### **Preventing falls amongst older people: socio-economic and ethnic factors**

Routine data will be used to examine variations in fall-related mortality, hospitalisation rates and health care seeking behaviour. An 'equity audit' data collection mechanism will be piloted to collect data on service provision and service use including socio-demographic and ethnicity.

Focus groups and interviews will explore the attitudes, beliefs and intentions of older people from differing socio-economic and ethnic groups including differences by people's experience of falling and fall prevention interventions. These data, along with findings from reviews, will be used to inform the final content of a large (n = 5000) cross sectional survey of belief and intentions amongst populations with large African Caribbean and South Asian communities, so as to determine preferences for different interventions, strengths of beliefs about risks of falling and costs and benefits of falls injury prevention programmes.

**Application:** The programme will provide the scientific basis for recommendations on the reasons for ethnic and socio-economic variations, and what sorts of intervention programmes are needed and will be acceptable to older people from different social and ethnic backgrounds. In addition, a simple system will be developed and piloted for routinely monitoring the extent to which NHS provision

and falls services is equitable and appropriate for people from different socio-economic and ethnic groups.

### **STREAM 3 INFRASTRUCTURE**

#### **Estimating the costs and quality of life loss due to fractures**

Fractures are serious cause of morbidity and cost to society. Equally important is the health related quality life loss (HRQoL) due to hip and other fall related fractures. Cost and quality of life consequences will be ascertained of both fractures and falls in a primary care sample of women. These data will also allow a more detailed description of the costs and consequences of fractures.

Changes overtime in the quality of life of patients with and without a fracture/fall in terms of utility scores and psychometric measures will be estimated using a linear mixed model. Utility weights will be combined with patients survival data to estimate quality adjusted life years for individuals aged 70 years and over who have and have not had a fracture/fall. Primary cost data will be collected in a postal survey where patients will be asked about: treatment received, length of stay at hospital, length of stay at residential care/sheltered or nursing accommodation, and social services support. Resource use data will be combined with 2004 unit prices to obtain an updated estimate of the cost of treating hip, wrist, vertebral and other fractures.

**Application:** This research project aims to provide a more accurate estimate of the longer-term consequences of falls and fractures in terms of cost and changes in health related quality of life. This would aid the comparison of falls and fractures with other significant public health treats in England. The data produced from this project will help to inform future economic evaluations for both fracture and fall prevention programmes.

#### **The long term health and health care outcomes of accidental injury**

Six existing injury datasets will be re-examined. Five of these datasets were collected between 1988 and 1997, and include a total of 8,588 injured patients admitted to over 50 different hospitals. A sample of 1753 of these patients also had a follow-up morbidity assessment at 6 m. As well as re-assessing this cohort, we will follow-up a sample of patients in the Northern General Hospital, Sheffield, Major Trauma Outcome Study database who were injured since 1997.

The follow-up will include tracing at the NHS Central Registry to identify deaths and cause of death, and a postal questionnaire to survivors including the SF-36, EQ-5D, Post-Traumatic-Diagnostic-Scale, and an assessment of use of resources in the past year. A sample of 400 patients will have a disability assessment using the OPCS disability survey instrument.

**Application:** Preventive interventions need to be targeted as far as possible where they will achieve most benefit by focussing on accidents, injuries and patients which result in significant loss of life, quality of life, and costs. However, little is known about the relative health and health care burden of different types of accidents, patients and injuries. This research will address this gap, and enable accident prevention policy to focus clearly on areas where the biggest public health problems arise.

# Programme wide project

## **Moving from observation to intervention to reduce inequalities in injury**

A considerable amount is known about factors which cause or precipitate injuries and also that many injury types show large socio-economic gradients. However, the research base on testing the effectiveness of injury prevention initiatives, and particularly in less affluent areas and individuals, is extremely scanty. Our knowledge of the impact of injuries on disability, quality of life and impact on wider society is also very limited.

The first project is a mixed methods study based around a cluster randomised trial in four areas of the UK. The basic area of analysis is the electoral ward with analysis identifying wards in deprived areas with particular high injury rates to vulnerable pedestrians (children and older people). Information on the number and distribution of injuries will be sent to councillors representing intervention wards and general information of child injury prevention to councillors from matched control wards. Outcomes being measured include the introduction of additional engineering and educational safety measures, and differences in attitudes and experiences.

The second project is a randomised controlled trial of the acceptability and effectiveness of installing thermostatic mixing valves in domestic properties to reduce hot water temperatures.

The third study is the UK Burden of Injury study, a multi-centred prospective study of 1320 people attending A & E or admitted to hospital with an injury. The study collects details on the nature and cause of the injury, pre-injury status and 1, 6 and 12 month follow-up, using standardised tools including EQ5D, HUI3, PedsQol and the Work Limitations Questionnaire. The data will then be modelled against regional and national A & E and inpatient datasets to estimate the UK burden of injuries.

**Application:** Children are a key focus, reflecting the Green Paper '*Every Child Matters*', but other vulnerable groups are also feature. The proposal is influenced by an evidence-based approach, derived from the HDA's Evidence Briefings and Cochrane Collaboration reviews. The consortium will encourage research capacity development in the field within their teams and in the dissemination of results.

The association of accidental injury with social deprivation permeates all projects. There is a dearth of well conducted trials in the field and this work includes two controlled trials, one relating to thermal and one to pedestrian injuries, injury types with the greatest socioeconomic mortality gradients. The trial contents: changing the environment within the home and an advocacy package designed for local councillors, all have relevance to the government-wide programme of '*Tackling health inequalities*'. The trials actively engage individuals, communities and professionals in intervention development.

The UK Burden of Injuries study will provide, for the first time, measures of the impact of injuries on individuals, the NHS, and wider society, subdivided by major cause of injury. These data will be extremely valuable in informing policy development relating to injury prevention across government departments.

# Conclusions

The projects chosen for inclusion in the programme demonstrate a wide variety of research methodologies. Some 15 universities are involved with contributions ranging from a few months to up to four years. The programme is planned to take until 2008 to complete but interim reports will be available along the way. Our knowledge will be enhanced of what works and, what interventions are suitable for use in areas or in populations with elevated risk.

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