# A NATIONAL CONTRACT ON ACCIDENTS

### **ACCIDENTS:** Social and economic interventions

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES	
	Government and National Players can:			
A1	Develop New Deal for Communities	No systematic reviews were identified in this area.		
A2	Remove obstacles to partnership	Community-based coalitions can be effective, and may be essential in working with some populations. They have been particularly effective in injury prevention. <sup>a</sup>	<ul> <li>Kuhn M, Doucet C, Edwards N. Effectiveness of coalitions in heart health promotion, tobacco use reduction, and injury prevention: A systematic review of the literature 1990-1998 Public Health Research, Education and Development Program, Public Health Branch, Ontario Ministry of Health 1999.</li> </ul>	
A3	Promote parental education (Sure Start)	Group-based parent-training programmes have a positive impact on the behaviour of children between the ages of 3 and 10 years. They also appear more successful than methods that involve working with parents on an individual basis. <sup>a</sup>	<ul> <li>Barlow J. Systematic Review of the Effectiveness of parent- training programmes in improving behaviour problems in children aged 3-10 years (second edition). Health Services Research Unit, Department of Public Health, University of Oxford July 1999.</li> </ul>	
A4	Improve provision of consistent monitoring data	Injury prevention interventions need to be based on accurate data derived from surveillance systems. <sup>a</sup>	a. NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).	
		Community-wide campaigns which use local injury data have resulted in a reduction in the reported incidence of injuries in the home. <sup>b</sup>	Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.	
			<li>b. Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine 1995;1-61.</li>	
A5	Co-ordinate Government strategy on accident prevention	No systematic reviews were identified in this area.		

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	Local Players and Communities can:		
A6	Monitor care homes for older people	No systematic reviews were identified in this area.	
A7	Promote safety practices at work	General training and education campaigns have generally been unsuccessful in reducing injury rates, but health and safety legislation has been associated with a reduction of injuries in the UK. <sup>a</sup> Back injury prevention interventions in the workplace, such as back belt programmes and exercise/flexibility programmes, may be beneficial in	<ul> <li>a Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine 1995;1-61.</li> <li>b Karas BE. Back injury prevention interventions in the workplace: an integrative review. AAOHN Journal 44:189-96.</li> <li>c Schonstein E, Kenny DT, Keating J, Koes BW. Work</li> </ul>
		preventing back injuries, but more research is needed. <sup>b</sup> A review is underway to compare effectiveness of different strategies in reducing time lost from work and in increasing functional status of workers with back and neck pain. <sup>c</sup>	<ul> <li>Schöhstein E, Reiniy DT, Reading J, Roes DW. Work conditioning, work hardening and functional restoration for workers with back and neck pain [Protocol for a Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford. Update Software.</li> </ul>
<b>A8</b>	Tackle social exclusion (New Deal, urban regeneration)	There is a strong association between poverty and the rate of childhood injuries, <sup>a</sup> but it is not clear which interventions are likely to be most effective in diminishing this association.	a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996;2:(5). Towner E, Dowswell T, Simpson G, Jarvis S. Health
		The design of Victorian streets with terraced housing means that there are few available play areas and that on-street parking is ubiquitous. These aspects of housing design are associated with higher rates of accident casualties. <sup>a</sup>	promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
		Structural and legislative measures are known to be the most effective interventions in reducing inequalities. <sup>b</sup>	b Gepkens A, Gunning-Schepers LJ. Interventions to reduce socioeconomic health differences: A review of the international literature. European Journal of Public Health 1996;6:218-26.
		Interventions which appear to have been successful at reducing variations in health include systematic and intensive approaches to delivering effective interventions, improvement of accessibility to services, prompts to encourage use of services, multifaceted strategies, collaboration between interest groups, and involvement of peers in the delivery of interventions such as home visiting. <sup>c</sup>	c NHS Centre for Reviews and Dissemination. Review of the research on the effectiveness of health service interventions to reduce variations in health 1995;3.
A9	Work within health improvement programmes on local partnership to improve local accident	Targeting of high risk households is likely to make the most impact in the prevention of injuries in children, <sup>a</sup> especially when supported by home safety equipment loans or subsidised equipment schemes. <sup>b</sup>	<ul> <li>a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996;2(5).</li> <li>b Towner E, Dowswell T, Simpson G, Jarvis S. Health</li> </ul>

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	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
	prevention initiatives, eg better identification of highest risks/ priorities/	There is some evidence that Accident Prevention Committees in high risk, deprived populations reduce injuries. <sup>a</sup>	promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
	targets	Coalitions can reduce head injuries, drownings, road crashes, and fractures in older people. <sup>c</sup>	<ul> <li>c Kuhn M, Doucet C, Edwards N. Effectiveness of coalitions in heart health promotion, tobacco use reduction, and injury prevention: A systematic review of the literature 1990-1998 Public Health Research, Education and Development Program, Public Health Branch, Ontario Ministry of Health 1999.</li> </ul>
10	Promote safety measures to community groups	Community-wide campaigns have resulted in a reduction in the reported incidence of injuries in the home. <sup>a</sup>	<ul> <li>a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996;2:(5).</li> <li>Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine 1995;1-61.</li> </ul>
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
A11	Raise public awareness of risks	No systematic reviews were identified in this area.	
	People can:		
A12	Take opportunities to improve their education, training and employment	No systematic reviews were identified in this area.	

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES	
	Government and National Players can:			
A13	Develop road safety strategy	Area-wide traffic schemes in the UK (such as traffic calming) appear to have resulted in some reductions in pedestrian injuries <sup>a</sup> and can reduce the total number of accidents by over 10%. <sup>b</sup> Guard rails and crash cushions (impact attenuators) can reduce the rate and	<ul> <li>a Harborview Injury Prevention and Research Center. Child Pedestrian Injury Interventions. University of Washington. <u>http://depts.washington.edu/hiprc/childinjury</u>.</li> <li>Speller V. Preventing injury in children and young people: a review of the literature and current practice. 1995; Wessex Institute of Public Health Medicine 1997:1-61.</li> </ul>	
		severity of accidents. <sup>c</sup>	b NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996;2(5).	
		Graduated driver licensing systems and night time curfews have been found to reduce young driver crashes in the USA. <sup>d</sup>	<ul> <li>c Elvik R. The safety of guard rails and crash cushions: a meta-analysis of evidence from evaluation studies. Accident Analysis and Prevention 1995;27:523-49.</li> </ul>	
			<ul> <li>d Foss RD. Effectiveness of graduated driver licensing in reducing motor vehicle crashes. American Journal of Preventive Medicine 1999;16:47-56.</li> </ul>	
A14	Ensure safety standards in new buildings	No systematic reviews were identified in this area.		
A15	Continue work on improving product standards	Continue work on	Incidence and severity of head injury are lower in cyclists wearing helmets, and these effects appear to be increased with robustness of helmet design. <sup>a</sup>	<ul> <li>Coleman P. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996;1- 89.</li> </ul>
		Child-resistant container closures have been shown to reduce home injuries. <sup>b</sup>	NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).	
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.	
			<ul> <li>b Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine 1995;1-61.</li> </ul>	
			NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).	

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A16	Monitor standards for sports facilities and equipment	Safety rules for organised sport can reduce injuries in the 15-24 year age group. <sup>a</sup> Ankle supports (semi-rigid orthoses or air-cast braces) are effective in preventing ankle injuries during high risk sporting activities. <sup>b</sup> Mouth guards can help prevent injuries in rugby. <sup>a</sup>	<ul> <li>a Coleman P, Munro J, Nicholl J, Harper R, Kent, G, Wild D. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996:1-89.</li> <li>b Quinn K, Parker P, de Bie R, Rowe B, Handoll H. Interventions for preventing ankle ligament injuries [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> </ul>
A17	Monitor water safety co- ordination at national level		<ul> <li>a Thompson DC, Rivara FP. The evaluation of the effectiveness of pool fencing to prevent drowning in children. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> <li>b NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).</li> </ul>
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
A18	Promote Design for Safety	mote <i>Design for Safety</i> Incidence and severity of head injury are lower in cyclists wearing helmets, and these effects appear to be increased with robustness of helmet design. <sup>a</sup> Child resistant container closures have been shown to reduce home injuries. <sup>b</sup>	<ul> <li>Coleman P. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996;1- 89.</li> </ul>
			NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
			<ul> <li>b Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine 1995;1-61.</li> </ul>
			NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).

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A19	Monitor vehicle safety standards	No evidence was found for formal periodic motor vehicle safety checks and random roadside inspections. <sup>a</sup>	a Coleman P, Munro J, Nicholl J, Harper R, Kent, G, Wild D. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996:1-89.
A20	Support for pilot schemes and voluntary bodies (eg Child Safety Week)	No systematic reviews were identified in this area.	
A21	Implement EC regulations on accident prevention	No systematic reviews were identified in this area.	
	Local Players and Communities can:		
A22	Give greater priority to walking and cycling in local transport plans	No systematic reviews were identified in this area.	
A23	Adopt school travel and green transport plans	No systematic reviews were identified in this area.	
A24	Develop traffic calming and other measures for local safety schemes as part of local transport plans	Area wide traffic schemes in the UK (such as traffic calming) appear to have resulted in some reductions in pedestrian injuries <sup>a</sup> and can reduce the total number of accidents by over 10%. <sup>b</sup> The provision of crossing patrollers, adoption of measures to redistribute traffic and improvement of the safety parameters of individual roads can reduce the rate and severity of childhood accidents. <sup>a</sup>	<ul> <li>a Harborview Injury Prevention and Research Center. Child Pedestrian Injury Interventions. University of Washington. 1997 <u>http://depts.washington.edu/hiprc/childinjury</u>. Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine 1995:1-61.</li> <li>b NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5). Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.</li> </ul>
A25	Develop safe play areas	There has been little evaluation of the effects of playground layout, equipment and surfacing on injury rates. <sup>a</sup> Wood chips and sand appear safer surfacing materials than mats, gravel, grass and asphalt, but more research on playgrounds is needed. <sup>b</sup>	<ul> <li>a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).</li> <li>Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.</li> </ul>

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
			b Harborview Injury Prevention and Research center. Fal Injury Interventions. University of Washington. 1997; <u>http://depts.washington.edu/hiprc/childinjury</u> .
26	Install smoke alarms in local and health authority properties	Smoke detector give away programmes appear effective in reducing fire injuries, while community education has not been shown to be effective. The effect on injuries of individual counseling or education has not been studied. <sup>a</sup> The use of safety devices in the home, such as smoke detectors and thermostat control for tap water, can reduce the risk of home injuries. <sup>a</sup> Targeting of households at high risk, for example low-income households, combined with home visits, education and free distribution of devices is likely to have the greatest impact. <sup>b</sup>	<ul> <li>a Warda L, Tenenbein M, Moffatt ME. House fire Injury prevention update. Part II. A review of the effectiveness preventive interventions. Injury Prevention 1999;5:212 DiGuiseppi C, Higgins JPT. Interventions to promote s alarms: systematic reviews of controlled trials. Archive Disease in Childhood 2000;82;341-8.</li> <li>b NHS Centre for Reviews and Dissemination. Prever unintentional injuries in children and young adolesc Effective Health Care 1996;2(5).</li> <li>Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for prevention of unintentional injuries, Health promotion Authority 1996;1.</li> </ul>
27	Encourage private sector safety checks on appliances	No systematic reviews were identified in this area.	
28	Promote/maintain home safety checks for older	Some falls in the elderly can be prevented by ensuring that the drug regimens used with elderly people are chosen to reduce unwanted side-effects. <sup>a</sup>	a Hanlon JT, Cutson T, Ruby CM. Drug-related falls in t older adult. Topics in Geriatric Rehabilitation 1995;273:1341-7.
	people	Home assessment and surveillance can reduce falls in frail elderly people. This can be carried out by a variety of health care workers or volunteers. <sup>b</sup>	b Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly. [Cochrane Review] In: The Cochrane Libra Issue 1, 2000. Oxford: Update Software.
		Falling in the elderly can be reduced by targeting multiple, identified risk factors in individual patients by behavioural interventions and targeting environmental hazards and other risk factors. <sup>b</sup>	NHS Centre for Reviews and Dissemination. Prever falls and subsequent injury in older people. Effective Health Care 1996:2(4).
29	Maintain highways, pavements and playgrounds	Wood chips and sand appear safer surfacing materials than mats, gravel, grass and asphalt, but more research on playgrounds is needed. <sup>a</sup>	a Harborview Injury Prevention and Research center. Fal Injury Interventions. University of Washington. 1997; http://depts.washington.edu/hiprc/childinjury.
30	Identify/safeguard potentially hazardous sites (rivers, railways, dumps etc)	No systematic reviews were identified in this area.	
31	Undertake community safety audits/risk assessment	No systematic reviews were identified in this area.	

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A32	Ensure well-developed emergency planning	Hospitals with up to date equipment and medical staff trained in trauma care have lower case – fatality rates among accident victims. <sup>a</sup> Other factors, such as the use of triage and rapid transportation from the site of the accident to the hospital, can also improve outcome. <sup>a</sup>	a Nygren Å, Alberts A, Brismar B, Dahlgren H, Lekander T, Magnusson S, et al. The treatment and rehabilitation of traffic accident victims (Trafikolycksfall). Stockholm: The Swedish Council on Technology Assessment in Health Care/ Statensberedning för utvärdering av medicinsk metodik (SBU) 1994:182.
		There is no evidence that mortality from major trauma is lower in high volume accident and emergency units or specialised trauma centres than in other facilities. <sup>b</sup>	b NHS Centre for Reviews and Dissemination. Hospital volume and healthcare outcomes, costs and patient access. Effective Health Care 1996:2(8).
	People can:		
<b>A</b> 33	Maintain household appliances to reduce accidents in the home	No systematic reviews were identified in this area.	
134	Install and maintain smoke alarms	The use of safety devices in the home, such as smoke detectors and thermostat control for tap water, can reduce the risk of home injuries. <sup>a</sup> Targeting of households at high risk, for example low-income households, combined with home visits, education and free distribution of devices is likely to have the greatest impact. <sup>a</sup>	a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents Effective Health Care 1996:2(5). Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education
		Counselling as part of child health surveillance may increase smoke alarm ownership and function, but its effect on injuries are unevaluated. <sup>b</sup>	<ul> <li>Authority 1996;1.</li> <li>b Warda L, Tenenbein M, Moffatt ME. House fire injury prevention update. Part II. A review of the effectiveness of the e</li></ul>
		Smoke detector give away programmes appear effective in reducing fire injuries, while community education has not been shown to be effective. The effect on injuries of individual counselling or education has not been studied. <sup>b</sup>	preventive interventions. Injury Prevention 1999;5:212-25. DiGuiseppi C, Higgins JPT. Interventions to promote smok alarms: systematic reviews of controlled trials. Archives of Disease in Childhood 2000;82;341-8.
		Community programmes which involve local participation and use a broad range of interventions can reduce childhood injuries from a wide variety of causes. <sup>a</sup>	

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
A35	Drive safely and within speed limits	The speed at which a car is driven affects the severity of pedestrian injuries. However, no evaluations of the effectiveness of speed limits were identified. <sup>a</sup>	a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996:1.
A36	Wear seatbelts on car journeys	Wearing seat belts reduces the risk of serious injury in road traffic accidents. <sup>a</sup>	a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996;2(5).
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
A37	Ensure that they play an effective role in workplace safety procedures	No systematic reviews were identified in this area.	

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	Government and National Players can:		
A38	Provide education/publicity on drink-drive	Evidence suggests that benzodiazepine use approximately doubles the risk of motor vehicle accidents. <sup>a</sup>	<ul> <li>Thomas RE. Benzodiazepine use and motor vehicle accidents: Systematic review of reported association. Canadian Family Physician. 1998;44:799-807.</li> </ul>
		Remedial interventions with drink/driving offenders can reduce recidivism and subsequent alcohol-related crashes. <sup>b</sup>	<ul> <li>b Dinh-Zarr T, DiGuiseppi C, Heitman E, Roberts I.</li> <li>Preventing injuries through interventions for problem drinking: a systematic review of randomised controlled trials. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> </ul>
			Wells-Parker E, Bangert-Drowns R, McMillen M, Williams M. Final results from a meta-analysis of remedial interventions with drink/drive offenders. Addiction 1995;90: 907-26.
A39	Provide education/publicity on speed management		<ul> <li>Vernick JS. Effects of high school driver education on motor vehicle crashes, violations, and licensure. American Journal of Preventive Medicine 1999;16:40-6.</li> </ul>
			Coleman P. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996:1- 89.
A40	Promote accident prevention through schools programmes (Healthy Schools Award)	School health promotion initiatives can have a positive impact on children's health and behaviour but do not do so consistently. Interventions are able to increase children's knowledge but changing attitudes and behaviour is harder.	a Lister-Sharp D, Chapman S, Stewart-Brown S, Sowden A. Health promoting schools and health promotion in schools: two systematic reviews. Health Technology Assessment 1999;3(22).
		A multifaceted approach is likely to be most effective. <sup>a</sup> School/young people's education <sup>b</sup> and training for drivers (e.g pre-licence	b NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
		driver education) have not been shown to reduce accident rates. <sup>c</sup>	Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
			<ul> <li>Vernick JS. Effects of high school driver education on moto vehicle crashes, violations, and licensure. American Journal of Preventive Medicine 1999;16:40-6.</li> </ul>
			Coleman P. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996:1- 89.

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A41	Promote Safer Routes to School	No systematic reviews were identified in this area.	
A42	Set up Youth Networks, playgroup associations	No systematic reviews were identified in this area.	
A43	Target health action zones/education action zones/ Single Regeneration Budget (SRB)/New Deal for Communities	There is a strong association between poverty and the rate of childhood injuries. <sup>a</sup>	<ul> <li>a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996;2(5).</li> <li>Gepkens A, Gunning-Schepers LJ. Interventions to reduce socioeconomic health differences: A review of the international literature. European Journal of Public Health 1996;6:218-26.</li> </ul>
			NHS Centre for Reviews and Dissemination. Review of the research on the effectiveness of health service interventions to reduce variations in health 1995;3.
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
	Local Players and Communities can:		
A44	Ensure effective provision/loans of safety equipment to target groups	When properly used, child car seat restraints reduce car occupant injuries. <sup>a</sup> In the USA, legislation for the under 4s has been shown to increase the use of car	a NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
		restraints and reduce the rate of injury and death. <sup>b</sup> Free car seat loans and reward/incentive/reinforcement programme increases car restraint use. <sup>b</sup>	Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
			<ul> <li>b DiGuiseppi C. Individual-level injury prevention strategies in the clinical setting. Future Child (in press).</li> </ul>
			Segui-Gomez M. Evaluating interventions that promote the use of rear seats for children. American Journal of Preventive Medicine 1999;16:23-9.
A45	Conduct local campaigns (LEAs) on accidental injury	Community and clinical educational programmes can increase child motor vehicle restraint use in children, <sup>a</sup> but the effect appears to decrease over time. <sup>b</sup>	a Grossman DC. Effectiveness of health promotion programs to increase motor vehicle occupant restraint use among young children. Am J Prev Med. 1999;16:12-22.
	prevention	There is no evidence that counselling of children and their parents by	Segui-Gomez M. Evaluation interventions that promote the use of rear seats for children. Am J Prev Med 1999;16:23-9.
		physicians in the clinical setting increases bike helmet purchase. <sup>c</sup>	<ul> <li>B Grossman DC. Effectiveness of health promotion programs to increase motor vehicle occupant restraint use among</li> </ul>

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
		Smoke detector give away programmes appear effective in reducing fire injuries, while community education has not been shown to be effective. The effect on injuries of individual counselling or education has not been studied. <sup>e</sup>	<ul> <li>1999;16:12-22.</li> <li>c DiGuiseppi C. Individual-level injury prevention strategies in the clinical setting. Future Child (in press).</li> <li>d Bass JL. Childhood injury prevention counseling in primary care settings: a critical review of the literature. Pediatrics 1993;92:544-50.</li> <li>e Warda L. House fire injury prevention update. Part II. A review of the effectiveness of preventive interventions. Injury Prevention 1999;5:212-25.</li> <li>DiGuiseppi C, Higgins JPT. Interventions to promote smoke alarms: systematic reviews of controlled trials. Archives of Disease in Childhood 2000;82;341-8.</li> </ul>
A46	Ensure more effective enforcement – fire, police, trading standards	No systematic reviews were identified in this area.	
A47	Put measures in place on prevention (eg stairgates, car seats) and rehabilitation (eg aids for older people)	Soft hip protector pads can reduce the risk of hip fractures amongst elderly people in an institutional setting. <sup>a</sup> Free car seat loans and reward/incentive/reinforcement programmes increase car restraint use. <sup>b</sup>	<ul> <li>Parker MJ, Gillespie LD, Gillespie WJ. Hip protectors for preventing hip fractures in the elderly [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> <li>NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).</li> </ul>
		When properly used, child car seat restraints reduce car occupant injuries. <sup>c</sup> In the USA, legislation for the under 4s has increased the use of car restraints and reduced the rate of injury and death. <sup>c</sup>	<ul> <li>b. DiGuiseppi C. Individual-level injury prevention strategies in the clinical setting. Future Child (in press).</li> <li>c. NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5). Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.</li> </ul>
A48	Develop private sector promoting safety culture for occupational road use	Evidence suggests that laws and campaigns introducing daytime running lights for cars reduces the number of multi-party daytime accidents by 3-12%. <sup>a</sup> However, daytime running car headlights have not been shown to reduce pedestrian injuries. <sup>b</sup> Vehicle modifications may reduce the risk of pedestrian injuries. <sup>b</sup>	<ul> <li>a. Elvik R. A meta-analysis of studies concerning the safety effects of daytime running lights on cars. Accident Analysis and Prevention 1996;28:685-94.</li> <li>b. Harborview Injury Prevention and Research Center. Child Pedestrian Injury Interventions. University of Washington. 1997;<u>http://depts.washington.edu/hiprc/childinjury</u>.</li> </ul>

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
A49	Promote swimming training	No systematic reviews were identified in this area.	
	People can:		
A50	Ensure that cyclists, especially children and	The use of cycle helmets by children substantially reduces the rates of serious injury from road traffic accidents. <sup>a</sup>	a. NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents Effective Health Care 1996:2(5).
	young people, wear cycle helmets	Incidence and severity of head injury are lower in cyclists wearing helmets, and these effects appear to be increased with robustness of helmet design. <sup>b</sup>	Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
		Helmets substantially reduce the risk of head, brain and severe brain injury, and injuries to the upper and mid-facial areas. <sup>c</sup>	<ul> <li>b Coleman P. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996;1</li> </ul>
		Legislation increases the use of helmets in those who continue to cycle and substantially reduces the rates of serious head injury. <sup>a</sup>	<ul><li>89.</li><li>c. Thompson DC. Helmets for preventing head and facial</li></ul>
		There is no evidence that counselling of children and their parents by physicians in the clinical setting increases bike helmet purchase. <sup>d</sup>	injuries in bicyclists [Cochrane Review]. In The Cochrane Library, Issue 1, 2000. Oxford Update Software.
			d. DiGuiseppi C. Individual-level injury prevention strategies in the clinical setting. Future Child (in press).
A51	Avoid drinking and driving (cont)	Remedial interventions with drink/driving offenders can reduce recidivism and subsequent alcohol-related crashes. <sup>a</sup> No specific intervention programmes for alcohol misuse prevention in young	a. Dinh-Zarr T, DiGuiseppi C, Heitman E, Roberts I. Preventing injuries through interventions for problem drinking: a systematic review of randomised controlled trials. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
		people have been shown to be effective in the long term. <sup>b</sup>	Wells-Parker E, Bangert-Drowns R, McMillen M, William M. Final results from a meta-analysis of remedial interventions with drink/drive offenders. Addiction 1995;90
		Brief interventions in primary care, including assessment of intake and provision of information and advice, have been shown to reduce alcohol	907-26.
		consumption by up to 20% in those with consumption levels above recommended guidelines. Brief interventions are as effective as more expensive specialist treatment in this context. <sup>c</sup>	b. Foxcroft DR, Lister-Sharp D, Lowe G. Alcohol misuse prevention for young people: a systematic review reveals methodological concerns and lack of reliable evidence of effectiveness. Addiction 1997;92:531-7.
		Alcohol ignition interlock devices appear to be effective in reducing drink driving recidivism. <sup>d</sup>	c. NHS Centre for Reviews and Dissemination. Brief interventions and alcohol use. Effective Health Care 1993:1(7).
		In the USA administrative per se laws (the enabling legislation for this action defines failing an alcohol concentration test as suitable grounds for license	<ul> <li>Coben JH, Larkin GL. Effectiveness of ignition interlock devices in reducing drunk driving recidivism. American Journal of Preventive Medicine 1999;16:81-7.</li> </ul>
		suspension) seem to have reduced drink driving recidivism in some states but not in others, compared with drivers who were sanctioned through other	<ul> <li>McArthur DL. The specific deterrence of administrative per se laws in reducing drunk driving recidivism. American Journal of Preventive Medicine 1999;16:68-75.</li> </ul>

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
A51	<i>(cont)</i> Avoid drinking and driving	conventional judicial processes. <sup>e</sup> Random screening can substantially reduce crash fatalities and injuries. <sup>f</sup> Laws in the USA requiring lower legal blood alcohol concentration limits among younger drivers reduce injuries and crashes. <sup>g</sup>	<ul> <li>f. Peek-Asa C. The effect of random alcohol screening in reducing motor vehicle crash injuries. American Journal of Preventive Medicine 1999;16:57-67.</li> <li>g. Zwerling C. Evaluation of the effectiveness of low blood alcohol concentration laws for younger drivers. American Journal of Preventive Medicine 1999;1:76-80.</li> </ul>
A52	Undertake effective training to improve road safety skills	A review on education for pedestrians is currently underway. <sup>a</sup> School/young people's education and training for drivers (e.g pre-licence driver education) have not been shown to reduce accident rates. <sup>b</sup>	<ul> <li>a. Duperrex O. Safety education of pedestrians for injury prevention [Protocol for a Cochrane Review]. In The Cochrane Library, Issue 1, 2000. Oxford Update Software .</li> <li>b. Vernick JS. Effects of high school driver education on motor vehicle crashes, violations, and licensure. American Journal of Preventive Medicine 1999;16:40-6.</li> <li>Coleman P. The effectiveness of interventions to prevent accidental injury to young persons aged 15-24 years: a review of the evidence. Medical Care Research Unit 1996;1-89.</li> </ul>
A53	Ensure that children and young people take up cycle/pedestrian training	There is little reliable evidence that children can be successfully trained to avoid injury on the roads, although some changes to knowledge and skills have been reported. <sup>a</sup> A systematic review on education of pedestrians for injury prevention is currently underway. <sup>b</sup>	<ul> <li>a. Harborview Injury Prevention and Research Center. Child Pedestrian Injury Interventions. University of Washington. 1997;<u>http://depts.washington.edu/hiprc/childinjury</u>.</li> <li>NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).</li> <li>Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.</li> <li>b. Duperrex O. Safety education of pedestrians for injury prevention [Protocol for a Cochrane Review]. In The Cochrane Library, Issue 1, 2000. Oxford Update Software.</li> </ul>
A54	Take up physically active lifestyles (to improve bone density and prevent osteoporotic fractures) ( <i>cont</i> )	There have been mixed findings about the effect of physical activity to prevent bone loss in postmenopausal women. Some reviews have found that physical activity appears to delay or reduce the loss of bone mineral density (BMD), reduce the risk of osteoporosis, <sup>a</sup> and reduce risk factors for hip fracture. <sup>b</sup> One review found that exercise training programes prevented or reversed bone loss of almost 1% per year compared to the controls. <sup>c</sup> However, another review found no statistically significant effect on bone mineral density. <sup>d</sup>	<ul> <li>a. Ernst E. Extercise for female osteoporosis - a systematic review of randomised controlled trials. Sports Medicine. 1998;25:359-68.</li> <li>Kelley GA. Exercise and regional bone mineral density in postmenopausal women: a meta-analytic review of randomized trials. American Journal of Physical Medicine and Rehabilitation 1998;77:76-87.</li> <li>Kelley G. Aerobic exercise and lumbar spine bone mineral density in postmenopausal women: a meta-analysis. Journal</li> </ul>

### POLICY

A54 (cont) Take up physically active lifestyles (to improve bone density and prevent osteoporotic fractures) (cont)

### SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE

Screening post-menopausal women for low bone density has not been shown to reduce the incidence of fractures.<sup>e</sup>

There is some evidence to suggest that exercise such as balance training is effective in preventing falls and subsequent injury in older people.<sup>f</sup> It is not known whether other single interventions such as exercise alone or health education classes, prevent falls in the elderly. Interventions targeted at both intrinsic and environmental risk factors of individual patients may be more effective.<sup>g</sup>

As smoking is a risk factor for osteoporosis, effective smoking prevention interventions may reduce the incidence of osteoporosis.<sup>h</sup>

See evidence relevant to C22, H26 in Cancer and Heart Disease and Stroke chapters.

Bisphonates appear to prevent and reverse bone loss<sup>i</sup> and may reduce the risk of fracture<sup>j</sup>.

Protocols for seven reviews of interventions to prevent and treat osteoporosis are available.  ${}^{\rm k}$ 

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- of the American Geriatrics Society 1998;46:143-52. Wolff I. The effect of exercise training programs on bone mass: a meta-analysis of published controlled trials in preand postmenopausal women. Osteoporosis International 1999;9:1-12.
- b. Joakimsen RM. Physical activity and predisposition for hip fractures - a review. Osteoporosis International 1997;7:503-13.
- c. Berard A. Meta-analysis of the effectiveness of physical activity for the prevention of bone loss in postmenopausal women. Osteoporosis International 1997;7:331-7.
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- e. NHS Centre for Reviews and Dissemination. Screening for osteoporosis to prevent fractures. Effective Health Care 1992:1(1).

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f. NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).

Province MA, Hadley EC, Hornbrook MC, Lipsitz LA, Miller JP, Mulrow CD, Ory MG, Sattin RW, Tinetti ME, Wolf SL. The effects of exercise on falls in elderly patients: a preplanned meta-analysis of the FICSIT trials. JAMA 1996;11:38-54.

- g. Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford. Update Software.
- h. NHS Centre for Reviews and Dissemination: Smoking cessation: What the Health service can do. Effectiveness Matters 1998:3(1).

#### **POLICY**

#### SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE

A54 (*cont*) Take up physically active lifestyles (to improve bone density and prevent osteoporotic fractures)

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- j. Karpf DB, Shapiro DR, Seeman E et al. Prevention of nonvertebral fractures by alendronate: a meta-analysis. JAMA. 1997;227:1159-64.
- k. Bonaiuti D, Shea B, Lovine R, Negrini S, Wells G, Cranney A, Gillespie W, Hanley D, Tugwell P. Exercise for osteoporosis in postmenopausal women [Protocol for a Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

Cranney A, Shea B, Wells G, Reginster JY, Adachi R, Tugwell P. Calcitonin for osteoporosis in postmenopausal women [Protocol for a Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

Haguenauer D, Mirmiran S, Welch V, Adachi JD, Shea B, Wells G, Tugwell P. Fluoride therapy for osteoporosis [Protocol for a Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

Papadimitropoulos E, Shea B, Wells G, Tugwell P, Cranney A, Gillespie W, Josse R, Coyte P, Greenwood. Vitamin D with or without calcium for ostoeporosis in postmenopausal women [Protocol for a Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

Shea B, Cranney A, Tugwell P, Welch V, Ortiz Z, Adachi R, Peterson T, Wells G. Calcium for osteoporosis in postmenopausal women. [Protocol for a Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

Tugwell P, Wells G, Shea B, Peterson J,Cranney A, Henry D, O'Connell D, Robertson J, Gillespie WJ. Hormone Replacement Therapy for OP in postmenopausal women [Protocol for Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

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	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
			in men [Protocol for Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford. Update Software .
			Bonaiuti D, Shea B, Iovine R, Negrini S, Welch V, Kemper H, Tugwell P, Wells G. Exercise for osteoporosis in postmenopausal women [Protocol for a Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
A55	Ensure a healthy diet (with sufficient calcium and vitamin D intake for bone health)	Vitamin D and calcium supplements for people on steroids can prevent osteoporosis. <sup>a</sup> It is not yet clear whether Vitamin D injections with or without the addition of calcium supplements in healthy people can prevent	<ul> <li>Gepkens A, Gunning-Schepers LJ. Interventions to reduce socioeconomic health differences: A review of the international literature. European Journal of Public Health 1996;6:218-26.</li> </ul>
		osteoporosis. <sup>b</sup>	Homik J, Suarez-Almazor ME, Shea B, Cranney A, Wells G, Tugwell P. Calcium and vitamin D for corticosteroid-induced osteoporosis [Cochrane Review]. In: The Cochrane Library. Issue 1, 2000. Oxford Update Software.
			b. Gillespie WJ, Henry DA, O'Connell DL, Robertson J. Vitamin D and Vitamin D analogues for preventing of fractures associated with involutional and post- menopausal osteoporosis [Cochrane Review]. In The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
			NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).
			Homik J, Suarez-Almazor ME, Shea B, Cranney A, Wells G, Tugwell P. Calcium and vitamin D for corticosteroid-induced osteoporosis [Cochrane Review]. In: The Cochrane Library. Issue 1, 2000. Oxford Update Software.

POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
Government and National Players can:		
Develop and implement National Service Framework for Older People	No systematic reviews were identified in this area.	
Local Players and Communities can:		
Continue reviews of medication, eyesight in older people (over 75 check)	There is no evidence that community-based screening of asymptomatic older people results in improvements in vision. <sup>a</sup>	a Smeeth L, Iliffe S. Community screening for visual impairment in the elderly [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software .
Promote safety awareness, with risk assessment of fallers, on discharge from hospital	Soft hip protector pads can reduce the risk of hip fractures amongst elderly people in an institutional setting. <sup>a</sup> Some falls in the elderly can be prevented by ensuring that the drug regimens used by elderly people are chosen to reduce unwanted side-effects. <sup>b</sup> Home assessment and surveillance can reduce falls in frail elderly people. This can be carried out by a variety of health care workers or volunteers. <sup>c</sup> Falling in the elderly can be reduced by targeting multiple, identified risk factors in individual patients by behavioural interventions, and by targeting environmental hazards and other risk factors. <sup>d</sup> Screening for osteoporosis has not been shown to be effective in preventing fractures in the elderly. <sup>e</sup>	<ul> <li>a Parker MJ, Gillespie LD, Gillespie WG. Hip protectors for preventing hip fractures in the elderly [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> <li>NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).</li> <li>b Hanlon JT, Cutson T, Ruby CM. Drug-related falls in the older adult. Topics in Geriatric Rehabilitation 1995;273:1341-7.</li> <li>c Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> <li>NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).</li> <li>d Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> <li>NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).</li> <li>d Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> <li>NHS Centre for Reviews and Dissemination. Preventing falls in the elderly. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.</li> </ul>
H H H H H H H H H H H H H H H H H H H	Players can:         Develop and implement         National Service         Framework for Older         People         Local Players and         Communities can:         Continue reviews of         nedication, eyesight in         older people (over 75         wheck)         Promote safety awareness,         with risk assessment of         allers, on discharge from	Government and National Players can:         No systematic reviews were identified in this area.           Develop and implement Vational Service         No systematic reviews were identified in this area.           Prevelop and implement Vational Service         No systematic reviews were identified in this area.           Continue reviews of nedication, eyesight in Idder people (over 75 heck)         There is no evidence that community-based screening of asymptomatic older people results in improvements in vision. <sup>a</sup> Soft hip protector pads can reduce the risk of hip fractures amongst elderly people in an institutional setting. <sup>a</sup> Soft hip protector pads can reduce the risk of hip fractures amongst elderly people in an institutional setting. <sup>a</sup> Some falls in the elderly can be prevented by ensuring that the drug regimens used by elderly people are chosen to reduce unwanted side-effects. <sup>b</sup> Home assessment and surveillance can reduce falls in frail elderly people. This can be carried out by a variety of health care workers or volunteers. <sup>c</sup> Falling in the elderly can be reduced by targeting multiple, identified risk factors in individual patients by behavioural interventions, and by targeting environmental hazards and other risk factors. <sup>d</sup>

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
			a preplanned meta-analysis of the FICSIT trials. JAMA 1996;11:38-54.
			e NHS Centre for Reviews and Dissemination. Screening for osteoporosis to prevent fractures. Effective Health Care 1992:1(1).
A59	Promote local initiatives on physical activity in older	There is some evidence to suggest exercise such as balance training is effective in preventing falls and subsequent injury in older people. <sup>a</sup>	a NHS Centre for Reviews and Dissemination. Preventing falls and subsequent injury in older people. Effective Health Care 1996:2(4).
	people	There is some evidence to suggest that exercise such as balance training is effective in preventing falls and subsequent injury in older people. <sup>a</sup> It is not known whether other single interventions such as exercise alone or health education classes, prevent falls in the elderly. Interventions targeted at both	Province MA, Hadley EC, Hornbrook MC, Lipsitz LA, Miller JP, Mulrow CD, Ory MG, Sattin RW, Tinetti ME, Wolf SL. The effects of exercise on falls in elderly patients: a preplanned meta-analysis of the FICSIT trials. JAMA 1996;11:38-54.
		intrinsic and environmental risk factors of individual patients may be more effective. <sup>b</sup>	b Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford. Update Software.
A60	Promote family support – accident awareness, parenting skills	Child resistant containers have been shown to reduce home injuries. <sup>a</sup>	a. NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
		There is some evidence to suggest that childhood injury prevention counselling in primary care settings can be effective in increasing the use of safety equipment in the home. <sup>b</sup>	Speller V. Preventing injury in children and young people: a review of the literature and current practice. Wessex Institute of Public Health Medicine1995;1-61.
		Home based social support, such as that provided by health visitors, is effective in reducing child injury rates. <sup>a</sup>	Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
		Home visiting programmes have the potential to significantly reduce the rates of childhood injury. <sup>c</sup>	<ul> <li>b. Bass JL, Christoffel KK, Widome M, Boyle W, Scheidt MD, Stanwick R, Roberts K. Childhood injury prevention counselling in primary care settings: a critical review of the literature. Pediatrics 1993;92:544-50.</li> </ul>
		Families are more likely to test and lower hot water temperature after receiving counselling in the clinical setting. <sup>d</sup>	DiGuiseppi C. Individual-level injury prevention strategies in the clinical setting. Future-Child (in press).
			NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
			Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.

	POLICY	SYSTEMATIC REVIEWS OF RELEVANT EVIDENCE	REFERENCES
			<ul> <li>Roberts I. Does home visiting prevent childhood injury: a systematic review of randomised controlled trials. BMJ 1996;312:29-33.</li> </ul>
			Hodnett ED, Roberts I. Home-based social support for socially disadvantaged mothers [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
			d. DiGuiseppi C. Individual-level injury prevention strategies in the clinical setting. Future Child (in press).
A61	Take part in <i>Healthy</i> <i>Schools</i> programmes	School health promotion initiatives can have a positive impact on children's health and behaviour but do not do so consistently. Interventions are able to increase children's knowledge but changing attitudes and behaviour is harder. A multifaceted approach is likely to be most effective. <sup>a</sup>	a. Lister-Sharp D, Chapman S, Stewart-Brown S, Sowden A. Health promoting schools and health promotion in schools: two systematic reviews. Health Technology Assessment 1999;3:(22).
A62	Provide local alcohol services	No systematic reviews were identified in this area.	
A63	Ensure integrated service provision	No systematic reviews were identified in this area.	
A64	Provide pedestrian training for children	There is no strong evidence to suggest that children can be successfully trained to avoid injury on the roads. <sup>a</sup>	a. NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Effective Health Care 1996:2(5).
		A systematic review is currently underway on safety education for pedestrians. <sup>b</sup>	Towner E, Dowswell T, Simpson G, Jarvis S. Health promotion in childhood and young adolescence for the prevention of unintentional injuries, Health promotion effectiveness reviews. London: Health Education Authority 1996;1.
			b. Duperrex O. Safety education of pedestrians for injury prevention [Protocol for a Cochrane Review]. In The Cochrane Library, Issue 1, 2000. Oxford Update Software.
A65	Promote cycle proficiency schemes	No systematic reviews were identified in this area.	
	People can:		
A66	Have regular eye-tests	There is no evidence that community-based screening of asymptomatic older people results in improvements in vision. <sup>a</sup>	a. Smeeth L, Illiffe S. Community screening for visual impairment in the elderly [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford. Update Software.

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### **ACCIDENTS:** Additional evidence

#### **Treatment of trauma**

There is no evidence that medical anti-shock trousers (pneumatic anti-shock garments) reduce mortality, length of hospitalisation or length of ICU stay in trauma patients.<sup>a</sup>

High dose methylprednisolone in the acute management of spinal cord injury can improve neurological recovery.<sup>b</sup>

#### Treatment of critically ill patients

There is no evidence that colloid solutions are of any benefit in fluid resuscitation, either used alone or in combination with hypertonic crystalloids.<sup>c</sup>

There is no evidence that one colloid solution is more effective or safe than any other in the treatment of critically ill patients.<sup>d</sup>

There is evidence that albumin increases the risk of death in critically ill patients.<sup>e</sup>

Hyperbaric oxygen in the treatment of nonpregnant adults with acute carbon monoxide poisoning has not been shown to reduce neurologic symptoms one month after treatment.<sup>f</sup>

#### Treatment for musculoskeletal injuries

Shock absorbing insoles in footwear reduce stress fractures in athletes and military personnel. Rehabilitation after tibial stress fractures is aided by pneumatic bracing.<sup>g</sup>

Antibiotic prophylaxis reduces wound, urinary and respiratory tract infections in patients undergoing surgery for closed fracture fixation.<sup>h</sup>

Condylocephalic nails (in particular Ender nails) for hip fractures increase fracture healing complications, re-operation, residual pain and deformity compared with extramedullary implants.<sup>i</sup>

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- b Bracken MB. Pharmacological interventions for acute spinal cord injury [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
- c Alderson P, Schierhout G, Roberts I, Bunn F. Colloids versus crystalloids for fluid resuscitation of critically ill patients [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
- d Bunn F, Alderson P, Hawkins V. Colloid solutions for fluid resuscitation [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software .
- e The Albumin Reviewers (Alderson P, Bunn F, Lefebvre C, Li Wan Po A, Li L, Roberts I, Schierhout G). Human albumin solution for resuscitation and volume expansion in critically ill patients [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
- f Juurlink DN, Stanbrook MB, McGuigan MA. Hyperbaric oxygen for carbon monoxide poisoning [Cochrane Review]. In The Cochrane Library, Issue 2, 2000. Oxford Update Software.
- g Gillespie WJ, Grant I. Interventions for preventing and treating stress fractures and stress reactions of bone of the lower limbs in young adults [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
- h Gillespie WJ, Walenkamp G. Antibiotic prophylaxis for surgery for proximal femoral and other closed long bonefractures. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
- i Parker MJ, Handoll HHG, Bhonsle S, Gillespie WJ. Condylocephalic nails versus extramedullary implants for extracapsular hip fractures. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.
- j Cranney A, Welch V, Adachi JD, Homik J, Shea B, Suarez-Almazor ME, Tugwell P, Wells G. Calcitonin for the treatment and prevention of corticosteroid-induced osteoporosis [Cochrane Review]. In: The Cochrane Library. Issue 1, 2000. Oxford: Update Software .
- k Handoll HHG, Madhok R Conservative interventions for treating distal radial fractures in adults [Cochrane Review]. In: The Cochrane Library Issue 1, 2000. Oxford. Update Software.
- 1 Alderson P, Roberts I. Corticosteroids in acute traumatic brain injury. [Cochrane Review] In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software .

Avenell A, Handoll HHG. Nutritional supplementation for hip fracture aftercare in the elderly [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

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Howell JR, Handoll HHG. Surgical treatment for meniscal injuries of the knee in adults [Cochrane Review]. In: The Cochrane Library. Issue 1, 2000. Oxford Update Software.

Langham J, Goldfrad C, Teasdale G, Shaw D, Rowan K. Calcium channel blockers for acute traumatic brain [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

Parker MJ, Griffiths R, Appadu BN. Nerve blocks (subcostal, lateral cutaneous, femoral, triple, psoas) for hip fractures [Cochrane Review]. In: The Cochrane Library, Issue 1, 2000. Oxford: Update Software.

### **ACCIDENTS:** Additional evidence

The efficacy of calcitonin for fracture prevention in steroidinduced osteoporosis remains to be established.<sup>j</sup>

No differences have been found in comparisons of methods of conservative treatment for wrist fractures.<sup>k</sup>

Reviews of the effective and safe management of specific accidental injuries are the focus of 23 further complete Cochrane reviews<sup>1</sup> and 29 protocols for Cochrane reviews.<sup>m</sup>

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