TRANSPORT RESEARCH LABORATORY

Helping parents to protect pre-school children from accidents

Prepared for Road Safety Division, Department of the Environment, Transport and the Regions*

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TRL REPORT 360

First Published 1998
ISSN 0968-4107

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Executive Summary

Just under 300 children aged under five die in accidents each year: about one in five children within this age range will attend accident and emergency departments for treatment after an accident. The Department of the Environment, Transport and the Regions has commissioned TRL and the Child Accident Prevention Trust to develop safety education, working with parents, to reduce these accident numbers. This project has:

- established the pattern of accidents involving the under fives, and how it changes with age;
- identified opportunities for contact with parents at which safety messages can be delivered;
- designed the text and ideas for a series of four magazine style booklets that together make up a developmental safety education resource;
- prepared a full colour version of booklet 1 for testing;
- carried out a before and after survey of the effect of booklet 1 on the safety knowledge and self-reported behaviour of a sample of 120 parents.

The casualty statistics indicate how types of accident and injury vary with age. Deaths for children under one are predominantly by suffocation or by causes unknown: for children aged 1 to 4 the predominant causes of accidental death are fire/heat accidents, motor vehicle accidents and drowning. The pattern of injury accidents is different from the pattern for fatalities: the predominant cause of injury is falling, which causes just over 50% of casualties at each of the ages considered. Overall injury accident numbers peak at age one and then decline slowly with increasing age. Most of the injury accidents occur indoors at home: however, the number of accidents out of doors, including traffic accidents, increases steadily with age to just under a third of the total at age four. Foreign body accidents and poisoning peak at age two: poisoning peaks very sharply, indicating a strong dependency on age. Accidental injury is much more likely among children with lower income parents than among other children.

The review of previous research found some dissatisfaction with group education sessions because they did not attract parents in the lowest income groups and did not adequately address the problems of safety. Successful safety programmes approached individual families directly. Such programmes were usually coordinated and implemented by health professionals.

There is some support for safety education within the primary care system, but such education is not a priority of primary care, since resources are concentrated on patient treatment. Programmes have been run successfully by the Health Visitor service. Health Visitors do see health education (including safety education) as one of their priorities and are in an ideal position to provide this service effectively as they have contact with the majority of families with young children and undertake regular developmental checks. In at least one case where Health Visitors provided safety education directly to families there were measurable gains in terms of reduced accident numbers. Parents are quite anxious to receive professional advice on safety and will usually act on that advice.

There are a number of educational resources already available to families, which include some safety advice. These either cover an extensive range of children's health problems, cover safety at all ages, or both. These resources tend to be rather complex and therefore may have value for literate parents but may not be so helpful for parents with a low reading age or whose first language is not English. There is a need for an education process that delivers limited but well targeted advice to all parents as their children grow and develop. The resources used in such a process need to be very easy to read, well laid out, bright and colourful.

Promotion of the safety education programme could be helped if a private sector mass market company can be persuaded to adopt and support the project. Within the public sector the availability of the materials could be promoted through the Post Office and Benefits Agency, as well as through health education channels, since both provide access to lower income families.

Aims and objectives for a training resource were identified that address accident problems from birth to three years old. The resource title, *One Step Ahead*, was selected because it reflects parents' concern to anticipate how their children will develop and what new steps are needed to protect them from accidents. The advantages and disadvantages of written and video materials were considered and printed materials seemed most appropriate to the resource aims. Four booklets providing safety advice, taking into account the stages of development between birth and age three, have been drafted.

The evaluation of booklet 1 was undertaken by surveying 120 parents just before and about one month after they were given a copy of the booklet. The sample was biased towards lower income families. Before receiving *One Step Ahead* these parents expected to get advice on safety matters mainly from health professionals and were generally satisfied with the existing provision. Most of them had also seen some safety leaflets but under half had read magazines for the parents of young children.

At the re-interview, the majority in all socio-economic groups said that they had read all or most of the booklet. The difference in the amount read by white and non-white groups was just significant, 53 per cent of the non white group reported reading all or most of it compared with 78 per cent of the white group. Three quarters of those who said they had read the booklet said that they had liked it a lot, 24 per cent liked it a bit and 2 per cent not much. All but one of the parents thought that the idea of a series of booklets was good.

The before and after surveys included thirty-four items which related to safety advice in booklet 1. For eight of these items the responses in the after survey showed a statistically significant difference from the responses in the before survey: in each instance the after survey showed

more respondents giving the safest possible response. There had been a very significant change in the parents' knowledge of safety and accident prevention. A multivariate analysis of these responses established that the change was independent of ethnic group, social group, whether the child was a first baby or not, and whether the parent had taken a first aid course or not.

The evaluation has demonstrated that parents, although they were satisfied with the pre-existing provision of safety advice, welcomed the resource, *One Step Ahead*, whose use did lead to significant gains in their knowledge of safety and accident prevention.

1 Introduction

In 1992 a total of 270 children aged 0-4 years died in England and Wales as a result of accidents and, over the whole UK, an estimated 800,000 were injured in non-fatal accidents. Mortality rates from accidents have fallen over the last 20 years but accidents are still one of the main causes of death for young children. In international comparisons of death rates from all injuries for ages 1-14 years, the UK is comparable with the USA and Australia, but has not matched the low rates achieved in some other north European countries. With regard to pedestrian road traffic accidents, for children aged 0 - 14 years, the UK has a poor record when compared with many other European countries.

Accident prevention is a complex problem with many possible lines of approach. Education, legislation, product design, publicity and engineering all have a part to play. Young children below the age of five spend most of their time with their parents or other carers and, therefore, these adults need to be aware of the hazards faced by their children and of the contribution that they can make to reducing risk through supervision, training and education. Parents and carers need the knowledge to provide a safe environment for their children from birth onwards, and also to begin to build the safety skills which will keep their children safe as they develop into independent adults.

TRL, in collaboration with the Child Accident Prevention Trust (CAPT), was commissioned by the Department of the Environment, Transport and the Regions to research the possibilities for increasing the safety training that parents give to children in the age range 0 to 4. The main objectives of this project were:

- to ascertain the opportunities for contacts with parents at which safety messages could be delivered;
- to identify and prioritise learning objectives, appropriate to parents teaching children under four years old;
- to produce a developmental safety training resource/ scheme for use by parents with children under four; and
- to evaluate the training resource/scheme.

1.1 Casualty statistics for pre-school children

The accident data reviewed came from three sources; the Registrar General's mortality data for England and Wales, the Department of Trade and Industry's Home and Leisure Accident Surveillance Systems (HASS and LASS) for the United Kingdom, and the Department of the Environment, Transport and the Regions Statistics for Great Britain. At the time of the research, the latest published mortality statistics were for 1992: although later statistics were available from the other sources, to ensure temporal comparability, if not comparability of location, the analysis below has concentrated on the 1992 data.

1.1.1 Fatalities

In 1992, in England and Wales, 72 children died in their first year of life as a result of accidents. A further 198 aged between 1 and 4 also died. In both age groups there were more boys than girls involved in fatal accidents, 54% in the under one age group, and 62% of the older age group. Figure 1 shows that the most likely types of fatal accident for infants up to the age of 1 year are suffocation or an undetermined injury. For children aged 1-4, fire or heat accidents, road accidents, and drowning are the three main types of fatal accident (Office of Population Censuses and Surveys, 1993) (see Table 1).

Table 1 Accidental deaths - England and Wales 1992. (Office of Population, Censuses and Surveys, 1993)

Age group	*Boys number (per cent)*	*Girls number (per cent)*	*Total number (per cent)*
Under 1	39	33	72
	(54%)	(46%)	(100%)
1 to 4	123	75	198
	(62%)	(38%)	(100%)

(Deaths from external causes, excluding homicide and surgery)

The statistics relating child fatalities to a measure of social status point to significantly different levels of risk depending on social group (see Table 2). Only 5% of accidental deaths in the first year happen in the third of families in social groups I to IIIN[1], almost two thirds of accidental deaths occur in the third of families where the parent is unmarried.

While the figures show that the problem of accidents is much more serious in the lower income families and in families where the parent is unmarried, they do not identify specific problem families. Even in the most risky group shown 99,978 children per hundred thousand born are not killed in accidents in their first year and most of these will enjoy as safe a childhood as their contemporaries born inside marriage and into the highest income group shown. In the absence of any target indicators better than social grade,

[1]*The social grouping used in UK Government statistical reports is mostly derived from a classification based upon the occupation of the person whose name heads the list on a household census return. The mortality statistics use the same classification based on the occupation of the father listed on the death certificate. These classifications have major drawbacks for the assessment of household income, the person classified may not be the household's principal wage earner, the household may receive significant income from other members, and the unclassified households may include a wide range of income levels from those too wealthy to need to work to those without income for want of work. Because of the focus on father's occupation in the mortality statistics, unmarried mothers and their children are not assigned a social group.*

Market researchers use a slightly simpler classification of a household's chief wage earner and also attempt to discriminate between the households with private income, pensioners, people between jobs and the long term unemployed. Their scale is formally known as the social grade but is generally referred to as the socio-economic group (SEG): it runs from A, the highest incomes, to E, the lowest incomes. This is the classification used most frequently in TRL research.

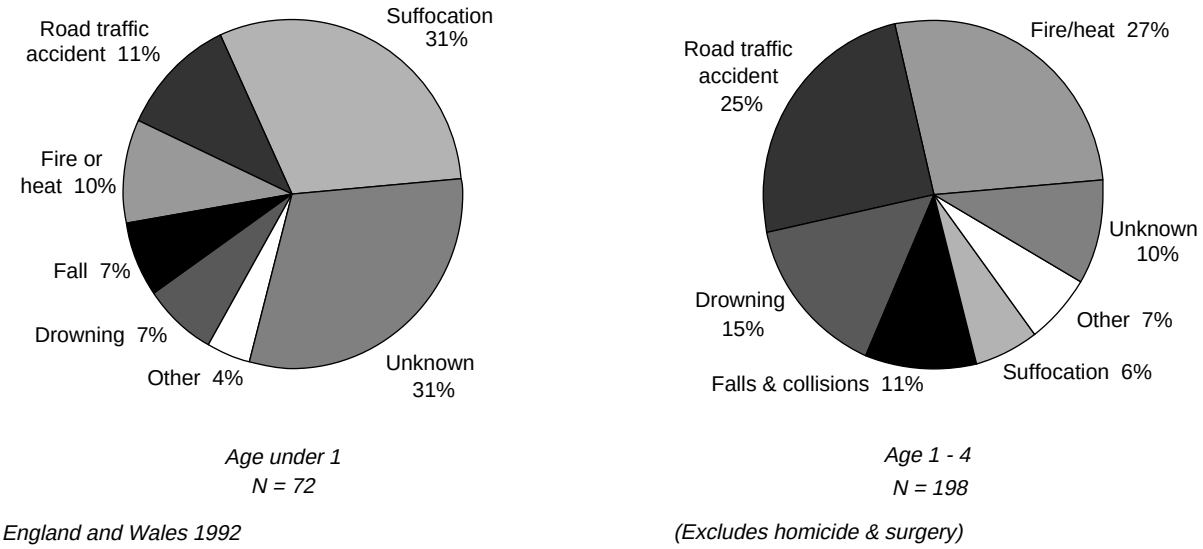


Figure 1 Fatal accident types by age group (Office of Population Censuses and Surveys, 1993)

Table 2 Post neonatal deaths* 1992 (Office of Population, Censuses and Surveys, 1995)

	Live births	*Accidental deaths in first year*	
Social group	*(000)*	*Number*	*Per 100,000 births*
Inside marriage			
I, II, IIIN	219.8	4	2
IIIM, IV, V, other	254.6	24	9
Outside marriage			
	215.2	47	22
Total	689.6	75	11

**Deaths at 28 days and over but under one year - external causes of injury and poisoning*

education and/or publicity are probably the only remedial measures that are practical and effective for what is a quite diffuse population.

The pattern, for fewer fatalities among higher income families, is repeated for children aged one to four. In the periods 1979 to 1980 and 1982 to 1983, these children from households in classes IV and V were almost three times more likely to be killed in an accident than children in households in classes I and II. The ratio varied with the external cause from just over 2:1 for death by submersion or suffocation, to about 9:1 for death by fire and flames (Office of Population Censuses and Surveys, 1988).

For all children under 5 the most common cause of accidental death in 1992 was an injury to the head, either skull fracture or inter-cranial injury, which together caused 39% of fatalities amongst children under 1 and 30% for those aged 1 to 4. For the younger group the next most frequent causes were asphyxiation, 17% and foreign body injuries, 13%: for the older group, the next most frequent causes were toxic effects 21%, and then drowning, 15% (Office of Population Censuses and Surveys, 1993).

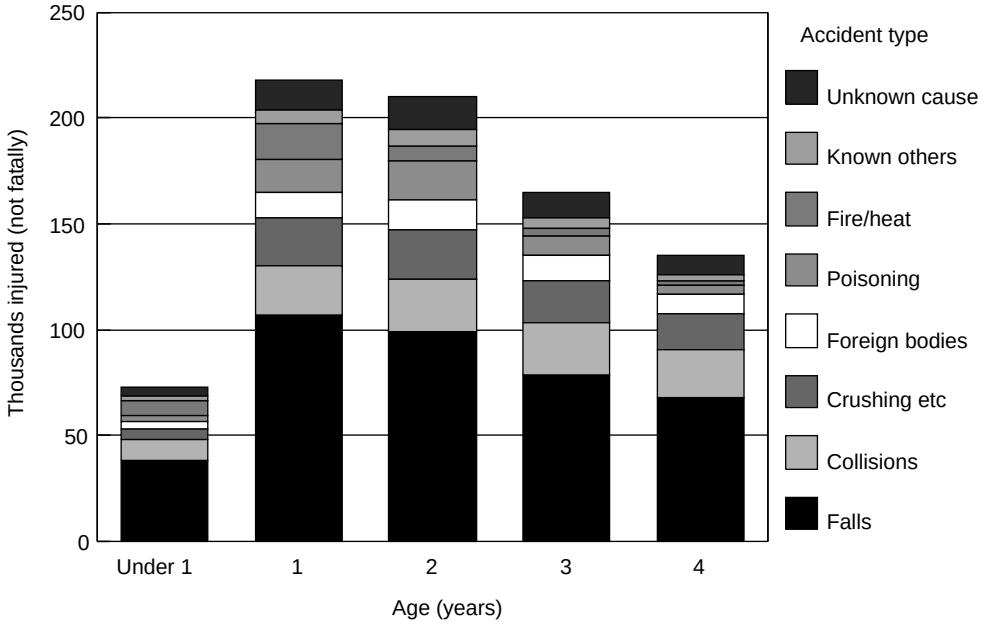
1.1.2 Non-fatal home and leisure accidents

The Department of Trade and Industry has provided unpublished estimates of accident incidence for the whole of the UK. The estimates are derived either from direct interviews with patients (or their carers) attending a sample of hospital accident and emergency departments or from the casualty records. The child data include all non-fatal accidents resulting from external causes except injuries resulting from physical attacks by other persons and road traffic accidents (HASS and LASS).

The Department of Trade and Industry has estimated that in the UK about 800,000 children, aged 4 or under, were treated for accidental injury at hospital accident and emergency departments in 1992: of these 57% were boys. Comparing the total casualty numbers with the total population in the age range, 4,000,000, points to an estimated annual accidental injury rate of about one for every five children. Estimated casualties were comparatively low for children under 1 at 73,000, peaked at 218,000 for children aged 1, and then declined slowly with age to 135,000 for 4 year olds.

Figure 2 shows the distribution of the main identified accident types. For all the ages shown falls are the most frequent type, causing just over 50% of casualties at each year of age. In the first year of life, two thirds of the falls are falls between levels (ie from one floor to another), and the remainder are distributed almost evenly, 1/6 being on the stairs and 1/6 falls at the same level (ie falling over). For ages 1 to 4, falls between levels and falls at the same level each provide about 2/5 of casualties: the remainder are mostly falls on the stairs, with falls from a ladder or building contributing about 5% of four year olds' accidents. Boys are involved in more falls than girls, rising from 54% of the victims aged under 1 to 61% of victims aged 4.

After falls collisions with objects, people and animals, are the next most likely accident. Not surprisingly there are relatively few collisions involving children aged under 1, about 9,000 in 1992. For the older children the number rises to about 23,000 for each year group. The proportion



Source DTI - HASS/LASS

Totals estimated for UK, 1992

Figure 2 Home and leisure injury accident types by age

of boy victims is similar to the proportion of fall victims, rising from 55% of victims under 1 to 63% aged 4. For all age groups about 1/3 of the collisions are with a moving object, for the babies the rest are equally divided between collisions with a stationary object and collisions with a person or animal, who can be moving or stationary. For the 1 to 4 age group about half the collisions are with a stationary object.

Crushing, cuts and punctures are increasingly common once children are mobile. In just under half of these accidents the injury is from pinching or crushing, about a third are cuts and tears, and most of the rest are bites from animals or insects.

Foreign body casualties reach a peak of 14,000 for children aged two and then decrease with age to about 7,000 for children aged four. For children under two the foreign body is most frequently in the digestive system, for two to four year olds in a body orifice.

Poisoning is a cause of injury that shows a strong age dependency. In 1992 there were under 3,000 cases involving babies under one, 15,000 aged one, a peak of 18,000 aged two, and then declining to 9,000 aged three, and under 4,000 aged four. The proportion of boys among the victims increased from 49% of those under 1 to 65% of victims aged 4.

Fire and heat are a relatively minor cause of non-fatal accidents except for one year olds, 17,000 of whom were injured in these accidents in 1992. The proportion of male victims of these accidents falls with increasing age, from 55% of those under 1 to about 50% of victims aged 4. More than half of fire and heat injuries in 1992 were caused by contact with hot liquids and gases, and a third or more arose from contact with a hot object, 10% or less, depending on age, were caused by naked flames. Although the number of casualties is low, compared with the numbers injured in other sorts of accident, given the high standard mortality ratio for death by fire and heat amongst lower income families, preventing fire and heat accidents does need particular attention in their homes.

85% of accidents to under fives happen at home, more than three quarters of these are inside the home. The incidence of accidents away from home increases steadily with age: about a third of these take place on a road or pavement. Nurseries, open spaces and shopping areas are the most common of the other locations. The proportion injured in shopping areas falls with age from about a fifth of accidents away from home for children under one to less than 1/20 at age four, while the proportion injured in nurseries rises to about a third of the four year old casualties, away from home.

Inside the home about 40% of all accidents happen in the living/dining room, the remaining accidents are shared almost equally between the bedroom, kitchen, stairs, and all other internal spaces.

The influence of social factors, noted in the discussion of fatalities above, seems to carry through to accidental injury. A national study of a cohort of children, born in Great Britain in the week 3-9 March 1946 has shown links between the incidence of accidental injury and the social circumstances of children's families at birth (Wadsworth, 1998). Wadsworth considered that the linkage might be biological in origin or might be the 'product of a cascade of interlinked psychological, educational and social difficulties.' He was hopeful that an intervention in the cascade was possible and should be the subject of experimental studies.

1.1.3 Road traffic casualties

The data on road traffic accidents have been taken from the Department of the Environment, Transport and the Regions road traffic accident database. This contains details of all road accidents reported by the police forces of Great Britain. In 1992, 343 children, in total, were reported as injured in their first year of life, this tripled to 1044 for children aged 1, and increased for each additional year of age, reaching 2331 for age 4.

The rate of increase in casualties with age varies depending on the mode of travel considered. Injuries to vehicle passengers jumped from 298 for children in their first year to an almost steady level of about 900 for each of the next four year groups. Presumably this is because very young children are not taken out in vehicles as frequently as the older children, but drivers may be more careful when they are carrying a very young child.

In general parents are conscious of the need for safety when carrying children in vehicles. TRL observation surveys in England in 1992 found that only 15% of children aged under 5 were carried in the front seat, and 98% of these front seat passengers were wearing a safety restraint. 89% of children under five in the back were restrained. Among car passenger casualties only 9% of the 0 - 4 age group are killed or seriously injured.

Pedestrian and cyclist casualty numbers have been considered together: these children have very few cycling accidents, generally in the course of play rather than on purposeful cycle journeys. Not surprisingly, given their size, about a half of these young casualties are injured coming from behind a masking vehicle. The number of pedestrian and cyclist casualties increases quite steadily with age; in 1992 the number rose from 42 children in their first year to 1247 for four year olds. This increase reflects both the child's developing mobility as a pedestrian or cyclist, and also the increased freedom that they are allowed with age. These accidents are more likely to lead to serious injury than passenger accidents, 25 per cent of pedestrians and cyclists aged four who were injured were killed or seriously injured compared with nine per cent of car passenger casualties in the same age range.

The data suggest that about one in 500 children, aged between 0 and 4, will be reported by the police as casualties in a road traffic accident every year. Slightly more of the injured children will have been travelling inside a vehicle at the time of the accident, but two thirds of the seriously and fatally injured children will have been injured as pedestrians or cyclists.

1.2 Literature review

The literature review covered both the safety research literature and also manuals for parents about the development and safety needs of their children.

1.2.1 Safety by design

It is commonplace that accidents can be prevented by separating the victim from the cause of injury. Towner et al (1996), in their review of health promotion interventions, found that some single-measure interventions were particularly effective for this. The review summarises a study of a community wide campaign to reduce the number of falls from high rise apartment buildings in New York (Spiegel and Lindman, 1977). Over 4,000 families were provided with window guards and a 35 per cent reduction in fatalities due to falls from windows was reported. The effectiveness of child-resistant closures in reducing poisoning from aspirin preparations has also been reported (Sibert et al, 1977). In South Africa, Krug et al (1994) have reported a reduction in paraffin swallowing incidents following the distribution of child-resistant containers.

Legislation can be an effective accident reduction measure if it is enforced. The legislation related to the materials and designs for children's nightwear has been effective in reducing burn injuries (Laing and Bryant, 1991). In this case the duty to comply is placed on the manufacturer and this can be enforced through product safety channels without impinging on the product user (apart, perhaps, from an increase in price). Legislation is not always so successful when it tries to control families or individual citizens. Erdman has shown, in a supervised experimental trial, that legislation which required that domestic water heaters should be set at a prescribed low level brought significant reductions in scalding accidents (Erdman et al, 1991). However, the suggested technique for controlling water temperatures in low cost housing, restricting the flow of hot water, was not acceptable to all high risk families (Fallet and Rengers, 1993; Waller et al, 1993).

Even where legislation requires the installation of safety devices, their actual use depends either on public acceptance or heavy enforcement. This has been highlighted in several studies of the use of child restraints in cars. Partyka (1990) reports that the use of car seats and restraints has been influenced both by legislation and by measures to heighten parental awareness of the protective capabilities of the restraints and seats. Kernish and London (1986) found non-use of child safety seats was motivated by cost, inconvenience of both installation and use, and negative child reactions either anticipated or actual.

Agran, et al (1991) studied accidents to children under one year of age who were travelling 'on-lap' in cars rather than in child safety seats. It was found that parents often place the child on the lap in order to attend to the child's needs, feed the child, or because they feel the child is more secure in this position. They recommended the implementation of parent education as well as strict enforcement of child safety seat laws.

A study in the Netherlands by Pieterse et al (1992) found that the decision to purchase a child restraint device for children under five years of age was mainly determined by beliefs concerning safety and comfort. The actual use of the restraints was determined primarily by the reaction of the restrained child. For parents who possessed a child restraint but did not use it regularly, the main reason for their behaviour seemed to be the child's irritability when restrained.

There are implications here for health education, first to persuade parents to obtain safety equipment and then to ensure that it is used. Legislation can ensure the inclusion of safety devices in new products but supporting education and publicity campaigns are necessary to make the legislation acceptable and ensure widespread use of the safety product.

1.2.2 Channels for safety education

There is a large class of accidents such as children tripping up, running into things, accidents in the bath, and so on for which there are no preventive devices: the reduction of these accidents is only amenable to education and publicity encouraging the more general adoption of safe practices.

Education and publicity programmes to reduce accidents can and often are implemented through the health service. In a study of the role of the NHS in preventing road accidents to children, Ward (1991) suggested incorporating road accident prevention material into child health records issued to the parents. She suggested that the advice should be specific to the age and development of the child. Other possible actions were providing health promotion literature and videos in the waiting areas of hospitals and GP's surgeries and units on Health Service premises for the sale or loan of safety equipment and information. Health Visitors and community nurses were seen as having a major role in encouraging the use of safety equipment, acting as a channel of communication between hospitals, GPs and other agencies, supporting Traffic Clubs and providing advice to parents and children.

The way in which the educational programmes are presented affects both the outcome and the range of families reached. Halperin et al (1983) in Massachusetts found that individual training or community education programmes were the only feasible preventive measures for such injuries as burns that require parents to make substantial behaviourial changes. Combes and Schonveld (1992) have undertaken an extensive review of research into ante-natal and post-natal health education in the UK. They found that educational provision was mainly through group sessions which were attended by predominantly white, middle-class, educated women. Those women who have a greater chance of ill health and accidents, namely the young, single, lower socio-economic groups and ethnic minorities, were absent or under-represented in these group sessions.

The uptake of routine care by parents, such as attendance at baby clinics, immunisations and developmental checks, was far greater than attendance at group sessions, both ante-natally and post-natally, and covered all social groups. Therefore education could be more effective when channelled through these contacts rather than when provided as group sessions. There is also a need to meet the requirements of fathers and partners for parent education.

Bass (1995) has argued that paediatricians, general practitioners and associated nursing staff have an important role to play in providing safety education for parents. Three separate studies have found support for this view among these health professionals, but analysis of primary care activities suggests that only a small proportion of professional staff undertake systematic preventive education programmes rather than just delivering post-accident advice (Lévêque et al, 1995, Kendrick et al, 1995, and Carter et al, 1995). Klassen (1995) is sceptical about the value of primary care education. It may provide an opportunity to reinforce safety strategies when children and parents are seen on a regular basis, but he considers that there are other care activities of proven value that deserve priority.

Towner (1996) et al refer to a study in Newcastle in the early 1980s (Colver 1982) where Health Visitors made home visits to give specific advice on hazard reduction for young children. As a result of this 60% of the experimental group made some physical change to improve the safety of their homes, compared to 9% of the control group. The purpose of the Health Visitors' visits was clear and the amount of advice given was small, specific and concrete.

1.2.3 Parents' views about safety education

The perspectives of children aged three to six years and their parents on child safety were investigated by Combes (1991a). She reports that most parents could not recall any safety discussions with their Health Visitors. Parents felt that they had most need for safety information when their children were aged one to three years, but by that age they had little contact with Health Visitors.

The parents did feel that Health Visitors had knowledge and expertise about safety and they were wanting to receive their help. The parents recognised that they were responsible for providing a safer environment for their children and also teaching children about safety, but they were not confident that their teaching was effective, even though they had the necessary knowledge about children's safety needs.

Combes and Schonveld (1992) found that there was a requirement to recognise the power of parents in their individual needs, including social, emotional and psychological needs, as well as medical and physical requirements, in order to increase the effectiveness of education. They suggested that the quality of the educational provision could be improved by encouraging active participation so that parents could review their own ideas and knowledge, learn from one another and apply information to their own circumstances.

1.2.4 Safety education and the developing child

Education should be provided at the time of need: because needs change quite rapidly with young children, frequent inputs were the most useful. The way children change as they develop has been discussed by other researchers. Van der Molen et al (1984) considered that existing educational programmes in the Netherlands did not sufficiently take into account the traffic situations which children generally encountered and how they behaved in these situations. Accident causes and circumstances were insufficiently taken into account as well as children's psychological abilities and limitations at particular ages.

A study of pedestrian and cyclist accidents by Pless et al (1989) concluded that a child's personality and behaviour are weaker risk factors for these accident injuries than factors such as parental educational levels, history of accident to a family member, unsafe environment and poor parental supervision.

The question of limited parental supervision of young children in the road environment was also raised by West et al (1993) in a study related to the introduction of the

Children's Traffic Club in seven counties in eastern England. Interviews conducted a year after the introduction of the Club showed that, compared to a control group, the parents increasingly tried to teach road safety to their children and there was a reduction in the proportion of children who were said by their parents to run ahead. However, there was no evidence that parents were exerting closer supervision of their children's behaviour in the streets and it was children from lower income families who were more likely to be left to play unsupervised in the streets.

A literature review by Christie (1995) indicated that exposure, parental attitude and environmental hazard may explain the high pedestrian accident rate of children from lower socio-economic groups. This was largely confirmed by a subsequent study of children in five urban areas within Great Britain to assess the role of socio-economic and environmental factors in child pedestrian accidents.

1.2.5 Training the trainers

Following her research into parents' and children's perceptions and understanding of accidents (Combes, 1991a) Combes has written a training resource for use both in in-service training and as part of the post-registration course in health visiting. The resource consists of a collection of papers and activities from which tutors can select materials appropriate to their group and the time available (Combes, 1991b). The resource is designed for use in a group setting and is not intended for use in individual study.

The resource includes training activities about working with both individual families and parents' groups, planning local work, setting priorities, evaluating progress, and consulting and involving both the local community and other professionals. The six main learning objectives are (in summary) to equip health visitors with up-to-date knowledge of childhood accidents, to explore how the values of families and health visitors influence accident prevention, to increase awareness of how families understand accidents, to consider a range of strategies and skills for preventing accidents, to explore aspects of community response to accidents, and to develop tools for setting priorities and evaluating outcomes.

Another study found that health practitioners involved in parent education would welcome resource materials for use by health practitioners to facilitate their work with parents both in one-to-one and group settings (Combes and Schonveld, 1992). These materials should be for use by the practitioners when face to face with parents developing education with a broad focus and improving its quality, while being sensitive to parents' individual needs.

In response to this finding Braun and Schonveld (1993) have prepared a resource for parent education that advises health practitioners on the delivery and evaluation of health education, and outlines materials covering 21 health education topics for use either with parents one-to-one or with parent groups. These topics include one on safety, which is concerned with the safety of the child from birth to nine months old.

The approach to providing education, recommended by Braun and Schonveld, is opportunistic, ranging from unplanned encounters, through arranged one-to-one meetings and organised group meetings. The resource aims to support health practitioners to develop parent education which:

- covers what parents want to know and what health professionals need to tell them;
- encourages parents to make their own decisions about health;
- promotes active participation by parents;
- is sensitive and responsive to the individual social, cultural, economic and family backgrounds of parents; and
- makes it possible for parents to develop their own support networks.

1.2.6 Safety manuals for parents

In addition to the research literature, some UK publications were reviewed which had been written with the intention of providing information for parents about the development of their children and their safety requirements.

The Health Education Authority's 'Birth to Five' is described as a guide to the first five years of being a parent. It is a sequel to the HEA's 'The Pregnancy Book', both of which are supplied to parents usually by midwives or Health Visitors. 'Birth to Five' is a well written, easy to read, reference book, which deals with many aspects of parenthood in a friendly, well illustrated style. It is informative and concise, and includes personal comments by parents, as well as information, advice and coping strategies. Only four pages are dedicated to safety plus a further five on first aid.

'Play It Safe' by Dr Sara Levene of the Child Accident Prevention Trust was originally produced to accompany the BBC's Safety series of the same name. Aimed at parents it is a manual of child accident prevention. The emphasis is very much on anticipating what might happen and thereby preventing accidents. A useful chart summarises what types of accidents most commonly occur as the child grows, and the theme 'think safety' is used as numerous places to play are considered. Descriptions of example accidents are used to illustrate points and there are many pointers on how to keep children safe, as well as safe items to buy.

A book for parents which is different is 'Keeping Kids Safe'. Produced by CAPT, it is designed specifically to be used in groups. Parents are encouraged to share their concerns and create positive solutions. Action to improve their own local environment is encouraged. Clear child-like illustrations cover personal as well as home and road safety. Many thought provoking questions are posed in addition to sound facts about children's abilities at various ages and the inherent risks involved.

The Traffic Club Books 1-5 produced by Dawn Boyfield Associates from research at the Transport Research Laboratory are designed for parents to use with their own pre-school children. The books are specifically road safety oriented and present the material developmentally. Information is given to parents on

children's abilities and limitations at various ages, but it is essentially a participatory scheme. Clear illustrations capture the children's interest in road safety items and the text for parents explains what to discuss with the child and why. Activities are suggested for outside work which links with what has already been done indoors.

1.2.7 Literature review summary

The literature review has shown:

- there are well established techniques for increasing child safety;
- for pre-school children, safety materials need to be aimed at parents and are most likely to be used when the materials are supported and promoted by health visitors;
- parents want information on how to keep their children safe but the materials must match their ability and interests;
- there are a number of resources already available about child accidents in general and also about the general care of very young children but no resource dealing in a developmental way with accident prevention for very young children has been found.

This project aimed to produce a developmental safety resource for the parents of young children.

2 Development of the resource

2.1 Exploratory interviews

Interviews were undertaken with parents, Health Visitors, voluntary organisations with an interest in parent education, and a marketing expert to investigate their views about accidents to young children, and possible ways to develop and encourage parental involvement in accident prevention.

2.1.1 Parents

Twenty five parents were interviewed at two baby clinics: there was one father and the rest were mothers; the majority were in their 20s, from a wide spread of socio-economic backgrounds, including 2 of ethnic minority backgrounds. It had been anticipated that first time mothers would be much more in evidence than others, but, in fact, 13 of the 25 parents had at least 1 other child.

Asked if they thought about safety most parents replied that they did, and regarded themselves as being responsible for their own child's safety. They mentioned several things which were of concern to them regarding home safety, referring particularly to the kitchen, the stairs, bathing and fires. They also reported that they worried about what might happen outside - about car safety, roads, travel on buses, the child wandering off and about dangerous play areas.

Wider issues like foreseeing problems were also mentioned, their answers varied with the age of the child and the problems they could perceive - the parents who just had one young baby were often aware of safety issues but found it difficult to visualise what would happen as the child became more mobile. Most parents thought that it would be helpful to receive information as their child grew, with several adding that it would be useful to have the information at the appropriate stage of development, in small amounts, and also to know the ages at which children were most likely to have certain types of accidents.

The parents had differing views on whether they should be given individual advice or more formalised talks. However, it was obvious from the clinics visited that many parents had actually come for individual advice.

Parents thought that safety materials should contain advice on home and road safety, safety equipment, first aid, the ages children have certain accidents, and staged information on development. They felt that any such materials should be delivered to them through Health Visitors or clinics.

2.1.2 Health Visitors

Ten Health Visitors were contacted and six filled in a questionnaire about their work with pre-school children, particularly work aimed at accident prevention. A copy of the questionnaire is shown in Appendix A. Three respondents had grass roots knowledge and three had more of an overview. Developmental checks, assessments and immunisation at clinics, and home visits, were mentioned as the contacts Health Visitors had with parents.

Health Visitors were asked specifically if safety messages should be given at birth, 9 months, 18 months, 27 months and 3 years. These were thought to be the key points for developmental checks or immunisations nationally, and would mean an appointment and therefore a definite time for distributing the materials. Health Visitors thought that these times were in general acceptable to them, with some slight variations. Some areas only saw pre-school children 4 times, and some had an additional contact at $4^1/_2$ years.

The sorts of messages Health Visitors thought parents should receive were home safety (falls, medicines, cot bumpers and quilts) and road safety (travel generally, and strapping children in cars safely).

The wider issues concerned Health Visitors more - they thought education was required to promote parental responsibility, in particular the supervision of young children, and to help anticipate the next developmental stage so preventing accidents. One reply indicated that Health Visitors in a particular area carried out safety checks with parents, at 4 different ages, in the home environment, presumably hoping to generate a parental risk assessment ability.

Health Visitors saw themselves as key professionals who promoted health, checked development, advised, informed, and supported parents. Clearly most of this work needs to be done on an individual basis. They also hold a watching brief, identifying families in need or at risk.

All Health Visitors said that they were happy to take responsibility for distributing safety materials (some saying that they already did this), and that they thought Health Visitors would be prepared to spend 5 minutes explaining materials to parents. They also felt that there

were several appropriate ways Health Visitors might distribute any safety materials - at routine checks, contacts at clinics, home visits, following an accident and as a back-up to group discussions.

Regarding the content, Health Visitors said that there should be safety hints for those families with a financial need, together with information on home safety, road safety, and child development, and they stressed the need for parental responsibility. They recommended that any materials should be clear, simple, positive, not patronising, give simple solutions to problems and be age appropriate. Mention was made by one Health Visitor that the materials should be free, in several ethnic languages and be parent and child interactive.

2.1.3 Voluntary organisations

A number of national voluntary sector organisations known to be active in the field of parent education were visited for the purposes of this research (Home Start, The National Childbirth Trust (NCT), Parent Network, Gingerbread, The Pre-School Learning Alliance and Newpin). They all had contacts with families from pregnancy throughout childhood, and dealt with almost any topic through a variety of approaches.

As they had direct contact with parents these organisations were in a good position to judge what materials would be interesting and acceptable to parents. They thought that the materials should be A4 magazine size, easy to read, cheerful, well designed and colourful with plenty of illustrations. There should be personal stories which would give a feeling of sharing rather than a didactic approach, and also opportunities and incentives for participation such as competitions and readers' contributions. A developmental theme should be used, possibly in the form of 'it's nice when they can... BUT ....', which could be a way of giving advice without seeming patronising.

These organisations could publicise and distribute materials to their members. This could be quite important as some of the organisations are in close contact with parents who may not be in touch with a midwife or Health Visitor.

Sponsorship was acceptable in principle to most, provided it was not by tobacco, alcohol or baby milk manufacturers.

2.1.4 Marketing expert

An informal discussion was held with a marketing executive for a large chain store. He considered marketing the materials as if they were a commercial product. The target group was the first consideration. The most 'accident prone' children are from families in lower socio economic groups where the mothers are likely to be young, aged 19 - 24. Any written materials should be bright, simple and attractive with a low reading age.

Distribution of materials or information could be through post offices as these are regularly visited by such parents, or through high-circulation Sunday newspapers or television-listing magazines. The Benefits Agency could also be approached to distribute it with benefit books. A commercial organisation willing to adopt the project would probably take over the final stages of design.

It would be important to obtain media coverage to promote the product. This could be achieved through special agencies which have contacts with breakfast/day time television. It would also be advisable to produce a three minute tape about the materials to send to local radio stations. Other publicity sources to consider were the public information displays in the Post Office and the Benefits Agency.

2.1.5 Summary of interviewee recommendations for the resource design

It was concluded from the interviews that there was a clear need for developmental resources which would educate parents on how to keep their young children safe. Health Visitors had shown themselves to be enthusiastic supporters and ideally placed as distributors of any such resources.

The research had shown that certain points should be taken into account in designing the resource:

- the materials should come in instalments related to the child's development;
- they should be well designed, cheerful, colourful, clearly illustrated and simple to understand;
- a didactic approach should be avoided with the emphasis on participation and real-life practical situations;
- cost to the parents should be kept to a minimum.

2.2 Designing the resource

In order to develop the resource it was necessary to:

- clearly identify the target group;
- write the objectives for the resource and consider how these could be met;
- investigate the possible routes for the materials to reach the target groups.

2.2.1 Target groups

The target group was identified as parents with babies and children aged 0-5 years but concentrating mainly on those up to 3 years old as the Traffic Club materials are available from age 3. At the younger ages the materials would only be addressed to the parents, but as the children get older (probably from age 2 years) some activities should be included for parents to do with their children. The resource would be aimed particularly at parents in social classes IIIM, IV and V as their children have the highest accident rates but it should appeal to all social groups.

The target group was large. There are approximately 700,000 live births per year in England and Wales. As Table 2 shows, about two thirds of these births are to families who are either in social groups IIIM, IV and V (judged from the occupation of the father), or where the mother is unmarried, and that 95 per cent of neonatal accidental deaths happened to babies in these groups.

About 8% of births are to mothers from ethnic minority groups, of which Pakistani mothers are the largest group.

This is a sizeable minority group whose possible difficulty with reading English needed to be borne in mind.

The fertility rate has been fairly stable at 1.8 since 1980. This is mainly women having fewer children rather than more women remaining childless, therefore most families are small. During the 1980s and 1990s, there was a steady rise in women's average age at first birth, by 1991 the mean age for all births was 27.5 years (the highest since 1961). In 1991, 32% of all births were to women over 30 years, but there has also been a rise in births among teenagers. Women with academic qualifications start their families later and have fewer children by age 25 than women with no qualifications. The particular target group for this resource would therefore be younger mothers with few qualifications.

In 1991, of the 31% of births outside marriage, about half were to cohabiting parents. In the same year the proportion of families with dependent children, which were headed by one parent, was 19%, but among West Indian families 44% were headed by a lone mother. Single and divorced mothers generally have lower levels of income. There has been a sharp increase in the number of families on supplementary benefit and also an increase in the number of families who are homeless or living in temporary accommodation.

To be developmental, the resource needed to be aimed either at specific ages or at stages of development:

- At specific ages, eg 0, 9 months, 18 months etc were considered because they could be linked to developmental checks carried out by health visitors, although the ages for these do vary from one area to another;
- At different stages of development, eg new born, starting to crawl, starting to walk.

It seemed preferable to target specific ages so that the distribution took place at the same age for every child. Because children develop at different rates it would be difficult for health visitors to know and remember when to distribute the materials if this timing were tied to stages of development.

2.2.2 Aims and objectives for the resource

The main aim was:

To reduce accidents to young children by raising parents' awareness of their children's safety needs and providing knowledge and support which will assist them in keeping their children safe.

Subsidiary aims were:

To make parents:

1 Aware that young children need supervision and protection.
Able to accept responsibility for their own children's safety.

2 Aware of child development and how this relates to safety.
Able to apply this knowledge to their own children.

3 Motivated to teach their own children about safety.
Able to educate their children about safety.

To make health practitioners:

1 Aware that parents need their support and guidance with regard to child development and safety.

The general objectives for parents were:

1 To recognise that young children need constant supervision and protection.
2 To recognise the particular stage of development reached by their own children, and be able to anticipate the next stage.
3 To be able to take the necessary safety precautions in relation to the stage of development reached by their children.
4 To be aware of individual differences between children.
5 To recognise that children do not and cannot behave as adults.
6 To be able to assess the risks within their own environment.
7 Always to set a safe example to their children.
8 To ensure that other people who care for their children understand how to keep the children safe.
9 To start safety education with their own children from an early age.
10 To develop their children's confidence and awareness so that they will grow into safety conscious, independent and responsible people.
11 To praise safe behaviour as well as criticise unsafe and dangerous behaviour.
12 To know how, when and where to seek help in order to keep their children safe, including emergency situations.
13 To encourage the development of vocabulary particularly related to safety.

Specific objectives for parents of babies aged 9 months or less were:

1 To recognise the rapid rate of physical development at this stage, and anticipate the next stage of development.
2 To undertake a safety audit of baby's home environment.
3 To know the risks of Sudden Infant Death Syndrome (cot death).
4 To know the dangers of suffocation, including drowning and choking.
5 To know the dangers of falls, including from high surfaces, being dropped, and crawling or climbing into dangerous situations.
6 To know the dangers of fires, hot liquids and objects.
7 To know the dangers associated with transporting babies in cars.
8 To take action with regard to the above to reduce the accident risk to babies in their environment.

Specific objectives for parents of children aged 9-18 months:

1 To recognise the dangers to toddlers associated with their increased mobility, and their inquisitiveness.

2 To update safety measures in the toddler's environment i.e. clearing hazards at child's head height, fitting safety catches, storing dangerous items safely and reducing the risk of drowning.

3 To know the dangers of stumbling and falling, bumping into objects, and crawling upstairs but not being able to come down.

4 To know that toddlers will climb out of buggies, high chairs, cots, windows.

5 To know that 18 months is the peak age for poisoning accidents from household products.

6 To start to identify common objects to the children and explain why they must do certain things.

7 To take action to reduce the accident risk to toddlers in their environment.

Specific objectives for parents of children aged 18-27 months:

1 To recognise the dangers to small children associated with their increased dexterity e.g. unscrewing bottles, turning taps and striking matches.

2 To recognise the dangers to this age group associated with their increased mobility but lack of co-ordination and judgement.

3 To update safety measures in the small child's environment including the garden, garage, shed and ponds.

4 To know that small children still put everything into their mouths and other orifices.

5 To continue to expand their vocabulary and explain why they must do certain things.

6 To know that poisoning accidents from household products are still a serious problem.

7 To be aware of the need to regard the small child as a pedestrian within the road environment i.e. to set a safe example, to hold hands/use reins, and to begin the process of road safety education.

8 To take action to reduce the accident risk to small children in their environment.

Specific objectives for the parents of children aged 27/30-36 months:

1 To recognise the dangers to small children associated with their increasing independence.

2 To recognise that an increasing number of accidents occur outside the home.

3 To know that water accidents are often fatal.

4 To update the safety measures in the small child's environment e.g. checking that all medicines, cleaning materials, and insecticides are secured; teaching the child to know their name and address.

5 To know that poisoning accidents from pills etc. peak at 2-3 years.

6 To know that accidents from foreign bodies peak at 2-3 years.

7 To understand that parental supervision is still necessary and that children cannot yet take responsibility for their own safety.

To satisfy these aims and objectives it was decided that for each age group the materials must cover:

1 General characteristics of a child of this age.

2 The current stage of development reached by the typical child and what they are likely to be able to do during the period covered by this particular resource.

3 Information about the particular dangers at this age.

4 How to prevent accidents:
- undertaking risk assessment
- making a safer environment
- using safety aids correctly
- passing on information to others who care for the child
- laying the foundations for safety training and education

5 Some first aid tips on dealing with accidents related to a particular age.

2.2.3 Presenting safety information to parents

The question of whether the materials should be video or printed was considered. Some of the advantages of printed materials compared with video materials included:

- a lower unit cost;
- printed materials are less bulky;
- the materials can be read at any time and do not require a play-back recorder.

Video was considered as a possible resource for training and supporting health practitioners or for them to use with a parent group.

It seemed most practicable to design a printed resource in four parts to cover accident prevention and child safety from birth up to three to four years old. The information would be presented in a positive, varied, cheerful, interesting, and colourful manner, which could be easily understood and had a maximum reading age of 12 years. The needs of ethnic minorities would be considered.

Developmental information relevant to any particular stage would be given in photographs, or possibly in a cartoon form (similar to 'How to be a little s-d') which would continue from one stage to the next and be seen from the child's point of view. Real life stories, possibly illustrated with photos, about accidents which have happened or been prevented would be included. Risk assessment would be encouraged through the inclusion of safety check lists, spot the hazard pictures and short quizzes. Hints and tips from other parents on safety measures together with information about safety aids - what to look for when buying new or second hand, loan schemes, low cost alternatives would be incorporated. There would be first aid tips related to specific situations and child ages (including emergencies), together with information on first aid training schemes. Parents would be

given information and encouragement on seeking help and support from family, friends, health visitors, organisations such as NCT, toddler groups etc. The resources would include activities for parents to do with older children such as naming different objects, identifying colours, simple stories to read to children, pictures for children to talk about, simple games for them to play. The centre page could be detachable as a poster with safety hints and messages for parents to put up, or later a game or activity for the parent to do with the child.

A variety of possible titles for the resource were considered. The final title needed to convey the essence of the resources, the aim to increase child safety and how this develops as the child develops. The final choice was *One Step Ahead*. This seemed to convey the need for parents to keep ahead of their child's development and be prepared to take the appropriate safety measures as the child's mobility and skills increase with age.

2.2.4 Drafting the 'One Step Ahead' materials

The materials were written and development tested with a small number of health and family support professionals working in the vicinity of TRL, Crowthorne. Outlines were developed and full drafts of the text prepared for Books 1 to 4, which covered children in the age range 0 - 3.

A complete black and white mock-up of Book 1 was prepared and used in a pilot investigation which involved a sample of 25 people, parents and health professionals. Their comments, both written and oral were collected and recorded. Comments were received from people professionally involved with the safety and care of children including members of staff at the Child Accident Prevention Trust (CAPT) and the Foundation for the Study of Infant Deaths (FSID). Dr Dorit Braun, a practising paediatrician with experience of resource development, made suggestions about the text, as did a local Health Visitor who is also a parent.

Visits were made to a group for one parent families, all of whom had very young children. Discussions were held at this group and the parents were very vocal and helpful, and also submitted quite substantial written comments. Other parents, who were approached individually, included two schoolgirl mothers and a trained nurse.

In general terms the book was favourably received, one person even commenting that she wished she had had something like this when her older child was born (mother of 2 children aged 21 months and 1 month). The content was found to be useful and helpful and the ideas included were popular.

Although there were concerns about whether the text was easy to read and understand and also whether it would be considered patronising and authoritarian, this did not appear to be the case but it may be that only parents with good language skills returned the books.

Some parents thought that in some places the text was stating the obvious and was an insult to their intelligence. For example, in a section about when the baby is unwell under 'Action' the first point says 'Dial 999 if the baby stops breathing or goes blue'. The inclusion of this advice seemed justified as it is such an important point and it would be negligent not to include it.

Most of the parents particularly liked the quizzes as they felt that these made them think more about the issues involved. These activity pages had been incorporated as a response to earlier suggestions from parents that safety publications were often boring and 'preachy'. A father, in the sample, was very interested in the accident statistics which were shown at appropriate points enclosed in a star shape.

The cot death article proved to be a little controversial even though it had been approved by the FSID. Some of the parents in the pilot seemed to think that it is all right to sleep with the baby in their bed: one father said 'Two-thirds of the world's population do this'. Some parents found it difficult to accept that a particular activity or practice could be unsafe if they had done this and everything had been fine. For example they had used cot bumpers, or put their baby to sleep on its side even though the advice is for babies to sleep on their backs. One mother had used a Moses basket for convenience and did not believe that there was a risk of overheating. They also commented on the fact that advice changes quite often, for example with reference to cot mattresses.

Some specific comments and suggestions were made, for example the Health Visitor thought that it might be a good idea to have a Quiz as one of the first items for the whole series to introduce the subject of safety. A number of suggestions were offered by parents which have been incorporated into the book. Several parents commented on 'Times To Treasure', the introductory article about what babies could do. They found the layout confusing although they were happy with the information provided: as a result, the layout has been changed.

The lessons learnt from the pilot were incorporated in the full colour Book 1 evaluation prototype and were also carried over to the black and white mock-ups of Books 2 to 4.

The health visitors approached at the pilot stage supported the idea that the Books could be distributed through health visitor channels. Distribution through other channels would depend upon the nature of any sponsor support given and this had yet to be explored in any depth. The possible use of distribution through the Post Office or Benefits Agency could be investigated once the sponsorship position was clearer.

3 One Step Ahead Book 1 evaluation

The objective of this trial was to test the opinions of a sample of at least a hundred parents about the proposed Book 1 resource and to see how their knowledge of safety measures, attitudes and self-reported behaviour changed after having had the book for about one month. The survey explored how the parents used their time, the health and social services that they used, where they went for information and what printed materials they saw and which, if any, they kept.

This design of trial, without any control sample, is known as the pre-experimental design. The aims of the experiment were limited to attempting to determine if the subjects' knowledge of safety had changed following their receipt of Book 1. Such a change does not demonstrate

rigorously that Book 1 had some beneficial effect on the subjects' knowledge. However, the absence of any such change would suggest that the proposed approach to increasing safety awareness was not working and that further development was not justified.

The trial took place over 2 to 3 months in the late summer of 1997. Two questionnaires were developed and piloted, one being the 'pre-questionnaire' for the initial interview held before the parent had been given the booklet (and before they knew what the survey was about). One Step Ahead was given to the parent at the end of the first interview, and the second 'post-questionnaire' was administered one month after the first. Both questionnaires were piloted and following this, minor changes were made to the pre-questionnaire. The post-questionnaire was found to be considerably too long, with parents less inclined to answer questions that they had already responded to a month earlier. Because of this a number of questions were removed from the post-questionnaire. Samples of the developed questionnaires are included in the appendices.

3.1 Interview sample

The Child Accident Prevention Trust suggested that the evaluation should be carried out with parents attending clinics in Basingstoke, Cumbria, Leeds, London and Manchester. The clinics were located in low-income districts, and the three metropolitan districts were located in multi-ethnic areas. The intention was to cover a broad range of parents, but with more parents from lower income families and non-white families than would be expected in a sample representative of the general population.

TRL's interview team approached the clinic organisers and secured permission to interview client parents during August 1997. Parents interviewed were asked if they wanted to have a copy of the magazine and if they would be willing to be interviewed about four weeks later. First interviews were completed with 142 parents and in September/October follow-up interviews were achieved with 120 of these (response rate 84%). The characteristics of the parents who completed both interviews are shown in Tables 3 and 4.

Table 3 Sex and age of carers in the trial

		Sample completed (100%=120 carers)
Sex of parent	Female	97%
	Male	3%
Age	25 years or less	37%
	26 to 30	31%
	Over 30 years	32%

Thirteen per cent of the respondents were non-white and 46 per cent were classified with SEGs D and E. Within the whole population of Great Britain, about six per cent are not white and about 30 per cent are in SEG D or E. Thus, as intended, the sample was biased towards lower income families and non-white respondents.

Table 4 Representativeness of carers in trial

		(100%=120 parents)	*Sample completed GB population**
Ethnic groups	White	87%	94%
	Black Caribbean	1%	1%
	Black African	3%	0.5%
	Pakistani	7%	1%
	Bangladeshi	1%	0.5%
	Other	1%	3%
SEG	A	3%	3%
	B	8%	14%
	C1	26%	23%
	C2	17%	32%
	D	28%	19%
	E	18%	10%

* *Population by ethnic group: Office for National Statistics, 1998*
Population by SEG: The Market Research Society, 1993

Just over half (54 per cent) of the respondents reported that they had been on a first aid course with about a third of these being run by either St John's Ambulance or Red Cross. Other courses mentioned were run at work, college or school and at least one Doctor's surgery ran a special course for mothers with first babies.

The interviewers were instructed to select only parents who had a baby aged eight months or less and also to achieve an equal number of interviews with first-time parents and parents who also had older children. Table 5 shows the characteristics of the babies whose parents were interviewed.

Table 5 Babies in the trial

		Sample completed (100%=120 parents)
First baby	Yes	47%
	No	53%
Sex	Male	42%
	Female	55%
	4 sets of twins:	3%
	2: both male	
	1: both female	
	1: male/female	
Age	0-9 weeks	33%
	10-17 weeks	32%
	18+ weeks	35%

As instructed, the interviewers achieved a sample of approximately equal numbers of parents with first babies and parents with a baby who was not the first child. All the babies were under 41 weeks old (eight months) and about two thirds (65%) were under 18 weeks old. The sample included slightly fewer parents with boy babies than with girl babies and three per cent of the parents had twin babies.

3.2 Sources of information, pre-questionnaire

In the pre-questionnaire carers were asked a number of questions on the advice that they currently received and

where it came from. This section gives a summary of the information from these questions.

The most frequently mentioned source of help and advice were Health Professionals (including Doctors) (63 per cent of respondents). Clinics and hospitals were also mentioned by 28 per cent of carers. The family was also a great source of help for 53 per cent of respondents and 16 per cent relied on their own experience.

Most people (79 per cent) felt that the level of advice given by Health Professionals was 'about right'. 17 carers wanted more advice such as information on health problems or advice on food or weaning. Four respondents felt they had too much advice: either they felt that they *wanted to bring their child up their own way*, or they found that *too much information caused them to become anxious*. Carers were asked if there were any specific safety topics on which they would like more information. 66 per cent said 'none', but 11 per cent wanted advice on accidents in the home, 4 per cent on car safety, a similar number wanted advice on food problems such as weaning and 3 per cent wanted information on first aid.

Carers were asked about any leaflets or booklets on child safety that they had been given. 85 people remembered one or more leaflets. 20 per cent of the 129 leaflets remembered were about cot safety, 13 per cent on safety at home and 12 per cent on car safety. Most of the leaflets had been obtained from the hospital (33 per cent of leaflets), the Health Visitor or Midwife (31 per cent) or from the Doctor's Surgery or clinic (12 per cent). The respondents found 60 per cent of the particular leaflets 'very useful', 35 per cent 'quite useful' and 5 per cent 'not much use'. Overall well over 90 per cent of the 85 respondents who had remembered receiving leaflets felt that in general they were useful, easy to understand, relevant and easily available.

All respondents were asked if they would like more leaflets if they were available. 58 per cent said 'yes', 34 per cent 'no', 6 per cent were unsure and 2 per cent said that it would depend on whether they felt they were useful. The 72 people who wanted more leaflets were asked where they would expect to get them. 74 per cent said from the clinic, 51 per cent from the Doctors' Surgery, 26 per cent from Health Visitors or Midwives, 19 per cent from hospitals or ante-natal clinics and 11 per cent from other places such as shops, schools or magazines.

When asked about magazines for parents, 50 people said that they read one or more magazines. Most of the magazines had been bought by respondents (77 per cent of the 78 magazines listed), and 17 per cent had been given, or lent, to them. Respondents found that 45 per cent of the magazines were 'very useful', 49 per cent were 'quite useful' and 6 per cent were 'not much use'. Overall 73 per cent of those who read magazines did not think that they provided information that should be provided by the Health Service. The remaining 27 per cent felt that some of the topics covered by the magazines such as information on food, weaning, health matters, immunisation and symptoms of illnesses should be provided by the Health Service.

3.3 Parents reactions to One Step Ahead Book 1

3.3.1 Booklet

120 parents completed interviews about four weeks after they had been given a copy of One Step Ahead. 66 (55 per cent) people had read all of it, 24 most of it and 23 some of it. Six parents said they had not read the magazine, and one did not remember. Lack of time was the main reason given for not reading the magazine although one respondent said that she had *looked at the pictures, but could not read English*. In all 113 parents had read at least some of 'One Step Ahead'. 89 per cent of Socio-economic groups A + B + C1 had read all or most of the magazine compared to 58 per cent of C2s and 69 per cent of SEGs D + E (differences significant at better than the 5 per cent level). The difference in the amount of the magazine read by white and non-white groups was just significant at the 5 per cent level with 53 per cent of the non-white group reporting reading all or most of the book compared to 78 per cent of the white group.

3.3.2 ABC of Resuscitation (poster)

61 carers recalled the subject of the poster without prompting. After being reminded of the subject, 100 people said they had read it and also understood it. In all 107 respondents remembered doing something with the poster. Most (80 per cent) had kept it in the book, but 6 per cent had pinned it on a wall and 9 per cent had put it somewhere where they could easily retrieve it such as on a table or in *the children's file*.

3.3.3 Overall reactions to the magazine

During the second interview there were a number of questions where it was possible for carers to comment generally about One Step Ahead.

There were differences of opinion on some parts of the magazine. One carer said:

> *The picture on the front was lovely*

While another responded:

> *I've done first aid so I knew a lot of this; also it had a horrible cover ... I didn't like the hazard drawing that was difficult to see properly. They had a needle and thread I couldn't see it properly.*

Some carers thought the magazine contained too many facts:

> *They need to change it a bit more. If they want to appeal to everyone they should have real experiences so that we can learn from other peoples' mistakes. its too factual really.*
>
> *It's just my opinion - (I) like the 'Rosie' story, would like more like that. Things that have happened to people is better than facts.*

However another mother said:

I would prefer factual information rather than queries so that you could refer to the book. The statistics that were quoted did not put the risks into perspective eg not shown in percentages. I would like the light hearted issues to be completely separate to the factual serious issues.

Overall, however, the impression given by the comments was positive:

It was simple and easy to read. It could have been more colourful. The diagrams they were good, everything had a stage and it was very short so you didn't get bored.

I enjoyed the fact that there were mainly pictures in it - too much reading and I wouldn't have read it. I read the book when it was first given to me and then loaned it to my sister who's just had a baby.

3.3.4 Reactions to particular articles

Table 6 shows the articles mentioned without prompting by more that 20 per cent of the 113 respondents who had read at least some of the magazine.

Table 6 Articles mentioned without prompting

Title of article	*Percent remembering unprompted (100%=113 who had read some or more of the magazine)*
Safe as Houses (General home safety and quiz)	42%
Which type of car seat to buy	28%
Do you belt your children (car seat item)	27%
Fit for your child (car seat item)	24%
Parent to parent (safety tips)	24%
Steve' Story (fire safety story)	22%

The least remembered articles (remembered unprompted by less than 10 per cent of respondents) were 'All Fall Down' (how to prevent falls) and 'Can We Help You' (Questions and Answers).

44 people said they had done the puzzles and quizzes. Table 7 shows the percentage of these who remembered each puzzle unprompted.

Table 7 Puzzles mentioned without prompting

Title of puzzle	*Percent remembering unprompted (100%=44 who had done the puzzles)*
Pitfalls (general safety behaviour and knowledge)	32%
Safe as houses (home safety picture puzzle)	66%
Good night - sleep tight (Questions and answers)	3%
Safety maze (word maze)	30%

Comments made by parents on individual articles and puzzles were examined. Most remarks were short and positive (such as *good* or *useful*), or reiterated what the article was about.

The most well remembered article (Safe as Houses) contained both an explanation of hazards in the home and a picture puzzle. One parent commented:

Very good. Made you look and think. You could relate to it. Couple of them I recognised from my own home. Didn't mention about radiators and low shelves as dangers.

Some found that *most of it was common sense* or *I got most right*, but even so the overall feeling was that the section was useful and interesting.

Although they were less well remembered, the comments on 'All fall down' and 'Can we help you' were mostly positive. One parent said *we have very steep stairs so this was very good*, another *I like answers from experts*. However there were comments such as *I do all those things, it was a bit silly*, and *silly questions - but I can't remember what they were*.

Remarks on the puzzles indicate that while some people enjoy doing these, others *don't like things like that, so I didn't do it.* It is also difficult to find a format that will please everyone. On 'Pitfalls' one parent said *I think they should set it up as a live thing*, while another said *Good. A good way to show things in drawn cartoon form - easy to read.*

36 per cent of the 113 respondents who had read at least some of the magazine thought that the ABC of resuscitation poster was the most useful part of the magazine, and 18 per cent said First Aid in general. 15 per cent said 'all' of the magazine, or 'most of it'. When they were asked 'which part did you enjoy most', 26 per cent said all or most. The puzzles were the next most frequently mentioned, with 10 per cent mentioning puzzles in general, 10 per cent 'Safe as Houses' and 4 per cent 'Pitfalls'.

Overall, 74 per cent of people who had said that they read the magazine liked it 'a lot', 24 per cent liked it 'a bit' and 2 per cent said 'not much'. No significant differences in responses were found for the ethnic groups or SEG of respondents.

The people who only liked the magazine 'a bit' or 'not much' were asked why. Eight of them did not know why, or responded by listing the things they had liked. Five people felt that they already knew what was in the magazine and two felt some or all of it was too easy. Three people felt there were too many facts and wanted more real life articles, while one person wanted more facts and one wanted more posters like the ABC of Resuscitation. Two people asked for more information on health matters. In addition two people referred to the graphics and said they could be improved.

11 people reported that there was something in the magazine that they had not understood, four of these were from the non-white group. Examination of respondents comments following the question found that one person mentioned not understanding English - but said she could ask her husband or children to help. Another said she had 'learning difficulties' and found it hard to read.

36 people said that there was some new information or advice that they had not seen or heard before. Of these 36, 28 per cent had learnt something new about car seats, a

similar percentage reported learning something about sleeping in general or bedding, 22 per cent had learnt about resuscitation and 14 per cent had become aware of hazards in the home that they had not thought about before.

Twelve respondents had done something new because of what they had learnt. One had removed cot bumpers and one had *tilted the baby's moses basket when she had a cold so it wouldn't stay on her chest*. Three others mentioned moving the baby to the bottom of the cot and two more said they had moved the cot away from the radiator. Another respondent said that when she got a new car seat it would be fitted properly and two others mentioned making sure the car seat was secure. Two parents mentioned covering electrical sockets and another said:

> *I'm going to cover electrical wires and make certain things are out of her reach. When I need to do things I'll make sure she's somewhere secure like a high chair. I'll also do the towel in the door.*

3.3.5 Distribution of the magazine

The parents were asked a number of questions on whether a series of magazines should be produced and how they should be distributed. Table 8 shows responses to these questions.

Table 8 Responses to questions on producing a series of magazines

Question	*Response (100%=120 parents)*
Is it a good idea to produce a series of booklets?	Yes: 99% Don't know: 1%
What age should the series go up to?	Up to 6 years: 68% 7 to 11 years: 19% 12 to 18 years: 13%
Would you read the rest of the series as X gets older?	Yes: 93% Maybe: 4% No/don't know: 3%
Would you buy the booklet if it were available in the shops? (No significant differences in responses for ethnic groups or SEG)	Yes: 58% Depends: 16% (most 'depends on price') No/don't know: 26%
How much would you pay for the book?	Probably would not buy (see above): 26% £1 or less: 34% over £1 up to £2: 34% over £2 up to £5: 4% missing: 3%

Respondents who said that they would buy the magazine were asked 'Where do you think would be a good place to sell it?', and all parents were asked where it should be put if the magazine were distributed free. Table 9 shows responses to these questions

Most of the parents who would pay for a magazine (90%) thought it should be sold in shops, but nearly half would be willing to pay for it at clinics and a quarter at

Table 9 Parents suggestions for distributing the magazine

Places where magazine could be sold (100% = 85 people who said they would buy the magazine)[1]	*Free distribution (100% = 120 parents)*[1]
Clinic	47%	85%
Doctors/surgery	23%	71%
Hospital/ante-natal	10%	37%
Nurseries/Playgroups	7%	22%
Shops	90%	20%
Schools	1%	13%
Libraries		11%
Health visitors	1%	7%
Dentists		3%
Other	4%	12%

[1]*Respondents could give more than one response.*

Doctors' surgeries. If the magazine were free, most parents suggested distributing it through clinics or at the Doctors' and 37 per cent suggested the hospital or anti-natal clinics. About a fifth thought it should be given away in shops or at nurseries and playgroups. The other sources mentioned included the Social Services and Citizens' Advice Bureau.

3.4 Changes in parents' responses to safety questions

Respondents to the pre- and post-questionnaires were asked questions about safety and first aid, ranging from what they would do if they bathed their baby to how they would know if the baby was very ill. Most of these questions were open questions. Section 3.4.1 reports on this qualitative data.

To give a quantitative measure of whether parents who had read the magazine had remembered the advice a content analysis on the open questions was also attempted. This used particular points from the advice given in 'One Step Ahead' as a coding frame for the open questions. Replies from the pre- and post- questionnaires could then be examined to give a measure of changes in response after parents had read the magazine. Section 3.4.2 reports on this quantitative analysis.

3.4.1 Qualitative data

Bathing the baby

The communal nature of bathtime came over:

> *Everybody joins in to bring things for baby like talc or soap*
>
> *His Dad bathes him in the big bath, they have a bath together*
>
> *I bathe him with his sister in the big bath.*

Most parents were careful to check the water temperature, and made some mention of holding onto the baby. Many parents, both in the first and follow-up interviews, referred to practical actions which were not specifically mentioned in the magazine, such as *I make sure the room is warm* or *make sure I have a good tight grip on him*. There were signs in the second interview that

parents were thinking about the advice they had read. For example in the pre-questionnaire one mother said:

Get everything I need around me. I wash her hair and then her body. I check the water with my elbow. She has a baby bath.

In the post questionnaire she said:

Baby bath on the floor because it is a flat surface. Check the water with my elbow. When she gets older I'll put a mat in the bath to make sure she doesn't slip.

Putting baby down to sleep

Around three quarters of the parents said they always put their baby to sleep on his/her back both before and after they had been given the magazine (74 per cent before, 78 per cent after). As the baby becomes more mobile parents do not always feel they have a choice:

I put him on his back, but now he rolls over and sleeps on his belly, so I always now put him on his belly

Sometimes on her side and sometimes on her back. Whichever position she tends to roll and do the opposite.

Parents were asked how they would tell if the baby was too hot or cold in bed. Most would touch some part of the baby, very often they mention several parts:

I'd touch the back of his neck or his stomach - it depends on what he's wearing.

They also judged temperature by the way the baby looks and his/her behaviour:

If she is too warm her face looks flushed. I check her by feeling her arms, hands and feet. If she is a bit cold she sneezes.

In the post-questionnaire more respondents mentioned feeling the tummy, or some part of the baby's trunk. One parent said in the before interview: *Feel head and back of neck*, a month later she said: *Feel her tummy now since reading the book.* Another said *Feel the top of head and feet*, then in the post-questionnaire she said *Feel his head and body*.

When questioned about different types of bedding in the pre-questionnaire 46 parents gave a response in line with the booklets advice compared with 53 in the post-questionnaire. Also the number of people giving a response not recommended in the booklet (eg use of a duvet, pillows or cot bumper) decreased. In addition, particular responses indicate that parents had taken notice of the book, for example before having 'One Step Ahead' one mother said about types of bedding: *They're all the same to me*, a month later she said:

Quilts can make a baby overheat and are dangerous. They shouldn't have baby pillows or bumpers.

Smoke alarm

In the pre-questionnaire respondents were asked, after a number of questions on safety, what other things they would do to keep them and their family safe. If they did not include having a smoke alarm in their answers, they were then asked specifically about this. The post-questionnaire only asked if the respondent had a smoke alarm in their home.

In both the before and after interviews, 101 of the parents said that they had a smoke alarm (84 per cent). The parents without an alarm seem just as likely to have thought about ways to keep their family safe as those with an alarm. For example one parent said *Socket covers. Fire guard. Stair gates. Bed sides. Smoke alarm.* Another said:

(we have) a stair gate. Being aware about things being on the floor and electrical points. Have the gas fire checked each year.

This parent, when questioned further, said they did not have an alarm, but might get one 'now that we have talked about it'.

Smoking

Both before and after receiving a copy of the magazine, about 100 carers said that friends or family would not smoke around the baby. When asked if there was any reason for this, the responses tended to be fairly general such as:

They go into the garden because they have kids of their own and don't smoke around them either (pre-questionnaire) or

Its too bad. Its not fair on her. Its wrong. I smoke myself but I'd never smoke near her.

Respondents were then asked specifically whether they felt that people smoking around the baby could harm him/her. Before receiving One Step Ahead 109 carers said that the baby could be harmed, afterwards 112 felt that way. They were asked how they thought smoking near the baby could cause harm. In the post-questionnaire there were increases in references to asthma (from 29 per cent to 38 per cent of carers), cancer (7 per cent to 11 per cent) and general health problems (4 to 11 per cent) and a decrease in references to cot death (from 28 to 18 per cent). However, both before and after, the most frequently mentioned health problems (from around 60 per cent of carers) were references to coughs, chest or ear infections, or breathing problems. For example:

The fumes will affect her lungs and breathing

or

She may inhale and there's no fresh air. It would affect her lungs or suffocate her.

Travelling in a car

Because of the need to shorten the questionnaire for the 'after' stage, the section on car seats and their use was reduced in the post-questionnaire. Some direct comparisons between the 'before' and 'after' stages were made however, and information on the types of car seats used and carers feelings about their use has been obtained from the pre-questionnaire.

Before receiving the magazine 110 carers said that they or another adult took the baby out in a car. In the post-questionnaire 107 respondents answered a similar question positively. 103 carers said that they owned a baby seat in the first interview and when asked how regularly they used their seat, 91 per cent said 'always'. In the post-questionnaire respondents were asked about precautions they took to keep their baby safe in a car 95 per cent of baby seat owners said they always used the seat.

In the first interview all respondents with a car seat felt it was very important to strap the baby in. (Respondents without a car seat were not required to answer this question.) As one parent said:

> *Anyone that says 'quite important' must be mad - anything could happen even on a short journey.*

Carers with a baby seat that was used in the front seat of the car were asked why they had that type of seat and prompted to think about airbags in the first interview. About a third knew that they should not be used with a passenger airbag, saying for example:

> *I have to be careful not to have the chair in the rocker position in the car. We haven't got a passenger airbag, if we had she would not be able to travel in the front.*

Most of the other responses to the prompt on airbags were to the effect that their car did not have them. However there was one worrying response:

> *The airbags are on passenger and driver side so we always have it (the baby seat) rear facing so she wouldn't be hurt.*

Four carers who took their baby in a car did not use a car seat. Two said they did not have the money to buy one, and one said *I haven't got a car of my own*. The fourth respondent said *I feel safer with him whilst he's very small clutched in my arms. I wear a seat belt.*

Choking

Carers were asked 'Would you know what to do if X was choking?' in both the before and after interviews. Responses were not easy to interpret in terms of the information in One Step Ahead as the details given were not always sufficient for the person doing the coding to recognise a response indicating that advice given in the article on 'Choking' in the magazine had been remembered. For example, the advice included *Lie the baby over your knee with her face down and head low*. If a carer said *Tip her over* or *I'd tip her upside down* it was not clear which way the baby was turned, or whether she was 'tipped' over the carer's knee. However the indications are again that some parents at least had taken notice of the advice, for example in the before interview one parent said *Sit her up and pat her back* while after having received a magazine she said *Turn her over and pat her back.*

Burns or scalds

The most frequently mentioned treatment for burns and scalds was to use cold water. Before having the magazine 77 respondents said that they would always put water on a burn and 10 said sometimes. During the after interview, 97 said always and 5 sometimes. Carers said *Run it under a cold tap* or *Apply cold water - and take her for medical help*. The second most frequent action was to seek medical help, with 56 carers saying, during the before interview, that they would 'always' do this. After receiving the magazine, 64 people gave that response.

While a very small number of carers responded with suggestions such as *Get cold water, damp a cloth and put it on the burn* or *Put some cream on*, it appeared that on the whole respondents had some idea of the correct response and were better informed after reading the magazine.

Stairgates

At the first interview, 13 carers said that their baby could crawl, a month later one more baby had started crawling. Although the babies were not yet mobile, about half the carers (59 respondents) reported having at least one stairgate in both the pre- and post-questionnaires. A higher percentage (70 per cent) of carers with more than one child owned a stairgate, compared to a quarter of parents with one child only.

Although some carers said they *only used (the stairgate) on the stairs*, others used them in a variety of places:

> *If cooking we use it in the kitchen, or at the top and bottom of the stairs*.

Carers with an unused stairgate were likely to start using it *when he can crawl around*.

36 per cent of respondents who did not own a stairgate said that they had thought about getting one. Most went on to say that they would get one when the baby was older:

> *We've got two flights of stairs and we'll need one to keep him out of the kitchen, but he's too young at the moment.*

14 carers had not thought about getting a stairgate and 12 of these said this was because they had no stairs. One mother said:

> *We are moving and will get one after we have moved.*

While another responded:

> *I never had one for Emma (her first child)-don't need one.*

Falls

Carers were asked if they would know what to do if their baby had a serious fall. In the first interview the most common response (by 75 respondents) was to take him or her to the hospital. The magazine has different advice for serious and less serious falls, but states that for serious falls 'do not move baby but keep her still...dial 999 for an ambulance'. In the second interview the number of respondents saying that they would take the child to hospital decreased to 58, and 51 carers said they would dial 999 or get help compared to 35 in the first interview. In addition, the number of people saying they would not move the baby increased from 15 to 28. For example one carer said *Rush her to hospital* in the pre-questionnaire, but a month later said *Try not to move her and call for help*.

For a less serious injury the advice is to 'gently check baby for any injury or pain before picking her up'. The number of people saying something similar to this increased from 26 to 51 after they had been given a copy of the magazine. Thus one mother said initially *I'm not sure, probably take him to the hospital.* A month later her reply gave some indication that she had looked at the magazine:

> *Check for bruising. If he was unconscious I'd take him to hospital.*

Some carers seemed more confident in their replies:

Pre: *Panic, find out what she had done. If it was serious get her to a doctor*

Post: *Don't move her and get an ambulance*

Pre: *I would get him checked by a doctor / nothing else*

Post: *It would depend how bad it was. If he fell down stairs, you shouldn't move him. I would ask doctor to call.*

Serious illness

When asked how they would know if their baby was seriously ill the most common response was that he/she would have a 'temperature' or 'fever' (76 respondents in the first interview, 84 in the second). Many carers also mentioned crying, usually in terms of *crying a lot* rather than an altered ('high pitched or weak') cry as suggested in the magazine. However there was a small increase (from 9 to 14) in the number of carers who mentioned a change in cry after they had received One Step Ahead.

In the first interview 30 respondents said that their baby would be less responsive in some way. A month later 49 carers mentioned this with responses such as *She'd go floppy and not be herself,* or *Unresponsive, listless, pale*.

Overall, while some carers did not change their responses greatly, saying for example at the first interview:

> *She would cry, be off colour, have a temperature*

and a month later:

> *If she wasn't very alert and bubbly like her normal self. If she had a temperature,*

others appeared to have learnt something. For example:

Pre *It would be instinct. She would be lethargic and miserable*

Post *She would have a temperature, be grumpy, listless and be pale and her eyes would be dull*

Summary of qualitative information

Many parents at the first interview had considered how they would cope in the various situations that were raised in the pre-questionnaire. On the whole they appeared to have been well briefed, possibly by their Health Visitors. However a month after they had received One Step Ahead their responses to similar questions indicated that they had read the magazine and taken notice of the advice given in it.

3.4.2 Changes in parents' responses to safety questions, quantitative approach

Answers to the questions on safety were coded using responses which related to advice given in 'One Step Ahead'. For example in the article 'Bath and Splash Time', two items of advice are 'use a bath mat or a towel in the bath' and 'always put cold water in first'.

39 possible responses to the questions on the various issues were identified. Five possible responses to the question on choking were not analyzed as the responses proved difficult to interpret in terms of the advice given in the magazine. The remaining 34 responses were examined to see if the difference in the number of carers mentioning a response before and after being given the magazine was statistically significant. The difference was statistically significant at the 5% level or better in the 8 responses listed in Table 10.

For each of the responses listed in Table 10, more respondents mentioned the recommended action after they had been given 'One Step Ahead' than before. If the parents had been responding in a random fashion the differences, before to after, might have been significant at the 5 per cent level for about two of the 34 responses in the test and the direction of the change was as likely to be negative as positive. The observed eight significant changes were all positive, which indicates that there has been a very significant change in the average knowledge of parents in the sample.

The data were further tested (using hierarchical log-linear modelling) to see if these observed changes were being influenced by the magazine and each of the following factors:

1 ethnic group of the respondent

2 SEG of the respondent

3 whether the child was a first child or not

4 whether the respondent had taken a first aid course or not

5 sex of baby

6 age of the baby

7 age of respondent

Table 10 Responses to questions on safety or first aid where the change in response was statistically significant

Response	*Number of parents giving the response*		*Level of statistical significance*
	Before	*After*	
Use a mat/seat/towel in the bath	7	29	1%
Check baby's temperature by touching chest/body	always: 44 sometimes: 0	always: 46 sometimes: 12	1%
Put cold water on a burn	always: 77 sometimes: 10	always: 97 sometimes: 5	5%
Dial 999 if the baby has a fall	35	51	5%
Do not move the baby if the fall is serious	15	28	5%
Check the baby for an injury (less serious fall)	26	51	1%
Regular use of a car seat (for those owning a car seat)	always: 91 sometimes: 12 never: 0	always: 98 sometimes: 2 never: 3	1%
If seriously ill the baby is less responsive/less active than usual	30	49	1%

The rows of Table 9 do not total 120 as the responses detailed were given in open questions and some carers did not mention particular items.

The log-linear modelling tests the statistical significance of interactions between variables, for example did the before and after scores vary with social class. The analyses found that the pre/post questionnaire changes in the number of carers giving a particular response were not significantly associated with any of the 7 factors, and there had been statistically significant knowledge gains across all sub-groups after exposure to the resource.

3.5 Parental locus of control

The respondents were asked to say how strongly they agreed or disagreed with a set of statements. The statement set was derived from a test to measure the dimensions of a parent's locus of control over their child's health. The scale was developed in the USA (De Vellis et al, 1993) and has been used in Norway with primary age children (Kraft and Loeb, 1996). Table 11 shows the statements used and the median response of the parents. A median value of one would mean that all the parents strongly agreed with the statement and a response of six would mean that the parents disagreed.

The major finding was that there was very little change in parental responses over the period of the evaluation. Standard errors of the median varied between 0.199 and 0.065 for the pre-questionnaires and between 0.198 and 0.073 for the post-questionnaires. The parents were strongly of the opinion that they themselves were a major influence in their child's well-being. They tended to disagree with the statements suggesting that the child's well-being depended on chance, God or regular interventions from the medical professionals.

There were no obvious variations in these beliefs across the SEG groups or between parents of first babies and others. Non-white parents were as confident as white parents in their own ability but rated God's help as being almost as important both before and after receiving the magazine.

3.6 Views of health professionals

After completing the interviews with parents, the interviewers were asked to contact the nine Health Visitors who worked at the clinics they had visited. It was difficult to get responses from the Health Visitors partly because they are out visiting or busy at a clinic for most of the time. Even when contacted two of them felt they could not respond because they had been too busy to look at the magazine when the interviewer was at the clinic or they had been on leave and the clinics had been staffed by another Health Professional who did not know about the magazine.

This section therefore reports on the seven telephone interviews that were completed (a copy of the questionnaire is given in Appendix D). Only one of the Health Visitors had had time to look at a copy. Six felt that it would be a good idea to produce a magazine and one felt that there was already too much literature around. At present, they had a small amount of literature on safety issues (the 'Birth to 5 years' book has 'a couple of pages' and some accident posters), but there was a feeling that many parents do not look at any of the information that they are given. If the magazine was produced they felt it should be available in public places, Doctors' surgeries and clinics and possibly primary schools. They all felt the magazine should be free, and five said they would be willing to distribute it if they approved of the contents.

On the whole they felt that the production of a series of magazines would be a good idea as they could be age related and not carry too much information in any one issue, although one felt that 'if you want them to learn anything incorporate it in 'Eastenders'. One comment was that it would need to reinforce what parents had already been told. One of the Health Visitors did think that 'it sounds like a middle class idea. I don't think people would bother to read it', and two felt strongly that there was already too much paperwork available for parents. One

Table 11 Parental locus of control

	Median response (Scale from 1 = agree strongly, to 6 = disagree strongly)	
	Before	*After*
Doctors, nurses and health visitors keep my child from getting sick	3.7	4.0
I have the ability to influence my child's well-being	1.4	1.6
My child can avoid illness with regular professional care	3.1	3.6
My child is in control of his/her own health	5.5	5.4
Having regular contact with a doctor is the best way for my child to avoid illness	3.6	4.0
Whether my child avoids injury is just a matter of luck	5.1	4.7
My child is the one who determines his/her well-being	5.4	5.5
Only trained doctors, nurses and health visitors can influence my child's health	5.0	4.7
God will decide what will happen to my child's health	5.1	5.2
Chance plays a big part in determining how healthy my child is	4.6	4.5
I can do a lot to prevent my child from getting hurt	1.3	1.3
My child's safety depends mostly on what my child does	3.4	3.5
My child's well being is in God's hands	5.2	5.3
My child can decide to live a safe and healthy life	4.9	5.0
I can do a lot to prevent my child from getting sick	1.7	1.5
Whether my child avoids sickness is just a matter of chance	4.4	4.2
The things I do at home with my child are an important part of my child's well-being	1.2	1.2
Doctors, nurses and health visitors control my child's well-being	4.4	4.4
God will keep my child safe	5.1	5.2
My child's safety depends on me	1.3	1.3
My child can do a lot to avoid getting sick	4.8	5.0
I can do a lot to help my child stay well	1.4	1.4
My child's health is largely a matter of good fortune	4.4	4.3
To a large degree my child can determine his/her own health	5.3	5.3
I can do a lot to help my child be strong and healthy	1.3	1.3
Whether my child stays healthy or gets sick is just a matter of fate.	4.5	4.5

suggestion made was that the magazine (for older age groups) could include things for children to do as well, so that parents and children could look at it together. This Health Visitor felt that the series could go up to 8 or 9 years when 'children start to become mature, so articles on water danger, cycling, road safety, sex education, relationships and family problems should be addressed'.

The Health Visitor from the London area said that the 'book should target the ethnic groups in the area.' Half her clients came from different ethnic backgrounds with 47 languages being spoken. Because of the language and cultural differences she felt they would actually need to be specifically targeted. 'The image of a white child on the cover may make them feel it wasn't relevant to them and they wouldn't read it - or the information in it didn't actually relate to their ideas of child rearing.'

4 Conclusions

Accidents are a largely avoidable cause of death and injury to young children in the United Kingdom and although accident mortality rates have fallen in recent years there is still a need for further improvement. The great majority of accidents to pre-school children occur in the home when the children are with their parents or other carers. These children are too young to take responsibility for their own safety and it is therefore the adult carers who need to understand and remove the hazards that their children face. Most parents, interviewed in this research, welcomed advice on how to provide an environment where their children could grow and develop in safety.

The children of lower income families are much more likely to be involved in serious accidents than those from high income families and so it is particularly important to provide information and support for the high risk group.

The published accident statistics show that the pattern of childhood accidents changes rapidly as children grow out of babyhood. Rates of development vary quite markedly from child to child and parents need information about development so that they can anticipate the unsafe things their children may be about to do and take steps to limit the chance of injury to the child.

Most parents have some contact with health professionals when their children are very young and these professionals see safety education as part of their role. A considerable amount of literature is available especially for expectant mothers and those with young babies but only a small part of this deals specifically with safety issues. The parents interviewed in the exploratory phase of this

research showed concern about their children's safety but felt that they needed information and guidance on specific safety matters as their children developed.

Considerations of materials cost, ease of use, the need to be developmental and ready availability for reference pointed to the development of a printed resource rather than a video resource. The project has developed four magazine style booklets to cater for children at different stages of development between birth and three years old (at roughly nine month intervals). The booklets included information on the development of children in the particular age group, the types of accident which were most common for this age group, risk assessment exercises, real life stories about accidents which had happened or had been prevented, information on safety aids, hints and tips from other parents and basic first aid for that age of child. For the youngest children the information was entirely for parents but for the two older age bands there were some activities that the parents could do with their children.

The evaluation of booklet 1 was limited to surveys of 120 parents just before and about one month after they were given a copy of the booklet. The sample was biased towards lower income families. These parents expected to get advice on safety matters mainly from health professionals and were generally satisfied with the existing provision. Most of them had seen some safety leaflets, under half had read magazines for the parents of young children.

At the re-interview, 89 per cent of social groups A, B and C1, 58 per cent of group C2 and 69 per cent of groups D and E said that they had read all or most of the booklet. The difference in the amount read by white and non-white groups was just significant, 53 per cent of the non white group reported reading all or most of it compared with 78 per cent of the white group. Three quarters of the people who said they had read the booklet said that they had liked it a lot, 24 per cent liked it a bit and 2 per cent not much. All but one of the parents thought that the idea of a series of booklets was good, two thirds thought the series should run up to the child's sixth birthday, the rest suggested older ages up to 18. Over half of the respondents thought that they would have bought the booklet if it had been offered for sale.

The before and after surveys included thirty-four items which related to safety advice in booklet 1. For eight of these items the responses in the after survey showed a statistically significant difference from the responses in the before survey: in each instance the after survey showed more respondents giving the safest possible response. There had been a very significant change in the parents' knowledge of safety and accident prevention. A multivariate analysis of these responses established that the change was independent of ethnic group, social group, whether the child was a first baby or not, and whether the parent had taken a first aid course or not.

The evaluation has demonstrated that parents welcome the resource, *One Step Ahead*, and its use can lead to significant gains in knowledge of safety and accident prevention.

5 Acknowledgements

This project was financed by the Department of the Environment, Transport and the Regions and guided by:

Deirdre O'Reilly	DETR Project Officer and Chair of the Research Steering Group.

The Group Members were:

Sue Aucott	Royal Society for the Prevention of Accidents
Geoff Dessant	Department of Trade and Industry
Chris King or Liz Tooze	Association of London Borough Road Safety Officers
Liz Saville	Local Authorities Road Safety Officers Association
Mike de Silva	Department of Health

Dorit Braun has been our quality auditor and in that role has provided numerous helpful suggestions and corrections.

We also wish to acknowledge the help given by the following individuals and organisations:

Berwyn Peet	London region coordinator, Homestart
Sue Orchard	Chair of Post Natal Committee, National Childbirth Trust
Rita Sutton	Pre-School Learning Alliance (formerly Pre-School Playgroups Association)
Jackie Lederer	Deptford Newpin
Joyce Cross	Gingerbread
Carolyn Peters	Parent Network
Martin Clarkson	Marketing Executive, Marks and Spencer plc.
Jane Naish	Royal College of Nursing
Liz Bixby	Liaison Health Visitor, Oxford
Lyn Fisk	Health Visitor, Mid-Glamorgan
Lorna Spratt	Health Visitor, Berkshire
Dawn Lacey	Health Visitor, Surrey
Jane Cameron	Health Visitor, Surrey

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Appendix A: Health Visitor questionnaire – Resource development phase

HEALTH VISITORS
INFORMATION GATHERING QUESTIONNAIRE RE PARENT TRAINING PROJECT

NAME:

ADDRESS:

TELEPHONE NUMBER:

INTRODUCTION

The Transport Research Laboratory and the Child Accident Prevention Trust are jointly involved in a research and development project to produce a resource which will encourage parents to keep their young children safe in home, leisure, traffic and other environments.

The preliminary idea for the resource is 4 or 5 developmental packs to cover the period 0 to 4 years.

QUESTIONNAIRE

1. Do health visitors have a statutory role with regard to pre-school children?

2. Are there any times when health visitors are legally required to see pre-school children?

3. What contact do health visitors have with the parents of pre-school children?

4. How is the contact made, and where?

   home
   clinic/surgery
   other

5. How do you see the role of the health visitors with regard to pre-school children?

6. Is there anything that particularly concerns you about the safety of pre-school children?

7. Are there any safety messages that you think should be given to parents of pre-school children?

8. It has been suggested that the following ages should be targeted:

   birth, 9 months, 18 months, 27 months and 3 years. Do you think this is a good idea?

Do you consider that any other ages would be more appropriate?

9. Would health visitors be able to take responsibility for distributing these materials?

10. What do you think would be the most appropriate way for health visitors to distribute these materials?

11. Do you think health visitors would be prepared to spend five minutes explaining the materials to parents?

12. Do you have any other observations or suggestions that you would like to make with regard to the idea of safety materials for the parents of pre-school children?

13. Would it be possible to visit informally a small group of parents to discuss their safety needs and perception of dangers etc?

Appendix B: Parent/carer questionnaire (pre)

PARENT TRAINING RESOURCE

INTRODUCTION AND INTERVIEW APPOINTMENT

Interviewer name: _____

Reference number: _____

Name of clinic: _____

Hello, my name is Y. I am doing a survey on behalf of the Child Accident Prevention Trust and the Transport Research Laboratory. We would like to talk to parents and carers about looking after very young babies. This will involve you reading a magazine that we have written *(*in English)* and contacting you again to see what you think of it. *(* if the respondent may not read English)*

Firstly, I have a quota to fill.

How old is your baby? _____ WEEKS

IF OVER 8 MONTHS (35 WEEKS), THANK AND TERMINATE INTERVIEW.

Is he/she your first child?

YES 1
NO 2

CHECK QUOTA. IF EXCEEDED, THANK AND TERMINATE INTERVIEW.

Now I would like to arrange an initial interview with you soon. When would it be convenient?

If willing, arrange date, time and place and record below
If unwilling, thank and terminate interview and record reasons for refusal overleaf.

Date _____ Time _____

Place _____

Postcode _____

Telephone number (inc. STD) _____

Respondent's name _____

COMPLETE APPOINTMENT CARD, GIVE TO RESPONDENT

I've written down what we've arranged on this card. If you need to change it, you can call Joan Franklin and she will arrange a new time for you. Her number is written here on the card. Is that OK?

THANK AND TERMINATE INTERVIEW.

ATTACH THE INTRODUCTION AND INTERVIEW APPOINTMENT SHEET TO THE FRONT OF THIS QUESTIONNAIRE

PRE-TEST QUESTIONNAIRE

Interviewer name: _____

Reference number: _____

Respondent name: _____

Clinic: _____

Date of interview: _____

Time interview started: _____

INTRODUCTION: Hello, my name is Y. I / a colleague of mine spoke to you a few days ago and arranged to come and talk to you today. Do you remember? Is that convenient?

Q1 What is your baby's name (X)? _____

Q2 ***INTERVIEWER*** *record sex of baby.*
MALE 1
FEMALE 2

Q3 What are your main concerns about X?
Probe: What do you want most for him/her when he/she grows up?

ADVICE AND INFORMATION

Q4 Where do you feel you get the most help and advice on looking after X?
Probe: What about when you go to the doctor or clinic, do you think they give you useful advice or information? What about anyone else?

Q5 Do you think that the level of advice and information given by health professionals is too little, too much or about right?

TOO LITTLE	1	*(go to Q5.1)*
TOO MUCH	2	*(go to Q5.2)*
ABOUT RIGHT	3	*(go to Q5.3)*
DON'T KNOW	4	*(go to Q5.3)*

If TOO LITTLE:

Q5.1 What additional advice or information would you like to receive and from whom?

go to Q5.3

If TOO MUCH:

Q5.2 What sort of advice or information do you feel you have been given too much of?
What sort would you prefer?

To all:

Q5.3 Are there any specific safety topics on which you would like more information?

Q6 Have you got any leaflets or booklets on child safety? *Prompt:* well, maybe something your GP or health visitor gave you?

YES	1	*(go to Q6.2)*
NO	2	*(go to Q6.1)*
DON'T KNOW / UNSURE / CAN'T REMEMBER	3	*(go to Q6.1)*

Q6.1 I have some examples of leaflets here. Do any of them look familiar?
Probe: Do you think you might have seen something similar?

YES	1	*(go to Q6.2)*
NO	2	*(go to Q6.7)*
DON'T KNOW / UNSURE / CAN'T REMEMBER	3	*(go to Q6.7)*

If YES:

Q6.2 Can you please tell me about any leaflets you have seen ...
***(Interviewer:** Complete table below. Ask each question about each leaflet individually. Continue overleaf if necessary.)*

What are they called? *(If can't remember, ask what they were about)*	Where did you get it from?	Have you read it?	How useful is the advice and information in it?	Did you keep it and then refer to it again?
1.				
2.				
3.				
4.				
	Codes 1 Bought 2 Hospital 3 Midwife 4 Doctors surgery 5 Health visitor 6 Clinic 7 Came by post 8 Borrowed 9 Can't remember 10 Other *(specify)*	**Codes** 1 Yes 2 No	**Codes** 1 Very useful 2 Quite useful 3 Not much use 4 No use	**Codes** 1 kept and refer 2 kept, don't refer 3 no / no longer have

Q6.3 Overall, would you say that these leaflets are useful?

YES	1
NO	2
DON'T KNOW / UNSURE / CAN'T REMEMBER	3

Q6.4 In general, are they written in a way which is easy to understand?

YES	1
NO	2
DON'T KNOW / UNSURE / CAN'T REMEMBER	3

Q6.5 Are they generally relevant to you and X?

YES	1
NO	2
DON'T KNOW / UNSURE / CAN'T REMEMBER	3

Q6.6 Were these leaflets readily available, or did you have to ask or look for them?
DO NOT PROMPT.

YES, ALL OR MOST READILY AVAILABLE	1
MOSTLY READILY AVAILABLE, HAD TO ASK/LOOK FOR SOME	2
HAD TO ASK OR LOOK FOR MOST OR ALL	3
DON'T KNOW / UNSURE / CAN'T REMEMBER	4

Q6.7 ***ASK ALL:***
Would you like (more) leaflets if they were available?

YES	1	*(go to Q6.8)*
NO	2	*(go to Q7)*
DON'T KNOW / UNSURE	3	*(go to Q7)*
DEPENDS *(say why)*	4	*(go to Q6.8)*

Q6.8 *If yes or depends:* From where would you expect to get them? *Probe:* What about the doctor's surgery? Or the hospital?

Q7 Do you read any magazines for parents?

YES	1	*(go to* Q7.1)
NO	2	*(go to* Q8)

Q7.1 *If YES:*
Can you tell me about them? ***Interviewer****: Complete table below. Ask about each magazine in turn. Continue overleaf if necessary).*

Name of magazine	Where do you get it from?	How often do you read it?	How useful is the advice and information in it?	Do you keep it and then refer to it when you need to?
1.				
2.				
3.				
4.				
	Codes 1 Buy it 2 Given to me 3 Borrow it 4 Other *(specify above)*	**Codes** 1 Every issue 2 Most issues 3 Only occasionally	**Codes** 1 Very useful 2 Quite useful 3 Not much use 4 No use 5 Don't know	**Codes** 1 Yes 2 No 3 Don't know / unsure

Q7.2 What is the main reason that you read this/these magazine(s)?
Probe: What do you like most about it/them?

Q7.3 Is there any information or advice in this/these magazine(s) that you think could or *should* be provided by the health service?
Probe: What information? Who do you think should be responsible for providing this information?

Q8 What other sources of information do you use to learn how to keep X safe?

Interviewer: *Circle 1 for each item mentioned unprompted and then ask if they can remember the name of the programme/video, etc. After each answer, ask "anything else?".*

When finished, read out any item not mentioned and ask "What about ...?". If they say "yes", circle 2, otherwise circle 3. ***DO NOT READ OUT THE CODES A, B, C, etc.***

item	***Record names of programmes, etc. and "other" items here***	mentioned unprompted	yes after prompt	no	CODE
television		1	2	3	A
videos		1	2	3	B
radio		1	2	3	C
newspapers		1	2	3	D
other →		1	2	3	E
other →		1	2	3	F

SAFETY MEASURES

Now I would like to ask you some questions about things that you and X do together.

Q9 Tell me about what you do when you bathe X. How do you make sure that he/she is safe?
Probe: Well, maybe you have a baby bath?
How do you check if the water is not too hot or too cold?

Q10 What about when you put X down to sleep. Which way do you put him/her down to sleep?
Probe: On his/her front, side or back? Do you always do this?

ALWAYS ON FRONT	1
ALWAYS ON SIDE	2
ALWAYS ON BACK	3
VARIES *(describe)*	4

Q10.1 Is there any special reason for this? *Prompt:* Did someone tell you that this is what you should do? Did you read it somewhere?

Q10.2 How do you know if he/she is too hot or too cold in bed?
Prompt: Maybe you would touch him/her? If so, which part of his/her body would you touch?

Q10.3 What about different types of bedding? Are some safer than others?
IF YES, probe: Which types do you think are the safest?

Q10.4 Where does X sleep? ***DO NOT PROMPT.***
Probe: Does he/she have his/her own room? With whom does he/she share a room?

OWN BEDROOM	1
IN BEDROOM WITH OTHER CHILD(REN)	2
IN PARENTS' ROOM	3
OTHER *(specify)*	4

Q10.5 What sort of bed does X have? ***READ OUT LIST (CAPITALS ONLY) AND CIRCLE ONE.***
If says COT or CRIB, verify. eg. COT, say "Is that large with high sides? Does it swing?"

COT (ie. large with high sides, non-swinging)	1
CRIB (ie. small with low sides, maybe swinging)	2
MOSES BASKET	3
IN BED WITH PARENT OR ANOTHER ADULT	4
BED (ie. no sides)	5
OTHER *(specify)*	6

Q11 Does X use a high chair?

YES	1	*(go to Q11.1)*
NO	2	*(go to Q12)*

If YES:

Q11.1 How do you make sure that X is safe in his/her high chair?
Probe: Is he or she strapped in? How do you make sure that he/she doesn't fall out?

Q12 Are there other things you do to keep you and your family safe? ***DO NOT PROMPT***

*If smoke alarm mentioned **unprompted**, go to* Q13

Q12.1 *If smoke alarm <u>not</u> mentioned, ask:*
Do you have a smoke alarm in your house/flat?

YES	1	*(go to Q13)*
NO	2	*(go to Q12.2)*

Q12.2 Have you ever thought about getting one? *Probe:* Have you thought about it and decided not to, or just not thought about it?

THOUGHT ABOUT IT AND DECIDED NOT TO	1	*(go to Q13)*
NOT THOUGHT ABOUT IT	2	*(go to Q12.3)*

Q12.3 Do you think that you might get a smoke alarm now that we have talked about it?

YES	1
NO	2
MAYBE / DEPENDS *(explain)*	3

Q13 If you discovered a fire in your house, what would you do first?
If says "Put fire out", probe: What if the fire was too big?

SMOKING

Q14 What about smoking? Does anyone in your household smoke?
Probe: Is that inside the house, or only outside?

YES, IN THE HOUSE	1	*(go to Q14.1)*
YES, OUTSIDE ONLY	2	*(go to Q14.2)*
NO	3	*(go to Q14.2)*

Q14.1 Do they smoke around X?

YES	1	*(go to Q14.4)*
NO	2	*(go to Q14.3)*

If no one in the household smokes in the house:

Q14.2 Would any of your friends or family ever smoke in the same room as X?

YES	1	*(go to Q14.4)*
NO	2	*(go to Q14.3)*
UNSURE/DON'T KNOW	3	*(go to Q14.4)*

Q14.3 Is there any reason why they/you choose not to smoke around X? **DO NOT PROMPT.**

Q14.4 Do you think that could harm X in any way (if they did)?

YES	1	*(go to Q14.5)*
NO	2	*(go to Q15)*
DON'T KNOW	3	*(go to Q15)*

Q14.5 How could it harm him/her?

TRAVELLING IN A CAR

Q15 Do you or another adult ever take X out in a car?

YES	1	*(go to Q15.1)*
NO	2	*(go to Q16)*

If yes:

Q15.1 Do you have a car seat for X?

YES	1	*(go to Q15.2)*
NO	2	*(go to Q15.9)*

Q15.2 What type is it? ***(READ OUT AND CIRCLE ONE)***

FIXED	1
PORTABLE *(eg. infant carrier)*	2

Q15.3 Does the baby face forwards or backwards?

FRONT-FACING	1	*(go to Q15.4)*
REAR-FACING	2	*(go to Q15.4)*
DON'T KNOW / CAN'T REMEMBER	3	*(go to Q15.5)*

Q15.4 Why did you choose this type?

Q15.5 Do you attach the baby seat to the front or the back seat of the car?
Probe: Do you always do this?

ALWAYS FRONT SEAT	1
ALWAYS BACK SEAT	2
SOMETIMES FRONT, SOMETIMES BACK	3
DON'T KNOW	4

Q15.6 Is there any special reason for this?
If has REAR-FACING seat and ever uses in FRONT SEAT, probe: Is there anything that you need to be careful about when using this kind of seat? *Prompt:* What about if there is a passenger airbag in the car?

Q15.7 How regularly do you use your baby seat? ***(READ OUT LIST AND CIRCLE ONE.)***

ALWAYS	1
OFTEN	2
SOMETIMES	3
RARELY	4
NEVER	5

Q15.8 How important do you think it is to strap him/her in? ***(READ OUT LIST AND CIRCLE ONE. Record any additional comments made.)***

VERY IMPORTANT	1
QUITE IMPORTANT	2
NOT VERY IMPORTANT	3
NOT AT ALL IMPORTANT	4

Additional comments

If don't have a baby seat:

Q15.9 Have you thought about buying one?

YES	1	*(go to Q15.11)*
NO	2	*(go to Q15.10)*

Q15.10 Do you think that you might get one now that we've talked about it?

YES	1	*(go to Q15.11)*
NO	2	*(go to Q16)*
DON'T KNOW / MAYBE / UNSURE	3	*(go to Q16)*

Q15.11 What is stopping you?

EMERGENCIES

Q16 Have you ever learned any first aid? *Probe:* Did you do a course? What was it called?

YES 1 *specify what, name of course, etc.*_____
NO 2

Ask all:

Q16.1 Would you know what to do if X was choking? *Probe:* What would you do?

Q16.2 What about if he/she was burnt or scalded whilst at home. What would you do?

STAIR GATES

Q17 Do you have a stair gate in your home?

YES	1 *(go to Q17.1)*
NO	2 *(go to Q20)*

Q17.1 Do you use it?

YES	1 *(go to Q18)*
NO	2 *(go to Q19)*

IF USES STAIR GATE:

Q18 How many stair gates do you have? _____ STAIR GATES

Q18.1 Where do you use it/them? *Probe:* Only on the stairs, or somewhere else as well?

Q18.2 Can X crawl yet?

YES	1 *(go to Q21)*
NO	2 *(go to Q21)*

IF OWNS STAIR GATE BUT DOESN'T USE IT:

Q19 How many stair gates do you have? _____ STAIR GATES

Q19.1 When do you think you will start to use your stair gate(s)?

Q19.2 Can X crawl yet?

YES	1 *(go to Q21)*
NO	2 *(go to Q21)*

IF DOES NOT OWN STAIR GATE:

Q20 Have you thought about getting a stair gate?

YES	1	*(go to Q20.2)*
NO	2	*(go to Q20.1)*

Q20.1 *If NO:* ***(IF INTERVIEWED AT HOME, INTERVIEWER CODE QUESTION)***
Is this because you don't have stairs? Or another reason?

HAVE NO STAIRS	1	*(go to Q20.3)*
ANOTHER REASON *(explain)*	2	*(write answer in Box Q20.2)*

Q20.2 What has stopped you from getting one so far?
What do you think would be the benefits if you were to get one?

Q20.3 Can X crawl yet?

YES	1 *(go to Q21)*
NO	2 *(go to Q20.4)*

Q20.4 ***If has stairs and cannot crawl:*** What about when X starts to crawl?
Probe: Do you think you might get a stair gate then?

ASK ALL:

Q21 Would you know what to do if your baby had a nasty fall?
Probe: What would you do?

ILLNESS

Q22 Has X ever been very ill?

YES	1 *(go to Q22.1)*
NO	2 *(go to Q23)*
DON'T KNOW	3 *(go to Q23)*

Q22.1 *If YES:*
What was wrong with him/her? How did you know he/she was ill? What did you do?

GO TO Q24

Q23 How do you think you would know if your baby was very ill?
Probe: What do you think the symptoms might be?

Q24 Does X have any disabilities or continuing health problems?
Probe: What is the nature of his/her disability/health problem?

NO DISABILITY / HEALTH PROBLEM	1
ASTHMA	2
VISUAL IMPAIRMENT	3
HEARING IMPAIRMENT	4
MOBILITY IMPAIRMENT	5
LEARNING DIFFICULTIES	6
DON'T KNOW	7
OTHER *(specify)* _____	8
UNWILLING TO SAY / REFUSED	9

Q25 What would you say are your main concerns about X's health and safety?
Probe: What do you worry most about happening to X?

Q26 ***Interviewer,*** *read out:* People have different attitudes and beliefs about their children's health and safety. I would like to read you some sentences about looking after children and ask you what you think about them.

Interviewer: SHOW CARD A.

Interviewer, *read out*: To help you, this card shows a scale of numbers. If you strongly agree with one of the statements, say "one". If you strongly disagree, say "six". If you agree, but not strongly, you could say either "two" or "three". Do you understand? Is it clear?

Interviewer: *read out each statement and record which number the respondent gives.*
DO NOT READ OUT THE CODES (A, B, C, etc).
HINT: *If the respondent says, for example, "yes", probe "So, would you say that you agree with that statement?". Remind them to refer to the card, if necessary.*

Statement	CODE	strongly agree					strongly disagree
Doctors, nurses and health visitors keep my child from getting sick.	A	1	2	3	4	5	6
I have the ability to influence my child's well-being.	B	1	2	3	4	5	6
My child can avoid illness with regular professional care.	C	1	2	3	4	5	6
My child is in control of his/her own health.	D	1	2	3	4	5	6
Having regular contact with a doctor is the best way for my child to avoid illness.	E	1	2	3	4	5	6
Whether my child avoids injury is just a matter of luck.	F	1	2	3	4	5	6
My child is the one who determines his/her own well-being.	G	1	2	3	4	5	6
Only trained doctors, nurses and health visitors can influence my child's health.	H	1	2	3	4	5	6
God will decide what happens to my child's health.	I	1	2	3	4	5	6
Chance plays a big part in determining how healthy my child is.	J	1	2	3	4	5	6
I can do a lot to prevent my child from getting hurt.	K	1	2	3	4	5	6
My child's safety depends mostly on what my child does.	L	1	2	3	4	5	6
My child's well-being is in God's hands.	M	1	2	3	4	5	6
My child can decide to live a safe and healthy life.	N	1	2	3	4	5	6
I can do a lot to prevent my child from getting sick.	O	1	2	3	4	5	6
Whether my child avoids sickness is just a matter of chance.	P	1	2	3	4	5	6
The things I do at home with my child are an important part of my child's well-being.	Q	1	2	3	4	5	6
Doctors, nurses and health visitors control my child's well-being.	R	1	2	3	4	5	6
God will keep my child safe.	S	1	2	3	4	5	6
My child's safety depends on me.	T	1	2	3	4	5	6
My child can do a lot to avoid getting sick.	U	1	2	3	4	5	6
I can do a lot to help my child stay well.	V	1	2	3	4	5	6
My child's health is largely a matter of good fortune.	W	1	2	3	4	5	6
To a large degree my child can determine his/her own health.	X	1	2	3	4	5	6
I can do a lot to help my child be strong and healthy.	Y	1	2	3	4	5	6
Whether my child stays healthy or gets sick is just a matter of luck.	Z	1	2	3	4	5	6

FAMILY DETAILS

Finally, I need to ask some questions about you and your family. This is just to check that we have a representative mix of people in our survey.

Q27 ***Interviewer** record sex of respondent:*

MALE	1
FEMALE	2

Q28 Do you or your partner have any other children?

YES	1 *(go to Q29)*
NO	2 *(go to Q30)*

Q29 A) How old is he or she/are they?
(Write ages in table below and ask B), C), D) for each child)
B) Have you cared for him/her since birth?
C) Does he/she live with you?
D) Does he/she have any disability or health problem? What is the nature of this?

Age of child A)	Cared for since birth? B)	Live in this house? C)	Disability or health problem? D)
WRITE AGE	**CODES** YES 1 NO 2	**CODES** YES 1 NO 2	**CODES** NO DISABILITY/HEALTH PROBLEM 1 ASTHMA 2 VISUAL IMPAIRMENT 3 HEARING IMPAIRMENT 4 MOBILITY IMPAIRMENT 5 LEARNING DIFFICULTIES 6 DON'T KNOW 7 OTHER *(write above)* 8 UNWILLING TO SAY / REFUSED 9

Q30 At what age did you leave full-time education?

UNDER 16	1
ABOUT 16 (ie. after GCSEs / 'O' levels or equivalent)	2
ABOUT 18 (ie. after 'A' levels, diploma or equivalent)	3
21 OR MORE (ie. after degree or post-graduate qualification)	4

Q31 How old are you now? _____YEARS

Q32 Do you have any disability or health problem? What is the nature of this?

NO DISABILITY / HEALTH PROBLEM	1
ASTHMA	2
VISUAL IMPAIRMENT	3
HEARING IMPAIRMENT	4
MOBILITY IMPAIRMENT	5
LEARNING DIFFICULTIES	6
DON'T KNOW	7
OTHER *(specify)*_____	8
UNWILLING TO SAY / REFUSED	9

Q33 Which of the following best describes you? (SHOW CARD B)
RECORD 99 IF RESPONDENT UNWILLING TO SAY.

01 02 03 04 05 06 07 08 09 10 11 99

Q34 What relation are you to X? ***(READ OUT LIST AND CIRCLE ONE.)***

NATURAL PARENT	1 *(go to Q35)*
LEGAL GUARDIAN eg. Adoptive/foster parent *(specify)*_____	2 *(go to Q35)*
PAID CARER eg. nanny *(specify)*_____	3 *(go to Q48)*
UNPAID CARER eg. relative *(specify)*_____	4 *(go to Q48)*

ONLY ASK Q35 TO Q47 TO PARENTS OR LEGAL GUARDIANS

Q35 Which of the following best describes your current status? (SHOW CARD C)

MARRIED (ONCE ONLY)	1	*(go to Q36)*
MARRIED (TWICE OR MORE)	2	*(go to Q36)*
LIVING TOGETHER AS A COUPLE	3	*(go to Q36)*
SINGLE (NEVER MARRIED)	4	*(go to Q38)*
DIVORCED	5	*(go to Q38)*
SEPARATED	6	*(go to Q38)*
WIDOWED	7	*(go to Q38)*
REFUSED	9	*(go to* Q38)

INTERVIEWER: IF RESPONDENT DOES NOT HAVE LIVE-IN SPOUSE OR PARTNER, GO TO Q38.

Q36 *If respondent has live-in spouse or partner:* And which one best describes your partner? (SHOW CARD B.) *RECORD 99 IF RESPONDENT UNWILLING TO SAY.*

01 02 03 04 05 06 07 08 09 10 11 99

Q37 *If applicable:* How old is your partner? _____ YEARS

Q38 Who is the main wage earner in this household?

Respondent	1	*(go to Q40)*
Other household member	2	*(go to Q39)*

Q39 Do you work? *Probe:* Is that full-time or part-time?

FULL-TIME	1	*(go to Q40)*
PART-TIME	2	*(go to Q40)*
NO	3	*(go to Q39.1)*

If NO:

Q39.1 Do you intend to take up work in the future?

YES	1	*(go to Q39.2)*
NO	2	*(go to Q40)*
DON'T YET KNOW / UNSURE	3	*(go to Q40)*

If YES:

Q39.2 How old do you think X will be when you start work? _____ MONTHS

***INTERVIEWER:* The following questions refer to the main wage earner of the household. If the main wage earner is the respondent, the questions should be re-phrased. ie. use YOU instead of HE or SHE.**

Q40 Is the main wage earner / Are you in paid work?

Yes	1 *(go to Q43)*
No	2 *(go to Q41)*

Q41 Is HE/SHE...? ***(SHOW CARD D AND CIRCLE ONE.)***

Unemployed and looking for a job	1 *(go to Q42)*
Retired from paid work	2 *(go to Q43)*
In full-time or part-time education	3 *(go to Q47-code 3)*
On a government training scheme	4 *(go to Q47-code 6)*
Unable to work because of long term sickness or disability	5 *(go to Q47-code 6)*
Looking after home and/or family	6 *(go to Q47-code 6)*
Casual worker / no regular income	7 *(go to Q47-code 6)*

Q42 For how long has HE/SHE been unemployed and looking for work? *(Circle one)*

6 months, or less	1 *(go to Q43)*
more than six months	2 *(go to Q47-code 6)*

Q43 Does/did HE/SHE work full-time or part-time? *(Circle one)*

Full-time	1
Part-time	2

Q44 Is/was HE/SHE employed or self-employed? *(Circle one)*

Employed	1
Self-employed	2

Q45 What is/was HIS/HER industry/profession? *(Write in below.)*

_____

Q46 What is/was HIS/HER job there? (Write in below.)

_____

Q47 ***INTERVIEWER*** *to code job below.* ***CIRCLE ONE NUMBER.*** *(The socio-economic groups are provided on the left hand side for convenience only.)*

(A)	Professional person; very senior manager in business or commerce; top-level civil servant.	1
(B)	Middle management executive in large organisation; principal officer in local government or civil service; top management or owner of small business. concern, educational or service establishment.	2
(C1)	Junior management; owner of small establishment; other in non-manual position; in full-time or part-time education.	3
(C2)	Skilled manual worker; manual worker with responsibility for other people.	4
(D)	Semi-skilled or unskilled manual worker; apprentice / trainee to skilled workers.	5
(E)	Unemployed for more than 6 months; on a government employment or training scheme; unable to work through sickness or disability; looking after house and/or family; casual worker or no regular income.	6
(N/A)	Unable/unwilling to provide information	9

Ask all:

Q48 We have developed a series of booklets to help parents learn about protecting children from accidents. Would you like a copy of the first booklet? It's free.

YES 1 ➜ ***give respondent a booklet***

NO 2 ➜ **THANK AND TERMINATE INTERVIEW**

If YES:

Q48.1 I would like to call back in a few weeks time, after you've had the chance to look through it, and find out what you think of it. Would that be alright?

YES 1 *(go to* Q48.2)

NO 2 ➜ **THANK AND TERMINATE INTERVIEW**

INTERVIEWER RECORD LENGTH OF INTERVIEW: _____ ***MINUTES***

INTERVIEWER NAME AND REFERENCE NO: _____

RESPONDENT'S NAME: _____

BABY'S NAME: _____

If YES:

Q48.2 If it is convenient, I would like to arrange a time now to talk to you again, in about four weeks time. Would that be OK? ***(CIRCLE ONE)***

AGREED TO ARRANGE SECOND INTERVIEW NOW	1 ***RECORD DETAILS BELOW***
UNWILLING TO ARRANGE NOW	2 ***EXPLAIN IN BOX BELOW***
REFUSED	3 ***EXPLAIN IN BOX BELOW***

Use this space to explain why second interview not arranged and/or alternative arrangements.

Interviewer:

Record agreed day and date of next interview: _____

Record agreed time of interview: _____ AM / PM

Interview to be held

at clinic	1 → *complete appointment card*
at home	2 → *complete appointment card*
somewhere else	3 → *record address and complete appointment card*

Record address

Postcode: _____

Telephone number: _____

Interviewer: *complete details on appointment card, give to respondent and say:*

I've written down what we've arranged on this card. If you need to change it, you can call Joan Franklin and she will arrange a new time for you. Her number is written here on the card. Is that OK?

THANK AND TERMINATE INTERVIEW

REMEMBER TO ATTACH THE INTRODUCTION AND INTERVIEW APPOINTMENT SHEET TO THE FRONT OF THIS QUESTIONNAIRE.

Appendix C: Parent/carer questionnaire (post)

POST-TEST QUESTIONNAIRE

Interviewer name: _____

Ref. no: _____

Respondent's name: _____

Baby's name (X): _____

Date of interview: _____

Time interview started: _____

INTRODUCTION: Hello, my name is Y. I / a colleague of mine spoke to you a few weeks ago and arranged to come back and talk to you today. Do you remember? Is that convenient?

YES **→ *go to page 2***

NO

↓

Would it be possible to arrange a new time and date with you?

NO **→ THANK AND TERMINATE INTERVIEW**

YES

↓

Record agreed day and date of next interview: _____

Record agreed time of interview: _____AM / PM

Interview to be held at clinic 1 → *complete appointment card*
at home 2 → *record address and complete appointment card*
somewhere else 3 → *record address and complete appointment card*

Record address

Postcode: _____

Interviewer: *complete details on appointment card, give to respondent and say:*
I've written down what we've arranged on this card. If you need to change it, you can call Joan Franklin and she will arrange a new time for you. Her number is written here on the card. Is that OK?

Q1 Do you remember that I/my colleague gave you a booklet a few weeks ago?
YES 1 *(go to Q2)*
NO 2 *(go to Q1.1)*

Q1.1 *If no, show booklet:*
Do you remember it now?
YES 1 *(go to Q2)*
NO 2 *(go to Q1.2)*

Q1.2 It was about the safety of children. Do you think you might have looked at it?
YES 1 *(go to Q3 or Q3.1)*
NO 2 *(go to Q11 on page 7)*

Q2 Can you remember what the booklet was about in general?

CHILD SAFETY *(or similar)* mentioned	1
DON'T KNOW / CAN'T REMEMBER / FORGOTTEN	2
SOMETHING ELSE *(specify)*	3

Q3 ***If interviewed at home:*** Can you please show me your booklet?
INTERVIEWER: Take booklet and do not return until end of interview.

PRODUCED BOOKLET - IT LOOKED USED	1
PRODUCED BOOKLET - IT LOOKED UNUSED	2
UNABLE TO FIND IT	3
REFUSED	4

Q3.1 ***If interviewed away from home:*** Have you still got it at home?

YES	1
NO	2
THINK SO / PROBABLY	3
DON'T KNOW/CAN'T REMEMBER	4

Q4 How much of the booklet have you read?

NONE	*1*	*(go to Q4.1)*
SOME OF IT	*2*	*(go to Q5)*
MOST OF IT	*3*	*(go to Q5)*
ALL OF IT	*4*	*(go to Q5)*
DON'T KNOW / CAN'T REMEMBER	*5*	*(go to Q5)*

Q4.1 *If NONE:*
May I ask you why you decided not to read it?

go to Q11 on page 7

INTERVIEWER: *IF RESPONDENT HAS READ **NONE** OF THE BOOKLET (SEE Q4), NOW GO TO Q11 ON PAGE 7.*

Q5 Inside the booklet, there was a large loose sheet. Can you remember what it was about?

RESUSCITATION / WHAT TO DO IF X IN UNCONSCIOUS *(or similar)*	*1*	*(go to Q5.2)*
DON'T KNOW / UNSURE / CAN'T REMEMBER	*2*	*(go to Q5.1)*
SOMETHING ELSE *(specify)* _____	*3*	*(go to Q5.1)*

Q5.1 It was about the resuscitation of babies. It told you what to do if your baby is unconscious and not breathing. Do you remember it now?

YES	*1*	*(go to Q5.2)*
NO	*2*	*(show the sheet. If still can't remember it, go to Q6)*
NOT SURE	*3*	*(show the sheet. If still can't remember it, go to Q6)*

Q5.2 Did you read it?

YES	*1*	*(go to Q5.3)*
NO	*2*	*(go to Q5.4)*
DON'T KNOW / UNSURE / CAN'T REMEMBER	*3*	*(go to Q5.4)*

Q5.3 Did you understand it?

YES	1
NO	2
NOT SURE	3
CAN'T REMEMBER	4

Q5.4 Where is the sheet now? ***DO NOT PROMPT.***
Probe: What did you do with the sheet after you read it?

PINNED ON THE WALL	1
SOMEWHERE ELSE EASILY ACCESSIBLE IN AN EMERGENCY *(specify)* _____	2
THREW IT AWAY	3
IN THE BOOK	4
DON'T KNOW	5
OTHER *(specify)* _____	6

Q6 ***If read some or all of booklet (see Q4):***
Can I ask you to tell me about any of the articles you remember reading in the booklet? What did you think of them?

Interviewer: *Circle 1 for each item mentioned unprompted and make a note of comments in the right hand column. After each item, say "Anything else?".*

Interviewer: *For each item not mentioned, read out the article description and ask whether they read it. Circle 2, 3 or 4.* ***Do not read out the article names (in brackets) - for your info only.***

Q6.1 ***If doesn't know or can't remember whether read booklet (see Q4)*** :
Maybe if I ask you about some of the articles in the booklet, you could tell me if you remember reading them and what you thought of them.

Interviewer: *Read out each item and ask whether they remember reading it. Circle 2, 3 or 4. Record comments.*

Article	YES UNPROMPTED	YES PROMPTED	D/K OR C/R	NO	Comments
Starting to sit up, then crawling, standing and climbing *(Times to treasure)*	1	2	3	4	
The story about Steve at home with Rosie when the chip pan catches fire *(Steve's story)*	1	2	3	4	
Keeping safe in the bath *(Bath time-splash time)*	1	2	3	4	
Questions and Answers *(Can we help you)*	1	2	3	4	
Hazards in the home *(Safe as houses)*	1	2	3	4	
Keeping safe in bed *Good night-sleep tight)*	1	2	3	4	
When your baby is unwell	1	2	3	4	
Safety equipment - advice and tips	1	2	3	4	
How to prevent falls *(All fall down)*	1	2	3	4	
Belting up in the car *(Do you belt your children?)*	1	2	3	4	
Making sure baby seat fits properly *(Fit for your child)*	1	2	3	4	
Which type of baby seat to buy	1	2	3	4	
Tips from other parents	1	2	3	4	
First Aid	1	2	3	4	

Q7 What about the puzzles and quizzes? Did you do any of them?
YES 1 *(go to Q7.1)*
NO 2 *(go to Q8)*

Q7.1 Do you remember what the puzzles were about?

Circle 1 for each mentioned unprompted. After each response, say "Anything else?". Read out each item mentioned and ask whether they did it, then circle 2, 3 or 4.

Article name	yes **unprompted**	yes **prompted**	unsure / can't remember	no	Comments
Spotting safe and unsafe things that Mandy did with Liam *(Pitfalls)*	1	2	3	4	
Spotting hazards in a picture.	1	2	3	4	
Quiz about safety in bed	1	2	3	4	
Word search (Safety maze)	1	2	3	4	

Q8 Overall, which part of the magazine did you find the most useful?

Q8.1 And which part did you enjoy the most?

Q9 Overall, did you like the booklet... ***READ OUT LIST AND CIRCLE ONE***
A LOT 1 *(go to Q9.2)*
A BIT 2 *(go to Q9.1)*
NOT MUCH 3 *(go to Q9.1)*
NOT AT ALL 4 *(go to Q9.1)*

Q9.1 *If not "A LOT":*
What was it about the booklet that you didn't particularly like? How do you think it could be improved?

Q9.2 Was there anything in the booklet that you didn't understand, or that you felt wasn't very clear?
YES 1 *(go to Q9.3)*
NO 2 *(go to Q10)*

Q9.3 What was it that you didn't understand? Was it a particular article that was unclear? (Which one?)

Q10 Was there any new information or advice in the booklet that you had not heard or seen before?
YES 1 *(go to Q10.1)*
NO 2 *(go to Q11)*

Q10.1 What was it? What did you learn?

Q10.2 Have you done anything new because of the book?
YES 1 *(go to Q10.3)*
NO 2 *(go to Q11)*
NOT APPLICABLE 3 *(go to Q11)*

Q10.3 How have you done this? How much did it cost you to do it? How do you think it has helped X?

Q11 It is intended to produce a series of these booklets, covering child development and safety. What do you think about this?

Q11.1 Is it a good idea?

YES	1
NO	2
DON'T KNOW	3
MAYBE / DEPENDS *(specify)*	4

Q11.2 What age do you think the series should go up to?

Q11.3 Would you like to read the rest of the series as X gets older?

YES	1
NO	2
DON'T KNOW	3
MAYBE / DEPENDS *(specify)*	4

Q12 Would you buy this booklet if it were available in the shops?

YES	1 *(go to Q12.1)*
NO	2 *(go to Q12.3)*
DEPENDS *(specify)*	3 *(go to Q12.1)*
DON'T KNOW/UNSURE	4 *(go to Q12.3)*

Q12.1 How much would you pay for it? £

Probe: Well, would be you be prepared to pay *anything* for it? Or would you only get it if it were free?

Q12.2 Where do you think would be a good place to sell it? *Probe:* Anywhere else?

go to Q12.4

Q12.3 Why not? ***OR*** Why are you unsure?

Q12.4 If the booklet were to be free, where do you think it should be put so that as many parents and carers as possible get it? *Prompt:* How about GP surgeries, ante-natal clinics or hospitals? *Probe:* Anywhere else?

SAFETY MEASURES

Now, I would like to ask you a few questions about things that you and X do together.

Q13 Could you tell me about what you do when you bathe X. How do you make sure that he/she is safe?
Probe: Well, maybe you have a baby bath?
How do you check if the water is not too hot or too cold?

Q14 What about when you put X down to sleep. Which way do you put him/her down to sleep?
Prompt: On his/her front, side or back? Do you always do this?

ALWAYS ON FRONT	1
ALWAYS ON SIDE	2
ALWAYS ON BACK	3
VARIES *(describe)*	4

Q14.1 How do you know if he/she is too hot or too cold in bed?
Prompt: Maybe you would touch him/her? If so, which part of his/her body would you touch?

Q14.2 Are some types of bedding safer than others?
If yes, probe: Which types do you think are the safest?

Q15 Do you have a smoke alarm in your house/flat?

YES	1
NO	2

SMOKING

Q16 Do you think any of your friends or family might smoke in the same room as X?

YES	1 *(go to Q16.2)*
NO	2 *(go to Q16.1)*
UNSURE / DON'T KNOW	3 *(go to Q16.2)*

Q16.1 Why is this?

Q16.2 Do you think that people smoking around X could harm him/her)?

YES	1	*(go to Q16.3)*
NO	2	*(go to Q17)*
DON'T KNOW	3	*(go to Q17)*

Q16.3 *IF YES:* How do you think it could harm him/her?

TRAVELLING IN A CAR

Q17 Do you or another adult ever take X out in a car?

YES	1	*(go to Q17.1)*
NO	2	*(go to Q17.2)*

IF YES:

Q17.1 What precautions, if any, do you take to make sure that X is safe when he/she is in the car?
Prompt: Do you maybe have a baby seat for X?

EMERGENCIES

Q17.2 Would you know what to do if X was choking? *Probe:* What would you do?

Q17.3 What about if he/she was burnt or scalded whilst at home. What would you do?

Q18 Do you have a stair gate in your home?

YES	1
NO	2

Q19 Can X crawl yet?

YES	1
NO	2

Ask All:

Q20 Would you know what to do if your baby had a nasty fall? *Probe:* What would you do?

Q21 How do you think you would know if your baby was very ill?
Probe: What do you think the symptoms might be?

Q22 ***Interviewer, read out:*** You may remember that, when I spoke to you last time, I read a list of statements to you and asked you whether you agreed or disagreed with them. I would like to do the same thing again, to see if you still feel the same way as you did last time.

Interviewer: SHOW CARD A.

Interviewer, read out: This card is the one we used last time. It shows a scale of numbers. If you strongly agree with one of the statements, say "one". If you strongly disagree, say "six". If you agree, but not strongly, you could say either "two" or "three". Do you remember it? Is it clear?

Interviewer: *read out each statement and record which number the respondent gives.*
DO NOT READ OUT THE CODES (A, B, C, etc).
HINT: *If the respondent says, for example, "yes", probe "So, would you say that you agree with that statement?" Remind them to refer to the card, if necessary.*

Statement	CODE	**strongly agree**					**strongly disagree**
Doctors, nurses and health visitors keep my child from getting sick.	A	1	2	3	4	5	6
I have the ability to influence my child's well-being.	B	1	2	3	4	5	6
My child can avoid illness with regular professional care.	C	1	2	3	4	5	6
My child is in control of his/her own health.	D	1	2	3	4	5	6
Having regular contact with a doctor is the best way for my child to avoid illness.	E	1	2	3	4	5	6
Whether my child avoids injury is just a matter of luck.	F	1	2	3	4	5	6
My child is the one who determines his/her own well-being.	G	1	2	3	4	5	6
Only trained doctors, nurses and health visitors can influence my child's health.	H	1	2	3	4	5	6
God will decide what happens to my child's health.	I	1	2	3	4	5	6
Chance plays a big part in determining how healthy my child is.	J	1	2	3	4	5	6
I can do a lot to prevent my child from getting hurt.	K	1	2	3	4	5	6
My child's safety depends mostly on what my child does.	L	1	2	3	4	5	6
My child's well-being is in God's hands.	M	1	2	3	4	5	6
My child can decide to live a safe and healthy life.	N	1	2	3	4	5	6
I can do a lot to prevent my child from getting sick.	O	1	2	3	4	5	6
Whether my child avoids sickness is just a matter of chance.	P	1	2	3	4	5	6
The things I do at home with my child are an important part of my child's well-being.	Q	1	2	3	4	5	6
Doctors, nurses and health visitors control my child's well-being.	R	1	2	3	4	5	6
God will keep my child safe.	S	1	2	3	4	5	6
My child's safety depends on me.	T	1	2	3	4	5	6
My child can do a lot to avoid getting sick.	U	1	2	3	4	5	6
I can do a lot to help my child stay well.	V	1	2	3	4	5	6
My child's health is largely a matter of good fortune.	W	1	2	3	4	5	6
To a large degree my child can determine his/her own health.	X	1	2	3	4	5	6
I can do a lot to help my child be strong and healthy.	Y	1	2	3	4	5	6
Whether my child stays healthy or gets sick is just a matter of luck.	Z	1	2	3	4	5	6

THANK AND TERMINATE INTERVIEW

INTERVIEWER RECORD LENGTH OF INTERVIEW: _____ **MINUTES**

Appendix D: Health Visitor post-evaluation questionnaire

TELEPHONE INTERVIEW WITH HEALTH PROFESSIONALS

CLINIC:_____ INTERVIEWER'S NAME _____

HEALTH PROFESSIONAL'S NAME _____ DATE _____

Thank you very much for the help you have given when we used your clinic/centre to ask parents about the 'One Step Ahead' magazine.

I would like to ask you a few questions about how you feel the magazine was received.

1 Do you think that parents have used the magazine, and will refer to it?

2 Can you tell me of any particular reactions to it?

3 What about you and your colleagues? Did you think the magazine contained useful information?

4 Do you think it is a good idea to produce a magazine like this?

5 Are there other materials which are as good, or better? (What are they?)

6 If the magazine is produced, where do you think it should be available?

7 Would you be willing to distribute it yourself?

8 Should it be free or a charge made for it?

9 It is hoped to produce a series of magazines for different age groups which will be given to the parent as each child gets older. Do you think this is a good idea?

Thank you very much for the help you have given us.

INTERVIEWER'S COMMENTS

Abstract

One in every five children, aged 0 to 4, requires hospital treatment for an accident every year, and nearly 300 die from their injuries. Children from lower income families are much more likely to be killed in an accident than the children in other families. Parents and carers need to know how to prevent accidents, and how to help their children learn to avoid danger. Group training is not an effective way to reach parents from lower income groups; a direct approach to individual parents supported by a professional, such as a Health Visitor, seemed both the most successful and the most welcome to parents. Materials for parents should be developmental, colourful, with a low reading age, and distributed either through welfare channels or through some commercial organisation serving lower income families.

This report reviews the need for additional safety materials, describes the development and design of four booklets providing safety advice for the parents of young children and reports the pre-experimental evaluation of the first booklet, for the parents of babies between birth and nine months old.

Related publications

PR116 *Social, economic and environmental factors in child pedestrian accidents: a research review* by N Christie. 1995 (price £20, code E)

PR117 *The high risk child pedestrian: socio-economic and environmental factors in their accidents* by N Christie. 1995 (price £30, code H)

PR99 *The effectiveness of the General Accident Eastern Region Children's Traffic Club* by K Bryan-Brown. 1994 (price £30, code H)

CT45.1 Child safety on the road update (1993-1996). *Current Topics in Transport: abstracts selected from TRL Library's Database (price £15)*

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