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What Teachers need to know about child pedestrian safety: Pointers for your next lesson

New approaches focus on practical training and should begin as soon as children start school

Child pedestrian road accidents are 56% higher in the UK compared with other European countries.

Increased car use

Paradoxically, the reduction in child pedestrian casualty figures achieved before the nineties may be due to increased car use due to the dangerous road environment (Hillman et al., 1990). Between 1971 and 1991 the percentage of 7 and 8 year old children travelling to school alone dropped from 80% to 9%. Unfortunately this also reduced opportunities to practice pedestrian skills.

Road accident rates rise with age, peaking at about twelve years of age. Boys, and children from lower socio-economic groups, display higher rates, though these may be due to greater exposure. Such children are allowed more freedom on the roads without adult supervision.

Increased exposure is associated with higher accident rates, though Demetre (1997) suggests that safe behaviour can only be attained through a degree of exposure on real roads. Also evidence exists linking accidents with dimensions which could be labelled 'problem behaviour', for example delinquency, deprived background, dangerous behaviour and aggression.

West et al. (1999) obtained measures of anti-social behaviour such as theft, violence, vandalism, fighting, and bullying, using self-report, parent, and teacher ratings, in a sample of 581 children. Problem behaviour was found to be a strong predictor of road accidents. Most accidents involved older children (11-16 years of age) occur while crossing or waiting to cross the road, while with younger children they tend to occur while playing (Christie, 1995).

Reducing casualty rates

Government attempts to reduce casualty rates can broadly be divided into engineering and educational. No one who drives in a city can have failed to notice a range of traffic calming measures such as narrowing roads, creating more pedestrian 'islands', and the infamous speed 'humps'. Educational measures have traditionally been conducted in the classroom using the Green Cross Code, or stop, look, listen, think, for under 7 year olds.

However, as Thomson et al. (1996) point out...
The instruction to ‘first find a safe place’ clearly overestimates the ability of young children to carry out this instruction.

Visual timing
Visual timing involves for example time-to-contact judgements, requiring consideration of both speed and distance, and these are poor in children (Lee et al., 1984).

At certain stages of development, children tend to focus on one aspect exclusively (e.g. distance), and are unable to take both into account simultaneously (Piaget, 1965).

Co-ordinating information
Children also need to co-ordinate information from different directions, which entails performing two or more tasks at the same time, and switching attention. The ability to do this efficiently improves with age (e.g. Dunbar et al., 1999), as does the ability to identify relevant information leading to decisions about behaviour.

Co-ordinating information and action
Finally, co-ordinating perception and action involves relating time available to time required to cross. One aspect is the judgement of ‘safe gaps’ between moving cars.

Lee et al. (1984) used the clever method of setting up a ‘pretend road’ alongside a real road, and asked children to cross it when it was safe to do so on the real road. Around 45% of safe gaps were refused by 5-7 year-olds (compared with 10% for adults), but ‘tight fits’ were accepted on 9% of available gaps, with potentially severe consequences on the real road. Mistakes made on the pretend road can be used to promote safer behaviour.

A related aspect involves the construction of ‘pedestrian strategies’. Wittebreed and Neelands (1990) found evidence of a developmental change, at around 7-8 years of age, when children move from continuous information sampling to making predictions, which appears to be related to the development of general cognitive abilities. It is suggested that safety training should focus more on the development of safe strategies for crossing the road.

The role of education
What are the implications for the role of education?

Road safety education needs to begin as soon as children go to school
It is now accepted that children are capable of acquiring quite complex skills, through appropriate training, at a much younger age than was thought possible.

The emphasis needs to be on practical training, in as real an environment as possible.

Children should be taught specific skills at the roadside as far as this is possible. Thomson et al. (1990) suggest grouping up to 4-5 children, and asking one child to choose a safe place, to identify dangerous features, or when it is safe to cross, etc. The others may then be asked to comment on the merits of the choice. The peer interaction aspect of ensuing discussion can be very conducive to learning. Another child can then take the lead. Varying roles will facilitate the ability to see events from differing perspectives.

Substantial improvements have been obtained with six half-hour sessions using this method. Where this is not practical other techniques may be viable.

Some schools may be able to set up pretend roads if a playground runs alongside a real road, a real road may be blocked off for a period of time, or mock-ups are possible in the playground. Also, in time, research may lead to classroom alternatives based on table top models, or video-training.

Classroom activities can have an important role Discussion in a classroom should be used to support any practical training. It can help to make children think about the differing possibilities, and it will expand and develop their concepts.

Other materials, such as books, films, and videos can also contribute in this way. Such discussions can be used to encourage the conceptual transition from visual search to making predictions about opportunities to cross.

Parents are a valuable resource for teaching safety skills
This may be difficult for many adults who are accustomed to taking charge at the roadside, and allowing children (especially very young children) no autonomy.

Training may be required, but the adult must encourage the child to make decisions, and Thomson et al. (1990) cite the work by Wood (1983) on the optimal adult role.

The strategy is to reinforce successful behaviour with general verbal prompts, but to intervene and demonstrate specific behaviour when behaviour is completely unsuccessful, reverting to general prompts when improvement occurs.
Sex Education & Parental Attitudes

Findings from a survey by Marie Stopes International showed that:

- More than 40% of women who had a miscarriage believed that the parents should be held responsible for the sex education of their children.
- Nearly two-thirds of parents (60%) did not feel embarrassed or uncomfortable talking about sex with their children.
- Almost every fifth child (19%) did not feel equipped with the necessary information to discuss sex with their children.
- Parents today are more likely to discuss the emotional aspects of relationships than the functional details or risks associated with sex.
- Parents are concerned about the lack of active participation in their children's sex education.
- Children's lack of knowledge about sex education.

The results suggested that significant numbers of parents were putting off discussions on certain core aspects of the subject until the point at which their children had almost entered adulthood.

The survey was based on a sample of 2000 adults who had children under 15 years of age. The survey was conducted in-home using CATI (Computer Assisted Personal Interview), and due to the sensitive nature of the subject and to increase the likelihood of respondents taking part in the survey, the survey was self-completed. On the surface, the respondents displayed a fairly open attitude towards sex education. Parents acknowledged their principal responsibility for educating their children about sex and signalled their intention to tackle most of the key issues. Yet there appears to be some disparity between the good intentions displayed by parents and the reality of what they will or will not discuss, with significant numbers deferring discussion about some of the more graphic and difficult aspects of sex until their children are almost in adulthood.

For further information about the "Explorations Survey" contact
The Press Office at Marie Stopes International
Tel: 020 7574 7252 e-mail
www.mariestopes.org.uk/explorations_survey.html

EUROPEAN HEALTHY SCHOOLS AND DRUGS

Innovation in school-based drug prevention

TACADE

TACADE is currently involved with nine European partner organisations on a project to develop improved and innovative concepts and practices in school-based drug prevention (SBPD). The project started in 1998 and focuses on the exchange of information and experience between the partners, based in Belgium, Finland, France, Ireland, Luxembourg, the Netherlands, Norway and Spain. The initial outcomes of the first year of the ESHD project showed that there was a great similarity between the background philosophies of SBPD programmes in the participating countries. The next two phases of the ESHD programme will cover aspects of:

- the implementation of school-based drug prevention projects
- school level monitoring of drug use and drug perception
- the evaluation of school-based drug prevention
- stakeholder involvement in drug prevention in schools
- the social climate in schools as a factor for drug prevention

TACADE will be co-ordinating the implementation element in partnership with Leefestel (Belgium) and the Marino Institute of Education (Ireland) and will be partnering other organisations to examine the social climate of the project.

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