

**Summary:**

# **Six years old children and crossing of roads**

Since the end of the 1970s the trend of the health risk in traffic has been more favourable for children than for the whole population, and more favourable the younger the children. This tendency ceased at the end of the 1980s. The health hazard for children has been fairly constant for the last 10 to 15 years. This indicates a need for more extensive and new measures to further reduce the health hazard.

As active road-users, children are primarily injured or killed as pedestrians. Approximately  $\frac{3}{4}$  of pedestrian accidents involving children are related to children crossing the road. The lowering in 1997 of the age for starting school brought six-year olds out onto the road to school. Children of six are less able to manage in traffic than seven years olds. Accordingly, there is reason to be particularly aware of the problems of the 6 year old.

Measures aimed at children at early school age should therefore target the problems they have crossing the road as pedestrians.

In this study an experiment was carried out trying to influence children's traffic behaviour by training. The main purpose of the training was to teach the children to look for safe spots to cross the road.

The study was carried out as an experiment. A sample of 44 children was tested (before-test) on the road in order to determine the routes they chose when they had to walk from one place to another. In most cases this entailed crossing a road. Half of the children were selected at random to be trained (test group) while the other half served as a control group. After training, children in both test group and control group were retested (after-test) in the same way as for the before-test.

Training was based on the use of a model (scale 1:40) representing various traffic environments. By explanations and illustrations using the model, correct and incorrect behaviour was demonstrated. Getting children to understand why certain behaviour is wrong and other behaviour is right was emphasised. This was achieved by building up knowledge gradually. By moving cars and pedestrians on the roads/pavements of the model, children were able to practise the correct behaviour.

Subjects brought up during training were, inter alia, use of pavements, pedestrian crossings and signalised crossings. A considerable part of training was aimed at making the children understand the importance of a clear view and the dangers that obstructions to a clear view may involve. The children were taught in groups of two or three. They underwent five periods of training, each period lasting for 30 minutes on average.

A comparison of the performance on the before and after tests showed a larger improvement in the test group than in the control group. Training seems to provide children with an improved basis for choosing a safer route from one place to another.

Training of children in real traffic will probably be the most effective method but at the same time demanding more resources. Theoretical classroom teaching will demand less resources but will probably have little effect. With this in mind, the use of models for training can be an interesting alternative.

The choice of a spot for crossing was the main theme in the study. For children to cross safely they also need to know when to cross. This was not brought up during training. In addition, the impulsiveness of children is a problem. It may lead to dangerous behaviour even though children possess the knowledge of what constitutes correct behaviour.