

## Press release

Leidschendam, 17 November 2009

### **New method gives more accurate figures on seriously injured casualties**

**A new method which was developed by SWOV makes it possible to determine the annual number of seriously injured road crash casualties more accurately than had been possible until now. This is one of the conclusions in the SWOV study [Seriously injured road crash casualties in the Netherlands in the period 1993-2008](#). The method makes use of the international standard MAIS to determine the injury severity of casualties.**

The Dutch road safety target is expressed in fatalities and injured: a maximum of 500 fatalities and 12,250 injured in 2020. In recent years, 'injured' has been used in the meaning of in-patients. Traditionally an in-patient is a traffic casualty who has spent at least one night in hospital. However, research has shown that 'admitted to hospital' is not necessarily the same as 'seriously injured'. For example, sometimes casualties who are not seriously injured are admitted to hospital for observation. According to the definition these casualties are indeed in-patients although they have not sustained serious injury. Therefore a new definition of seriously injured was necessary and the Minister of Transport followed SWOV's recommendation to only take the real seriously injured into consideration for future road safety assessments.

The international measure Maximum Abbreviated Injury Score (MAIS) describes the injury severity of a casualty. Using the new method, all casualties who have been admitted to hospital and have a minimum MAIS of 2 are considered to be seriously injured. To gain insight into the development of the number of seriously injured according to this new definition SWOV made a time series for the years 1993-2008. This required linking the data file BRON which contains the casualty data registered by the police, and the data file LMR which contains the discharge data of patients who are admitted to a Dutch hospital. The SWOV study shows that this linking and estimation procedure gives a reliable real number of seriously injured casualties.

The two data files were linked for the period 1993-2008. This linkage shows a downward trend of the number of seriously injured casualties from 17,900 in 1993 to 15,300 in 2006. It must be noted, however, that the number of seriously injured once more increased during the two following years to reach 17,600 in 2008. The development of the real number of seriously injured therefore deviates in

a negative direction from the development of the real number of traffic fatalities. Not only does the number of traffic fatalities show a stronger decrease than the number of seriously injured, neither does it show an increase as is the case for the seriously injured casualties. Further research is required to obtain clarity about the factors that have an influence on the unexpectedly high numbers of seriously injured casualties in recent years.

The SWOV study has indicated that it is possible to use the data files BRON and LMR to obtain reliable estimates about the real number of traffic casualties. SWOV therefore recommends to use the new method from now on to obtain reliable estimates about the real number of road crash casualties. In addition, SWOV also recommends to use this new method as a basis for formulating future targets for road safety policy.

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**For the editor:**

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**About SWOV**

The Institute for Scientific Research SWOV has been carrying out fundamental and anticipatory research into road safety for over 45 years now and has a position of knowledge and information centre on this subject. It aims at road safety improvement by making use of the results from scientific research.

More information about SWOV is available on its website [www.swov.nl](http://www.swov.nl)

