



Impaired Vision and accident risks

Conclusions

The most important conclusions of the studies presented and of the discussions during the workshop are stated below:

1. There is a link between impaired vision and accident rates.
2. There also is a link between impaired vision and increasing age. This applies to all forms of vision:
 - a) **visual acuity**: becoming older means a decrease of the visual acuity. This process often goes on so slowly, that people don't notice that their visual acuity becomes worse. They therefore overestimate their visual powers. In many cases, the visual acuity of drivers is below the legal standards without them realising it. This can be the cause of traffic accidents.
 - b) **visual field**: the loss of visual field can be the cause of a traffic accident. Especially amongst the older population, visual field defects can occur in the form of glaucoma.
 - c) **twilight vision and glare sensitivity**: a relatively high percentage of the driving population has problems with twilight vision and with glare sensitivity. These problems occur more often with increasing age. Problems with twilight vision and glare sensitivity can be the cause of accidents, especially at night time. There is a proven link between rear-end collisions at night time and impaired twilight vision / increased sensitivity.
3. Given the link between age, impaired vision and accident rates, each driver should undergo regular eye checks. Such eye checks could prevent accidents. Minor eyesight problems concerning glare and twilight vision start between the age of 50 and 55, whereas major problems concerning visual acuity and glare (cataract) and visual field (glaucoma, age related maculopathy) start between the age of 60 and 65. Therefore, eye checks should start at the age of 60 and thereafter take place every 5 years.