

**PLEASE NOTE**

This SWOV Fact sheet has been archived and will no longer be updated.  
Recently updated SWOV Fact sheets can be found on [swov.nl/fact-sheets](http://swov.nl/fact-sheets).

# SWOV Fact sheet

## Post-licence training for novice drivers

### Summary

In recent years much attention has been paid in the European Union to post-licence training for novice drivers. Young novice drivers are involved in crashes far more often than drivers who have more experience. For this reason, post-licence training courses have been started up in many European countries to improve novice drivers' traffic insight and self-assessment, as well as (occasionally) their skills. However, not all training courses result in a substantial reduction in the number of crashes involving novice drivers. One reason for this is that training their skills sometimes gives these drivers the idea that they can tackle anything, with the result that they actually drive less carefully. The European ADVANCED project has therefore drawn up rules which post-licence training courses for novices have to comply with. However, evaluation studies have shown that this also does not always have the desired effect. It is recommended that only such post-licence training courses as have been proved to have a positive effect on attitudes and behaviour in traffic should be permitted.

### Background

The crash rate for young novice drivers (18-24 years) is over four times higher than for experienced drivers (30-59 years). The crash rate for young men is over six times higher. Novice drivers lack traffic insight, and they are not yet able to synchronise the tasks required in traffic with their own capabilities. In turn, this is linked to an *overestimation* of their own abilities, an *underestimation* of the dangers, and a *longing* for excitement and sensation. It takes years before a person has gained enough driving experience for the crash rate to decline substantially (see the SWOV fact sheet [Young novice drivers](#)).

Post-licence training courses, also known as second phase training or refresher days, are seen as a way to accelerate the process of learning by practical experience. However, research has shown that not all advanced training has a positive effect on the crash rate of novice drivers. A greater effect can be expected from accompanied driving, and especially from the graduated driving licence (see the SWOV fact sheets [Accompanied driving](#) and [The graduated driving licence](#)).

### What do we mean by post-licence training?

The idea behind the post-licence training for novices is that lessons in traffic insight and self-assessment as a driver have little effect during initial driver training. A certain amount of driving experience as an independent driver is essential. Post-licence training, which is provided several months after the driving test has been passed, is usually given in the form of a one-day course. The aim of this post-licence training course is to improve hazard perception and reduce risk acceptance, curb over-confidence, and increase traffic insight. Sometimes post-licence training courses for novices also teach complex skills that are used relatively infrequently, such as how to manoeuvre a car out of a skid or perform an emergency stop. A training ground is used for this purpose.

In a number of countries, such as Finland, Luxemburg, Austria, Estonia and Switzerland, a second-phase training course is a compulsory part of the training trajectory. In a number of other European countries, including the Netherlands, post-licence training for novices is voluntary. In principle, post-licence training for novices is intended for all novice drivers. In some countries, there are also compulsory courses for novice drivers who have been guilty of a violation. This is known as *driver-improvement training*. These compulsory courses are usually carried out as part of a demerit points system. This type of driver-improvement training is not discussed in this fact sheet (For the effects of these courses see the SWOV fact sheet [Demerit points systems](#)).

### *From training skills to training traffic insight and self-assessment*

A striking development that has stood out over the years is the shift from training skills to training traffic insight and self-assessment. Until the end of the 1980s, every novice driver in Norway was required to follow a course for driving on slippery roads. This was, in fact, a short anti-skid course. A crash analysis showed that novice drivers who had followed the course actually had more crashes

rather than fewer. Many studies carried out subsequently, showed that short skills training courses for controlling situations that occur relatively infrequently, have the reverse effect on road safety (Elvik & Vaa, 2004). This applies to both novices and more experienced drivers. In the meantime, the anti-skid course for novices is no longer compulsory in Norway.

### **What are the effects of the present post-licence training courses for novice drivers?**

#### *Finland*

In Finland, a compulsory post-licence training course was introduced at the beginning of the 1990s which was largely used as the model for the ten golden rules of the ADVANCED project (see the following page). Novice drivers are required to follow this course within six months of receiving their provisional licence at the earliest, and two years after at the latest. The course consists of filling in a questionnaire about their own driving behaviour, a test drive with a driving instructor to evaluate their driving style, participating in dangerous situations on a driver training ground (with a maximum of six trainees at the same time), and a group discussion with a maximum of twelve participants. The effects of this driver training course on the crash rate were examined with the aid of questionnaires, supplemented by data from insurance companies (Keskinen et al. 1999). For this purpose, novice drivers from before the introduction of the compulsory driver training course were compared with novice drivers after its introduction. No reduction of the crash rate was noted after the post-licence training in the first eighteen months of being in possession of a driving licence. However, there were substantial statistical differences between measurements taken two, three and four years after obtaining the provisional driving licence amongst those who had participated in the post-licence training course and those who had not. However, in a marginal note, the authors stated that it was not possible to correct for the fact that developments in the control group and the experimental group did not run parallel. This means that the effects ascertained during the research could have been the result of causes other than the post-licence training. For example, it is possible that economic developments in Finland have led to more novices driving newer and therefore safer cars.

#### *Luxembourg*

Peräaho et al. (2000) studied the effect of the introduction of compulsory post-licence training courses in Luxembourg. The purpose was to compare the crash rate of people who had not yet followed the post-licence training course and those who had just completed it. No significant differences in crash rate were found amongst men, but amongst women there was a significant increase in the crash rate as a result of taking the post-licence training course. It is possible that because the post-licence training in Luxembourg is mainly a driving skills training course, it has no effect, or even the opposite effect to that intended.

#### *Germany*

In Germany, the effect of voluntary post-licence training was studied by Henning, Chaselon & Schulz (1994). This was a post-licence training course within the framework of the 'Jugend fährt sicher' (Young people drive safely) project. It showed that the crash rate for those who had followed the post-licence training course was slightly lower than for those who had not. The difference was statistically significant, but in absolute terms the effect was very small. It is possible that all or part of the effect was not brought about by the course content, but by the personalities of the novice drivers who opted for this voluntary course: people who are careful by nature are possibly more inclined to attend this type of course than those who are not (see the subsection about 'volunteer bias' in the SWOV fact sheet [Contents and evaluation of road safety education programmes](#)).

#### *Sweden*

A voluntary post-licence training course was also evaluated in Sweden (Nyberg & Engström, 1999). This evaluation only looked at whether the training course had led to changes in knowledge, self-reported behaviour and attitudes. The course led to a higher percentage of drivers claiming they consistently wore their seatbelts. However, no positive effects regarding driving speed, vehicle spacing or adapting to (weather) conditions could be determined as a result of the post-licence training course.

#### *Austria*

In Austria positive results were achieved with compulsory post-licence training. The first analyses show an average reduction of 28% per annum in the number of crashes with injury involving young

drivers (Gatscha & Brandstätter, 2007). After obtaining their driving licence, young drivers have to return on *three* occasions for a training course consisting of the following parts:

- Driving skills analysis: between two and four months after obtaining their driving licence, the novice drivers undertake a two-hour drive with a driving instructor. During the drive, the driving instructor provides feedback regarding individual driving style, and pays special attention to observation behaviour, defensive driving and social interaction in traffic.
- Road safety training: between three and six months after obtaining their driving licence, the novice drivers participate in a training of approximately six hours on the driver training ground. The purpose of the training is to increase the participants' awareness and skills, to enable them to anticipate critical situations better, i.e. how to avoid or avert such situations, or how to minimize their consequences.
- Psychological group discussion: a two-hour group discussion is held on the same day as the road safety training course. A number of risk situations are discussed under the leadership of a psychologist (for instance single-vehicle crashes) including underlying factors such as overestimating one's skills, and one's responsibilities in traffic.
- Driving skills analysis: between six and twelve months after obtaining their driving licence, a second drive is carried out with the driving instructor. During the drive, particular attention is paid to how they have developed since the first driving skills analysis.

#### *The Netherlands*

The Dutch post-licence training course 'Alcohol-free on the road' has a somewhat different content. During this course, novice drivers are given the opportunity to experience for themselves the effects of alcohol on their ability to drive. Police statistics show that young people who have participated in this programme are less inclined to drive under the influence of alcohol (0.7%) than those who have not participated (4.2%; Brookhuis, De Jong & Lemstra, 2006). However, the research report does not state whether these differences are significant or perhaps merely circumstantial.

#### **What are the requirements for post-licence training courses for novices?**

In the 2002 EU ADVANCED project, ten golden rules were established with preconditions that post-licence training courses for novices should meet, based on current knowledge (in particular regarding the adverse effects of short skills training courses), and pedagogical and didactical insights (Bartl et al., 2002). Freely translated, these rules are:

1. The course must be varied and highly interactive.
2. The group must not be so large that participants can avoid being noticed, or that the instructor is unable to provide individual attention. However, the group must be sufficiently large to stimulate group discussion.
3. Practical exercises (for instance performing an emergency stop) must be regarded more as a starting point for self-reflection than as a means of learning complex skills. Each practical exercise must therefore be discussed afterwards.
4. In order to prevent distraction and keep attention focused on the subject, discussions should be held in classrooms wherever possible. The instructor should ensure that the arguments put forward during the discussion are made visible (e.g. on a blackboard), so that everyone can participate and remember the issues better.
5. Training ground exercises should be carried out in such a way that they stimulate self-reflection regarding the limitations of the participant's skills and encourage self-reflection in general. As stated in point 3, the key issue is not to learn a skill, but to avoid high-risk situations.
6. Instructors must make sure that the exercise does not lead to undesirable side effects, and that participants have not shut the door to critical self-reflection from the outset.
7. Course designers must keep a watch on whether certain course elements could actually lead to the participant overestimating his own skills.
8. The training methods and teaching aids used must be as varied as possible (training grounds, discussions, reviewing actual crashes, solving problems, self-assessment based on questionnaires, videos followed by discussion, drives in traffic whereby the instructor and the other participants observe the actions of the novice drivers, etc.).
9. The instructor must ensure that the course is concluded in a positive way and in a relaxed atmosphere. The participants must be able to indicate what influence the course will have on their own behaviour in traffic in the future.
10. Lastly, it should be realized that although the course aims to increase risk awareness, the participants may regard it as a skills training (with risk compensation as an undesirable side

effect). To be sure that the message has been effectively communicated, continuous feedback from the participant is essential.

These ten golden rules of the ADVANCED project clearly show the concern that, if a course is not extremely well designed, overestimation of one's own skills is encouraged, and the effect on road safety will be the opposite of what is intended.

### **How effective is the ADVANCED project?**

Partly because the evaluation studies did not provide a clear picture, the European NovEV project was set up (Sanders & Keskinen, 2004). This project ran from 2002 to 2004 and was intended to evaluate post-licence training courses that were based on the ten golden rules of the ADVANCED project. The Netherlands was one of the countries that participated in the NovEV project. The post-licence training tested in Gelderland and Flevoland provinces within the framework of NovEV, occupied a day and consisted of the following elements:

- a driving skills analysis. This analysis consisted of a forty-minute drive in traffic, followed by a 25-minute evaluation. During the drive, the participant was observed by an examiner of the Dutch Driving Test Organisation (CBR) or an experienced driving instructor, and by a fellow participant.
- training on a driver training ground for the purpose of letting participants experience how easily, for example, a car can skid and how little can be done about it. This training was not intended as a skills training.
- a group discussion intended to let the participants reflect on their own behaviour and attitude in traffic.

A questionnaire was designed for use in evaluating this project, and participants were observed by examiners and instructors using a specially developed evaluation system (De Craen et al., 2005). The analysis showed that attitude, self-assessment and risk acceptance had not changed. However, more detailed analysis of the data showed that the post-licence training course provided by one of the two locations did lead to an improvement in driving behaviour, whereas the training course at the other location actually resulted in a deterioration in driving behaviour. The fact that the instructors at the successful location believed in the ideas of the project was a striking coincidence. These instructors were aware that the object of the exercises on the driver training ground was not to teach skills, but to let people experience how easily a dangerous situation can occur. The instructors at the location where an adverse effect on driving behaviour had been observed, did not believe in the ten golden rules of the ADVANCED project, and would rather have provided a skills training course. It is possible that the instructors' dissimilar motivation played a part in the different results of the two locations.

Besides the Netherlands, research within the framework of NovEV has been carried out in Austria, Germany, France, Belgium and Spain. The results show a mixed picture. Some of the results were positive and others were negative. It is clear from the NovEV studies that even though the training courses provided on driver training grounds are explicitly not aimed at training skills, there is a risk that this type of training may encourage participants to overestimate their skills.

### **Conclusions**

Evaluation studies do not provide a clear picture of the effects of post-licence training courses. What certainly do not work are post-licence training courses aimed at quickly teaching skills, such as correcting a skid. What do seem to work are post-licence training courses where the emphasis is placed on increasing traffic insight and self-assessment. Even then, however, success is not guaranteed. When the ten golden rules of the ADVANCED project are followed, it still does not necessarily mean that the post-licence training course will be effective. It seems that instructors must also be motivated and have faith in the post-licence training methodology.

When the three separate elements are examined (analysis of driving skills in traffic, experiencing dangerous situation on the driver training ground, and group discussion), there are indications that the analyses of driving skills and the group discussions do work. However, even when practising on the driver training ground is explicitly intended to teach participants to avoid dangerous situations, there is still a chance that the younger participants will regard this practice as a skills training.

In the Netherlands, all post-licence training courses for novice drivers are only voluntary. Moreover, anyone who wants to can offer post-licence training. As post-licence training courses can potentially have a negative effect on road safety, this is not a desirable situation. On the other hand, no clear

guidelines can be provided that guarantee that the crash rate of novice drivers will decrease. One possibility could be to allow only those post-licence training courses which research has proved or accepted as having a positive effect on attitudes and behaviour.

## Publications and sources

Bartl, G., et al. (2002). [\*The EU ADVANCED project: Description and analysis of post-licence driver and rider training. Final Report.\*](#) Commission Internationale des Examens de Conduite Automobile CIECA, Rijswijk.

Brookhuis, K.A., Jong, C. de & Lemstra, D.J. (2006). [\*Alcoholvrij op weg. Onderzoek naar het effect van een specifiek preventieprogramma op alcoholgebruik in het verkeer onder jongeren.\*](#) Rijksuniversiteit Groningen, Experimentele en Arbeidspsychologie, Groningen.

Craen, S. de, et al. (2005). [\*Young drivers experience: the results of a second phase training on higher order skills.\*](#) R-2005-8. SWOV Institute for Road Safety Research, Leidschendam.

Elvik, R. & Vaa, T. (2004). [\*The handbook of road safety measures.\*](#) Pergamon, Amsterdam [etc.].

Gatscha, M. & Brandstätter, C. (2007). [\*Evaluation der zweiten Ausbildungsphase in Österreich.\*](#) Kuratorium für Verkehrssicherheit (KfV); Bundesministerium für Verkehr, Innovation und Technologie (BMVI), Wenen.

Henning, H.-J., Chaselon, F.M. & Schulz, S.-O. (1994). [\*Schlussbericht zur Wirksamkeitsuntersuchung zum Modellversuch "Jugend fährt sicher".\*](#) BAST.FP.2.9124. Universität Bremen, Studiengang Psychologie, Abteilung für Methoden, Diagnostik und Evaluation, Bremen.

Keskinen, E., et al. (1999). [\*Driver training in Finland.\*](#) In: IATSS Research, vol. 23, nr. 1, p. 78-84.

Nyberg, A. & Engström, I. (1999). [\*"Insight" – An evaluation. An interview survey into driving test pupils' perception of the "Insight" training concept at the Stora Holm driver Training Centre.\*](#) VTI rapport 443A, Swedish National Road and Transport Research Institute VTI, Linköping.

Peräaho, M., et al. (2000). [\*Seconde phase de formation du conducteur à Colmar-Berg, Luxembourg – Lien avec les accidents.\*](#) In: Bartl, G. (ed.), DAN-Report: Results of EU-project: Description and analysis of post-licensing measures for novice drivers. Kuratorium für Verkehrssicherheit, Wien, p. 125-137.

Sanders, N. & Keskinen, E. (eds.) (2004). [\*EU NovEV project: Evaluation of post-licence training schemes for novice drivers. Final Report.\*](#) International Commission of Driver Testing Authorities CIECA, Rijswijk.