

# EXTREME BEHAVIOUR



– mainly a question of driving without a license

**Version 2.0**

## SMC, October 2015

### Background

According to studies conducted by SMC, VTI and NTF (1, 2) the vast majority of motorcyclists are safety conscious. They don't take unnecessary risks and they enjoy riding a motorcycle. To have a valid driving license when riding a motorcycle is a matter of course for motorcyclists.

However, regarding fatalities among drivers of motorcycles we see the same four factors occurring again and again - riding without a license, riding under the influence, aggressive riding, and high speed combined with reckless riding. SMC has chosen to group these factors under the label "extreme behaviour". The total number of motorcycle accidents are declining but fatal accidents containing one or more of these factors are increasing. It's becoming increasingly clear that the problem of extreme behaviour is mainly about the group lacking a driving license. This group is difficult to reach and influence with traditional road safety measures.

### Riding without a license among fatal motorcycle accidents

Many of the riders who die in motorcycle accidents do not have a driving license, have never undergone rider training and do not have the knowledge needed to ride a motorcycle. Within this group the other three extreme behaviour factors are overrepresented. Between 2005 and 2010 25% of drivers in fatal accidents were driving without a valid driving license, according to a summary from the Swedish Transport Administration (Table 1).

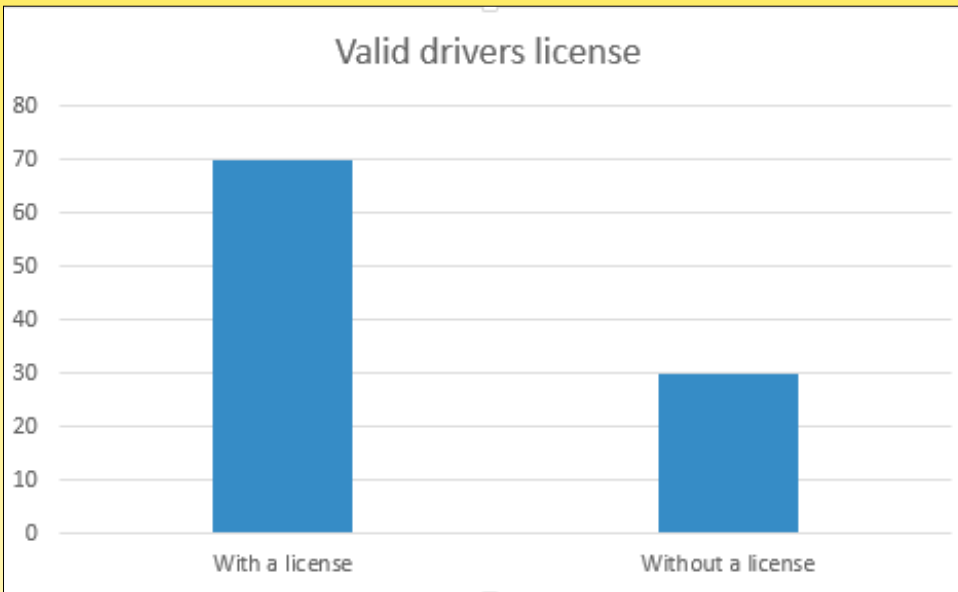
And there is more. Many of those killed 2005-2010 while riding without a license did not own the motorcycle they were killed on. The bike was often not registered and/or not insured, and therefore not permitted to be driven on the road. One fifth of the riders in this group did not wear a helmet, which have been required by law since 1975. Finally, a majority, 60 percent, were intoxicated and/or under the influence of drugs.

<u>Killed MC riders 2005-2010</u>	<u>Without license</u>	<u>All fatal accidents</u>
	65	263
<u>Single accidents</u>	25 %	41 %
<u>Average age</u>	30	39
<u>Alcohol or/and drugs</u>	60 %	26 %
<u>Legal owner of MC</u>	32 %	63 %
<u>No helmet</u>	20 %	7 %
<u>Cross/enduro</u>	22 %	6 %
<u>Un registered MC</u>	12 %	3 %
<u>MC not in use</u>	35 %	11 %
<u>Speed more than 30 +</u>	42 %	36 %
<u>Dark, dusk, dawn</u>	46 %	24 %
<u>Outside village</u>	46 %	70 %
<u>City street</u>	55 %	27 %
<u>If alcohol, promille</u>	1,6	1,4

**Table 1.** Fatal accidents on motorcycles 2005-2010, without license vs all accidents

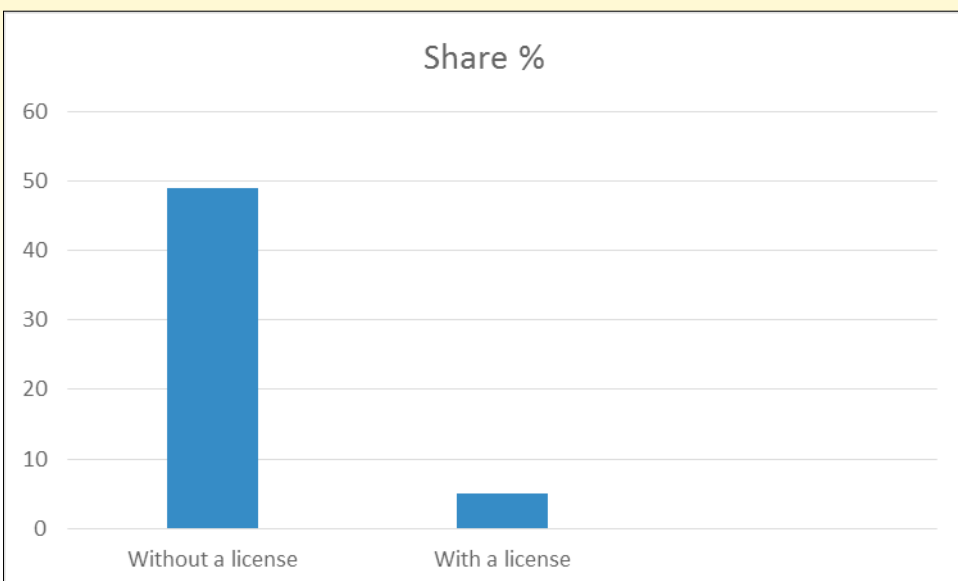
### Fatalities on two-wheel motorcycle 2011-2014, without/with a valid license

SMC has gone through all fatal accidents on two-wheel motorcycles 2011-2014 and compared the group who had no driving license with those who had (table 2 show each group individually). Out of 140 fatalities, 41 didn't have a license, which corresponds to 30 percent. The average age is lower among those without driving license, 33.3 years, but it still shows that this is not about youngsters. The group who lacked a valid driver's license at the fatal accident has increased compared to the period 2005-2010, when they accounted for 25 percent.



**Image 1.** Fatalities on motorcycles 2011-2014 with/without license.

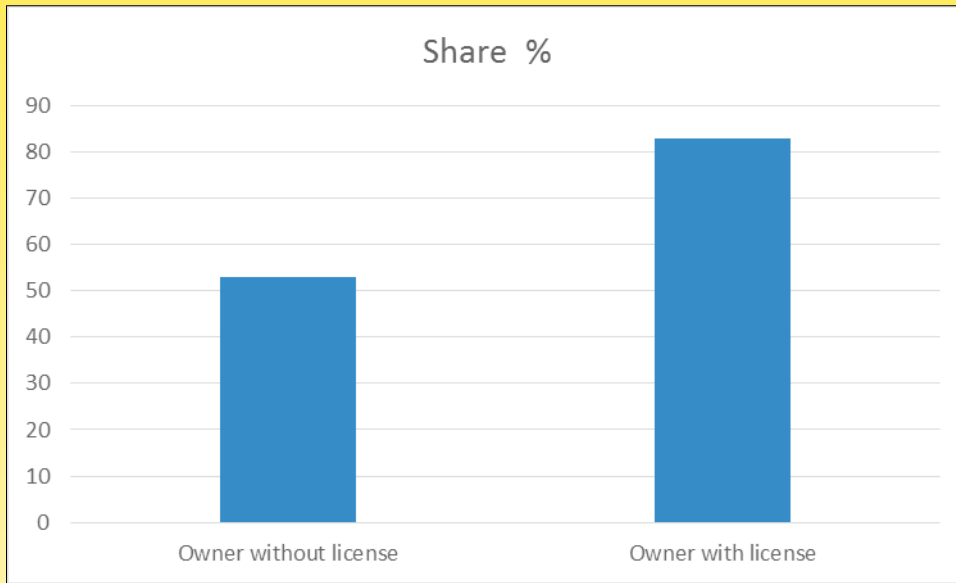
If you compare those without license with those who had a license it becomes clear that the license-less group was guilty of a number of traffic offenses during the ride that led to the fatal accident. To begin with, a majority rode under the influence of alcohol and/or drugs. 78 percent without a valid license drove under the influence compared to 7 percent in the group with a license. Riding without a license combined with influence of alcohol and/or drugs obviously increases the risk for accidents. The number of people riding under the influence of alcohol and/or drugs among the license-less group have increased compared to the period 2005-2010 when it was 60 percent.



**Image 2.** Riding under the influence of alcohol and/or drugs, without/with license.

None of the victims with a license drove without a helmet at the fatal accident. Among the license-less group 8 of the total of 41 fatalities were missing helmet – i.e. 20%.

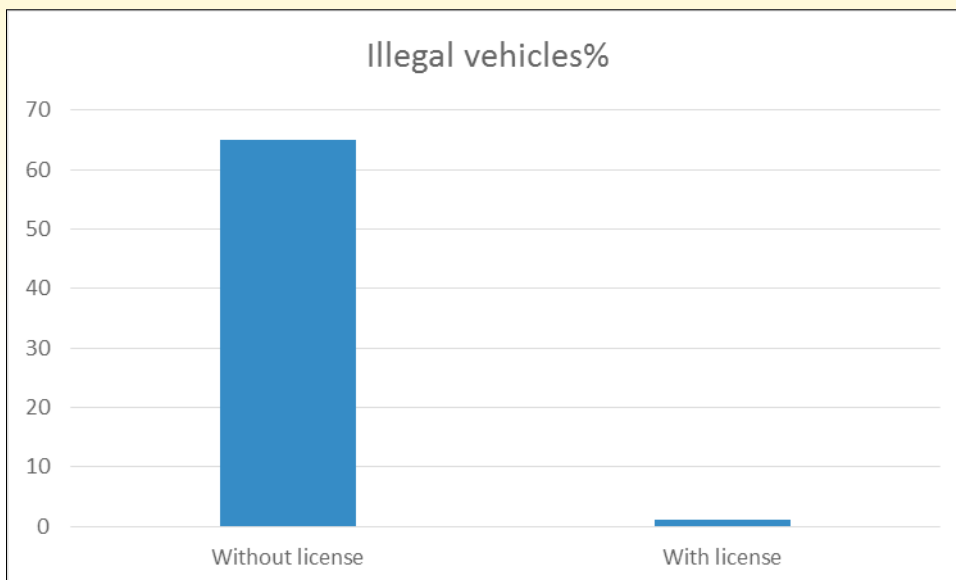
Riding without a license and not wearing a helmet obviously increases the risk of serious injury or death when an accident occurs.



**Image 3.** Ownership among those killed, without/with license.

Just over half, 53 percent, of those who lacked a license owned the motorcycle they drove themselves to death on. That compares with 83 percent among those who had a license. Driving without a license on a motorcycle you're not used to ride also increase the risk of being killed or seriously injured. The proportion of owners among the license-less group has increased significantly compared with the period 2005-2010, when it was 32 percent.

Two thirds of those who had no driver's license drove a motorcycle that was decommissioned, deregistered or unregistered and/or uninsured, in other words a motorcycle illegal to use in traffic. This problem is non-existing in the license group where only one person was riding a motorcycle with driving ban, and this was due to a technical inspection which was not completed within the prescribed time. No licensed drivers drove motocross/enduro (not allowed on roads) at the fatal accident compared to 19 percent among the license-less group.



**Image 4.** Number of unregistered, decommissioned and uninsured vehicles without/with license.

## Fatalities 2011-2014 – without and with a valid license

	Number without license (%)	Number with license (%)
Number	41 (30 %)	99 (70%)
Average age	33,3	43,2
Alcohol	20 (49%)	5 (5%)
Per mille, average	1,5	1,62
Drugs	13 (34 %)	2 (2%)
Alcohol AND drugs	19 (46 %)	0
Total alcohol and/or drugs	32 (78 %)	7 (9 %)
No helmet	8 (20%)	0
Owner	22 (53 %)	82 (83%)
Unregistered/decommissioned/ uninsured	27 (65%)	1 (1%)
Cross/enduro	8 (19%)	0
Single	25 (61 %)	34 (34%)
Collision	19 (46%)	53 (53%)
Wildlife	0	5 (5 %)

**Table 2.** Fatalities 2011-2014, without/with MC license. Source: Swedish Transport Administration in-depth studies 2011-2014.

### Riding without a license among severely injured 2010-2014

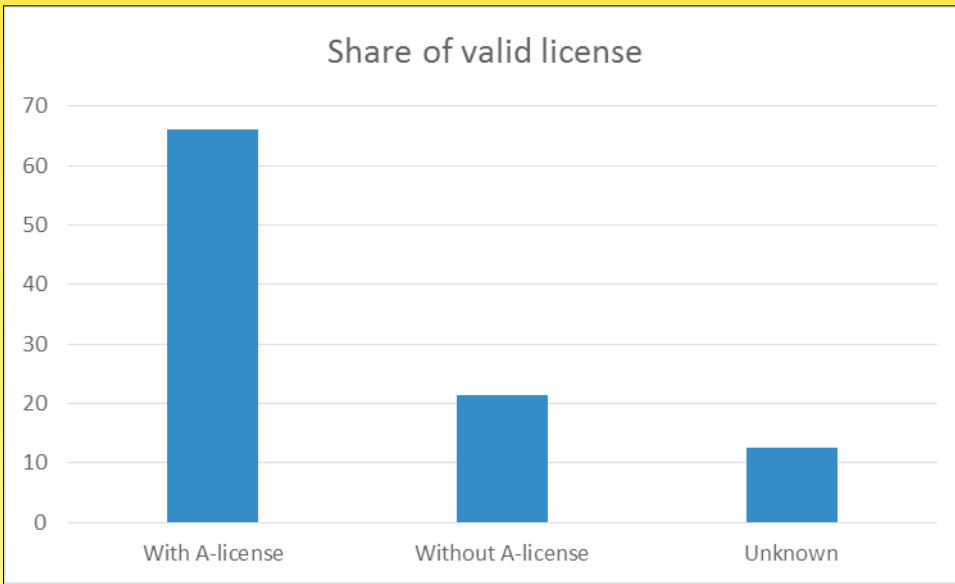
SMC have put together an overall picture of the Swedish Transport Agency statistics on police-reported motorcycle accidents with severely injured motorcycle drivers. The statistics include age, MC model and license status. The statistics clearly show that riding without a license is an important factor not only among the fatalities, but also among motorbike riders who are seriously injured.

According to police-reported accidents in STRADA (6) 1263 people were severely injured on two-wheel motorcycles in 2010-2014 - 118 women (9.34%) and 1145 men (90.65%). The average age was 42.48 years (in the years 2013-2014 was 41 years).

Of the 1,263 severely injured 214 did not have a valid license for motorcycles, which corresponds to 17% of all severely injured. In addition to these we are missing license information on 110 people, or 7% - 105 men, 2 women and 3 of unknown gender. There are probably people in this group as well who lack a valid licenses.

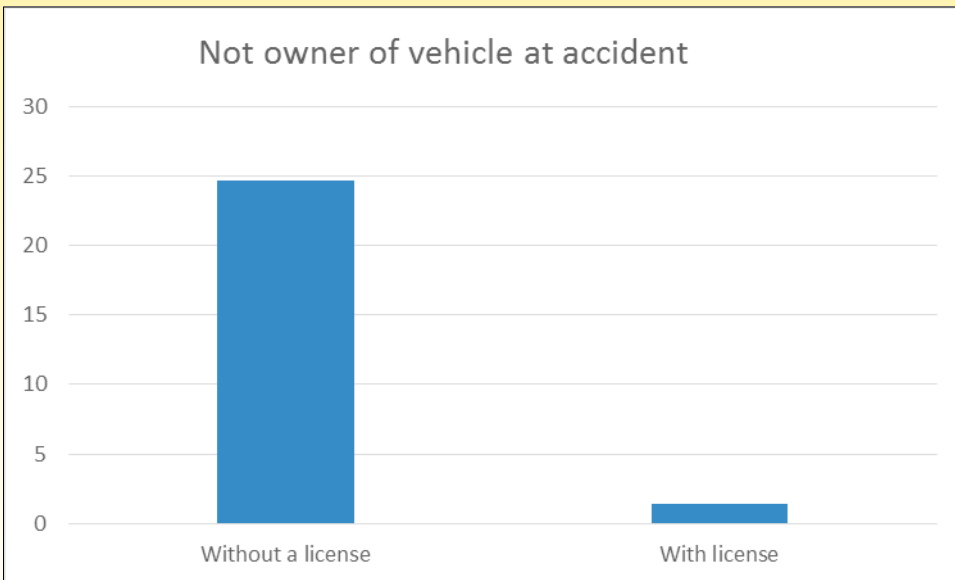
### Severely injured in two-wheeled motorcycle accidents 2013-2014

SMC also made a special study of those who were severely injured in the two-wheel motorcycle accidents during 2013-2014 (7). 21.5 percent lacked a valid license! In addition to these license data for nearly 13 percent are missing. Only two thirds of the seriously injured, 66 percent, had a valid motorcycle license.



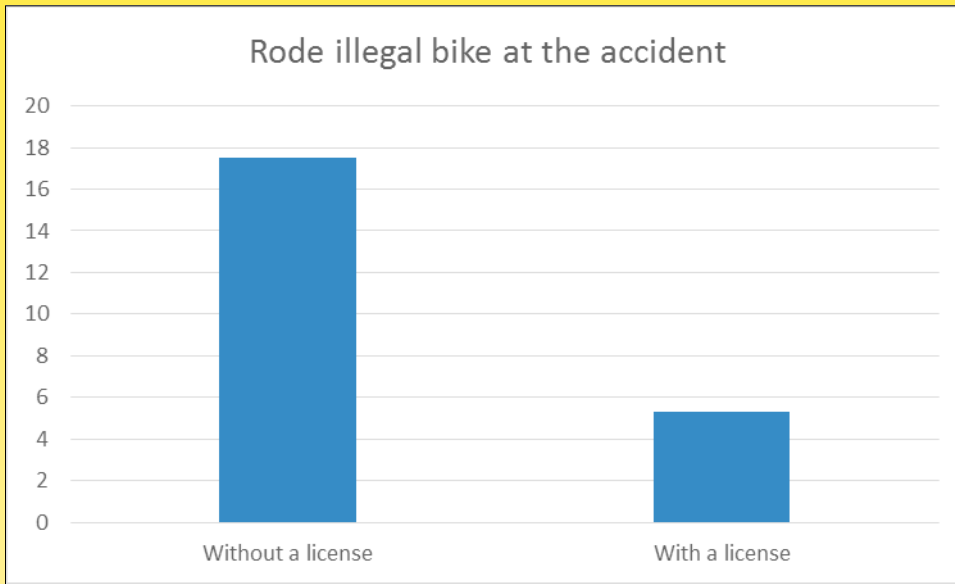
**Image 5.** Severely injured on motorcycles 2013-2014, without/with license

For the period 2013-2014 SMC have looked at the details of ownership among the severely injured. The number of license-less severely injured who rides a motorcycle they do not own and/or a motorcycle that has been banned are much higher than for those with a license – like the fatalities just showed us. 25 percent of those who had no valid license did not own the motorcycle they were riding. Among those who had a license the corresponding figure were 1.4 percent.



**Image 6.** Ownership among severely injured, without/with license.

In the license-less group 17.5% drove a motorcycle with a driving ban (unregistered, decommissioned and/or uninsured vehicle), compared with 5.3% among those who had a valid license.



**Image 7.** Number of unregistered, decommissioned and uninsured vehicles without/with license.

Every day SMC scans MC related articles in media. All articles concerning extreme behaviour gets published on our web. Hundreds of articles about road accidents during the period 2012-2015 describes some kind of extreme behaviour. Most common are male motorcycle riders among those without a license and under the influence of alcohol and/or drugs.

### Is this a true picture of Swedish motorcyclists?

These accident statistics shows a totally different picture of the Swedish motorcycle riders than the study regarding motorcyclists' attitudes to road safety which was provided by the SMC and the NTF in 2010 (1). In the study everyone had a motorcycle license. Drunk driving and/or under the influence of drugs was clearly not acceptable among the motorcyclists. In fact, motorcyclists in the study reported a much better attitude towards alcohol/drugs than motorists. To pay vehicle taxes, insurance and driving a registered vehicle went without saying, as well as no mock-insured motorcycles. The MOT-inspection of motorcycles show consistently each year that motorcyclists do take care of their motorcycles. There is only one factor where motorcyclists were "worse" than car drivers - following the speed limit.

### Is there a difference between drivers of motorcycles and cars?

SMC has compared license-less drivers among motorcycle and car drivers. We studied the number of people driving under the influence of alcohol and/or drugs between 2010 and 2014. The share of license-less drivers is higher among those driving a motorcycle. The proportion of those driving under the influence of drugs and/or alcohol are also higher among license-less motorcycle drivers than car drivers. In summary SMC concludes that the presence of alcohol and/or drugs are more common among license-less motorcycle drivers compared to car drivers.

Vehicle	License	No license	Total	% without license
Motorcycle	120	52	172	30
Car	416	33	449	7
Total	536	85	621	14

**Table 3.** Fatalities, per vehicle with and without license, 2010-2014

The table above shows the proportion of deaths that do not have a driving license is significantly higher among those who ride a motorcycle than those driving a car. A full 30 percent of those killed motorcycle riders were missing valid license, compared with 7 percent among car drivers.

Vehicle	Alcohol	Sober	Total	% affected by alcohol
Motorcycle	38	123	161	24
Car	85	334	419	20
Total	123	457	580	21

**Table 4.** Fatalities affected by alcohol, per vehicle, 2010-2014

The proportion of deaths that are alcohol affected is slightly higher among those who drove motorcycles compared to car drivers, 24 and 20 percent respectively.

Vehicle	License	No license	Total	% without license
Motorcycle	15	22	38	58
Car	62	21	85	25
Total	77	43	123	35

**Table 5.** Fatalities affected by alcohol, per vehicle with and without license, 2010-2014

Over half, 58 percent, of those who perished on motorcycles 2010-2014 driving under the influence of alcohol lacked a license. The corresponding figure for cars was 25 percent.

Vehicle	Drugs	No drugs	Total	% affected by drugs
Motorcycle	29	137	166	17
Car	31	394	425	7
Total	60	531	591	10

**Table 6.** Fatalities affected by drugs, per vehicle, 2010-2014

The proportion of drivers killed 2010-2014 under the influence of drugs is higher among motorcyclists, compared with car drivers, 17 and 7 percent.

Vehicle	License	No license	Total	% without license
Motorcycle	8	19	27	70
Car	15	15	30	50
Total	22	34	57	60

**Table 7.** Fatalities affected by drugs, per vehicle with and without license, 2010-2014

The proportion who lack a valid license is high among both motorbike and car drivers who were under the influence of drugs in connection with the fatal accident. The proportion is significantly higher among motorcycle riders compared to motorists, 70 and 50 percent.



## **Is there anything the police can do?**

It is above all the police who is able to intervene against drivers without a license. A Norwegian analysis of motorcycle fatalities in 2005-2009 shows that 80% of this group can be found in the criminal records for economic crime, drugs, violence, vandalism, traffic offenses and other crimes (3). Some measures suggested by the analysis group were that the police should have mandate to take action against the group - controls and sanctions aimed specifically against this group and also controls and monitoring of at-risk youths.

Just as in Norway, Sweden should be able to compare fatal accidents with the police criminal records. Articles that SMC gathered on their website shows that people are only rarely prosecuted and convicted. Just as in Norway, the Swedish police must be given the mandate to prioritize the license-less group that obviously put themselves outside of the law, not just in terms of riding without a license. SMC would be happy to cooperate with police regarding the issue of license-less drivers.

Control of licenses on a large scale should be prioritized, as the group driving without a license are not only large among those killed but also among the severely injured. The statistics above show there are many license-less even among those killed in cars.

## **What can the rest of us do?**

Unfortunately, it's not a priority for the work to halve the number of fatalities and reduce serious injuries by 25% by 2020 that all drivers of motor vehicles have a valid license.

SMC strongly believes that having a driving license should be a top priority and call upon all involved to include this as a target immediately. If everyone who rode a motorcycle 2011-2014 had had a driving license, the interim target for fatalities and serious injuries would have been achieved to a great extent already.

SMC also calls for annual statistics from the Swedish Transport Agency and the Swedish Transport Administration, where having a driving license should be shown for drivers killed or seriously injured, as well as ownership structure, sobriety and driving bans. There are existing statistics that can be used to measure and monitor the proportion of drivers and riders with driving licenses annually.

It is also extremely important the problem is made visible to sensitize the various stakeholders - insurance companies, associations, driving schools, authorities, courts, politicians, family and friends. If knowledge is spread in the society, it's possible for anyone to inform and take action.

It is important to change the attitude towards road safety. The fact that so many drives and rides vehicles without a license and are killed or injured suggest that certain groups have accepted illegal driving. SMC want road safety education to begin at school age, long before a driver's license is an issue. Basic road user education from school should naturally lead to an active choice: get a license, or, not drive a motorized vehicle at all. Road safety is an important matter for the whole society, including pedestrians and cyclists. It is important regardless if a person decides to get a license or not.

A visible measure adopted to reduced accidents on motorbikes are stricter requirements for driving licenses throughout the EU. The age limit has been raised, the requirements for test vehicles have been tightened and more driving test has been introduced. In parallel, Sweden has introduced mandatory risk training for motorcycles and raised the fees for driving tests on a motorcycle. Sweden has Europe's highest test costs. Sweden also has the highest known percentage of license-less drivers among fatalities on motorcycles.

It's obvious according to SMC that we need a change of the license system. The world's leading road safety experts have put education as the primary measure for increasing safety among motorcyclists. On this basis we must work to give as many people as possible access to training, see to that training is cost effective and therefore available for most people, and – finally – that experience and not the test itself is seen as the important part of driver training.

## Sources

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1. Motorcyclists' attitudes to road safety, Maria Nordqvist SMC and Nils-Petter Gregersen NTF, 2010
2. Motorcyclists' attitudes to road speed and speed limits, Maria Nordqvist SMC and Nils-Petter Gregersen VTI, 2013
3. Temaanalyse, Dødsulykker på motorsykel 2005-2009, Statens Vegvesen 2011
4. In-depth study of motorcycle fatalities 2011-2014, Swedish Transport Administration
5. In-depth study of motorcycle and car fatalities 2010-2014, Swedish Transport Administration
6. Severely injured coupled with license status in police registered motorcycle accidents 2010-2014, STRADA and Vägtrafikregistret, Swedish Transport Agency
7. Severely injured coupled with license status, ownership and vehicle status in police registered motorcycle accidents 2013-2014, STRADA and the Swedish Transport Administration