

## SPEED LIMIT MYTHS - BUSTED

### **Myth 1: “German autobahns prove we don’t need speed limits”**

Contrary to popular belief, there are speed limits on certain sections of Germany’s autobahns. About 60% of autobahns have no speed limits, while in areas where traffic is heavier or near cities the speed limit is set between 95 km/h to 115 km/h.

A 2008 report by the European Transport Safety Council (ETSC) found that of the 645 road deaths in Germany in 2006, 67% occurred on motorway sections without limits and 33% on stretches with a permanent limit. The fact that 33% of German motorways have a permanent limit and 67% have either a temporary limit or none means that these figures, at first glance, suggest that having a speed limit does not the lower the number of fatalities on motorways. But as ETSC note: ‘this similarity of percentages takes no account of traffic volumes on different sections.’ The report also makes the point that the relationship between speed and road crashes has been studied extensively and is very clear: the higher the speed, the greater the probability of a crash and the severity of the crashes.

The relationship between speed and the increase in the number of deaths and injuries has been researched and is referred to in more detail in Myth 2. Writing about the ‘power model’ devised by Rune Elvik, from Norway’s Institute of Transport Economics, Peter Walker explains what insights it can offer: Using the most widely accepted statistical model, drawn up by a Norwegian academic using data from 100 studies in more than a dozen countries, an increase in average traffic speeds of just 3mph would be expected to cause more than 25 extra deaths a year on motorways and more than 100 serious injuries.



Source: Stack Exchange

Of course, countries differ. Not only in their vehicle fleet but in the total lengths of motorway, average flows of vehicles, geographical situation (i.e. many use Germany's autobahns to cross over into other countries) and their overall transport infrastructure. But a number of studies and trials have reported on the relationship between speeds and crashes specifically on autobahns:

- The road safety impacts of speed limits were evaluated in 1984 by the Federal Highway Research Institute. The study estimated that a general limit of 120 km/h on the Autobahn network would lead to a 20% reduction of road deaths, a limit of 100 km/h to a 37% reduction.
- Between November 1984 and May 1987 in the Land of Hesse 100 km/h limits on some motorways reduced the number of death and injury crashes per billion vehicle kilometre by 25% to 50%. In 1992 and 1994 a field trial on the A2 Autobahn showed a 50% decrease of the crash rate per billion vehicle kilometre (Umweltbundesamt, 1999).
- A 1991 case study used in the ETSC report illustrates the results of introducing a 130 km/h speed limit on a 167km section of the A61 in Rheinland-Pfalz combined with a ban on overtaking heavy good vehicles. The combined result was a 30% reduction in fatal and severe injury crashes.
- In December 2002 a 130 km/h limit was introduced on a 62km section of the Autobahn 24 between Berlin and Hamburg. The number of injury/material damage crashes decreased by 48% and the numbers of casualties decreased by 57% (comparing the 3 years before and 3 years after introduction).

So, the evidence is that imposing a speed limit on autobahns would have a positive safety benefit. To date Germany has been reluctant to impose speed limits on autobahns, partly due to a perceived loss of freedoms and partly due to the potential for adverse economic impacts. The Handelsblatt newspaper has likened this issue to the Americans' gun control issues, with the evidence of the safety benefits unquestionable, but the political courage lacking. However, the mood is changing. An opinion poll conducted in January 2019 by the Ennid institute and published by Bild am Sonntag newspaper showed that 52% of Germans favour setting maximum speed limits (46% oppose), although the survey related to actions to tackle climate change. German authorities are changing their approach to speed limits and have stepped up the enforcement of speed limits.

Despite having roads constructed to some of the highest safety standards in the world, Germany ranks firmly in the middle of industrialised countries in terms of traffic deaths. For every billion kilometres driven on German roads, 5.6 people were killed in crashes in 2011, according to the International Transport Forum of the Organisation for Economic Co-operation and Development. In the United States, 6.75 people died for every billion kilometres driven, while in Britain, 3.9 people were killed.

In order to move Towards Zero trauma on the roads it is likely that there will be growing pressure on policy makers to remove unlimited speed limits. Evidence shows that it will make a significant contribution to road safety.

