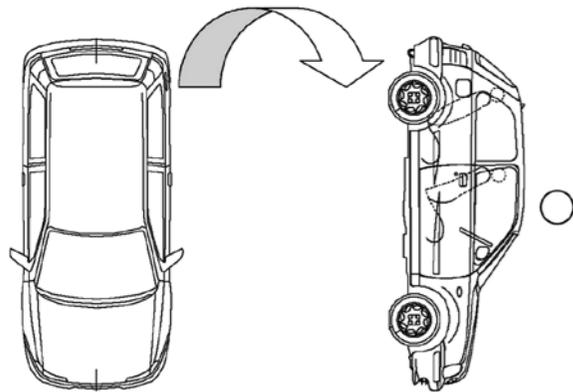




## Third crash: Failing to stay on the road

### Situation

A passenger car going at a high speed fails to stay on the road, overturns, and crashes into a tree.



### Result

The impact on the side while overturning does little to reduce the speed of the car. If the car now were to hit a tree from the side or roof, those in the car would be subjected to the full force of the blow because of the absence of a protective crumple zone. The roof and the doors are the least stable zones of a car and are incapable of withstanding the direct impact if the car hits a tree. In such cases, the passenger compartment will be compressed to the point where the passengers' chances of survival are virtually nil.



## Facts and figures

In 2007, 196 persons lost their lives on country roads in Switzerland; in Germany the number was 3012. Compared to European figures, Switzerland has 26 deaths per million inhabitants, putting it in second place behind the Netherlands. Germany is in fifth place with 36 deaths per million. Poland takes last place with 78 deaths.

On average, 53 percent of all persons killed on Swiss roads each year die through accidents on country roads. In Germany the figure is 60 percent.

Of all fatal accidents on country roads, 54 percent (38 percent in Germany) are self-inflicted, 15 percent (33 percent in Germany) are head-on collisions, and 7 percent (14 percent in Germany) occur while turning off roads.

Although in Switzerland passengers in cars are the most frequent victims of fatal accidents on country roads (44 percent; Germany 61 percent), the risk for someone on a motorcycle to have a serious accident is up to 27 times higher than in a car, depending on the kind of accident.

In Switzerland there are approximately 400 road accidents (1075 in Germany) involving farm vehicles each year. Out of these, approximately 10 (43 in Germany) a year turn out to be fatal. Of these, 30–40 percent occur while a vehicle makes a left-hand turn.

(Source: bfu, FSO, BUL, destatis, IRTAD)



## Tips

### Country roads are unforgiving of mistakes

- Never drive without wearing a seatbelt or helmet
- Give the road your full attention and concentration
- Pay attention to all possible road participants – be it a pedestrian or a combine harvester

### Failing to stay on the road means a life-threatening risk

- Adjust your speed early to changing situations, especially in curves
- Anticipate situations while driving in order to avoid sudden change maneuvers
- Use ESP in your vehicle to help you stay in your lane

### Passing others is always risky

- Remember, half of the free lane belongs to oncoming traffic
- Use turn signals and look behind before changing onto the other lane
- Never pass another vehicle unless you're sure it's safe to do so

### Anticipate others while crossing a road

- Leave space for a farm vehicle to suddenly leave, enter, or cross the road
- Give yourself time when crossing or entering a road – motorcycles are more difficult to see
- Anticipate the time a vehicle entering the road needs to accelerate



# Country roads – how safe are they actually?

Day for media and guests

Thursday, July 18, 2009

Wildhaus (Switzerland)



## Welcome

Dear guests

Country roads make up a major part of the road network in Switzerland and Germany and are used by passenger cars, trucks and agricultural vehicles – not to mention pedestrians, bicycles, and horseback riders. In short, country roads are there to accommodate both commercial and leisure traffic.

According to the AXA traffic safety report, road users generally believe that driving on country roads is safer than driving in cities and on highways. They are wrong: approximately half of all fatal accidents occur on country roads. Many such accidents could be prevented if drivers were more aware, roads were constructed differently, and vehicles were fitted with better technology.

For this reason, our accident researchers have decided to focus on safety on country roads by conducting crash tests to show the most frequent accident scenarios encountered when driving outside of town. The purpose is to make drivers aware of the dangers and risks lurking on country roads and to show how safety can be improved.

We are confident that this will prove to be an interesting and informative day for you.

Clemens Klinke  
Chairman of the Board  
DEKRA Automobil GmbH

Andreas Krümmel  
Member of the Executive Board  
AXA Winterthur



## Schedule

**from 10:00** Guests arrive on the crash site in Wildhaus

### 10:30 Welcoming

*Andreas Krümmel*  
Member of the Executive Board  
AXA Winterthur

*Clemens Klinke*  
Chairman of the Board  
DEKRA Automobil GmbH

### 10:45 First crash: Head-on collision with motorcycle

A heavy motorcycle going at approx. 60 km/h overtakes a car. During the maneuver it collides head-on with a passenger car coming correctly from the opposite direction at 30 km/h.

### 12:00 Second crash: Side collision with farm vehicle

A passenger car going at approx. 80km/h crashes without braking into the trailer of a farm vehicle that is crossing.

### approx. 12:30 Lunch at the skating rink in Wildhaus

### 14:30 Third crash: Failing to stay on the road

A passenger car overturns and hits a tree.

### approx. 15:30 End of the event

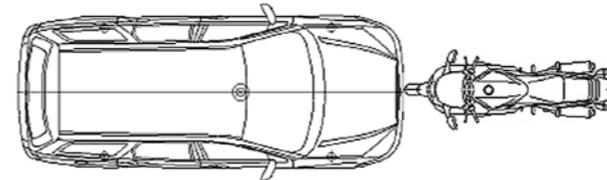
(Program subject to changes)



## First crash: Head-on collision with motorcycle

### Situation

A heavy motorcycle going at approx. 60km/h overtakes a car. During the maneuver it collides head-on with a passenger car coming correctly from the opposite direction at 30km/h.



### Result

The impact causes the driver and person on the back to be hurled against the oncoming car. If they were to hit the support (A-pillar) or edge of the roof of the passenger car, they would sustain a severe blow; if they were to hit the windshield, their impact would be somewhat cushioned. If the motorcycle were to be going at a higher speed, the person on the back, especially, would likely be catapulted over the oncoming vehicle and onto the road.

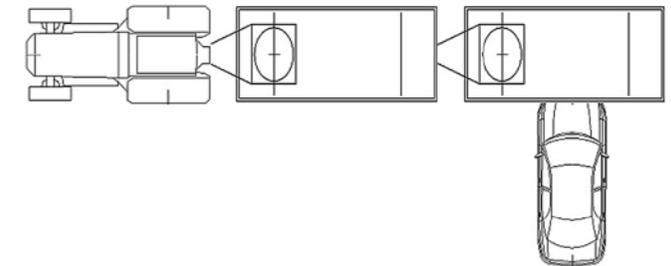
In the oncoming vehicle, the airbags are released, causing minor injuries to the passengers. If the motorbike driver were to penetrate the windshield, the risk of injury for the driver and passenger in the car would rise as well. If the motorcycle's fuel tank were to be damaged, there would also be a risk of fire.



## Second crash: Side collision with farm vehicle

### Situation

A tractor with two loaded trailers crosses a road in order to get from one field to the next. A passenger car going at approx. 80km/h crashes without braking into the second trailer of a farm vehicle that is crossing.



### Result

Tractors and trailers used on farms generally have no underride protection. The hood of the car therefore passes beneath the edge of the trailer's platform and render the car's crumple zone useless. The full force of the impact must thus be absorbed by the A-pillars and the windshield. The roof subsequently is sheared off toward the back, leaving the car wedged underneath the trailer. The passengers have virtually no chance of survival – despite seatbelts and airbags. The driver of the tractor, however, is virtually in no danger at all.