

Claims data points to high-end electric car risks

Electric luxury cars and sport utility vehicles may be 40 per cent more likely to cause accidents than their standard engine counterparts, possibly because drivers are still getting used to their quick acceleration, French insurer AXA said.

The numbers, based on initial trends from claims data and not statistically significant, also suggest small and micro electric cars are slightly less likely to cause accidents than their combustion engine counterparts, AXA said at a crash test demonstration.

AXA regularly carries out crash tests for vehicles. This year's tests, which took place at a disused airport, focused on electric cars.

Overall accident rates for electric vehicles are about the same as for regular cars, according to liability insurance claims data for "7,000 year risks" - on 1,000 autos on the road for seven years - said Bettina Zahnd, head of accident research and prevention at AXA Switzerland.

"We saw that in the micro and small-car classes slightly fewer accidents are caused by electric autos. If you look at the luxury and SUV classes, however, we see 40 per cent more accidents with electric vehicles," Zahnd said.

"We of course have thought about what causes this and acceleration is certainly a topic."

Electric cars accelerate not only quickly, but also equally strongly no matter how high the revolutions per minute, which means drivers can find themselves going faster than they intended.

Half of electric car drivers in a survey this year by AXA had to adjust their driving to reflect the new acceleration and braking characteristics.

"Maximum acceleration is available immediately, while it takes a moment for internal combustion engines with even strong horsepower to reach maximum acceleration. That places new demands on drivers," Zahnd said.

Sales of electric cars are on the rise as charging infrastructure improves and prices come down.

Electric vehicles accounted for less than 1% of cars on the road in Switzerland and Germany last year, but made up 1.8% of Swiss new car sales, or 6.6% including hybrids, AXA said.

Accidents with electric cars are just about as dangerous for people inside as with standard vehicles, AXA said. The cars are subject to the same tests and have the same passive safety features like airbags and seatbelts.

But another AXA survey showed most people do not know how to react if they come across an electric vehicle crash scene.

While most factors are the same - securing the scene, alerting rescue teams and providing first aid - it said helpers should also try to ensure the electric motor is turned off. This is particularly important because unlike an internal combustion engine the motor makes no noise.

In serious crashes, electric autos' high-voltage power plants automatically shut down, AXA noted, but damaged batteries can catch fire up to 48 hours after a crash, making it more difficult to deal with the aftermath of an accident.

For one head-on crash test last week, AXA teams removed an electric car's batteries to reduce the risk of them catching fire, which could create intense heat and toxic fumes.

Zahnd said studies in Europe had not replicated US findings that silent electric vehicles are as much as two-thirds more likely to cause accidents with pedestrians or cyclists.

She said the jury was still out on how crash data would affect the cost of insuring electric versus standard vehicles, noting this always reflected factors around both driver and car.

"If I look around Switzerland there are lots of insurers that even give discounts for electric autos because one would like to promote electric cars," she said.