Rural roads
- the biggest killer
Where, when and why are people killed on rural roads?

On an average day, nine people die on Britain’s roads; six of them are killed on rural roads. But why are roads in the countryside the biggest killer? What are the ingredients in those crashes that make them more dangerous than roads in towns and cities? What are the common factors that point to the causes?

The IAM Motoring Trust asked road safety researcher Jean Hopkin to find out by looking at the official data of over a quarter of a million fatal and serious injury crashes over the six years, between 2000 and 2005. Her extensive analysis compares all the relevant factors of crashes on rural roads in England, Wales and Scotland.

Two-thirds of fatal and serious casualties on rural roads happen on 60 or 70 mph speed limit non-motorway roads. No matter how skilled and conscientious the driver, the determinants of death, serious or slight injuries on these roads are the impact speed, the EuroNCAP “star rating” of the car, and what the car hits.

Car manufacturers have invested heavily in crash protection so that today new cars are driven out of the showroom with 4 or 5-star crash protection ratings. But not even a 5-star car can protect its occupants in a crash on a 1-star rural road; most are sub-standard in safety and crash protection making them potentially lethal when things go wrong.

But that is now changing. The new science and engineering of “road protection” can make roads more forgiving when a crash happens. The road authority safety engineers in England, Wales and Scotland have the skills to transform the safety of Britain’s rural roads. Without political support and the resources they can’t do it, but with them hundreds of lives and ten times as many disabling injuries would be saved every year.

The IAM Motoring Trust welcomes a debate on the facts and the issues that Jean Hopkin’s analysis presents. Please let us know what you think should be done to reduce deaths and injuries on Britain’s rural roads.

You can contact us at info@iamtrust.org.uk

Neil Greig
Director
IAM Motoring Trust

Rural roads: the biggest killer

In Wales and Scotland, three-quarters of fatalities occur on rural roads; compared with two-thirds on rural roads in England; more than half of serious injuries are on rural roads in Wales and Scotland, compared with less than half in England.

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Neil Greig
Director
IAM Motoring Trust

View the full report at: www.iamtrust.org.uk

Six years of deaths and serious injuries on Britain’s roads – the big picture

More than a quarter of a million roads users were killed or seriously injured on all of Britain’s roads – urban and rural – in the six years between 2000 and 2005; most on roads in England.

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>% of GB total</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Wales</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Scotland</td>
<td>9%</td>
<td></td>
</tr>
</tbody>
</table>

Fatalities

<table>
<thead>
<tr>
<th>Road Type</th>
<th>2000 – 2005</th>
<th>% of GB total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>1,842</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1,899</td>
<td></td>
</tr>
</tbody>
</table>

Serious Injuries

<table>
<thead>
<tr>
<th>Road Type</th>
<th>2000 – 2005</th>
<th>% of GB total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>177,371</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>18,424</td>
<td></td>
</tr>
</tbody>
</table>

In a car

Two-thirds of car occupants killed or seriously injured on rural roads are car drivers; almost a quarter are front seat passengers.

In a car

- Drivers: 66%
- Passengers: 34%
  - Front: 35%
  - Rear: 29%

Two-thirds of those killed or seriously injured on rural roads are car drivers and passengers; a fifth are motorcycle riders.

In a car

- Motorcycle: 19%
- In a car: 64%
- Walking or cycling: 6%
  - In a car: 58%
  - Walking or cycling: 12%

View the full report at: www.iamtrust.org.uk

Facing the big picture

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On a pedal cycle

The proportion of pedal cyclist casualties aged 5 to 11 years is twice as high in rural Wales and Scotland than in England

Age

A third of fatal and serious injury casualties on rural roads are in cars driven by young drivers, twice as many as in cars with a driver over the age of 60

On foot

There are few pedestrian crossings and refuges on rural roads and so only a small proportion of fatal/serious injury accidents happen where they are available

Fewer pedestrians who follow the Highway Code advice to walk along the road facing traffic are killed or seriously injured (KSI) than those who walk with their backs to traffic

On a motorcycle

Riders/passengers on more powerful motorcycles are the biggest group of rural road biker deaths and serious injuries

Three-quarters of rural motorcyclist fatalities and serious injuries are riders aged between 15 and 59

Cars driven by younger drivers that are involved in rural fatal and serious injury crashes are more likely to have three or more car-occupant casualties than any other age group

Men v women

Almost three-quarters of car occupants killed or seriously injured on rural roads are in cars driven by male drivers, most motorcycle casualties are on bikes ridden by male riders

As pedestrians or cyclists, more men are killed or seriously injured in rural road crashes than women

KSI = Killed or Seriously Injured
### Weather, daylight, darkness

Two-thirds of fatal and serious injury accidents on rural roads are during daylight hours, on dry roads and in good weather conditions; casualties in Scotland are more likely when the roads are wet than in England and Wales.

#### Days of the week

<table>
<thead>
<tr>
<th>Day</th>
<th>England</th>
<th>Wales</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>12%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Tues</td>
<td>17%</td>
<td>15%</td>
<td>12%</td>
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<tr>
<td>Wed</td>
<td>16%</td>
<td>14%</td>
<td>13%</td>
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<tr>
<td>Thurs</td>
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<td>12%</td>
<td>13%</td>
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<td>Fri</td>
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<td>13%</td>
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<tr>
<td>Sat</td>
<td>10%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Sun</td>
<td>12%</td>
<td>14%</td>
<td>13%</td>
</tr>
</tbody>
</table>

#### Time of day

A third of rural road casualties are in accidents during the morning and evening peak hours, a third during the day between these peaks, and a third at night.

#### Season

Summer is the peak season for rural road deaths and serious injuries, particularly during the holiday months of July and August.

#### Speed limits

Three-quarters of fatal and serious injuries on rural roads in England, Wales and Scotland are on 60 or 70mph speed limit roads.

### Single carriageway roads – the most deadly

Eight in 10 casualties killed or seriously injured on England’s rural roads are on single carriageway roads; an even greater proportion of deaths and serious injuries occur on these lower standard roads in Wales and Scotland.

### Lower hierarchy roads

Younger drivers have a higher proportion of crashes on lower hierarchy roads (B, C and unclassified) than drivers in all other age groups.

### Casualties in single and multi-vehicle crashes

A third of fatal and serious injuries in rural road crashes; half involve two vehicles.

### Car pre-crash manoeuvres

A third of fatal and serious injuries to car occupants on rural roads occur when the car is being driven on a bend and around a half occur on straight roads.
Motorcycle pre-crash manoeuvres
The proportion of motorcyclists killed or seriously injured when overtaking another moving vehicle on rural roads is twice as high as for car occupants.

The four main crash types
Three-quarters of all fatal and serious-injury accidents on rural roads can be grouped into four types.

Cars running off the road
Four in 10 car occupant casualties on rural roads are in cars that leave the road and hit a roadside object; trees and ditches are significant rural roadside hazards.

Casualties at night and overnight
Half of the fatal and serious-injury crashes on rural roads that involve younger drivers occur in the evening and overnight (7pm to 7am) compared with a third for drivers in the 26 to 39-year-old age group.

Jean Hopkin BA (Honours)
Independent research consultant
Jean Hopkin worked for more than 20 years as a researcher, project manager and team leader at the Transport Research Laboratory, specialising in social policy research in transport and road safety. Since 1995 she has worked as an independent research consultant on a wide range of public sector projects at local, national and EU level. More recently she has also returned to TRL on a part time basis, while at the same time maintaining her independent consultancy role.

Her road safety research has included work on under reporting of road accidents, a national hospital based recording system for road casualties, research into the costs and consequences of road accidents and valuation of accident and casualties. She also worked extensively with road safety practitioners across the UK to develop Vocational Qualifications for professionals in road safety and for all transport professionals.

Jean Hopkin has a degree in Geography, and is married with two teenage children.