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Young road users: some accident statistics

"It'll never happen to me!" Well, very likely it won't — but, on the other hand, perhaps it will. It is the purpose of this article to try to show just how likely it is that a young person will be involved in a road accident, whether as pedestrian, vehicle passenger, or driver.

The popular view is that young people are the most accident-prone and suffer the most casualties. There are several ways of making the comparison, the easiest one being simply to compare the number of road accidents, in a given year, suffered by people in different age groups, with the number of people of that age in the population. These can then be reduced to a standard figure, such as the number of casualties per 100,000 people. The table shows these rates for the whole of Great Britain in 1981, broken down into different modes of travel and, where

appropriate, driver/passenger status.

It can be seen from this table that the casualty rate reaches a peak of over 2,300 casualties per 100,000 (that is, 2.3%) in the 17- and 18-year-old age group, descending to a much lower figure (0.4%) for the average person over 25. Nearly half of the peak rate arises from motorcycling alone, while in the 16-year-old age group moped accidents account for a third of the casualties. As is to be expected, car accidents make a relatively greater contribution in older age groups.

To be really meaningful, however, such figures need to be related to the numbers of people who actually own or habitually use a given form of transport. But, although total numbers of vehicles are known, there is no accurate way of estimating how many of them are habitually used by each age group. In the 1978/9 National Travel Survey, the "main driver" was identified for each of the vehicles available for use by the 11,400 responding households. Among those aged 16-20, 10½%, 5% and 2% were main drivers of a car, a motorcycle, or a moped respectively. For those aged 21-26, the figures were 34%, 3%, and ½% respectively. Other people in the household may, of course, also drive the vehicles to a lesser extent; young people will, in particular, often be fairly frequent secondary users of a family car.

Motorcycling and car driving compared

A better way of comparing risks by age is to look at casualties in terms of the distances covered by different forms of transport. The required amount of travelling by each age group can be estimated

AGE	Peder- trian	Push- bike	Moped user	Scooter/m'cycle		Car		Goods etc.	All road users
				Driver	P'ger	Driver	P'ger		
0 - 14	212	84	0.5	0.3	2.2	0.3	81	17	397
15	179	194	5.6	10	30	5	125	26	576
16	169	173	445	157	89	15	232	32	1311
17	159	124	174	1092	136	210	368	54	2318
18	152	88	67	940	145	420	445	69	2325
19	126	75	44	671	103	458	391	72	1940
20	141	76	33	539	85	466	405	82	1827
21	106	52	23	354	51	416	291	76	1369
22	81	50	17	269	36	375	251	58	1137
23	76	42	18	220	25	335	216	63	996
24	69	43	15	159	20	328	187	60	879
25 - 99	69	21	8	35	2	157	86	45	423
All ages	111	46	19	93	14	148	119	43	593

Casualty rates per 100,000 of the population in Great Britain, 1981.

from the National Travel Survey. When this is done, we find that motorcycle riders aged 17-19 are from 6 to 7 times as likely to be involved in a serious or fatal accident as are riders aged 40-49; the corresponding factor for car drivers is 5.

At any age, motorcycle riding is much more dangerous than car driving – even those aged 40-59 are 5 times as likely to be involved in an injury accident (per mile) riding a motorcycle compared with driving a car. Due to the much greater protection to car occupants in an accident, his chance of injury on a motorcycle is 15-20 times that when driving a car – in a car accident, it is more often the other party who is injured. In view of the much greater involvement rate for young motorcyclists, it turns out that they are over one hundred times as likely to be injured on a motorcycle (per mile) as is a middle-aged person driving a car. Is it surprising that parents don't want their offspring to have a motorbike?†

The table can be used to discover the chance of being involved in some kind of road accident by a given age. The figures, as already stated, apply to 1981; the rates have come down slowly in the past, but there are now signs that they are levelling off. Assuming that they are maintained in future years, then 397 out of 100,000 children in each year group up to the age of 15 will, on average, suffer a road accident. This means that nearly 6% of all 15-year-olds will have suffered an injury in an accident – and some won't have reached 15 as a consequence.

If we extend this analysis to later age groups, we find that a further 8½% will have been casualties by the age of 20, and 6.2% more by the age of 25. Bearing in mind that some people will have been involved in more than one accident, about 20% of all individuals will have suffered injury in a road accident by the time they are 25 – and this total does not include a substantial proportion that are not reported to the police.

† These figures can be found described in much greater detail in *Road Accidents in Great Britain, 1981* (Department of Transport).