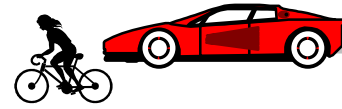


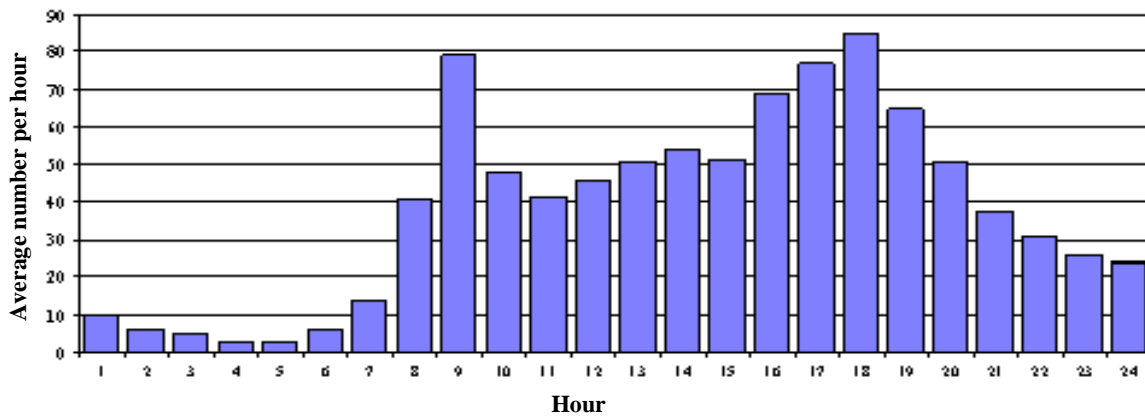
# Safety on the Roads



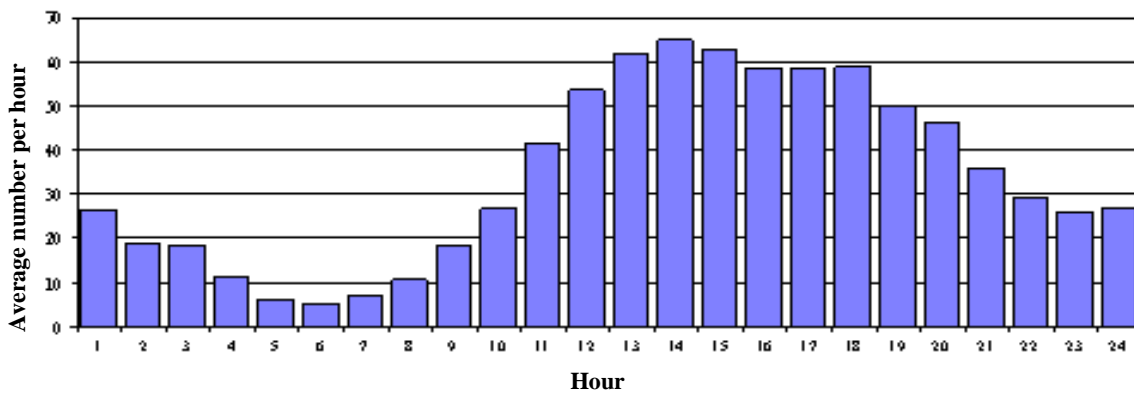
These charts and graphs are from the Department of the Environment, Transport and the Regions website ([www.detr.gov.uk](http://www.detr.gov.uk)). Give a brief account of what each chart and graph shows. Suggest possible reasons for the findings.

## 1 Casualties in Great Britain by hour of the day 1998

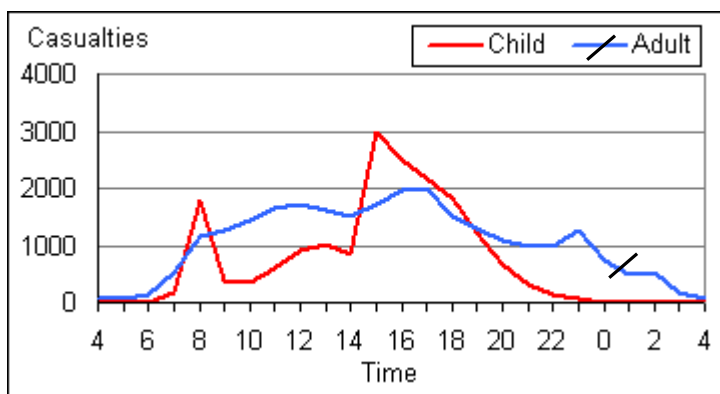
(a) Weekdays



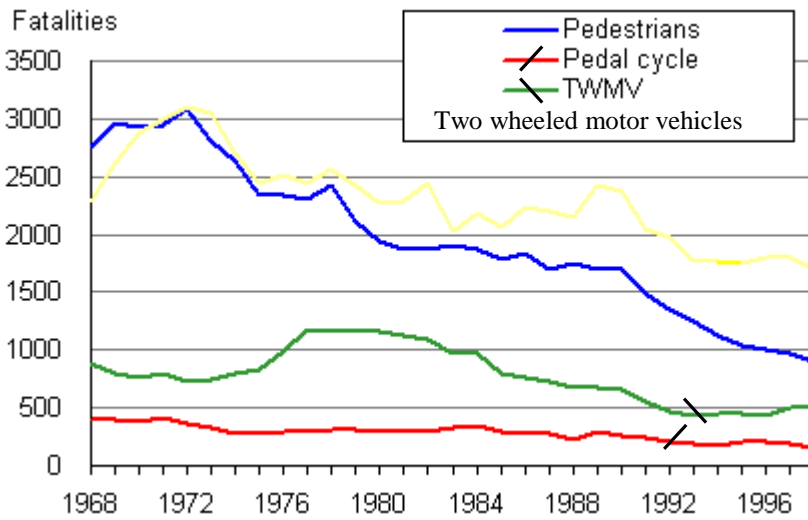
(b) Weekends



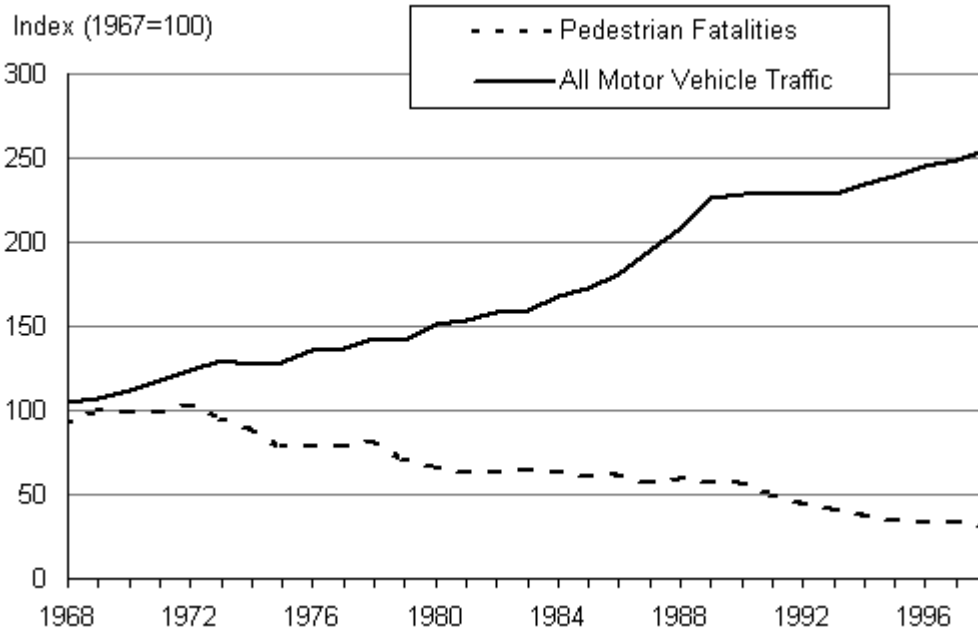
(c) Child/Adult Casualties by Hour of Accident



**2 Road Accident Deaths by User Type 1968 - 98**

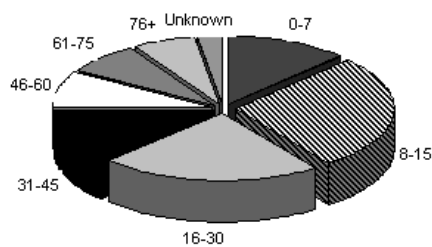


**3 Pedestrians Killed in Road Accidents 1968 - 98**

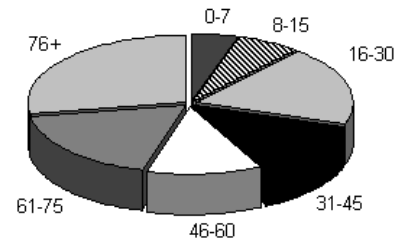


**3 Who is most at risk?**

**Pedestrian Casualties by Age Group (1998)**

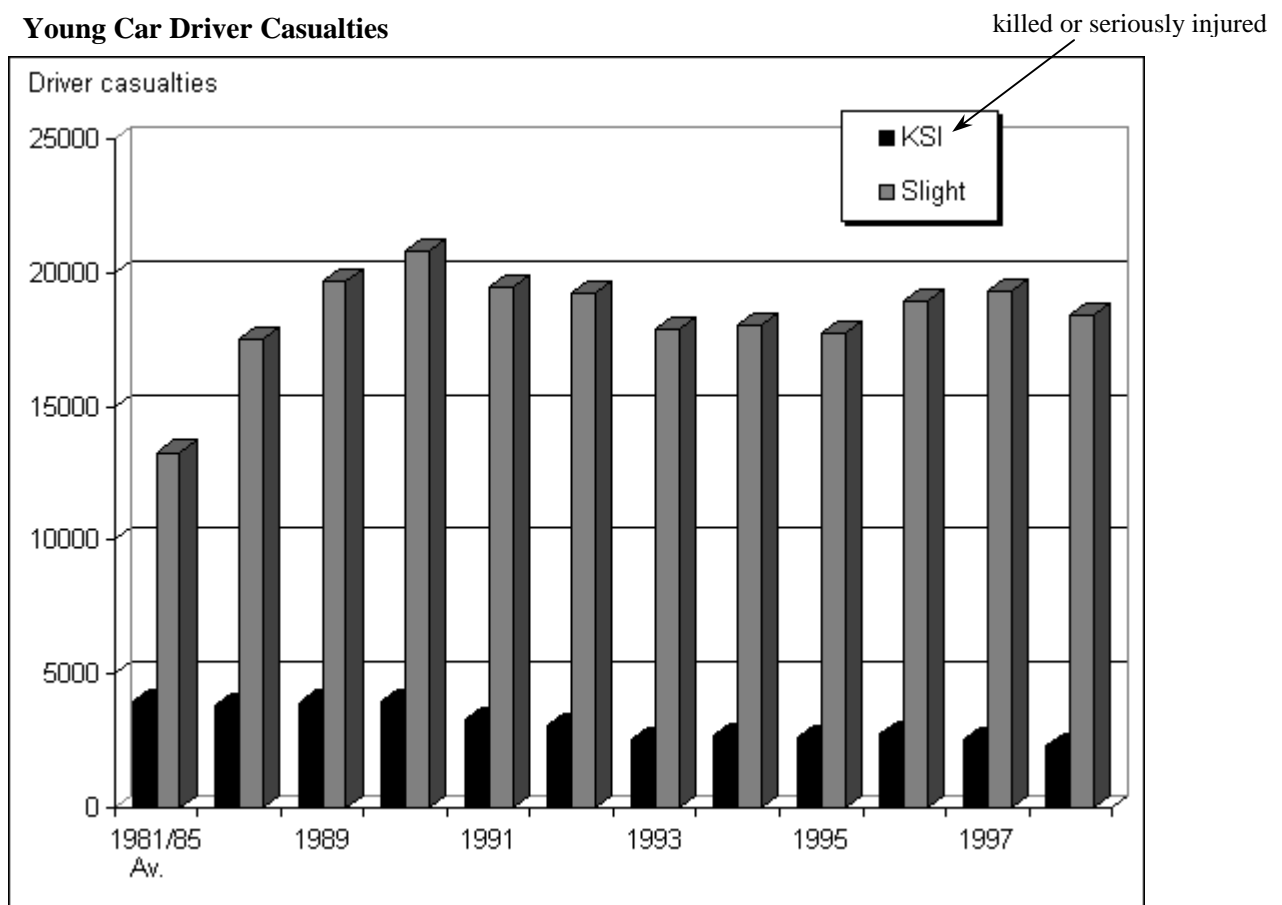


**Pedestrian Fatalities by Age Group (1998)**

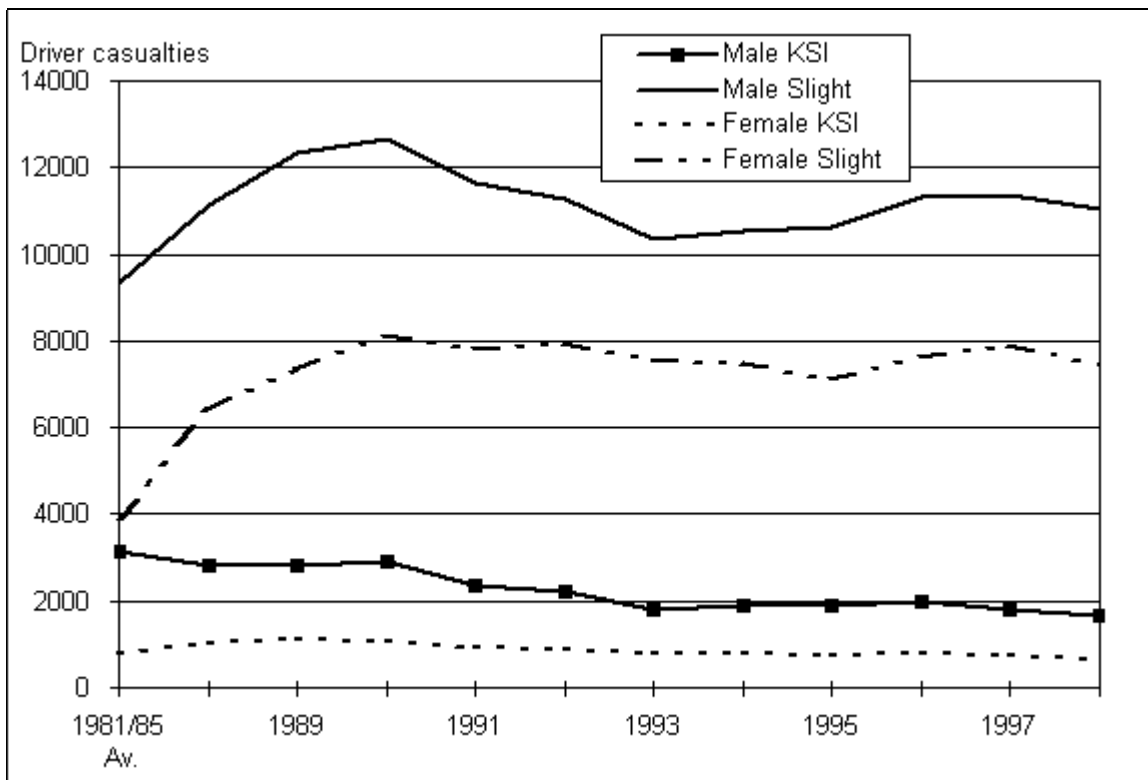


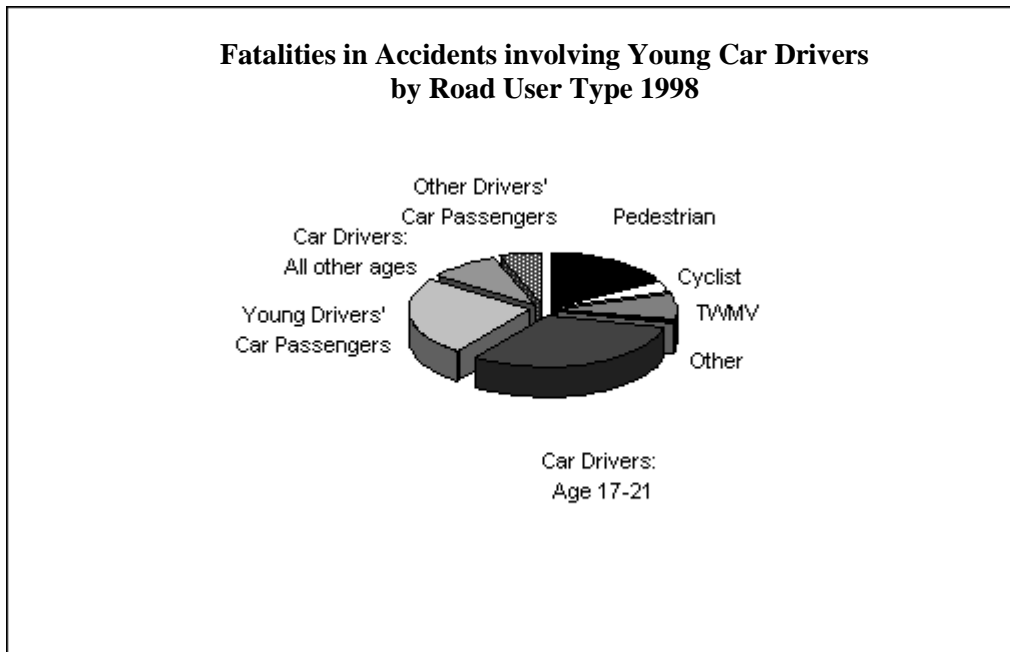
#### 4 Young Car Drivers (aged 17 – 21) in Road Accidents in Great Britain

**Young Car Driver Casualties**



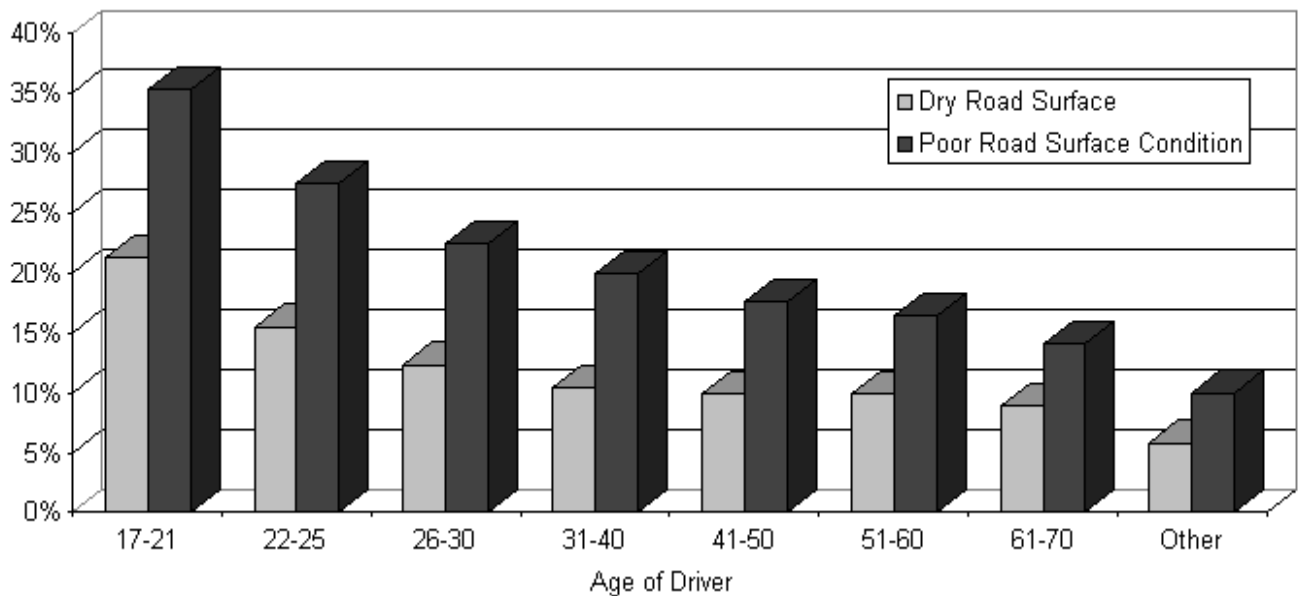
**Young Car Driver Casualties by Gender**



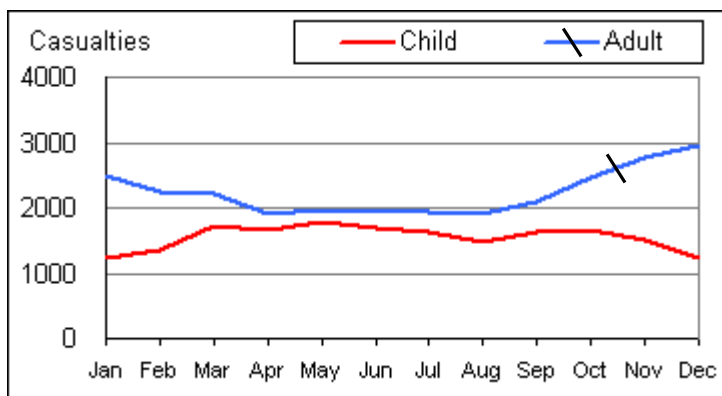


### 5 Driver Loss of Control in Road Accidents by Road Condition

% of drivers who lost control



### 6 Pedestrian Casualty Rates by Month of Accident



<b>Teacher Notes</b>
----------------------

**Units** Foundation Level, Making sense of data  
Intermediate Level, Handling and interpreting data

**Skills used in this activity:** Interpretation of graphs and charts

**Preparation:** You need copies of pages 1 – 4 for each student.

**Notes on the Activity**

The charts and graphs used in this activity are all from the website maintained by the Department of Environment, Transport and the Regions ([www.detr.gov.uk](http://www.detr.gov.uk)) and as such are subject to Crown copyright protection. This means that the material may be used without requiring specific permission, but the source and copyright status must be acknowledged.

**Answers** There are a variety of possible answers. The most likely are given below.

***Casualties in Great Britain by hour of the day 1998***

- No. of casualties peaks at about 9 am and 4-7 pm - many people travelling to and from work or school. Few casualties in the early hours - not many people travelling.
- Pattern different at weekends. High level of casualties throughout the late morning and afternoon - more people travelling. Higher number of casualties during the night than on weekdays - more people out at weekends.
- Peaks for children at the times when they are going to school and after school finishes. Virtually no child casualties at night - children in bed. No. of adult casualties quite high throughout the working day peaking when most people are going home from work. Smaller peak around midnight – people travelling home after a night out.

***Road Accident Deaths by User Type 1968 – 98***

Higher number of road deaths amongst pedestrians than cyclists or motor cyclists - probably because more people walk than use bikes or motor-bikes. Decrease in pedestrian deaths over the 30 year period - probably because of decrease in the total number of pedestrians (more people now use cars or other modes of transport).

***Pedestrians Killed in Road Accidents 1968 – 98***

Traffic has more than doubled by 1998 yet number of pedestrian fatalities less than half – probably due to fewer people walking, more travelling by car and other modes of transport.

***Who is most at risk?***

Roughly  $\frac{1}{3}$  of pedestrian casualties are children (0 –7 and 8 – 15 groups), but these groups form a much smaller proportion of pedestrian fatalities. The opposite is true of the elderly (61 – 75 and 76+ groups). Children more likely to survive an accident than elderly people.

***Young Car Drivers (aged 17 – 21) in Road Accidents in Great Britain***

Many more drivers have slight injuries than are killed or seriously injured – more minor than major accidents. Steep rise in slight injuries in late 80's – more young people driving? More male than female injuries – more male than female drivers or females better drivers? Gradual decrease in number of male deaths and serious injuries perhaps due to better safety measures.

***Fatalities in Accidents involving Young Car Drivers by Road User Type 1998***

Young car drivers and their passengers account for over half – not surprising since by definition all the cases under consideration involve young drivers.

***Driver Loss of Control in Road Accidents by Road Condition***

Smaller proportion of older drivers lose control whatever the conditions– more experienced.

***Pedestrian Casualty Rates by Month of Accident***

More adult casualties in winter – accidents more likely to happen in poorer weather.  
More child casualties in summer – more children likely to be playing outside on/near roads.

