

The cost of road accidents

- [Road safety](#)

The NHS spends an estimated £131 million per year on emergency hospital admissions because of childhood accidents. Just a small amount of money invested in injury prevention can save many times that amount further down the line.

To help you make the case for child accident prevention in your area, we're providing estimates for the costs of different accidents. This article deals with the substantial cost of road accidents.

Road accidents – the scale of the problem

- In 2009 2671 children were killed or seriously injured on the road – that's 7 children every day.
- The number of children dying on the roads is decreasing year on year, but there is still some way to go. In 2009 81 under-16s were killed on the roads.

The financial cost

Thanks to a valuation report released by the Department for Transport (DfT) we are able to estimate the amount of money saved by preventing different types of accident. The figures below are taken from the [DfT's 2009 accident valuation report](#).

The DfT estimates that the value of preventing the accidents that happened on the roads in 2009 would be around £15.8 billion. This includes all accidents – there are no breakdowns for child accidents only, as many accidents involve numerous casualties from across all age groups.

An 11 year old boy walking home on a winter evening is hit by a car travelling at 35 miles per hour. The child wasn't wearing reflective clothing so the driver found him quite hard to spot. He stepped out into the road quickly and the driver, who was travelling at 5mph over the speed limit, did not have time to swerve or brake.

The young boy suffered serious injuries and was taken to hospital by ambulance.

The DfT estimates that the average cost per seriously injured casualty on the roads is **£178,160**.

A 14 year old boy, taking a short cut home, finds himself cycling by the side of a dual carriageway. He isn't a confident cyclist and isn't wearing a cycle helmet. As he rides home, he is hit by a car travelling at 70mph and is knocked off his bike, killing him instantly.

The DfT estimates that the average cost per fatality on the roads is **£1,585,510**.

How accurate are these costs?

The valuations provided by the DfT encompass all aspects of the valuation of casualties, taking into account:

- **The human costs including pain, suffering and grief.** This is calculated on a 'willingness to pay' approach i.e. how much people would be willing to pay to avoid grief, pain and suffering.
- **The direct economic costs of lost output.** This is most relevant for adult accidents if the injury requires short-term recuperation. For children, however, this becomes substantial if they suffer injuries that cause them lifelong problems, such as a severe head injury.
- **The medical costs associated with road accident injuries.** This includes the cost of treatment, hospital staff time, ambulance costs, etc. See 'the cost of burns' and 'the cost of a hot drink scald' for more detailed breakdowns of these costs.

It is also worth noting that the costs include direct and indirect costs. For example, property damage caused by an accident will impact directly on an individual or an organisation. However, the cost of lost output (for example, a child who suffers a spinal injury that leaves her unfit for work later in life) will be borne by society at large through taxation.

Above we've given two accident examples to give you an idea of the amount of money that can be saved by investing in accident prevention. However, bear in mind that costs will vary on a case-by-case basis, and these costs should be taken as a guide only.

The emotional cost

The DfT's estimates assign a monetary value to the grief, suffering and pain experienced by casualties. However, when making the argument for preventing road accidents it is worth highlighting the emotional effects they can have on children and families.

- Children who have been involved in road accidents often suffer from post-traumatic stress (PTS). The parents of children have also been found to suffer from PTS, often as long as six months after the accident has occurred.
- A serious injury can leave a child disabled or disfigured for life. They will carry reminders of their accident with them every day.
- Children who are admitted to hospital after an accident can miss out on days, weeks, or even months of education. These days are difficult to get back, and the lost education can have a serious impact on the child's future.

How could it be prevented?

The problem of road accidents is tackled in many different ways, by Road Safety Officers and numerous other professionals across the country. Things such as speed cameras, road safety training, traffic calming, etc, are all deployed in an effort to lower the number killed or seriously injured. However there are four broad considerations when looking at preventing road accidents.

- **Engineering.** Better vehicle engineering can help prevent accidents, as can good road design. Although vehicle engineering is out of the hands of the average accident prevention commissioner, good road design can be influenced by good road safety arguments. For instance, if there is a road accident hot spot in your area, it could be improved by a pedestrian crossing or speed bumps.
- **Enforcement.** Legislation has an important role to play in preventing road accidents, and many pieces of legislation have dramatically reduced the number of children killed or injured on the roads. For example, laws that made it compulsory for children to wear seatbelts in the car have protected children who would otherwise have been killed on the roads. Lower speed limits in certain areas can be an effective way to prevent serious injuries. If a child is hit by a car travelling at 40mph there is an 80% chance she will die. If a child is hit by a car travelling at 30mph there is an 80% chance she will live.
- **Empowerment.** Although most people can learn the green cross code, there are some road accident prevention measures that aren't accessible to all. For instance, child safety seats are often expensive, putting them out of reach of the very poorest. Certain road safety education is inaccessible to those with [literacy problems](#), or who do not speak fluent English.
- **Education.** There are many good education programmes that help pedestrians and cyclists become more aware of the dangers of the road and that educate drivers about the impact of their speed. Some of these have been proven to reduce the number of people killed or seriously injured on the roads.

For more information on what works, visit the [accident prevention programmes](#) section of the library.

More information

More in our 'cost of accidents' series:

[How much does a hot drink scald cost?](#)

[How much does a burn cost?](#)

All resources tagged with '[road safety](#)'

[See the full DfT accident valuation report](#)