

HELMET LAWS: A SUMMARY OF THEIR EFFECT

Australia

Australian Capital Territory

Casualties: 89 hospital admissions year before law, 87 and 88 in two years after.

Cycle use: fell 33% weekdays, 50% weekends.

Net result: risk of injury increased relative to cycle use.

New South Wales

Casualties: child cyclists 21% more likely to suffer death or serious injury post-law.

Cycle use: fell 36% - 44% (but 90% among girl teenagers in Sydney)

Net result: risk of serious/fatal injury increased.

Northern Territory

Casualties: pre/post law unknown.

Cycle use: fell 22% - 50%

Subsequent changes: The law was modified after 2 years, the practical effect of which was to reduce helmet wearing to only about 20% and cycle use has increased again. Despite low helmet use, in 2001 Northern Territory had the lowest casualty rate in Australia and also the highest per-capita cycle use.

Net result: Greatest benefit after fall in helmet use.

Queensland

Casualties: no change in intra cranial injuries, increase in concussions.

Cycle use: fell 22% - 30%.

Net result: risk of injury may have increased relative to cycle use.

South Australia

Casualties: no change in trends.

Cycle use: fell approx 38%.

Net result: large decrease in cycle use without casualty benefit.

Tasmania

Casualties: possibly slightly fewer head injuries to children under 9 years. No change for children 10 - 14 years. Adults unknown.

Cycle use: no data.

Net result: minimal benefit, and only if cycle use unchanged.

Victoria

Casualties: small initial decline in % head injuries less than for pedestrians. Over first 4 years, no net decline in %HI.

Cycle use: fell 36% - 46%.

Net result: risk increased relative to cycle use.

Western Australia

Casualties: head injuries fell, but by less than decline in cycling.

Cycle use: fell 30% - 50%.

Subsequent changes: number of cyclists recovered following extensive promotion and population growth, but cycle use still lower than pre-law for children and utility journeys. Casualties in 2000 were at an all-time high.

Net result: risk of head injury increased; utility cycle use not recovered.

Canada

Alberta

Casualties: head injuries apparently doubled in first 6 months.

Cycle use: no data.

Net result: possible increase in risk of head injury.

British Columbia

Casualties: no change in overall % head injuries compared with non-law provinces. % head injury in motor vehicle crashes

increased.

Cycle use: fell 28% - 30%.

Net result: no obvious benefit for fall in cycle use.

New Brunswick

Casualties: no data.

Cycle use: no data.

Net result: not known.

Nova Scotia

Casualties: no change in head injuries relative to cycle use, but total injuries doubled.

Cycle use: fell 40% - 60%; greatest fall among teenagers.

Net result: no obvious benefit for fall in cycle use.

Ontario

Casualties: reductions in head injuries but not linked to law, which is not enforced.

Cycle use: no reliable data. Helmet wearing rate similar in 2001/2 to pre-law, probably because of lack of enforcement.

Net result: no benefit.

Czech Republic

Casualties: no data.

Cycle use: no data. The law is not enforced and appears to be widely unknown and disregarded.

Net result: no known benefit.

Iceland

Casualties: no data.

Cycle use: no data. Enforcement is understood to be lax and child helmet use has fallen.

Net result: no known benefit.

New Zealand

Casualties: head injuries fell 19%, less than cycle use and not more than for population at large.

Cycle use: fell approx 22%.

Net result: risk of head injury relative to cycle use increased. Report showed cost outweighed benefit by a large factor.

Spain

Casualties: contradictory data.

Cycle use: no data but cycle use low. Helmet use remains unusual except among sports cyclists. Enforcement very lax.

Net result: no known benefit.

USA

In the USA, little monitoring of the effect of helmet laws on injuries or bicycle use has been undertaken. Helmet laws are seldom enforced. One analysis of jurisdictions with helmet laws found no significant change in fatalities, which were subject to large year-to-year variation. Cycle use generally fell with laws, but recovered if the law was not enforced.

Nationally, an increase in helmet use from 18% to 50% of cyclists was not accompanied by any fall in the proportion of head injuries. An analysis of 8 million cases of injury and death to cyclists over 15 years found no benefit from helmets, with a small increase in risk of fatality for helmet wearers.

Some of the laws referred to in this information sheet apply only to children, others to all ages.

More complete information and full references can be found at www.cyclehelmets.org/mf.html#1096.