2. Marine incident trends

2.1 Australian marine fatality trends

To provide the broadest initial view of Queensland's relative maritime safety performance, the 2003 review commences with a comparison of Queensland's maritime fatality involvement per million of population with that of other Australian states and territories—based on Australian Bureau of Statistics (ABS) coroners' report data. While the ABS scope and definitions of water transport deaths vary slightly from those used by Maritime Safety Queensland for fatal marine incidents, the ABS data nonetheless allows a nationwide comparison from a common point of reference. For example, the ABS data may include water transport deaths that do not meet the 'marine incident' definition which relates specifically to the operation of a vessel. ABS data also is based on the year that coroners' reports are registered, rather than the year in which an incident may have occurred. The ABS data nonetheless resolves issues of comparability between individual jurisdictions' maritime incident data collections and definitions. Figure 1 shows that over the past 25 years, all states and territories in Australia have shown a marked improvement in maritime fatality rates per million of population. Table 1 at Appendix 1 provides comparative interstate water transport death rates for the period 1976 to 2002.

During the period 1994 to 1999, the data shows that the Queensland maritime fatality rate per capita exhibited both an absolute and a relative decrease compared with other jurisdictions. From ranking sixth of the eight jurisdictions in the 1990-94 period, Queensland's ranking improved to fourth over the period 1995-99. Queensland ranked second in Australia with a maritime fatality rate of 1.93 per one million of population for the period 2000 to 2002. This represents a fall of 25 per cent over the previous five-year average of 2.59 fatalities per million of population. Comparatively, the maritime fatality rate per million of population for all of Australia for 2000 to 2002 was 2.07. Coronial data for the 2003 calendar year was not available from the ABS at the time of printing this report.

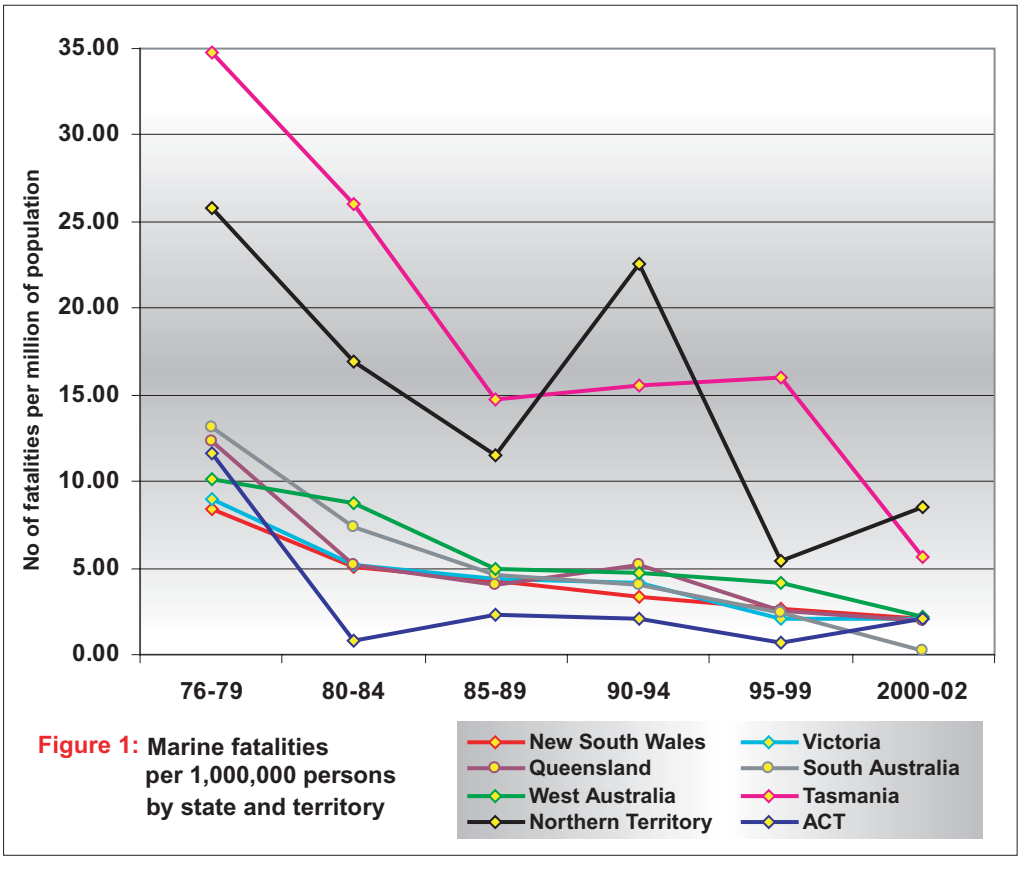


Figure 1: Marine fatalities per 1,000,000 persons by state and territory

During this three decade period numerous marine safety initiatives have been introduced at both the national and state levels, including:

- Compulsory boating safety equipment (1976)
- Recreational boating safety education campaigns (1978)
- Formal training courses for commercial marine licensing (1980)
- Voluntary training courses for recreational boating (1985)
- On-water random breath testing (1989)
- Introduction of electronic positioning radio beacons (EPIRBs) (1992)
- Introduction of formal recreational boat licence training option (1993)
- Positive flotation for vessels (1996)
- Introduction of boating weather service (1998)
- Introduction of on-water speed detection devices (1999)
- Know, Know, Know Your Boat education campaign (2000)
- BoatSmart education campaign (2003)

Maritime Safety Queensland is continuing to work closely with other maritime agencies like the Queensland Boating and Fisheries Patrol and the Queensland Water Police and with the maritime industry and boat operators to further improve Queensland marine safety performance.

2.2 Marine incidents in Queensland

2.2.1 Introduction

The analyses included in this report draw on data from 'reported' marine incidents. While the overall level of reporting of marine incidents is considered robust, there is an acknowledged indeterminate level of under-reporting of marine incidents in any given year. A comprehensive set of tables showing time-series trends for reported marine incidents from 1998 to 2003 is provided at Appendix 1.

When disaggregated, incidents numbers are often small and random variations can be large. For this reason, Maritime Safety Queensland generally assesses marine incident trends in terms of their rate of occurrence in the year under review compared with the average of the previous four years of data.

2.2.2 Reported marine incidents

In 2003, 645 marine incidents were reported in Queensland. This represents a decrease of five from the 650 incidents reported in 2002. The number of incidents reported in 2003 is generally consistent with the trend in recent years and the previous four-year average of reported marine incidents.

2.2.3 Marine incidents by severity

This section examines all reported marine incidents in Queensland. Incidents are analysed from two perspectives:

- the severity of resultant personal injury (Figure 2), and
- the severity of resultant property damage (Figure 3)

Figure 2 shows that total reported marine incidents fell slightly in 2003, but were generally in line with the trend over the previous five years. The aggregate numbers of reported marine incidents in recent years suggest that there may be a plateau occurring in the rate of marine incidents. Analyses in subsequent years will continue to monitor this aspect.

Figure 2 also shows reported marine incidents according to the severity of the personal injury outcome. Incidents resulting in fatality have fallen from 12 in 2000 to 7 in 2003. This compares favourably with the four-year average of 9.75 fatality incidents per year. Serious injury incidents fell significantly in 2003 to 21, compared with 53 in 2002 and a four-year average of 55.25. This fall can be attributed to improved safety on the water as well as more rigorous application of the 'hospitalisation' criterion for serious injury incidents.

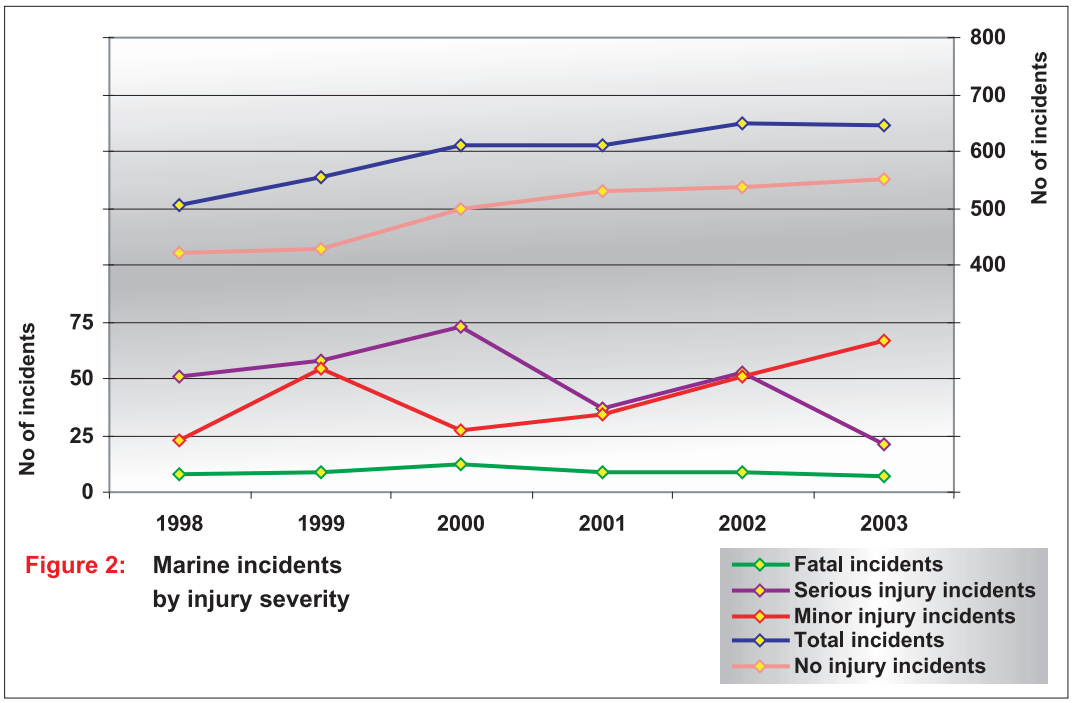


Figure 2: Marine incidents by injury severity

Incidents resulting in minor injuries have also been included in Figure 2. Minor injuries resulting from marine incidents appear to be generally consistent with recent trends. The marginally higher number of minor injury incidents reported in 2003 is consistent with the earlier mentioned fall in serious injury incident numbers. It is also encouraging to note the continuing growth in 'no injury' incidents—both in absolute and relative terms.

The second view of incident severity relates to property damage and loss. The various dimensions of property damage and their relative involvement in marine incidents between 1998 and 2003 are shown in Figure 3.

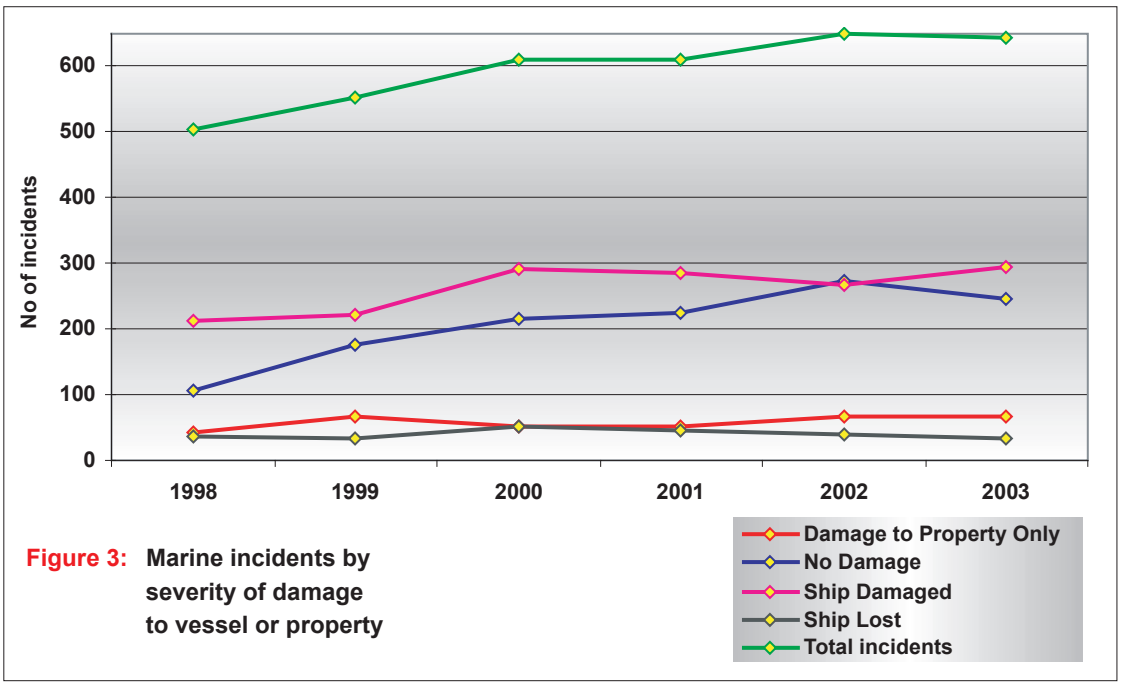


Figure 3: Marine incidents by severity of damage to vessel or property

The number of vessels deemed a total write-off/loss in terms of property damage (33) is down 17.5 per cent on the number of ships lost in 2002 and is well below the previous four-year average of 42 ships lost per year. 'Ships damaged' rose marginally in 2003—up from 268 in 2002 to 294 in 2003, and higher than the previous four-year average of 266.5. There was a corresponding fall in 2003 in the number of incidents where 'no damage' was reported.

2.2.4 Marine incidents by region

The Brisbane region recorded the greatest number of reported marine incidents (192) in 2003, while the Townsville region recorded the least number of reported incidents (49). Reported marine incidents in all regions are generally in line with their respective four-year averages. Figure 4 shows the number of reported marine incidents according to the region in which the incident occurred. Map 1 shows the comparative numbers of commercially and recreationally registered ships for each region.

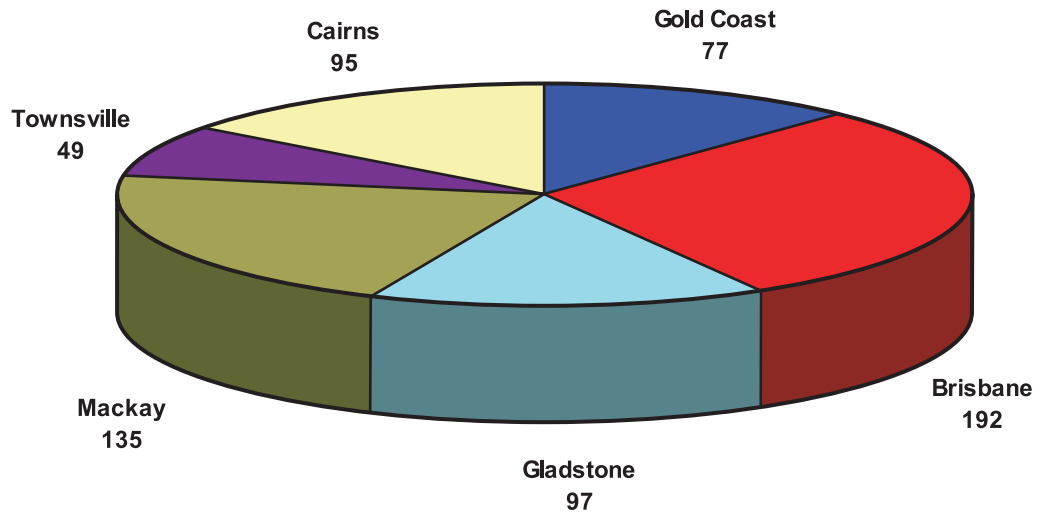
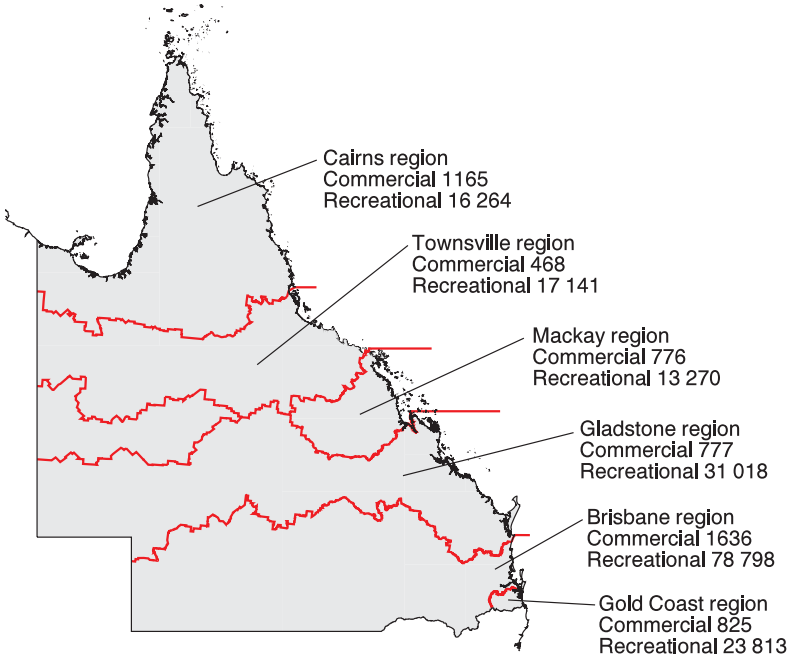


Figure 4: Marine incidents in 2003 - by region



Map 1: Registered ship numbers by region - 2003