

4.0 Fatal and serious marine incidents

This section examines the combination of marine incidents that resulted in fatalities and serious injuries (FSI incidents).

4.1 Reported fatal and serious injury incidents

In 2006, Maritime Safety Queensland received reports of 47 FSI incidents—seven less than in 2005. This FSI incident outcome is in line with the previous four-year average of 46.75 FSI incidents per year.

Studies of hospital admissions data suggest a higher level of serious injuries from ‘water transport’ accidents than indicated from Maritime Safety Queensland’s marine incident records. It is acknowledged that there is a level of under-reporting of non-fatal injury marine incidents. Maritime Safety Queensland is liaising with Queensland Health to access hospitalisation data to more accurately determine the extent and nature of serious injuries resulting from marine incidents.

There was a combined total of 53 fatalities and serious injuries recorded from the reported marine incidents in 2006—17 fatalities and 36 serious injuries. While the number of fatalities in 2006 is high the combined total is consistent with the previous four-year average of 53.5 fatal and serious injuries per annum.

4.2 FSI incidents by region

Figure 15 shows the number of FSI incidents reported in each region during 2006.

In 2006 four regions recorded fewer FSI incident numbers than in 2005. Brisbane region recorded a significant decrease in the number of recorded FSI incidents—with seven recorded FSI incidents in 2006, down from 14 in 2005 and well under-represented when compared with the region’s previous four-year regional average of 13.75 FSI incidents per annum.

The Cairns region, with 15 recorded FSI incidents, recorded the highest number of FSI incidents in 2006—up by eight on the region’s 2005 result and almost double the region’s previous four-year average of eight FSI incidents. While the Cairns region has approximately nine per cent of the state’s registered vessel fleet, the 15 FSI incidents reported for the Cairns region represent approximately 32 per cent of the total reported FSI incidents in 2006 (n=47). The 15 incidents resulted in seven fatalities and nine persons seriously injured. Of the region’s 15 FSI incidents, 10 involved commercial

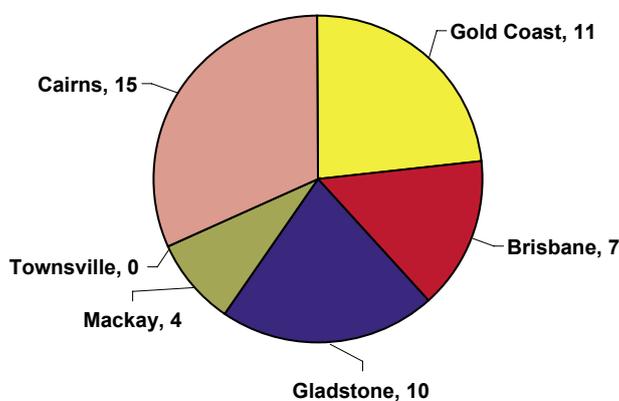


Figure 15: Fatal and serious injury incidents in 2006 - by region



vessels and five involved recreational vessels, including four recreational speedboat incidents.

Gold Coast region recorded the next highest number of reported FSI incidents in 2006 with 11 recorded FSI incidents. These 11 incidents resulted in one fatality and 12 persons seriously injured. While Gold Coast region has approximately 14 per cent of the state's registered vessel fleet, the 11 recorded FSI incidents represent approximately 26 per cent of the total FSI incidents in Queensland in 2006. The Gold Coast region's FSI incidents comprised six commercial vessel incidents and five recreational vessel incidents. Four of the five recreational vessels involved were recreational speedboats.

There were only four recorded FSI incidents in the Mackay region in 2006—down significantly on the nine reported FSI incidents in the region in 2005 and the region's previous four-year average of 6.25 FSI incidents. The four FSI incidents resulted in the loss of one life and the hospitalisation of four persons.

Gladstone region recorded ten FSI incidents in 2006, four more than reported in 2005. This was almost double the region's previous four-year average of 5.25 FSI incidents. The ten FSI incidents resulted in the loss of four lives and the hospitalisation of seven persons.

Townsville region did not record any FSI incidents in 2006.

Incident study 1

Shooting the breeze!

The vessel: 6.2m commercial water taxi

The incident

After spending a boozy Saturday at the pub, a man decided to head home using the local water taxi. Despite adequate onboard signage and verbal warnings from the master of the water taxi, the passenger, in his inebriated state, felt compelled to stand on his seat and feel the wind through his hair. The master repeatedly directed him to sit down. At the same time, other passengers attempted to restrain him. Finally, after much coercion, he got back into his seat.



The experienced master, noting the potential for injury to the passenger, immediately slowed the vessel. However, the inebriated passenger stood up once again and as the boat continued to decelerate, he fell forward over the bow.

The master immediately stopped the boat to minimise harm to the person overboard. But despite the master's best efforts, the vessel ran over the top of him. The passenger sustained major lacerations to his face, head and arms. The master immediately called ooo and the injured man was transferred to a waiting ambulance at a nearby marina. He required emergency surgery for his injuries and was hospitalised for a number of weeks.

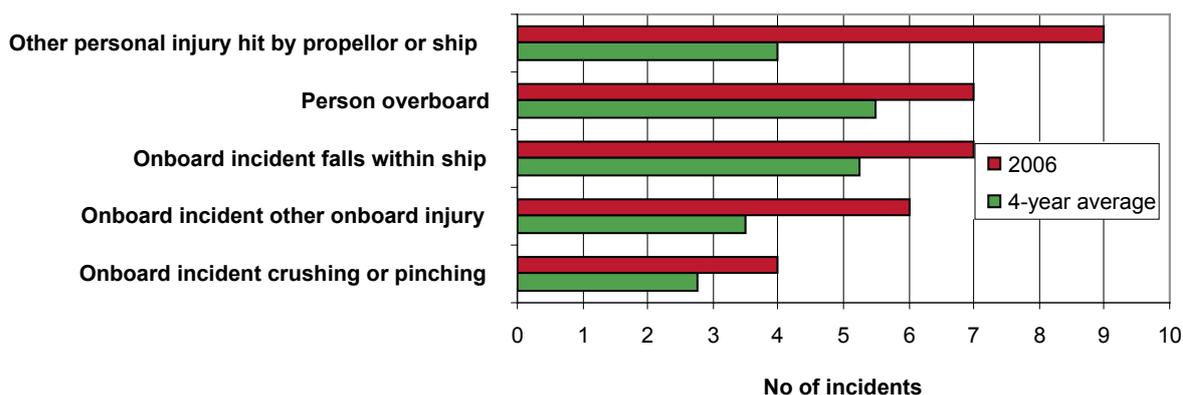
Safety insights

- Alcohol and boats do not mix, even as a passenger.
- A prudent master always assesses risks inside his boat as well as outside.
- Boats by their nature can move unexpectedly in any direction.
- Whenever moving about on a boat, ensure you have hold of a railing or other secure point.

4.3 FSI incidents by incident type

The five most frequently occurring types of fatal and serious injury incidents reported in 2006 accounted for 33 (70.2 per cent) of all reported incidents (n=47). Figure 16 shows the top five incidents types reported in 2006 compared with their previous four-year average involvement.

Figure 16: Fatal and serious marine incidents in 2006 by incident type (Top 5)



All of the top five incident types have shown increases in involvement in 2006. All five are significantly over-represented when compared with their previous four-year average involvement.

The most frequently-occurring FSI incident type in 2006 was 'other personal injury hit by propeller or ship' (9), up from seven in 2005 and well above the previous four-year average involvement of four.

The next most frequently-occurring FSI incident types in 2006 were 'person overboard' (7) and 'onboard incidents falls within ships' (7). These compare with previous four-year average involvements of 5.50 and 5.25 respectively.

'Person overboard' incidents accounted for 4.3 per cent (30) of all reported marine incidents in 2006 but made up almost 15 per cent (7) of the FSI incidents (n=47) and almost 43 per cent of the fatal incidents reported in 2006.

Onboard incidents as a group made up more than 36 percent (17) of all reported FSI incidents in 2006. This compares with 40.8 per cent of all FSI incidents in 2005. Comparatively, onboard incidents accounted for only 8.3 per cent of all reported marine incidents in 2006.

4.4 FSI incidents by vessel type and length

The 47 FSI incidents reported in 2006 involved 56 vessels. Figure 17 shows the five vessel types that figured most frequently in FSI incidents in Queensland in 2006 and their comparative involvement since 1999. The five most frequently occurring vessel types involved in FSI incidents in 2006 were:

- Recreational speedboats (16)
- Commercial fishing vessels (7)
- Commercial speedboats (7)
- Commercial-other (6)
- Commercial passenger vessels (5)

Three of the vessel types showed proportional increases in FSI incident involvement in 2006—recreational speedboats, commercial speedboats and commercial-other ships.



There were 16 recreational speedboats involved in FSI incidents in 2006, up from 13 in 2005 and in line with the previous four-year average involvement of 14.75. FSI incidents involving recreational speedboats resulted in the loss of eight lives and the hospitalisation of eight others.

There was a sizeable increase in the involvement of commercial speedboats in FSI incidents—from three in 2005 to seven in 2006, up significantly on their previous four-year average involvement of 4.25. These seven incidents resulted in the hospitalisation of eight seriously-injured persons. Commercial fishing ships continue to be heavily represented in FSI incidents. There were seven commercial fishing ships involved in FSI incidents in 2006. These incidents resulted in the loss of five lives and serious injuries to two of the fishing ships' crew.

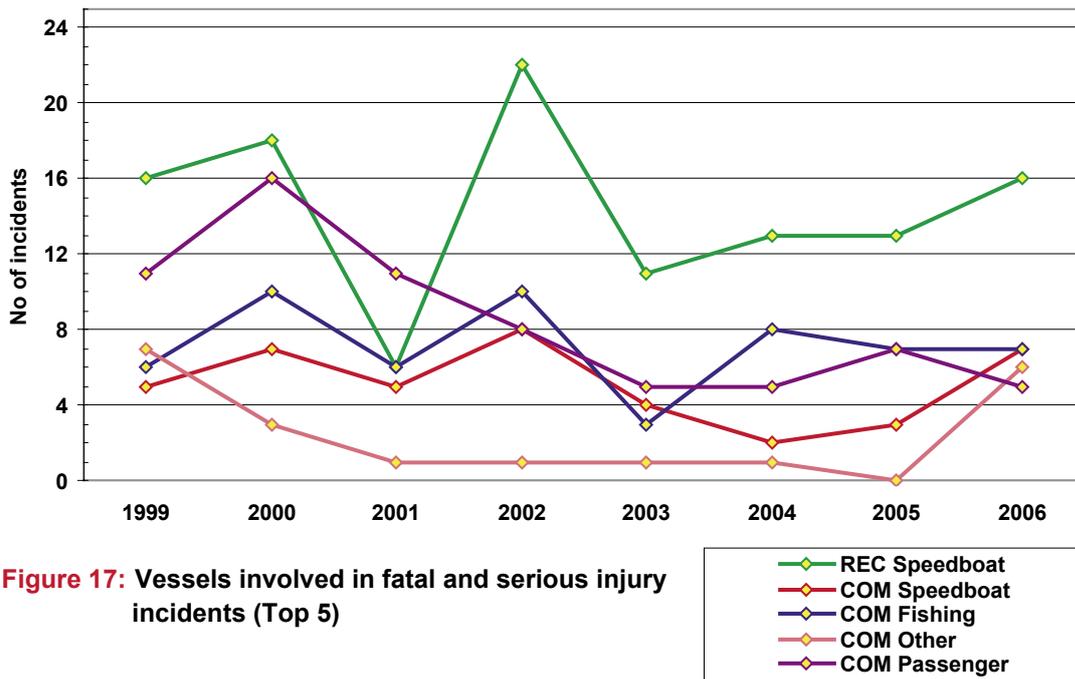


Figure 17: Vessels involved in fatal and serious injury incidents (Top 5)

Of the 56 vessels involved in the 47 FSI incidents in 2006, 24 (42.8 per cent) were under eight metres in length. This compares with 56 per cent of vessels under eight metres in 2005. 15 of these were recreational vessels and nine were commercially registered vessels. 15 (26.8 per cent) of the vessels involved in FSI incidents in 2006 were over 15 metres in length—compared with 20 per cent in 2005. All 15 vessels were commercially registered. Looking at the 14 incidents in 2006 that resulted in fatalities, there were 16 vessels involved. Four of these vessels were less than 8 metres in length, all recreationally registered. The remaining 12 vessels ranged in length from 8 to 53 metres—six commercial vessels and six recreational vessels.

4.5 FSI incidents by location

Twenty (42.6 per cent) of the reported FSI incidents in 2006 occurred in offshore waters, four more than in 2005. A further 17 (36.2 per cent) reported FSI incidents occurred in smooth waters. Only 6.4 per cent of FSI incidents in 2006 occurred in inland waters—down from 11.5 per cent in 2005.

There were eight fatalities and 13 serious injuries that resulted from the 20 offshore FSI incidents compared with five fatalities and 14 serious injuries from the 17 FSI incidents in smooth waters. Figure 18 shows the location of reported FSI incidents in 2006.

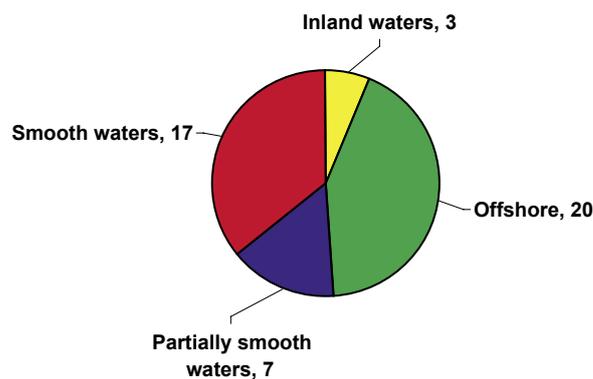


Figure 18: Fatal and serious injury incidents in 2006 - by location

4.6 FSI incidents—incident characteristics by extent of involvement

This section analyses FSI incidents in 2006 to determine the extent to which individual incident characteristics such as human contributing factors, weather conditions and vessel type were involved in these more serious incidents. The analysis, which focuses on the thirty most frequently occurring characteristics in FSI incidents, measures:

- The number of times each characteristic was reported or identified during investigation as being involved in a FSI incident, and
- Changes in the extent of involvement of these characteristics in 2006 compared with their average rate of involvement in FSI incidents in the previous four-year period.

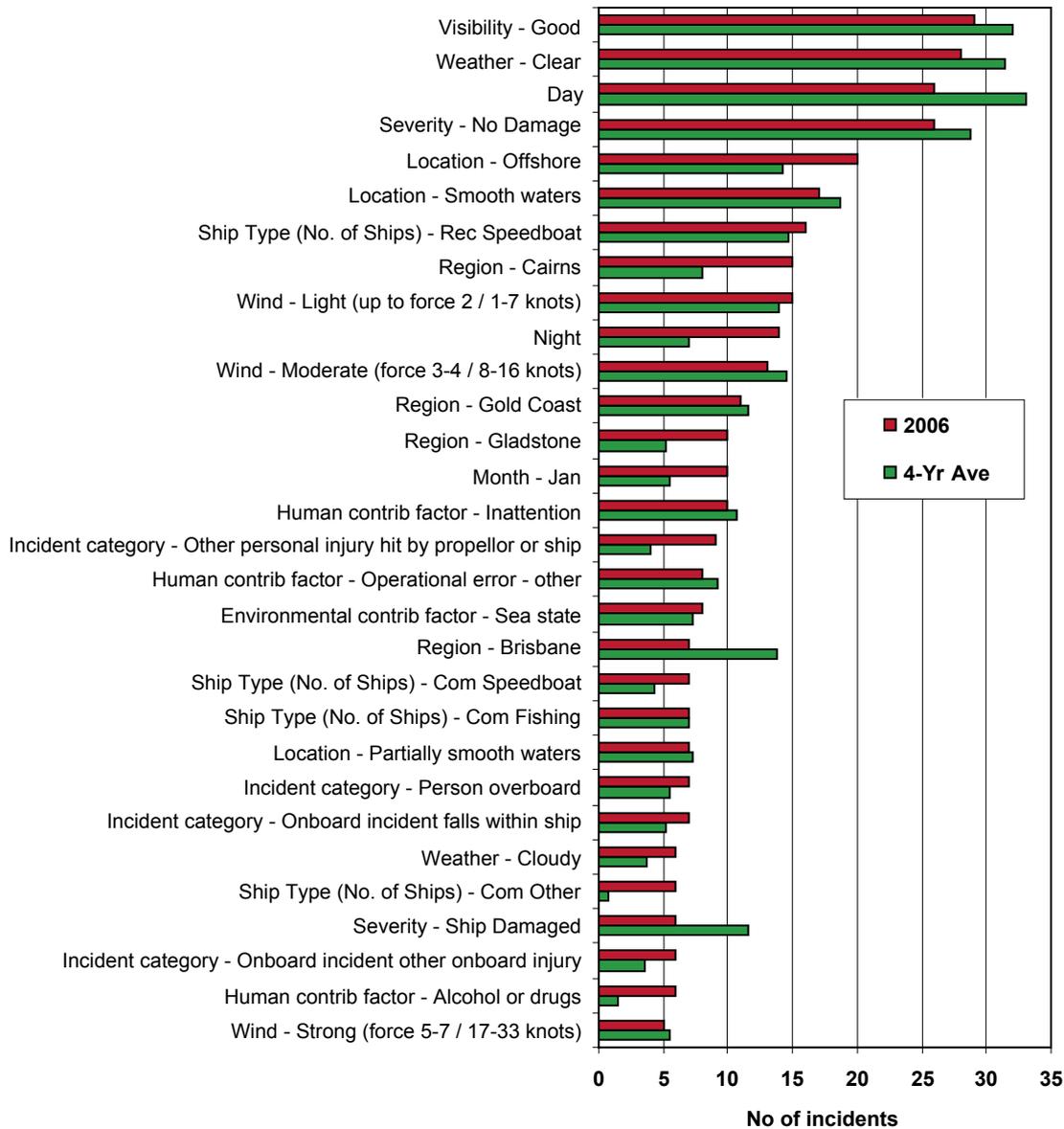
Figure 19 shows the extent of involvement in 2006 of the ‘top 30’ incident characteristics together with their average rate of involvement over the previous four-year period. Despite an 8.7 per cent increase in the number of reported incidents in 2006 the majority of the 30 most frequently occurring attributes are under-represented when compared with their previous four-year average involvement.

The most notably over-represented attributes in FSI incidents in 2006 were:

- Offshore incidents
- Cairns region incidents
- Night time incidents



Figure 19: Characteristics ranked by size of involvement in marine incidents resulting in fatalities and serious injuries - Queensland - 2006 (Top 30)



Twenty (42.6 per cent) of the 47 FSI incidents reported in 2006 occurred in offshore waters. This represents an increase of 25 per cent over the number of offshore FSI incidents in 2005 and a 40.35 per cent over-representation when compared with the previous four-year average for offshore FSI incidents. As mentioned earlier in the report offshore incidents resulted in eight fatalities and 13 people being hospitalised.

The most frequently occurring offshore FSI incidents in 2006 were onboard incidents (nine). A further four incidents involved a person overboard, resulting in four fatalities. All four of these fatal person overboard incidents involved commercial fishing vessels.

Four of the 20 offshore FSI incidents involved recreational speedboats. These four incidents resulted in two deaths and three persons seriously injured.

In 2006 the Cairns region recorded 15 FSI incidents, up from seven in 2005 and well over-represented when compared with the region's previous four-year average number of reported FSI incidents (eight).



The Cairns region accounted for almost 32 per cent of the State's FSI incidents in 2006 and 41.2 per cent of the 17 marine incident fatalities recorded in 2006.

Fourteen (29.8 per cent) of the 47 FSI incidents recorded in 2006 occurred in the night-time hours between 6pm and 6am. This represents an increase of more than 133 per cent over the six night-time FSI incidents recorded in 2005. The 14 night-time incidents resulted in eight fatalities and seven persons being seriously injured. Over the previous four years an average of seven FSI incidents occurred each year during the hours of darkness.

Recreational speedboats (13) were the most frequently represented vessels in FSI incidents in 2006, up by one on their involvement in FSI incidents in 2005, but marginally below their previous four-year average involvement in FSI incidents (13.75). The involvement of recreational vessels in marine incidents is examined in more detail later in this report.

Less than two per cent (12) of all incidents reported in 2006 involved a person being hit by a vessel or by a vessel's propeller. Despite this, the 'Other personal injury—hit by propeller or ship' incident type accounts for more than 19 per cent of reported FSI incidents and almost 17 per cent of all recorded fatalities and serious injuries in 2006. The nine recorded incidents represent a 125 per cent increase in 2006 over the previous four-year average FSI involvement for this incident type. One person died and eight were hospitalised as a result of these nine incidents. This illustrates the likely severe consequences from this type of incident.

As has been the case in recent years, ambient conditions including clear weather, good visibility and the daytime period were some of the most frequently occurring attributes of FSI incidents in 2006. These factors characterise more than 50 per cent of the 47 reported FSI incidents in 2006—down from 75 per cent level of involvement in FSI incidents experienced over the past five years.

Of the incidents involving fatality or serious injury in 2006, more than 55 per cent (26) did not result in any physical damage to either the vessels involved or to other property.

In 2006, the proportion of FSI incidents occurring in smooth waters decreased relative to the number of smooth water FSI incidents in 2005. There were 17 smooth water FSI incidents reported in 2006—36.2 per cent of all FSI incidents in the year. This compares with 23 (44.2 per cent) smooth water FSI incidents in 2005. The previous four-year average number of smooth water FSI incidents was 18.75. Despite this fall in the proportion of smooth water incidents involving a fatality and serious injury, five people died and a further 14 people were hospitalised from these incidents.

Recreational speedboats were the most frequently involved vessel type in all FSI incidents in 2006. There were 13 (27.6 per cent) involved in the 47 FSI incidents reported in 2006—in line with the 12 recreational speedboats involved in FSI incidents in 2005 and a previous four-year average FSI incident involvement in 13.75. The involvement of recreational vessels in marine incidents is examined in more detail later in this report.

There were also seven commercial fishing vessels involved in the 47 reported FSI incidents in 2006, the same number as in 2005 and in line with a previous four-year average FSI incident involvement of 7.25. These seven vessels were involved in seven separate FSI incidents resulting in five fatalities and two serious injuries. Commercial fishing vessels have consistently been among the most frequently involved vessels in FSI incidents, particularly those incidents involving fatalities. The involvement of commercial vessels and in particular, commercial fishing vessels in marine incidents is examined in more detail later in this report.



Incident study 2

Net gain or loss?

The vessel: 16.8m commercial fishing vessel

The incident

Around midnight, three men aboard a commercial prawn trawler had just winched the nets in for their first catch of the night. Not long after casting the nets for the second time the master encountered a problem with the trawl gear. It appeared that one of the nets or its trawl gear was snagged.

While the master was talking to the owner of the vessel by mobile phone seeking advice about whether to cut the trawl gear free, one of the deckhands noticed that water was beginning to wash over the back deck. The deckhand yelled to the master who immediately attempted to cut the trawl gear away with an angle grinder, but at the same time a swell broke over the side of the boat rolling it onto its side. The two crewmen were thrown into the water and initially swam clear of the vessel. Once it settled upside down they managed to scramble onto the upturned hull. The master was not sighted.

After some time the trawler's dinghy surfaced near the upturned hull and the two crewmen swam to it, righted it and were able to climb aboard and bail most of the water out. It was not long before another trawler in the area located the two men in the dinghy and was able to raise the alarm. They were shortly joined in their search for the master by a number of other trawlers but the master was not located. The upturned trawler eventually sank. The master's body was never found. The trawler's life jackets apparently were placed in a locker in the wheelhouse but were not able to be retrieved prior to the vessel capsizing.

Safety insight

- When operating in offshore waters, life rafts should be easily accessible and hydrostatically released in the event of capsize or sinking.
- Life jackets are not boating accessories.
- The wearing of a suitable life jacket and personal EPIRB is strongly recommended in dangerous industries such as offshore commercial fishing.
- Commercial fishers should always have contingency plans in the event their nets get snagged. Saving the crew first and the vessel second is always more important than saving trawl gear or nets.

