

# ***NATIONAL MARINE SAFETY COMMITTEE INC.***

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## **INCIDENT DATA HALF YEARLY UPDATE TO 30 JUNE 2008**

This report is part of the NMSC's yearly updating of incidents. It covers the circumstances surrounding all incidents that occurred for the period 1 January 2008 to 30 June 2008. The NMSC will continue to provide half-yearly or yearly updates as appropriate.

**NOTE: ANY INCIDENT DATA PROVIDED HERE IS SUBJECT TO CHANGE DUE TO LAG EFFECTS IN REPORTING, COLLECTION AND DATA ENTRY. LATER PERIOD DATA IS MOST LIKELY TO BE AFFECTED. THE SECRETARIAT WILL CONTINUE TO WORK WITH ALL STATES AND THE NORTHERN TERRITORY TO MINIMISE CHANGES TO THE DATA**

### ***Snapshot***

During the six month ending June 2008, there were 801 marine incidents resulting in 21 fatalities and 254 injuries.

Of the 801 reported marine incidents:

- 46% occurred in the summer months, 44% occurred in the autumn months while 8% occurred in the winter months.
- 28% of incidents took place between 12pm and 6pm.
- A collision of vessels made up 20% of all incidents, followed by unintentional groundings, which made up 14% of all incidents.

Of the 21 fatalities:

- Most occurred in clear weather conditions (57%).
- Approximately 60% were a result of a boat capsizing or a person falling overboard.
- 76% were male.
- 81% involved either human or environmental factors.
- 72% involved recreational vessels only.

## ***Incidents by Type***

The following table presents a breakdown of the top 10 incident types in incidents to 30 June 2008:

<b>Rank</b>	<b>Incident Type</b>	<b>Records</b>	<b>% of Total</b>
<b>1</b>	Collision of Vessels	168	21.7
<b>2</b>	Unintentional Groundings	119	15.4
<b>3</b>	Collision with fixed object	57	7.4
<b>4</b>	Capsizing	55	7.1
<b>5</b>	Swamping	38	4.9
<b>6</b>	Fire	33	4.3
<b>7</b>	Sinking	32	4.1
<b>8</b>	Person overboard	30	3.9
<b>9</b>	Collision with submerged object	23	3.0
<b>10</b>	Falls within Vessels	22	2.8

The order of incident types follows closely to that shown over the three year period 2005-2007. Collisions continue to be prevalent, with 32% of all incidents being collisions of some form. Unintentional groundings form the second largest category, making up 15% of all incident types. Incidents where people are likely to end up in the water are also significant, constituting 27% of all incidents reported.

## ***Contributing Factors in Incidents***

In the six months to June 2008, there were 774 contributing factors recorded in 801 incidents. This represents 0.97 contributing factor per incident. An error of judgment made up the largest category, with almost 23% of all contributing factors. This was followed by the wind/sea state and other human factor, making up 16% and 14% respectively of all contributing factors. The top ten contributing factors in incidents are shown in the table below:

<b>Rank</b>	<b>Contributing Factor</b>	<b>Records</b>	<b>% of Total</b>
<b>1</b>	Error of Judgment	177	22.9
<b>2</b>	Wind/sea state	125	16.1
<b>3</b>	Other environmental factor	105	13.6
<b>4</b>	Other human factor	75	9.7
<b>5</b>	Inexperience	65	8.4
<b>6</b>	Navigational error	55	7.1
<b>7</b>	Other material factor	52	6.7
<b>8</b>	Failure to keep a proper lookout	52	6.7
<b>9</b>	Equipment - Machinery	44	5.7
<b>10</b>	Floating or submerged object	24	3.1

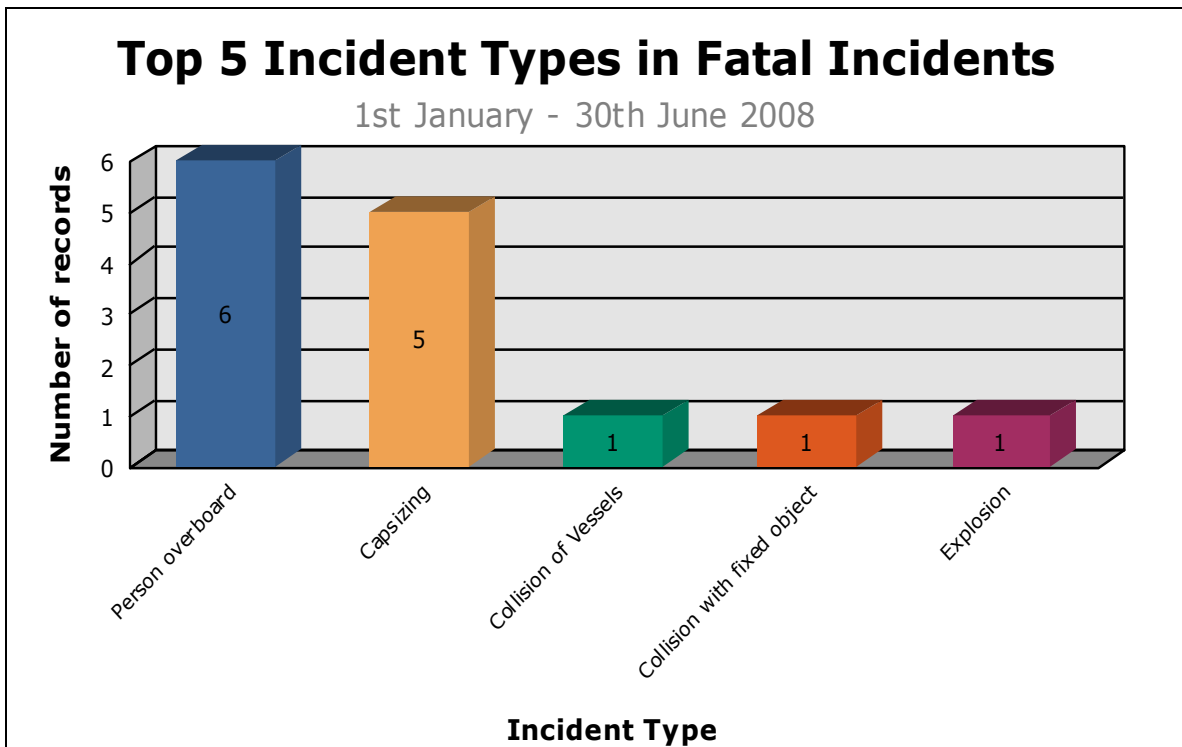
Human factors continue to dominate in incidents when compared to the two years 2005, 2006 and 2007, representing 56% of all contributing factors. This is followed by environmental factors and material factors, representing 32% and 12% respectively of all contributing factors.

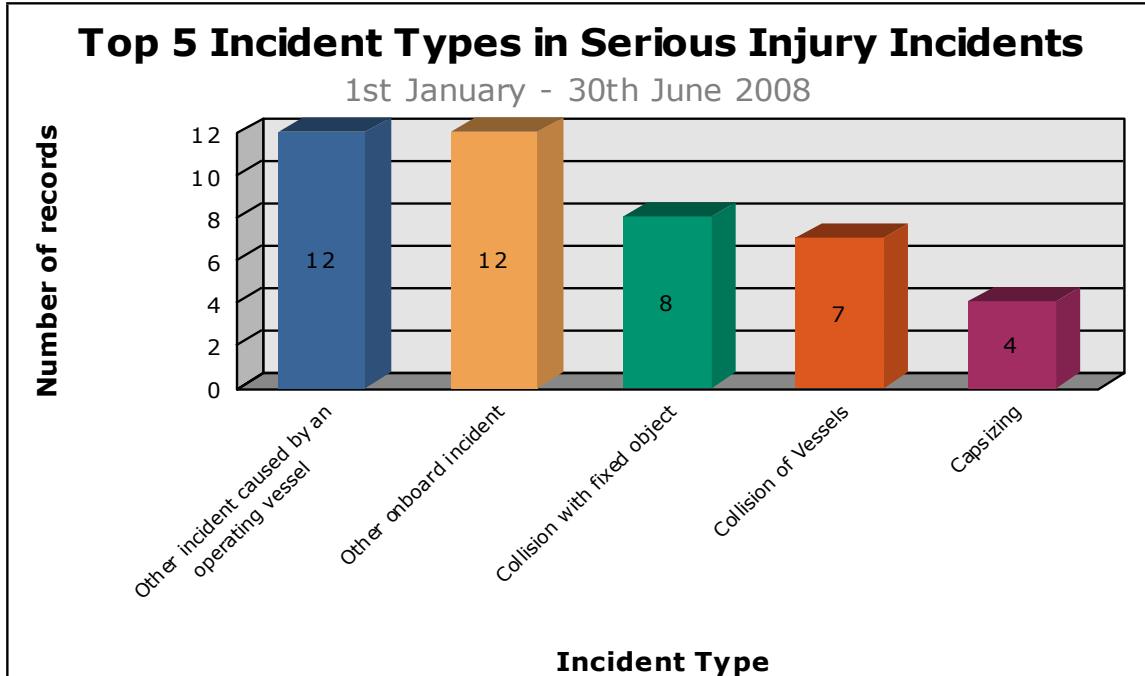
***Fatalities and Serious Injuries***

In the first half of 2008, there were 21 fatalities and 78 serious injuries reported. The number is lower than at the same point in 2007 which had 29 fatalities. This figure includes January and February, the two summer months. Data from previous years tends to support the conclusion that most incidents occur in the first half of the year.

*Incident Types in Fatal and Serious Injury Incidents*

Of the 21 incidents involving fatalities and 78 incidents involving serious injuries, the following graphs present the top 5 incident types for each:



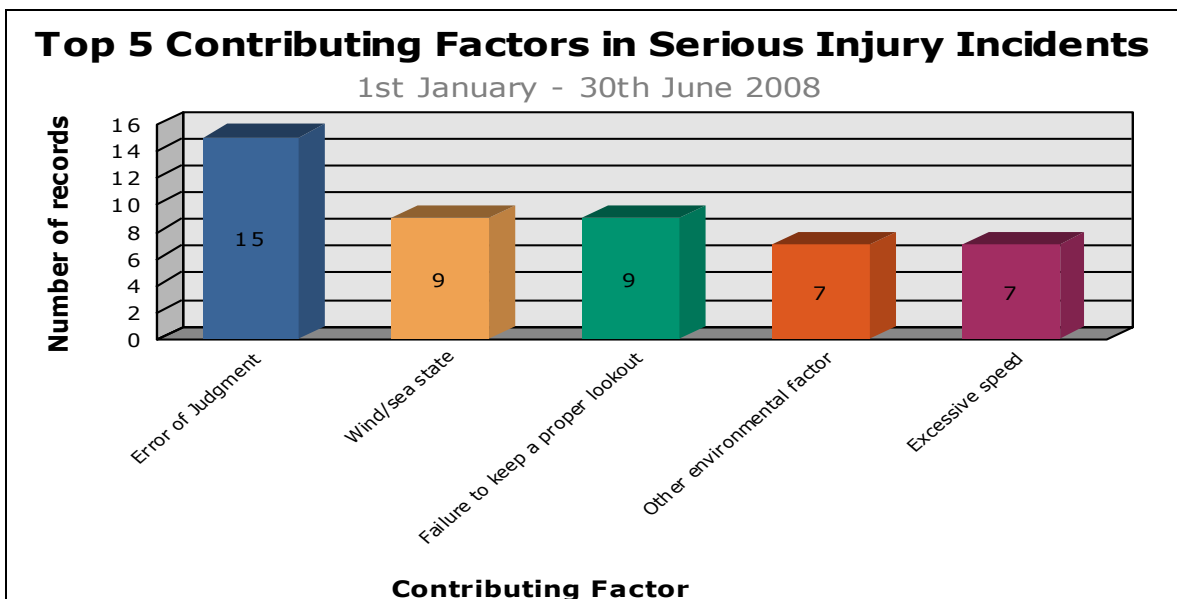
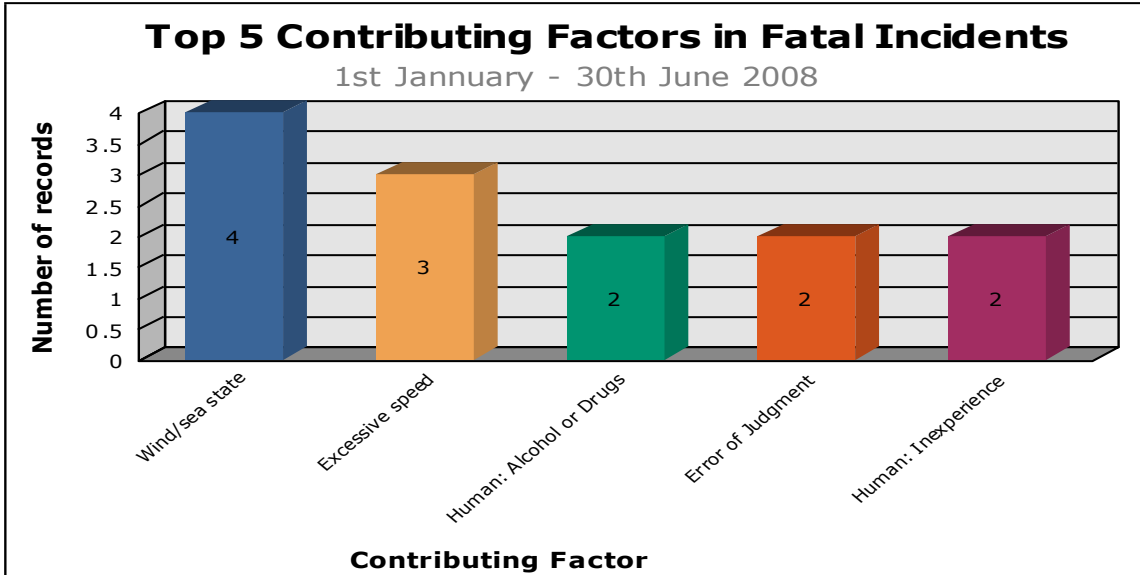


Person overboard and capsizing are the largest incident types in fatal incidents and account for over 52% of all such incidents. Hits, other incident caused by an operating vessel and other on board incident are the predominant incident types in serious injury incidents. Other incident caused by an operating vessel is any other incident involving a person not on board a vessel (eg: swimmer, surfboard rider) due to the operation of a vessel; does not include a fall overboard, fall within vessel, crushing or pinching, hit by vessel or propeller, skiing or diving incident. Other onboard incident is any other incident on board a vessel (eg: crew, passenger) due to the operation of the vessel; does not include a falls overboard, falls within vessel, or crushing or pinching.

#### *Contributing Factors in Fatal and Serious Injury Incidents*

Of the 21 fatal incidents, there were 19 reported contributing factors, human factor is responsible for 11 and environmental factor for 6. Of the 78 serious injury incidents, there were 82 reported contributing factors, with human factor alone accounting for 43.

The following graphs present a breakdown of the top 5 contributing factors in fatal and serious injury incidents:



Human and environmental factors contributed to a significant proportion of the incidents in both fatal and serious injury incidents. In both fatal and injury incidents, human factor was responsible for the majority of the incidents, constituting over 58% and 52% for fatal and serious injury incidents respectively. The next dominant factor was environmental factors which accounted for about 32% each for fatal and serious injury incidents respectively. Material factors were largely under-represented in both fatal and serious injury incidents.

## ***Vessel Types and Lengths***

### *Commercial and Recreational Vessel Incidents*

In the six months period to 30 June 2008, there were 322 incidents involving at least one commercial vessel and 452 incidents involving at least one recreational vessel. This represents 40% and 56% respectively of all incidents.

Of the 21 reported fatalities, 15 involved recreational vessels only, 5 involved commercial vessels only and 1 involved both recreational and commercial vessels. Recreational motorboats were the most common vessel type involved in fatalities, being involved in about 71% of all fatalities. Commercial passenger vessels were the next largest category and were involved in about 24% of all fatalities.

Of the 78 serious injuries, 56 involved recreational vessels only, 15 involved commercial vessels only, 6 involved both recreational and commercial vessels and 1 was not known. Recreational motorboats were the most common vessel type involved in serious injuries and were involved in about 72% of all serious injuries. The next largest categories were commercial passenger and commercial non-passenger vessels which were involved respectively in about 17% and 3% of all serious injuries.

### *Vessel Lengths*

Of the vessels involved in incidents for which a vessel length was recorded<sup>1</sup>, the largest group involved vessels between 5m and 9.9m in length. This accounted for about 32% of all vessels. This was followed by vessels less than 5m in length, which accounted for about 23% of all vessels.

The breakdown of vessel lengths differs between recreational and commercial vessels. In incidents involving recreational vessels, 64% of vessels were less than 10m in length. In incidents involving commercial vessels, only 23% of vessels were less than 10m in length. This suggests that in general, recreational vessel incidents are likely to involve smaller vessels while commercial vessel incidents involve larger vessels.

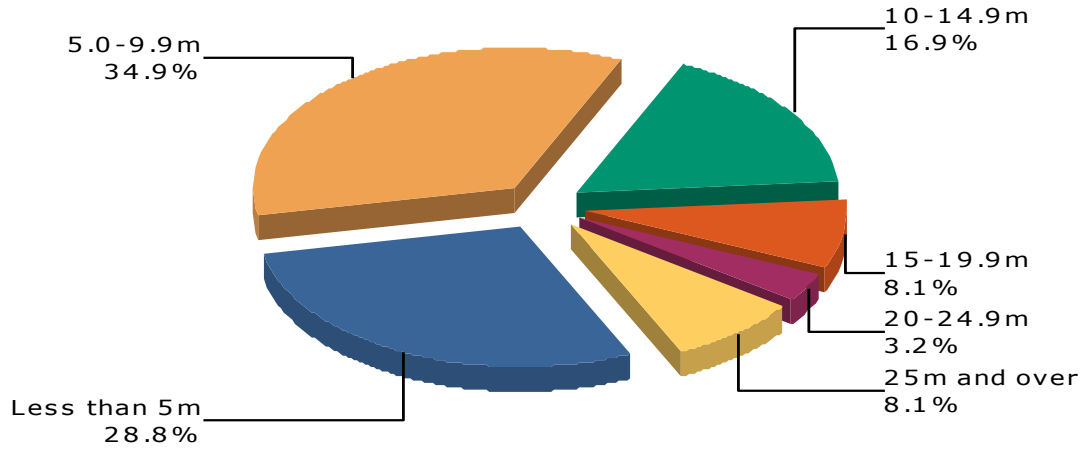
A breakdown of recreational and commercial vessels by vessel length grouping is shown below:

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<sup>1</sup> Many incidents lack information on the vessel lengths of the vessels involved due to forms not being fully completed. In addition, WA does not provide vessel lengths to the NMSC.

### Recreational Vessels Involved in Incidents, by Vessel Length

1st January - 30th June 2008



### Commercial Vessels Involved in Incidents, by Vessel Length

1st January - 30th June 2008

