

MARINE INCIDENTS DURING 2007

Preliminary Data Analysis¹²

This section is part of the NMSC's yearly updating of incidents. It covers the circumstances surrounding all incidents that occurred during calendar year 2007. The NMSC will continue to provide half-yearly or yearly updates as appropriate.

To begin please click on a link below or scroll down for the full report. This report can also be accessed as a PDF file [here](#).

Snapshot

Incidents by Type

Contributing Factors in Incidents

Fatalities and Serious Injuries

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Snapshot

During 2007, there were 1375 marine incidents resulting in 47 fatalities and 350 injuries.

Of the 1375 reported marine incidents:

- 29% occurred in the summer months while 19% occurred in the winter months.
- 42% 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 17% of all incidents.

Of the 47 fatalities:

- Most occurred in clear weather conditions (64%).
- Approximately 41% were a result of a boat capsizing or a person falling overboard.
- 82% were male.
- 79% involved either human or environmental factors.
- 74% involved recreational vessels only.

¹ 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 vary.

² Data in this report does not include incidents from the Northern Territory from August 2007. This will have a minor impact on the national figures. The Secretariat will update the report when the data becomes available.

Incidents by Type

The following table provides a breakdown of all incident types in incidents in 2007:

Rank	Incident Type	Records	% of Total
1	Collision of Vessels	273	19.9
2	Unintentional Groundings	232	16.9
3	Collision with fixed object	104	7.6
4	Capsizing	92	6.7
5	Sinking	82	6.0
6	Swamping	65	4.7
7	Fire	56	4.1
8	Other	54	3.9
9	Person overboard	50	3.6
10	Falls within vessel	49	3.6
11	Structural failure	49	3.6
12	Collision with submerged object	47	3.4
13	Unknown	41	3.0
14	Collision with wharf	30	2.2
15	Collision with floating object	23	1.7
16	Hit by propeller or vessel	21	1.5
17	Other onboard incident	19	1.4
18	Flooding	17	1.2
19	Other incident caused by an operating vessel	17	1.2
20	Onboard crushing or pinching	16	1.2
21	Loss or presumed loss of a vessel	11	0.8
22	Skiing incident	11	0.8
23	Intentional Grounding	4	0.3
24	Collision with an animal	3	0.2
25	Diving incident	3	0.2
26	Explosion	2	0.1
27	Loss of stability	2	0.1
28	Collision with overhead obstruction	1	0.1
29	Parasailing incident	1	0.1
	Total	1375	100.0

The order of incident types follows closely to that shown over the two years 2005-2006. Collisions continue to be prevalent, with 35% of all incidents being collisions of some form. Unintentional groundings form the second largest category, making up 17% of all incident types. Incidents where people are likely to end up in the water are also significant, constituting 22% of all incidents reported.

Contributing Factors in Incidents

In 2007 there were 1761 contributing factors recorded in 1375 incidents. This represents 1.28 contributing factors per incident. An error of judgment made up the largest category, with 16% of all contributing factors. This was followed by the wind/sea state and inexperience as specific factors, making up 14% and 7% respectively of all contributing factors. A full list of contributing factors in 2007 is provided in the table below:

Contributing Factor	Records	% of Group Total	% of all Contributing Factors
Environmental Factors			
Wind/sea state	250	45.6	14.2
Other environmental factor	116	21.2	6.6
Floating or submerged object	49	8.9	2.8
Tidal conditions	41	7.5	2.3
Restricted visibility	38	6.9	2.2
Wash	35	6.4	2.0
Bar conditions	19	3.5	1.1
Total Environmental	548	100.0	31.1
Human Factors			
Error of Judgment	285	32.0	16.2
Other human factor	169	19.0	9.6
Inexperience	117	13.1	6.6
Failure to keep a proper lookout	102	11.5	5.8
Navigational error	91	10.2	5.2
Excessive speed	39	4.4	2.2
Insecure mooring	30	3.4	1.7
Lack of maintenance	25	2.8	1.4
Alcohol or Drugs	14	1.6	0.8
Fatigue	7	0.8	0.4
Overloading	7	0.8	0.4
Lack of fuel	4	0.4	0.2
Total Human	890	100.0	50.5
Material Factors			
Other material factor	123	38.1	7.0
Equipment – Machinery	90	27.9	5.1
Equipment - Hull failure	55	17.0	3.1
Equipment – electrical	23	7.1	1.3
Equipment – Navigation	19	5.9	1.1
Inadequate stability	13	4.0	0.7
Total Material	323	100.0	18.3
Total - All Contributing Factors	1761		100

Human factors continue to dominate in incidents when compared to the two years 2005 and 2006, representing 51% of all contributing factors. This is followed by environmental factors and material factors, representing 31% and 18% respectively of all contributing factors.

Fatalities and Serious Injuries

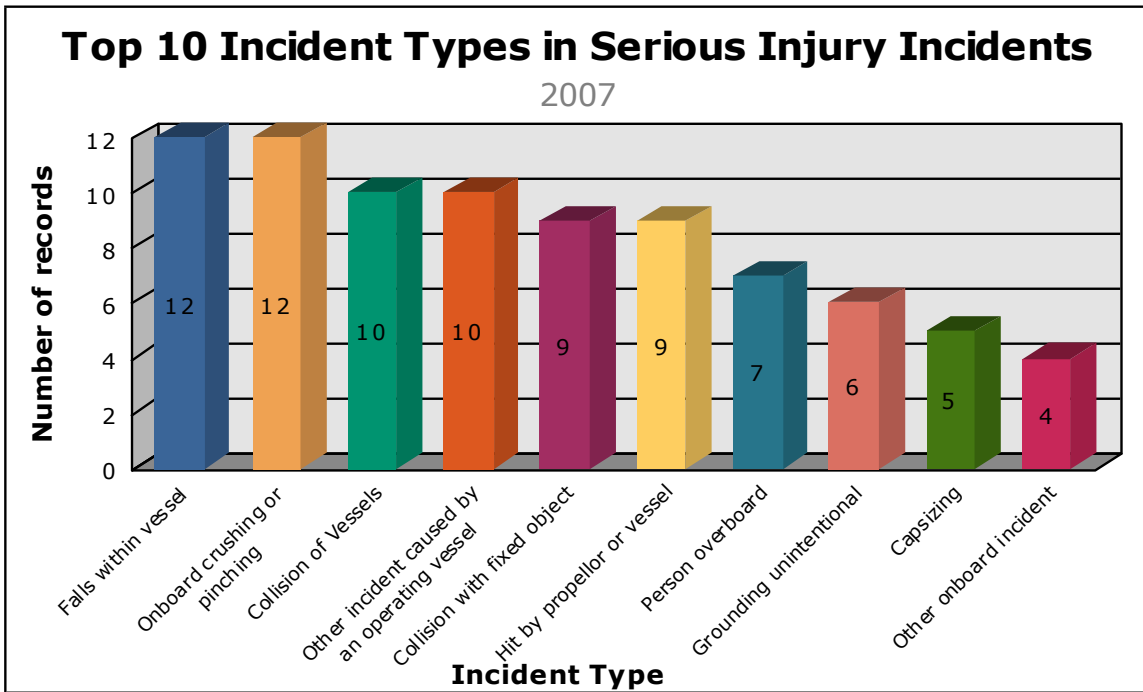
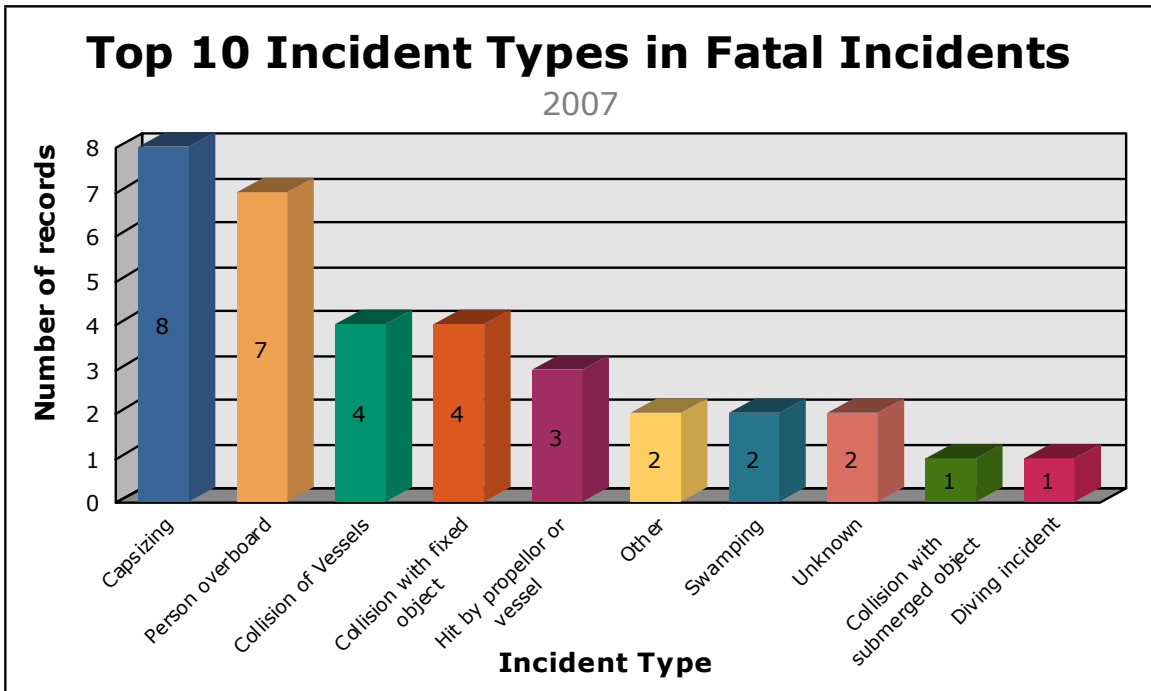
In 2007, there were 47 fatalities and 114 serious injuries reported. The number of fatalities remains steady compared to 2006 while the number of serious injuries has fallen from the 148 reported in 2006. A more detailed breakdown is shown below:

	2007	% of all incidents
Fatalities	47	
Serious Injuries	114	
Fatal Incidents	37	2.7
Serious Injury Incidents	98	7.1

Most fatal incidents involved only one fatality. This is also the case for serious injuries. Out of all incidents reported in 2007, 10% involved fatalities or serious injuries.

Incident Types in Fatal and Serious Injury Incidents

Of the incidents involving fatalities and serious injuries, the following graphs provide the top 10 incident types for each:

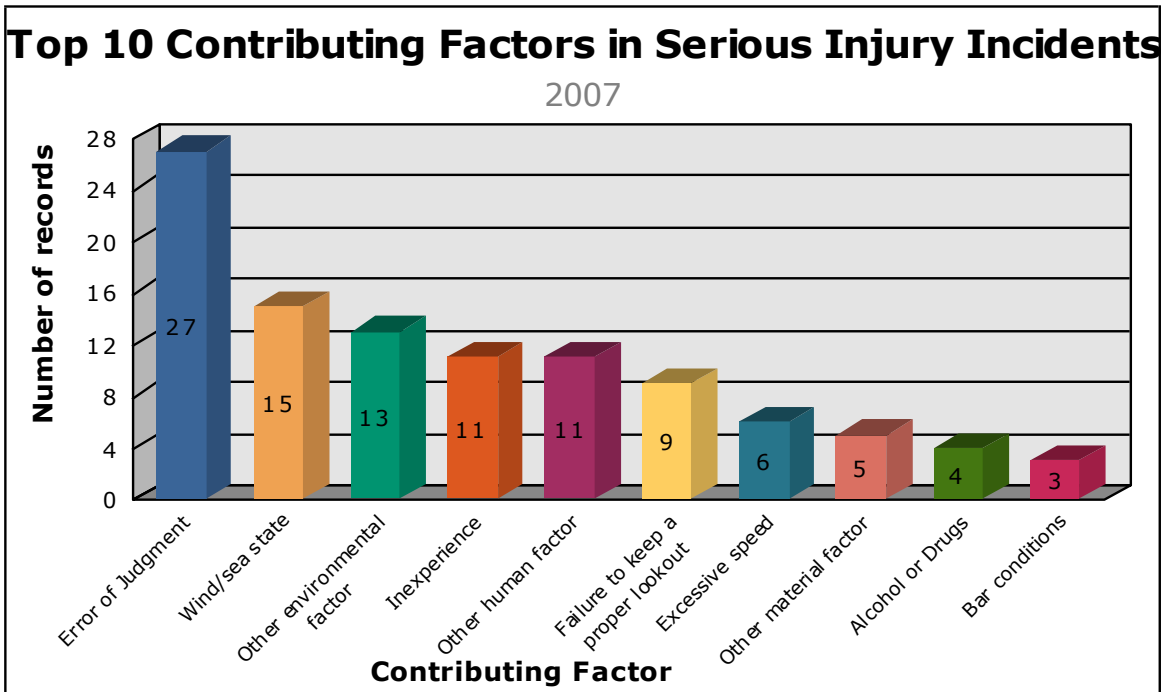
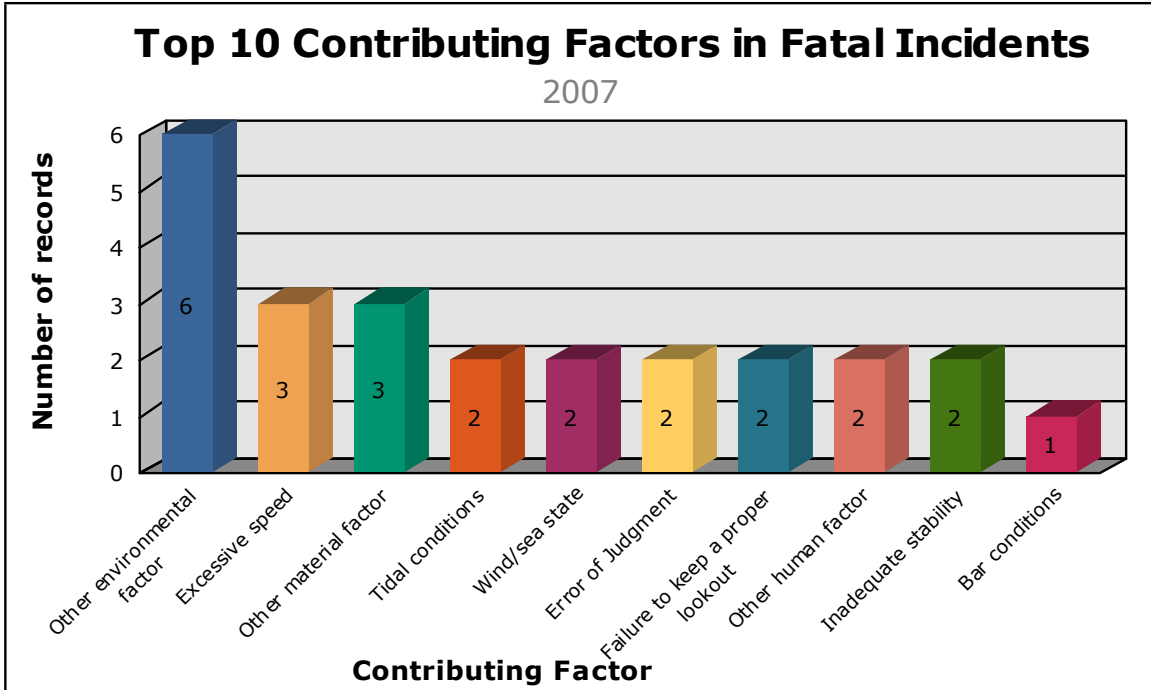


Capsizing and person overboard were the largest incident types in fatal incidents and account for 41% of all such incidents. This shows that a significant proportion of fatalities occurred from people ending up in the water. Hits, falls and collisions were the predominant incident types in serious injury incidents.

Contributing Factors in Fatal and Serious Injury Incidents

Of the 37 fatal incidents, there were 29 reported contributing factors. Of the 98 serious injury incidents, there were 120 reported contributing factors.

The following graphs provide a breakdown of the top 10 contributing factors in fatal and serious injury incidents:



Human and environmental factors made up a significant proportion of contributing factors in both fatal and serious injury incidents. In fatal incidents, environmental factors were the largest group, making up 41% of all contributing factors. This was followed by human factors, making up 38% of all contributing factors. In serious injury incidents, human factors made up 62% of contributing factors followed by environmental factors, making up 32% of all contributing factors. Material factors were largely under-represented in fatal and serious injury incidents.

Vessel Types and Lengths

Commercial and Recreational Vessel Incidents

In 2007, there were 583 incidents involving at least one commercial vessel and 801 incidents involving at least one recreational vessel. This represents 42% and 58% respectively of all incidents.

Of the 47 reported fatalities, 35 involved recreational vessels only, 7 involved commercial vessels only and 5 involved both recreational and commercial vessels. Recreational motorboats were the most common vessel type involved in fatalities, being involved in 77% of all fatalities. Commercial passenger vessels were the next largest category, being involved in 21% of all fatalities.

Of the 114 serious injuries, 73 involved recreational vessels only, 34 involved commercial vessels only, 2 involved both recreational and commercial vessels and 5 were not known. Recreational motorboats were the most common vessel type involved in serious injuries, being involved in 48% of all serious injuries. The next largest categories were commercial passenger and commercial non-passenger vessels, being involved respectively in 12% and 11% of all serious injuries.

Vessel Lengths and Incident Types

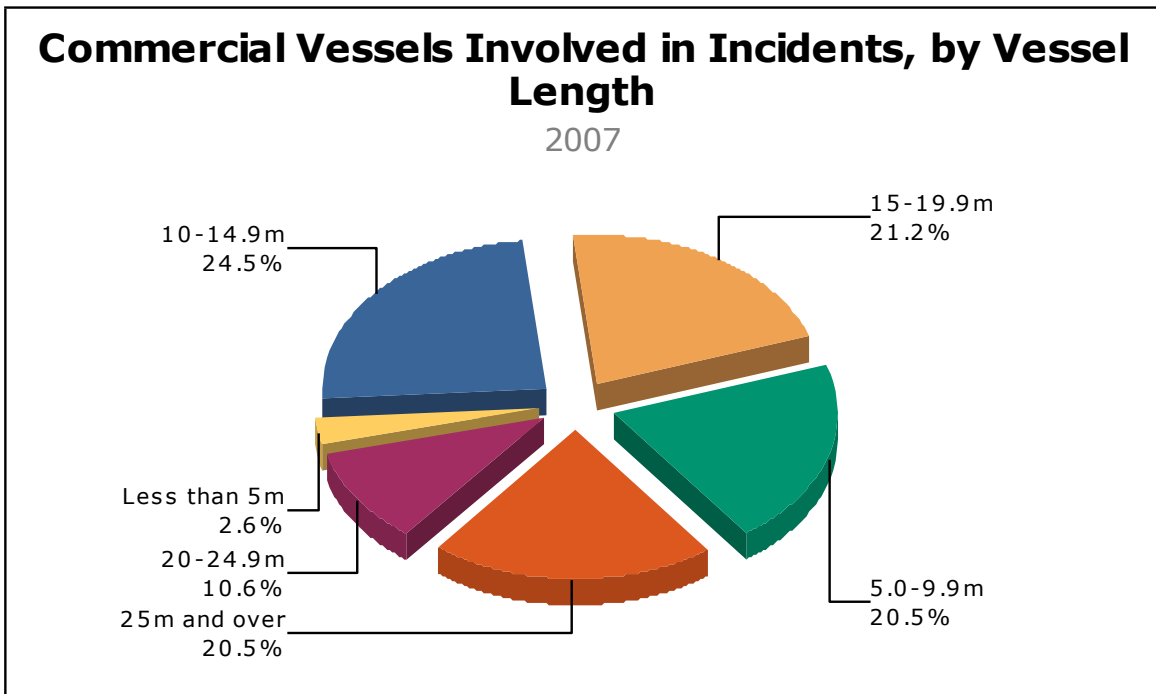
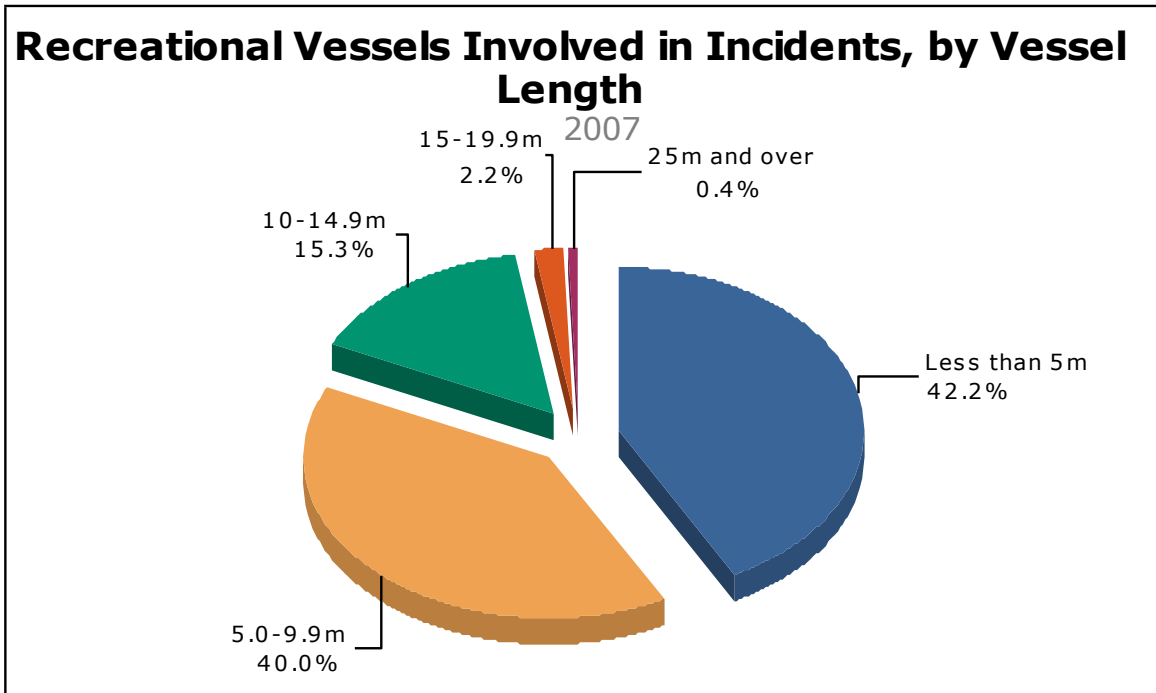
Of the vessels involved in incidents for which a vessel length was recorded¹, the largest group involved vessels between 5m and 9.9m in length. These accounted for 34% of all vessels. This was followed by vessels less than 5m in length, accounting for 33% of all vessels.

The breakdown of vessel lengths differs between recreational and commercial vessels. In incidents involving recreational vessels, 82% 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

¹ 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.

vessel incidents involve smaller vessels while commercial vessel incidents involve larger vessels.

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



Across all vessel length groups except for those over 20 metres in length, collision of vessels was the largest incident type. Capsizings were more prevalent in shorter vessels while collisions with objects became more prevalent in larger vessels. More detail on incident types in vessel length groups can be seen below:

