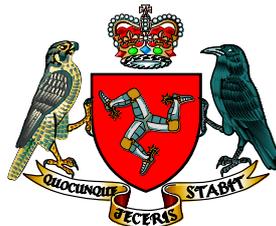


# Isle of Man Ship Registry

## Summary of Casualties, Accidents and Incidents on Isle of Man Registered Vessels

2011

**Isle of Man Government  
Department of Economic Development**



**Isle of Man  
Government**

*Reiltys Ellan Vannin*



Published March 2012

## Introduction

The Isle of Man Ship Registry (IOMSR) is committed to helping seafarers, managers, owners and operators concerned with all Manx vessels in achieving continued high standards of safety and pollution prevention.

Occasionally things go wrong. When they do the master, skipper or technical manager is required by law to submit a report on what has occurred.

From these reports we can alert the shipping industry about areas and activities where any additional safety controls may be necessary and hopefully prevent similar occurrences from happening again.

We also aim to produce statistics based on report findings. Where any trends are identified we can work with shipping companies and other organisations in an effort to reduce these occurrences on board Isle of Man vessels.

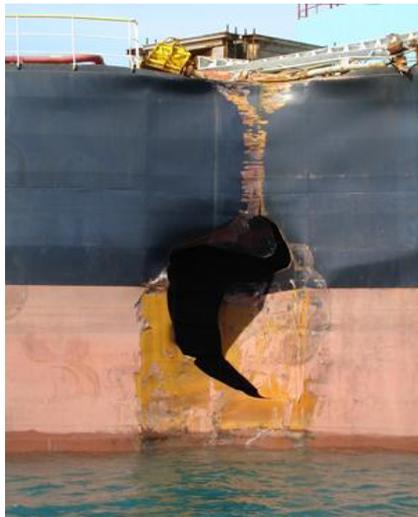
The reporting scheme is reliant upon masters, skippers or operators reporting as accurately and in as timely a manner as possible. To submit a report or if you have any questions then please contact us at:-

Isle of Man Ship Registry, Department of Economic Development,  
St George's Court, Upper Church Street, Douglas, IM1 1EX, Isle of Man, British Isles

Tel +44 1624 688500

Fax +44 1624 688501

Email: [marine.survey@gov.im](mailto:marine.survey@gov.im)



[www.iomshipregistry.com](http://www.iomshipregistry.com)

# Contents

	<b>Page</b>
<b>1 What is an Occurrence?</b>	<b>4</b>
<b>2 Reporting Occurrences</b>	<b>5</b>
2.1 Who has to report	5
2.2 When to report	5
2.3 How to report	5
2.4 ISM Code Vessels	6
2.5 Reports published in 2011	6
2.6 Investigations by IOMSR in 2011	6
2.7 Investigations by external investigation body on Isle of Man vessels in 2011	6
<b>3 ARF Reports Received in 2011</b>	<b>7</b>
3.1 ARF Fleet Comparison – Total Fleet	9
3.2 ARF Fleet Comparison – Total Fleet (Excluding Pleasure Vessels)	10
<b>4 Analysis of ARF Reports Received in 2011</b>	<b>11</b>
4.1 Type of Occurrences	11
4.2 Place of Occurrences	12
4.3 Number of Injuries and Deaths by Rank	12
<b>5 Casualties in 2011</b>	<b>13</b>
5.1 Brief Summary of All Casualties in 2011	14
<b>6 Accidents in 2011</b>	<b>16</b>
6.1 Brief Summary of Selected Accidents in 2011	17
<b>7 Incidents in 2011</b>	<b>19</b>
7.1 Brief Summary of Selected Incidents in 2011	20
<b>8 Breakdown of Occurrences in 2011 by Cause</b>	<b>21</b>
8.1 Occurrences by Working Method	21
8.2 Occurrences by Ship Access	22
8.3 Occurrences by Movement About the Ship	22
8.4 Occurrences by Human Factor	23
8.5 Occurrences by Mechanical & Other Equipment	24
8.6 Occurrences by Other Miscellaneous Causes	24
<b>9 Conclusion</b>	<b>25</b>

# 1 What is an Occurrence?

An 'occurrence' is classed as either a **casualty**, **accident** or an **incident** in the Merchant Shipping Accident Reporting and Investigation Regulations (SD815/01). These are defined as follows:-

## Casualty

This means "any contingency which results in:-

- (a) loss of life or major injury to any person on board, or the loss of any person from, a ship or a ship's boat;
- (b) the loss or presumed loss of any ship or the abandonment of any ship or a ship suffers material damage;
- (c) a ship goes aground, is disabled or is in collision;
- (d) any loss of life or major injury, or serious harm to the environment, is caused by a ship;
- (e) any major damage to the environment brought about by damage to a ship and caused by, or in connection with, the operation of the ship."

## Accident

This means "any occurrence of the following type provided that it caused material damage to any ship or structure, or damage to the health of any person, or serious injury:-

- (a) the fall of any person overboard;
- (b) any fire or explosion resulting in material damage to a ship;
- (c) the collapse or bursting of any pressure vessel, pipeline or valve or the accidental ignition of anything in a pipeline;
- (d) the collapse or failure of any lifting equipment, access equipment, hatchcover, staging or bosun's chair or any associated load-bearing parts;
- (e) the uncontrolled release or escape of any harmful substance or agent;
- (f) any collapse of cargo, unintended movement of cargo sufficient to cause a list, or loss of cargo overboard;
- (g) any snagging of fishing gear which results in the vessel heeling to a dangerous angle; or
- (h) any contact by a person with loose asbestos fibre except when full protective clothing is worn."

## Incident

This means "any occurrence, not being a casualty or an accident as a consequence of which the safety of a ship or any person is imperilled, or as a result of which material damage to any ship or structure or damage to the environment might be caused."

Incidents can also be referred to as 'near misses' or 'near accidents'. Vessel inspections by the IOMSR have shown that the type of incidents reported to technical managers range from 'minor incidents', e.g. a person forgetting to wear a safety helmet on deck, to 'major incidents', e.g. narrowly avoiding a swung load suspended from a lifting appliance. The IOMSR encourages the master, skipper or technical managers to use their judgement in determining a 'minor incident' and a 'major incident'. All 'major incidents' should be reported to the IOMSR using the ARF Form. If there is any doubt then report to IOMSR.

## 2 Reporting Occurrences

### 2.1 Who has to Report

The master, skipper or technical manager of any Manx registered vessel wherever they may be. The master, skipper or technical manager of any foreign flagged vessel in Manx territorial waters.

A vessel means any description of watercraft ranging from pleasure vessels, fishing boats, commercial yachts, passenger ships and cargo vessels.

Occurrences on board ships in ports, with the exception of those involving stevedores or shore-based workers, are included and must be reported. Occurrences involving shore-based workers should also be reported to the country's Health and Safety Department or equivalent body.

### 2.2 When to report

When a **CASUALTY** occurs the master, skipper or technical manager must inform the IOMSR as soon as possible after becoming aware of the casualty and the Master or Skipper must send a report to the IOMSR as soon as is practicable by the quickest means available.

When any **ACCIDENT** occurs the master, skipper or technical manager must inform the IOMSR as soon as is practicable and by the quickest means available. A report must be sent to the IOMSR no later than within 24 hours of the vessel's next arrival in port.

When an **INCIDENT** occurs the master, skipper or technical manager must report the incident to the IOMSR before the vessel departs from the next port.

### 2.3 How to report

Initial reports can be made directly by telephone, fax or email to the IOMSR. When the occurrence has been investigated on board the master, skipper or operator should complete the Accident Report Form (ARF – see right) and forward it to the IOMSR by fax, email or mail. Any additional report forms used on board to document the occurrence may also be submitted to the IOMSR along with the completed ARF. It is recommended that a copy of the ARF is kept on board as a record.

The ARF is available on request from the IOMSR or available for download from the IOMSR website.  
<http://www.iomshipregistry.com/formdocs/forms/>

It is also recommended that a brief statement is included in the Official Log Book narrative section.

When reports are received the IOMSR decides whether or not an investigation is warranted. Not all occurrences are investigated, this may be because:-

- it has been agreed that investigation is being conducted by another investigation authority; or
- the shipboard staff and/or technical managers have completed a thorough investigation and the underlying cause is clear.

Reference No: -  
(Ship Registry Use Only)

 **Accident Report Form**

Isle of Man Government

Name of Ship: -  IMO No.

Date of Accident: -  Location of the Ship at the time of the Occurrence

Classification of the Occurrence  
(Casualty, Accident or Incident)

**Details of Personnel Involved in the Casualty**

Number of persons Killed

Number of Persons Injured

Was the Accident caused mainly by persons other than the ships crew? Yes / No

For Example shore personnel, stevedores, persons on another vessel

**\* Notes**

1. Any Occurrences involving any of the following **MUST BE CLASSIFIED AS A CASUALTY**

- Damage to the ship, its equipment or fittings, which requires immediate repair before the ship can continue in service, or a breach of the hull, or cracking of the primary structure.
- Damage to equipment or machinery which has been identified as Safety Critical and prevents the ship from being operated as designed
- Loss of life or serious injury to any person
- Major damage to the environment.

An ACCIDENT is less serious than a casualty and includes falls overboard, small fires and explosions, machinery failures etc. An INCIDENT is the least serious and covers near misses, which could have led to accidents or casualties.

Full Reporting requirements are contained in Manx Shipping Notice No. 3

Name of Person Making Report  Signature (If submitted by Post or Fax)

Rank

Date

Form ARF 1 11/01/07 Page 1

Investigations are carried out in accordance with SOLAS ChI Reg 21 using the guidance contained in IMO Resolutions A.849(20) and A.884(21). It is not the intention of these reports to apportion blame or economic liability.

The initial part of an investigation seeks to establish the causes and circumstances of what has happened, with a view to deciding whether or not any further investigation is warranted. This is called a 'preliminary examination'. When a preliminary examination is complete, the Isle of Man Ship Registry will decide if it is appropriate to conduct further investigation.

Whenever an occurrence is investigated a report is made. A provision is made for any person likely to be affected by a report to see the draft and comment on the facts and analysis therein before it is finalised. Sometimes due to the circumstances surrounding the investigation it is not always possible to publish the reports. Published reports are primarily for the benefit of all seafarers, managers and owners concerned with Manx vessels in the hope that lessons learnt may prevent similar occurrences from happening again. The names, addresses and any other details of anyone who has given evidence to an investigator are not disclosed unless a court determines otherwise. Any reports published are available on the IOMSR website.

#### **2.4 ISM Code Vessels**

Where vessels comply with the International Safety Management (ISM) Code the Safety Management Manual should include procedures for ensuring accidents and hazardous situations are reported (ISM9.1). The IOMSR will accept the vessel's reporting form in lieu of the ARF provided it contains at least all of the information required by the ARF.

If vessels have a safety officer on board as required by the Merchant Shipping Safety Officers, General Duties & Protective Equipment Regulations (SD816/01) then the safety officer should be involved in the investigation on board.

#### **2.5 Reports Published in 2011**

None.

#### **2.6 Investigations by IOMSR in 2011**

<b>Type of Vessel</b>	<b>Nature of Casualty</b>
Bulk Carrier	Man Over Board – Death
Bulk Carrier	Death on board enquiry
Bulk Carrier	Enclosed Space Entry – Death

#### **2.7 Investigations by external investigation body on Isle of Man vessels in 2011**

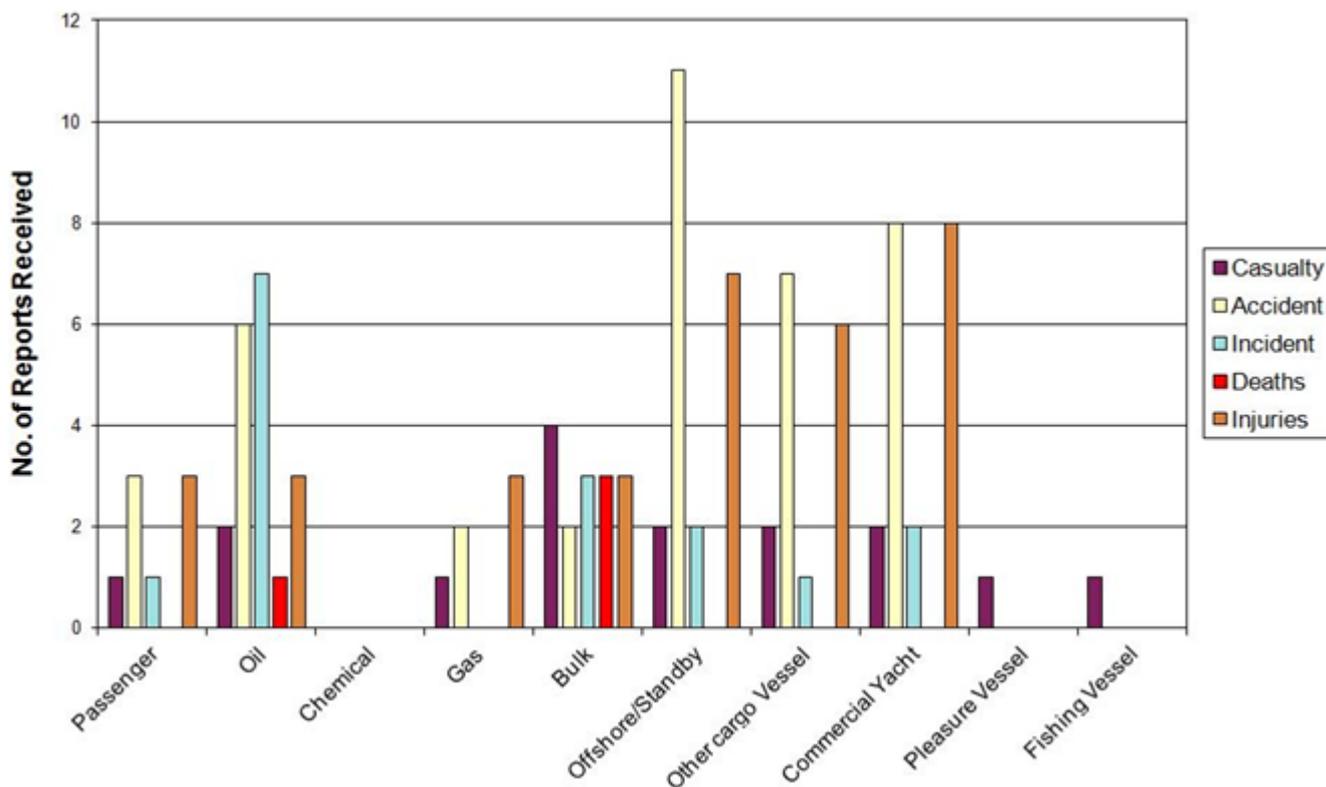
<b>Type of Vessel</b>	<b>Nature of Casualty</b>
General Cargo	Grounding – UK MAIB investigation

### 3 ARF Reports Received in 2011

In 2011 IOMSR received a total of 71 reported occurrences. There were no reported occurrences from foreign flagged vessels in Isle of Man territorial waters in 2011. The table below shows the number of reported occurrences by type in 2011 and the preceding 4 years.

	2007	2008	2009	2010	2011
<b>Casualties</b>	6	9	15	8	16
<b>Accidents</b>	29	25	26	49	39
<b>Incidents</b>	1	1	16	12	16
	<b>36</b>	<b>35</b>	<b>57</b>	<b>69</b>	<b>71</b>
<b>Collision, heavy contact, foundering or Stranding</b>	4	3	7	13	18
<b>Fire</b>	3	6	3	5	7
<b>Explosion</b>	-	1	-	-	-
<b>Pleasure Vessel: Explosion, collapse or Bursting</b>	-	-	-	-	-
<b>Pipe Systems: Explosion Collapse or Bursting</b>	-	-	3	1	1
<b>Sudden uncontrolled Release of any substance from a system or pressure vessel</b>	1	2	3	1	1
<b>Accidental Ignition of Flammable material</b>	-	1	-	-	-
<b>Electrical Short Circuit or Overload</b>	1	-	-	-	-
<b>Failure of any Lifting device</b>	1	1	3	2	3
<b>Failure of any Access Equipment</b>	-	-	-	-	-
<b>Involving Access to or from the ship</b>	1	1	2	1	2
<b>Slips or Falls (same level)</b>	4	4	3	7	5
<b>Slips or Falls (different levels)</b>	5	2	7	3	6
<b>Involving mooring Ropes or Hawses</b>	4	2	4	7	2
<b>Involving Lifting Equipment</b>	1	3	4	1	1
<b>Exposure to hazardous or toxic substances</b>	-	-	-	2	2
<b>Man Overboard</b>	1	-	2	5	2
<b>Electric Shock</b>	1	-	-	-	1
<b>Violence to the person</b>	-	2	-	-	1
<b>Other</b>	9	7	16	21	19
<b>Total</b>	<b>36</b>	<b>35</b>	<b>57</b>	<b>69</b>	<b>71</b>

The graph below represents the 16 casualty cases, 39 accident cases, 16 incident cases and includes 4 deaths and 33 people injured on different types of vessel in 2011.



The IOMSR recognises that the previous chart may not reflect the total number of incidents recorded by vessels and reported to their technical managers using the vessel's own incident reporting procedure. The majority of incidents reported to technical managers are therefore presumed to be very minor.

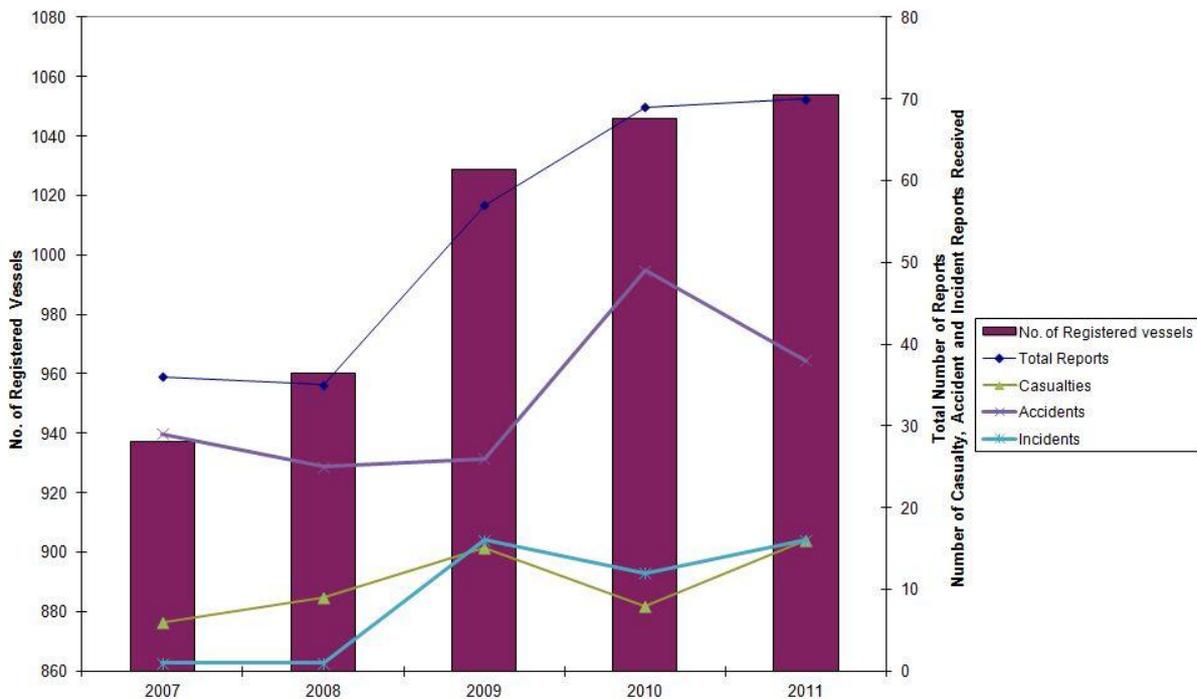
There were no reported occurrences from foreign flagged vessels in Isle of Man territorial waters in 2011.

### 3.1 ARF Fleet Comparison – Total Fleet

The table below shows occurrences as a percentage of the total Isle of Man registered fleet over 5 years. Isle of Man registered vessels include merchant ships, small ships, commercial yachts, pleasure vessels, fishing vessels, and demise ships.

Year	2007	2008	2009	2010	2011
Casualties / Fleet Size	0.6%	0.9%	1.5%	0.8%	1.5%
Accidents / Fleet Size	3.1%	2.6%	2.5%	4.7%	3.6%
Incidents / Fleet Size	0.1%	0.1%	1.5%	1.1%	1.5%
Total Occurrences / Fleet Size	3.8%	3.6%	5.5%	6.6%	6.6%

The graph below shows a comparison between the number of reports received and the number of all Isle of Man registered vessels over the last 5 years. The total number of vessels on the Register each year is calculated as an average from the total number of vessels each month.

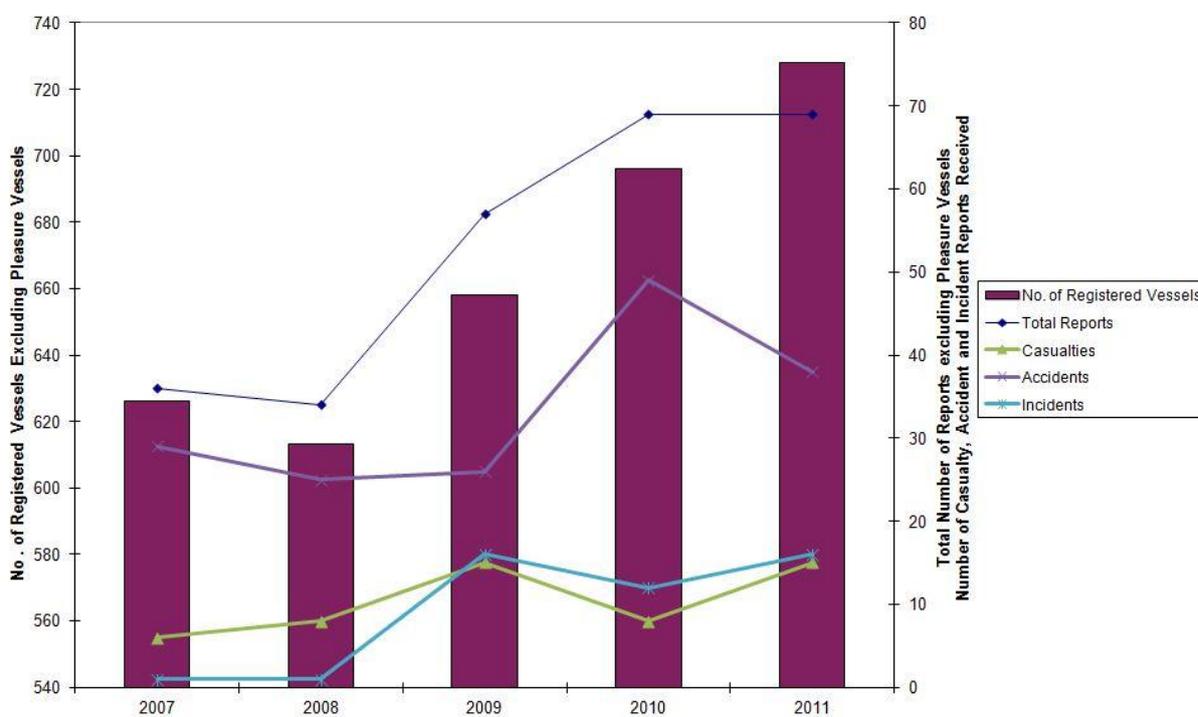


### 3.2 ARF Fleet Comparison – Total Fleet (Excluding Pleasure Vessels)

The table below shows occurrences with total Isle of Man registered fleet (excluding pleasure vessels) over 5 years.

Year	2007	2008	2009	2010	2011
Casualties / Fleet Size	1.0%	1.3%	2.3%	1.1%	2.1%
Accidents / Fleet Size	4.6%	4.1%	4.0%	7.0%	5.2%
Incidents / Fleet Size	0.2%	0.2%	2.4%	1.7%	2.2%
Total Occurrences / Fleet Size	5.8%	5.5%	8.7%	9.9%	9.5%

The graph below compares the number of ARF Reports received with the number of Registered Vessels (excluding Pleasure Vessels) over a period of 5 years.



## 4 Analysis of ARF Reports Received in 2011

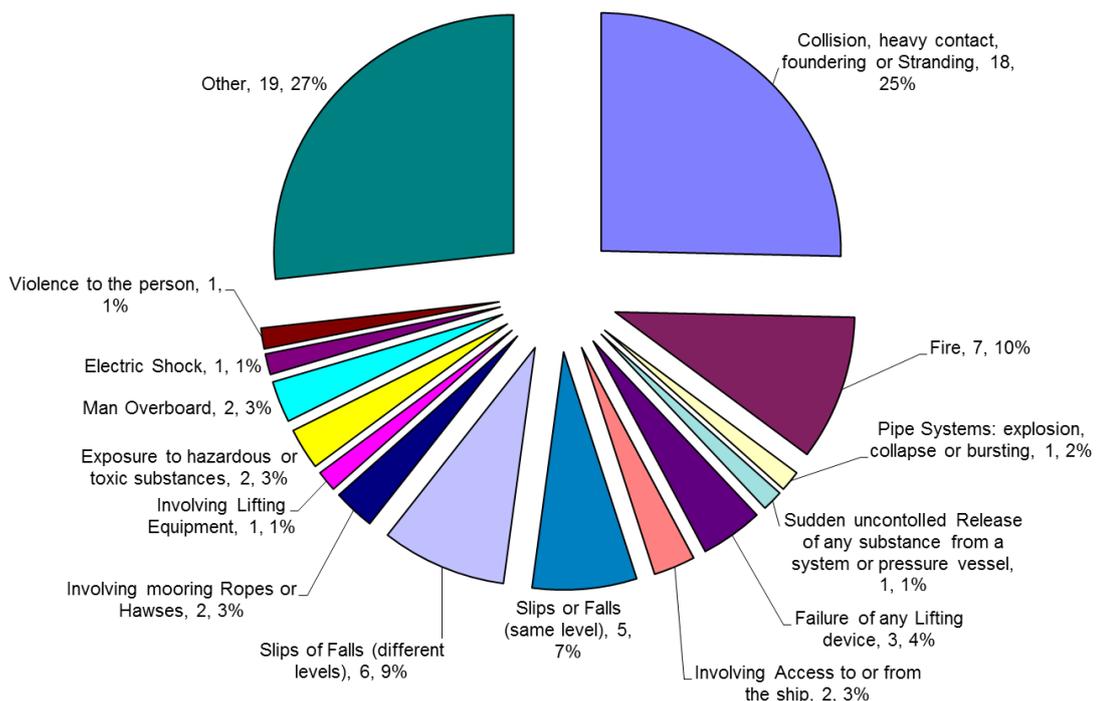
The table below summarises the condition the vessels were in at the time of the occurrence.

	Total Occurrences			Cases involving	
	Inc	Acc	Cas	Injury*	Death**
Berthed to quay/Ship Yard	4	16	4	17	0
At Anchor/Anchoring/Weighing Anchor	4	7	0	5	0
Mooring/Unmooring	3	1	2	0	0
Making Way in Port/Confined Waters	1	3	2	1	1
Making Way Open Sea	4	9	7	5	3
Stopped - Drifting/DP	0	3	1	1	0
<b>Total</b>	<b>16</b>	<b>39</b>	<b>16</b>	<b>29</b>	<b>4</b>

\*in some cases more than one person may have been injured in the same case.

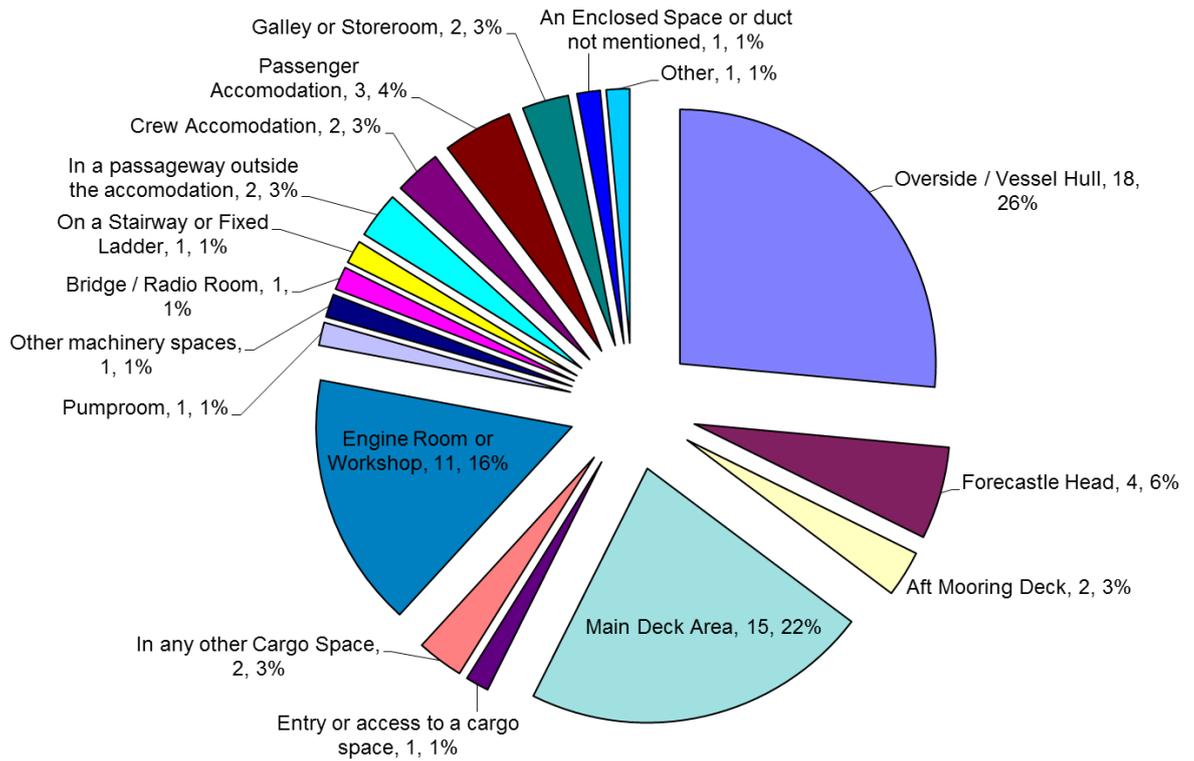
\*\* Where a case involves deaths and injuries, this is counted once under a death case.

### 4.1 Type of Occurrences

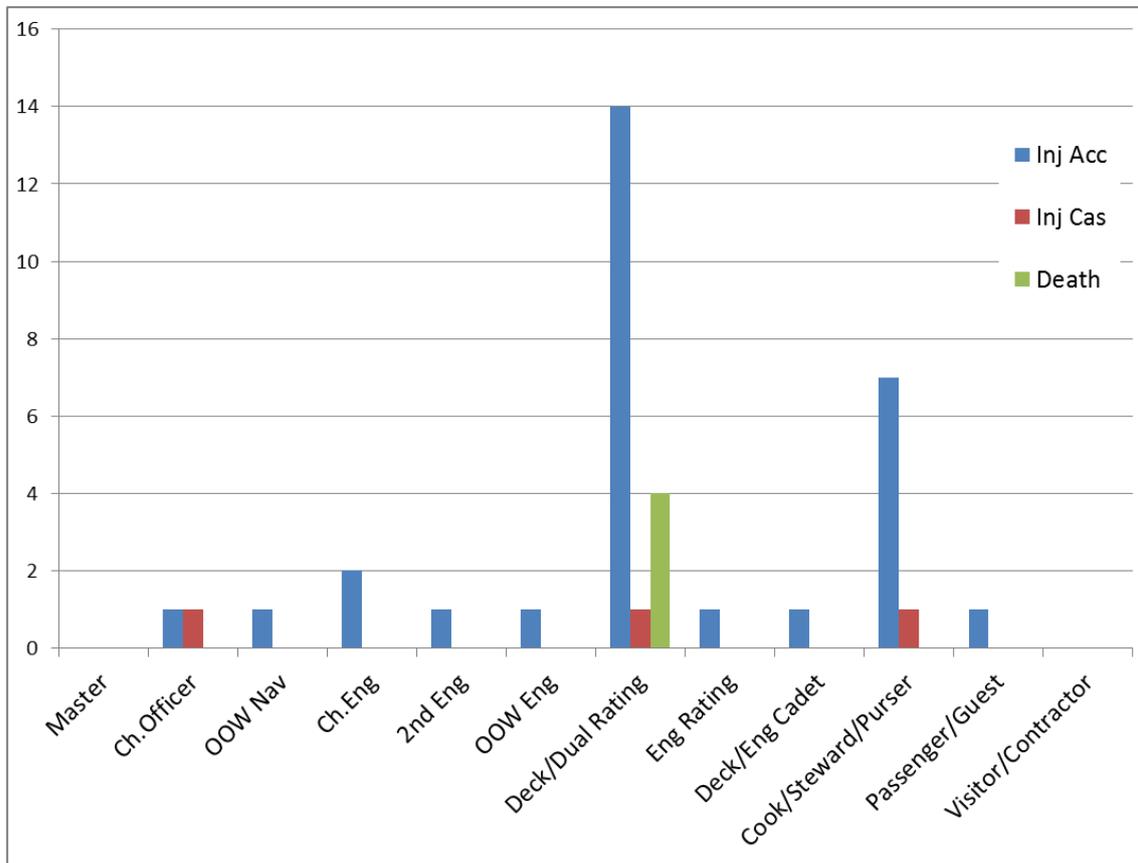


The chart above shows that in addition to the 'Other' category the majority of occurrences were slips/falls and collisions/groundings. The 'Other' category includes occurrences such as general maintenance, medical illness, manual handling, stowaways and cargo shifting.

## 4.2 Place of Occurrences



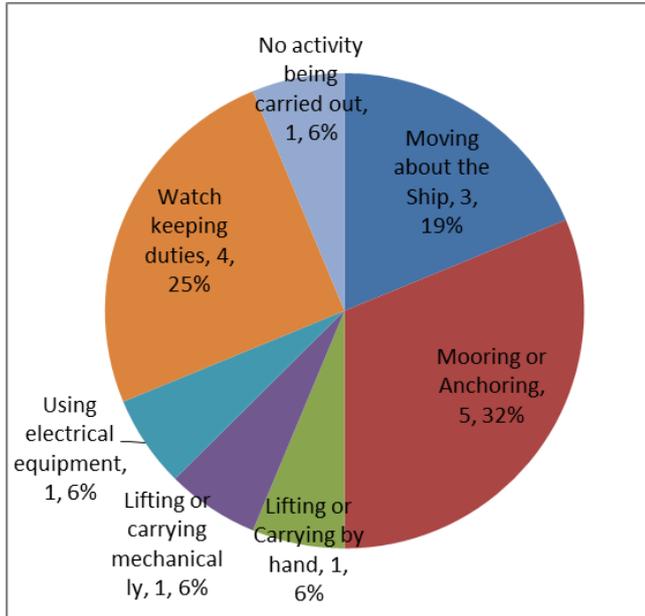
## 4.3 Number of Injuries and Deaths by Rank



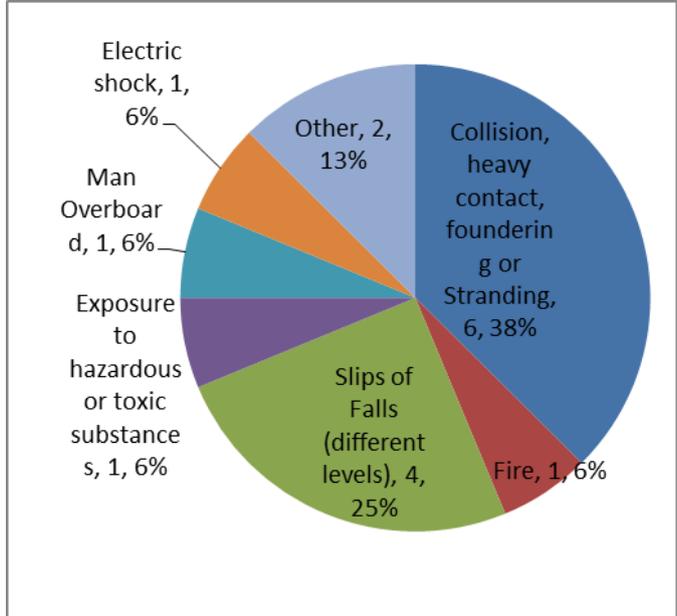
# 5 Casualties in 2011

A total of 16 Casualties were reported in 2011. The 16 casualty cases are outlined in the charts below.

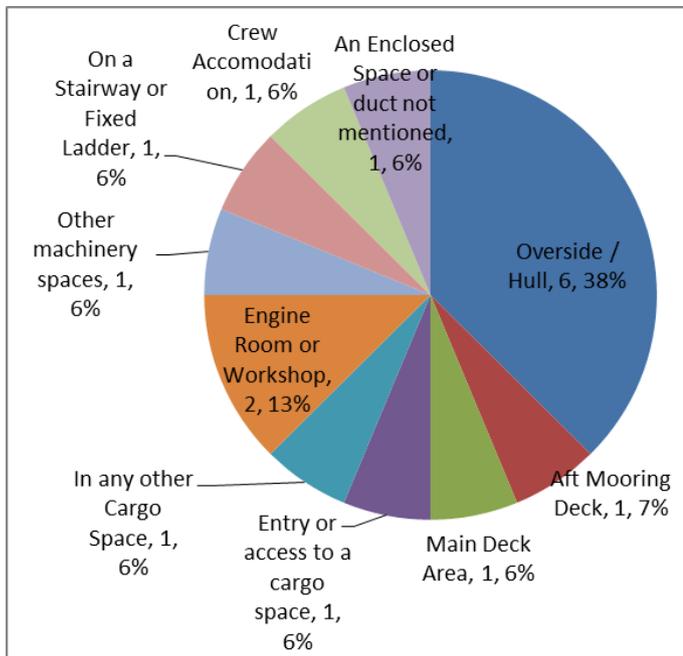
**Activities Leading To A Casualty**



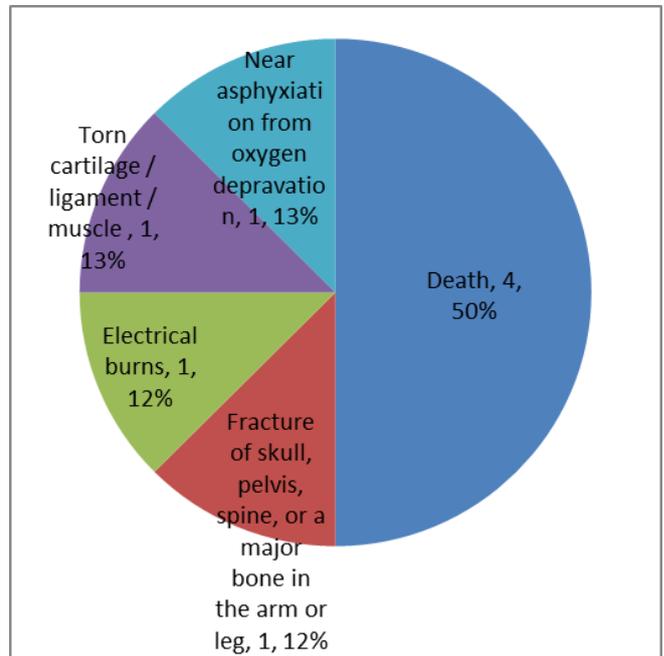
**Type of Casualty**



**Place Where Casualty Occurred**



**Injuries from Casualties**



## **5.1 Brief Summary of All Casualties in 2011**

### **1 Bulk Carrier**

A crew member was washed overboard when a large swell wave broke onto the poop deck of the vessel. The crew were tidying up some mooring lines on the poop deck which had become loose in heavy weather.

➤ This case was the subject of an Isle of Man Casualty Investigation

### **2 Commercial Yacht**

The yacht was in a repair yard and being transported by a travel for placement onto blocks. The Master was reassured by the yard foreman the blocks were in the correct position for the hull structure. As the vessel was being lowered onto the blocks the hull was observed to bend and then crack. Fuel then leaked out of the vessel. The shipyard accepted full responsibility.

### **3 Commercial Yacht**

The chief engineer was making adjustments to a thermostat connected to a resistor bank. Whilst leaning across the resistor bank his elbow made contact resulting in a severe DC shock. The chief engineer suffered severe electrical burns.

### **4 Other Cargo Ship**

When shifting berth using tug boat assistance in a port congested with ice, the vessel made heavy contact with the berth causing significant structural damage which had to be repaired before leaving port. Inadequate assessment of the situation and clearance distances was identified as the primary cause.

### **5 Oil Tanker**

The vessel was fully loaded transiting the Mediterranean Sea when a main engine failure occurred resulting in immobilisation of the vessel. The vessel was towed to port to make repairs and investigate. The main engine failure originated from a main bearing overheating.

### **6 Oil Tanker**

A crew member slipped and fell down the stairs leading to the fo'c'sle and suffered a compound fracture to his leg and severe head injuries.

### **7 Other Cargo Ship**

A crew member slipped and fell off a ladder while entering a hold and severely fractured his leg.

### **8 Fishing Vessel**

Whilst the vessel was moored another fishing vessel was moored along side. The vessel had its moorings accidentally removed when the other fishing vessel departed. The vessel then drifted and later became stranded on a pier structure as the tide ebbed. The vessel was partially flooded but was able to be recovered from the pier structure on the flood tide without structural damage.

### **9 Offshore Vessel**

The vessel was slowing down within the 500m zone in preparation for dynamic positioning of the vessel. As the vessel came to a stop near the platform the stern was swung round and subsequently made contact with the platform leg. The vessel suffered damage to the bridge wing, lifeboat and crane. The vessel was being manoeuvred by junior officers whilst the senior officers were in a meeting.

## **10 Bulk carrier**

The vessel collided with the berth when entering the port with pilot and tug assistance. The vessel was draft restricted and did not have a navigational chart or other hydrographic information for the port.

## **11 Gas Carrier**

The vessel suffered a fire in the incinerator room. When oil was transferred to the incinerator from the sludge tank oil leaked onto the main engine exhaust manifold. A large fire soon engulfed the incinerator space and the general alarm was sounded and the fire soon extinguished by the emergency party.

## **12 Offshore Vessel**

Whilst making way conducting a tow the vessel was rolling moderately when the cook descended some stairs holding a hot try in both hands. The cook slipped on a stair and fell down the stairs tearing a muscle in the process.

## **13 Passenger Ship**

Vessel made heavy with the berth after conducting a swing using tug boat assistance when arriving in port during squally weather and high winds. Significant structural damage was caused to the shell plating.

## **14 Bulk Carrier**

A crew member was found lying seriously injured on the main deck of the vessel. The crew member later died as a result of his injuries. The cause and circumstances are unknown.

➤ This case was the subject of an Isle of Man Investigation

## **15 Bulk Carrier**

When departing port two crewmen decided to enter a cargo hold access space. The adjacent holds were fully loaded with coal. The cargo hold access space was oxygen depleted. The crewmen were seen from the main deck lying unconscious in the space. A rescue was mounted and the two men retrieved to the main deck. One crewman died and the other crewman was revived and airlifted to hospital. The reason why they entered the space was not determined.

➤ This case was the subject of an Isle of Man Casualty Investigation

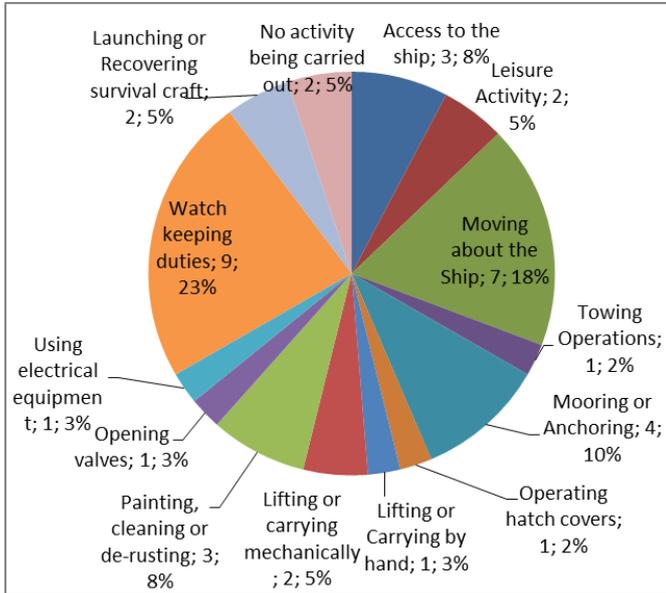
## **16 Pleasure Vessel**

Whilst making way under sail the vessel's retractable keel hit an uncharted underwater obstruction in 28m of water whilst the maximum draught was 10m. The retractable bilge was significantly damaged.

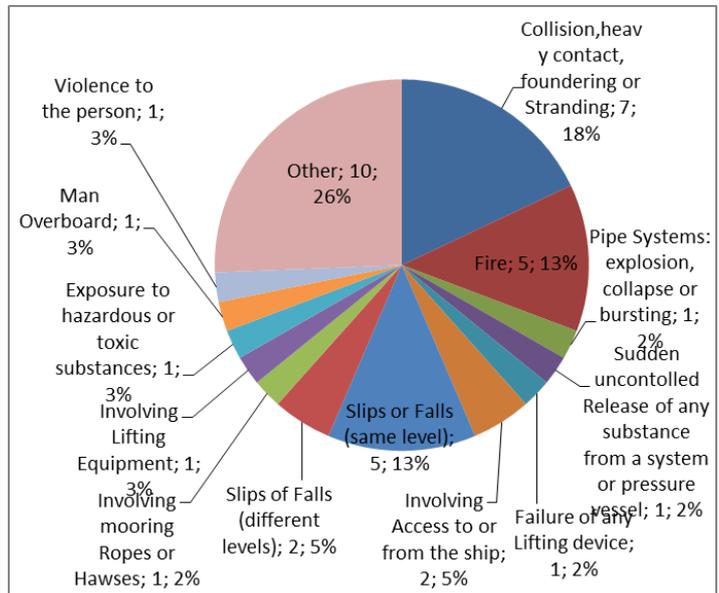
# 6 Accidents in 2011

A total of 39 accidents were reported in 2011. The 39 accident cases are outlined in the charts below.

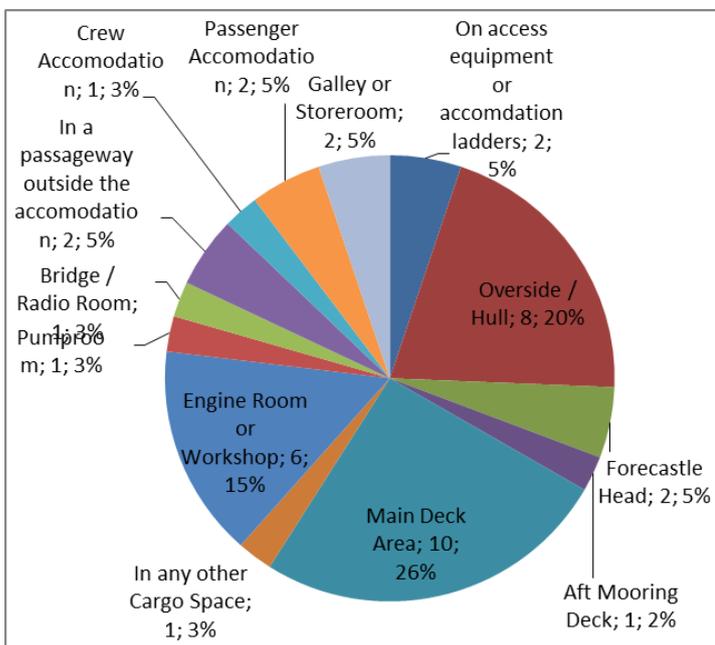
**Activities Leading To Accident**



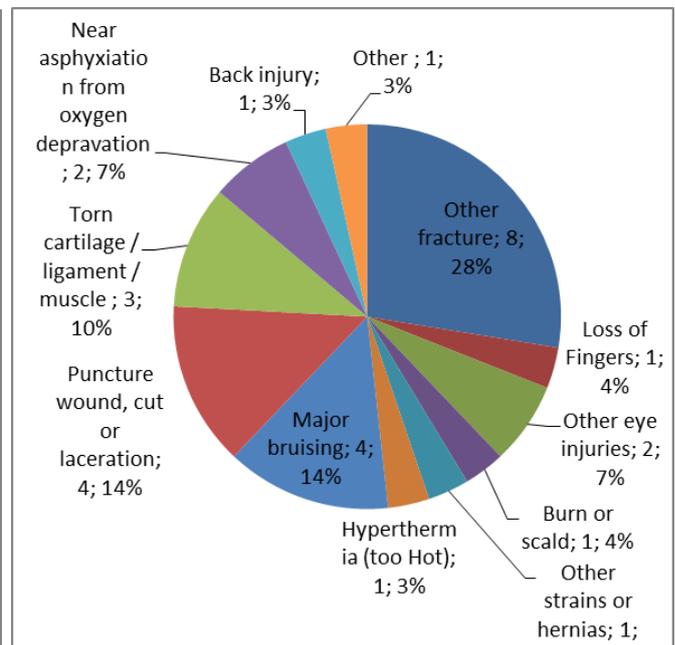
**Type of Accident**



**Place Where Accident Occurred**



**Injuries from Accidents**



On some occasions more than one injury occurred during the same accident. The majority of injuries from accidents are puncture wounds, cuts, lacerations and 'other fractures'. In the majority of these cases the cause was attributed to personal negligence.

The majority of injuries sustained follow the same trend as the previous year. This stresses the need for seafarers to be more careful, safe working practices are properly followed and equipment is in good working order.

## **6.1 Brief Summary of Selected Accidents in 2011**

### **1 Gas carrier**

After aerating a cargo space with dry air in preparation for hot work the access hatch was closed. The access hatch cover was later opened by a crew member however the pressure inside the cargo space rapidly forced open the access hatch cover into a crew member's chest causing him to slip, loose his safety helmet and hit his head against a steel ladder. He suffered severe lacerations as a result.

### **2 Offshore Vessel**

While unloading pipes in rough seas a bundle of pipes moved trapping a crew member's legs causing him severe bruising.

### **3 Oil Tanker**

Crew members were involved in vegetable oil squeezing operations in cargo tanks working in shifts. The tank operations were conducted in shifts at temperatures of 55C with planned rest periods every 5-10 minutes and copious drinking water supplied. After the tank operations were completed 2 crew members collapsed with hyperthermia and were taken to hospital.

### **4 Offshore Vessel**

Whilst using the ship's stores crane a crew member noticed a ruptured hydraulic hose leak near the control unit. The crew member rapidly descended a ladder and fell over on the oily deck fracturing his ankle.

### **5 Commercial Yacht**

A crew member was carrying a capstan to the aft deck when he stumbled and fell down the stairs fracturing his knee cap.

### **6 Commercial Yacht**

A crew member jumped from a stairwell on the quayside onto the vessel landing heavily on his foot. He suffered a minor fracture as a result.

### **7 Commercial Yacht**

An engineer stepped ashore from the passarelle onto the quayside. As he stepped ashore he stepped onto a cable, twisted his ankle and fell over.

### **8 Commercial Yacht**

Crew members returned to the vessel intoxicated after a night ashore. Whilst on the quayside a stewardess was on a fellow crew member's back when she grabbed a headline causing both crew members to fall backwards. The stewardess landed on her hands causing a minor wrist fracture.

### **9 Commercial Yacht**

Whilst the vessel was at anchor it was noted that the vessel was dragging anchor. When attempting to raise the forward anchor it was noted the anchor was missing. The vessel's stern then appeared to touch bottom. The main engines were started in an attempt to manoeuvre the vessel in addition to the bow thruster and other small craft in attendance attached with lines. As the vessel was manoeuvring the stern anchor became wrapped around one of the prop shafts and damaged the propeller.

## **10 Offshore Vessel**

The vessel was approaching an oil rig to receive 2 passengers by basket transfer. The 500m checklist had been completed and the vessel manoeuvred near the rig under dynamic positioning. As the vessel was alongside the rig a main engine shut down resulting in loss of starboard propulsion, thrusters and azimuth control. The vessel made light contact with one of the rig fenders.

## **11 Oil Tanker**

The vessel was double berthed in a ship yard's wet dock. As the vessel was being manoeuvred from the berth the bridge wing struck a shore crane damaging the bridge wing and smoke float.

## **12 Bulk Carrier**

Whilst the vessel lay at anchor a crew member was working on top of a hatch cover. When he finished his work he decided not to use the ladder but climb down from the hatch coaming. As he descended he fell on the main deck and hit his elbow on a hatch stiffener causing injury.

## **13 Offshore Vessel**

The vessel was conducting a lifeboat drill at anchor in light winds and low swell. The lifeboat was recovered without incident. When the davit brake was released the forward hook mechanism released and the forward end of the lifeboat fell to the deck damaging the lifeboat. An investigation concluded a possible design fault with the release hook mechanism.

## **14 Oil Tanker**

Whilst using the vessel's incinerator a small fire developed when some oil/sludge leaked into an air casing and drip tray. The fire was extinguished with a portable extinguisher.

## **15 Offshore Vessel**

Crew members were transferring chemicals into a fuel tank using a portable electric pump. A leak was noticed at the discharge end of the pump where an attempt to close the leak resulted in the hose becoming detached and the chemical spraying into one crew member's face and another crew member's upper body.

## **16 Other Vessel**

Ash from the incinerator was transferred directly to a storage container in the garbage room without being allowed to cool. A short while later the fire alarm sounded in the garbage room where a fire had developed. The fire was eventually extinguished using fire hoses.

## **17 Offshore Vessel**

A crew member was washing down the fo'c'sle deck using a high pressure washer with the trigger taped into the on position. He placed the washer down to pick up a brush and accidentally knocked the washer which sprayed into a fellow crew member's face causing him facial injuries.

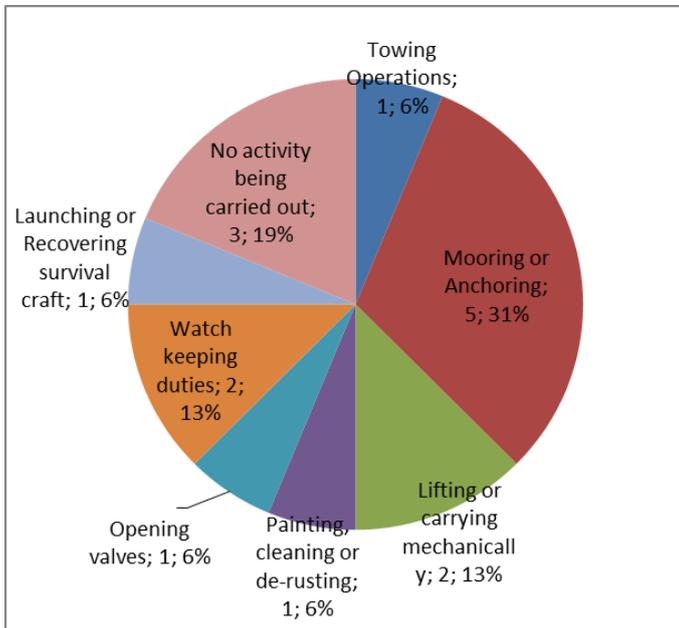
## **18 Offshore Vessel**

A crew member was attempting to board the vessel from a bollard on the quay in order to climb over the ship's railing. He was warned not to at the time but ignored the warning. As he proceeded to climb he slipped and fell into the water between the ship and quayside. The ship's crew recovered him and subsequently he was taken to hospital.

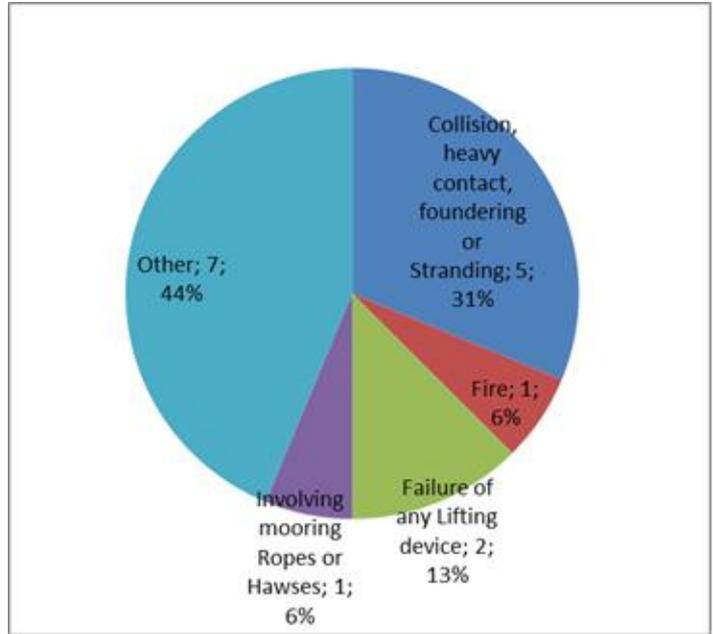
## 7 Incidents in 2011

A total of 16 incidents were reported in 2011. The 16 incident cases are outlined in the charts below.

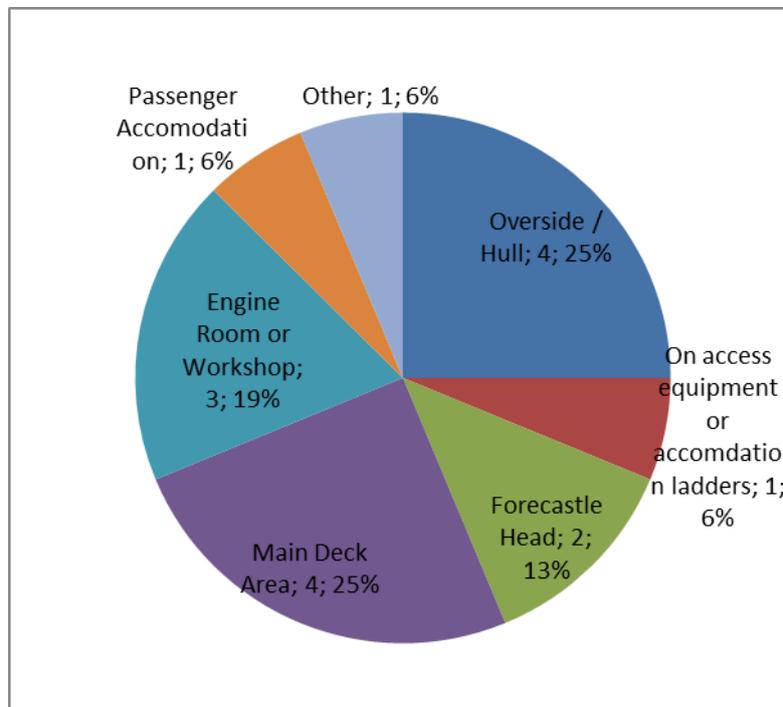
### Activities Leading To Incident



### Type of Incident



### Place Where Incident Occurred



## **7.1 Brief Summary of Selected Incidents in 2011**

### **1 Oil Tanker**

The vessel was making way on a coastal voyage in rough seas when the main engine shut down due to low jacket water pressure. The vessel was escorted to port by a tug boat.

### **2 Oil Tanker**

Whilst the vessel was departing port the main engine failed to engage in astern propulsion from all control points when lifting off the berth. The vessel re-berthed until an inspection and repairs were made.

### **3 Bulk Carrier**

Whilst the vessel was at anchor it was observed that the vessel was dragging anchor. In order to avoid collision with another anchored vessel the other anchor was released and the vessel eventually stopped before collision occurred.

### **4 Oil Tanker**

Whilst conducting a load test of the provision crane the wire rope parted as the test load was being hoisted.

### **5 Oil Tanker**

Whilst the vessel was discharging oil cargo de-ballasting operations were commenced by mistake. The ballast water discharged onto an attending sludge barge moored alongside the vessel.

### **6 Offshore vessel**

During a life boat drill it was noticed that the lifeboat did release when operating the remote pull wire. On investigation it was found that the pull wire had been incorrectly attached to the davit brake mechanism.

### **7 Offshore Vessel**

Whilst departing port it was noticed that the thruster system failed due to electrical problems. The vessel returned to port to undergo repairs.

### **8 Oil Tanker**

Whilst attempting to weigh anchor in rough seas and strong winds the anchor windlass failed and could not be operated. The decision was made to slip the anchor cable at the bitter end.

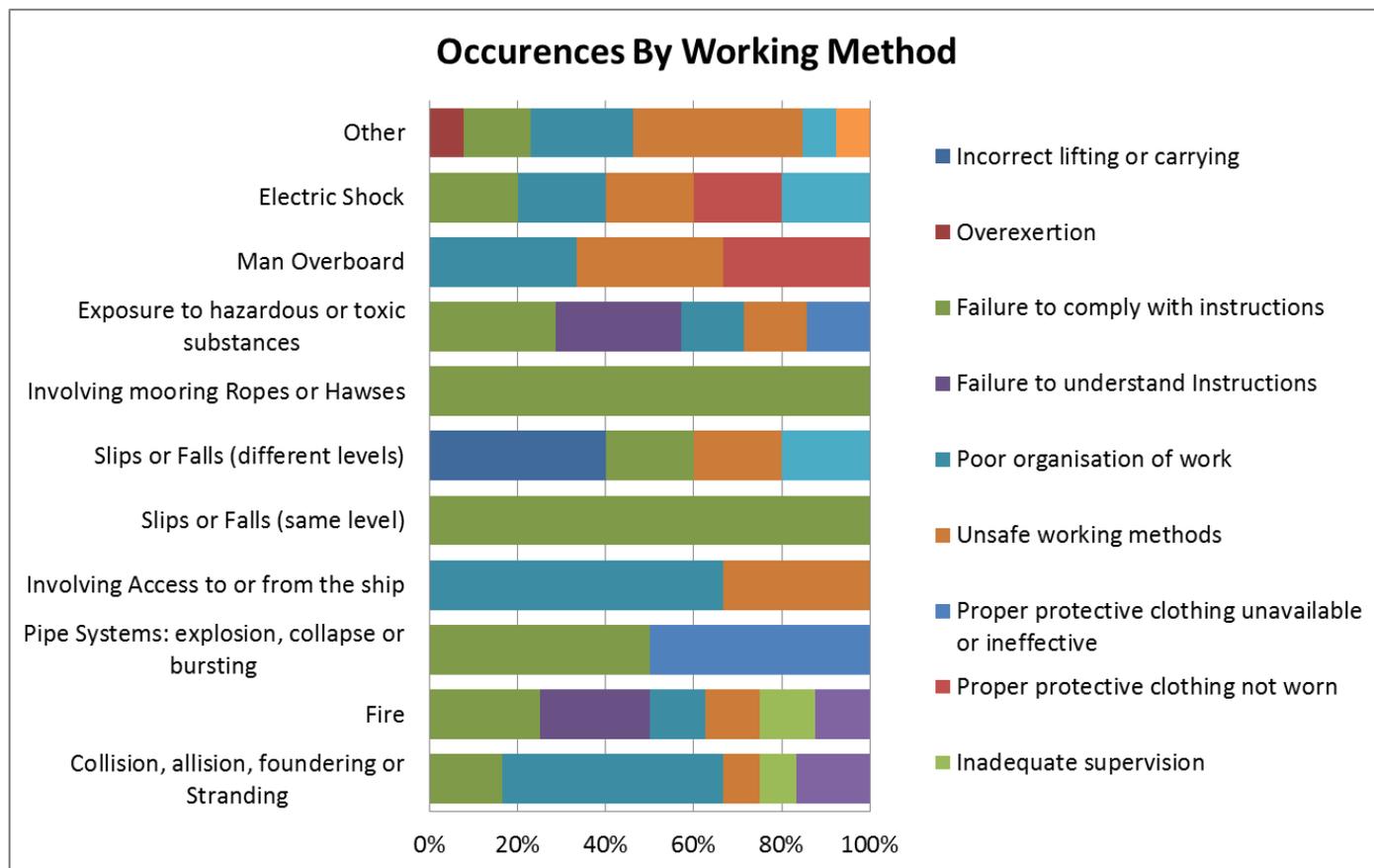
### **9 Commercial Yacht**

A small fire developed in a bucket containing oily rags in the vessel's garage. A bucket of water was thrown on the fire which appeared to extinguish the fire and fill the space with thick smoke. The fire team assembled but was stood down when it was realised the fire had been extinguished. It is believed the fire resulted from the oily rag's spontaneously combusting in the bucket.

## 8 Breakdown of Occurrences in 2011 by Cause

The following charts represent a breakdown of all the occurrences by cause divided into several categories represented on the ARF Form. Determination of the cause is following an investigation into the occurrence by ship's staff, company investigators or an external investigating body. **It is important to remember that an occurrence may be the result of several causes across different categories.**

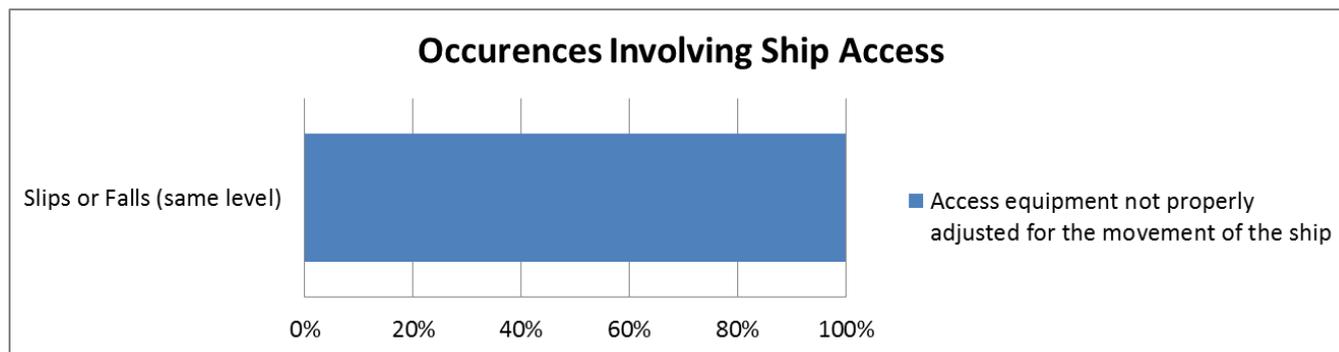
### 8.1 Occurrences by Working Methods



The chart above shows that the predominant working method cause has been attributed to unsafe working methods. Seafarers should avoid taking shortcuts in order to complete the job more quickly. This highlights the importance of effective work planning and risk assessment. A seafarer should not feel they must put themselves in a dangerous situation to complete the job or to save a few minutes of time. Stop and re-evaluate!

Poor organisation of work stresses the need for effective planning and execution with good communication. Where poor organisation of work led to a collision or grounding this highlights the need for effective bridge team management.

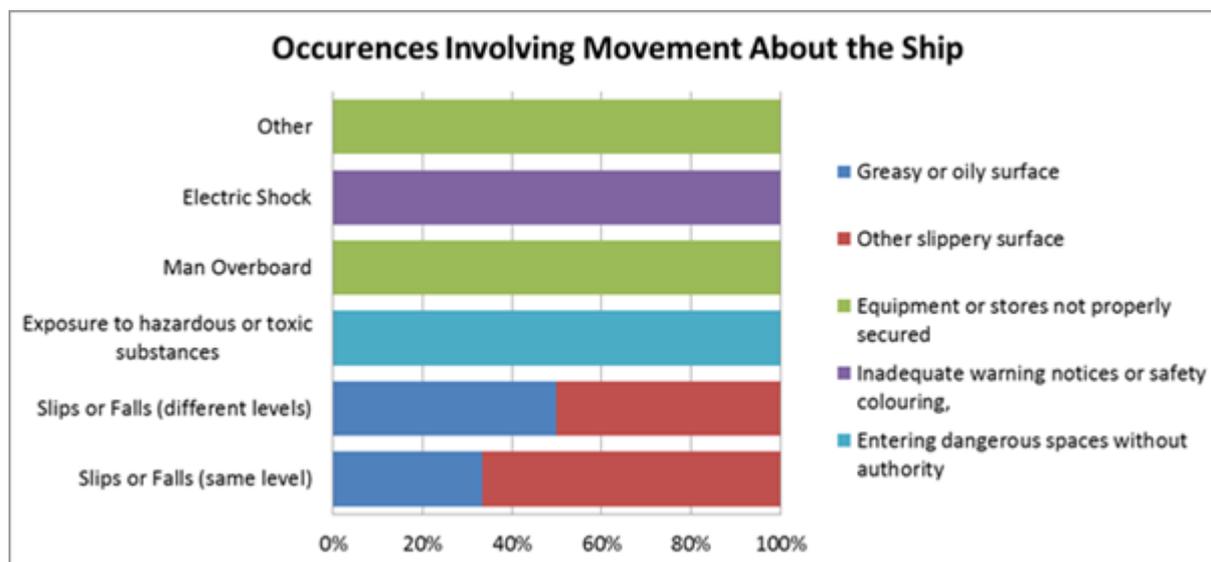
## 8.2 Ship Access



All personnel boarding a vessel are required by the Regulations to use the means of access provided. The master is required to ensure that a safe means of access is provided to the vessel at all times and to ensure that it is maintained in a safe condition. Everyone intending to board or leave the vessel should be strongly encouraged by the ship's staff to use the safe means of access provided even if a shortcut appears to be an easier or shorter journey.

Crew members joining the vessel from a launch boat are strongly encouraged to wear appropriate lifejackets and only consider the transfer under suitable conditions taking into account the weather and vessel motion.

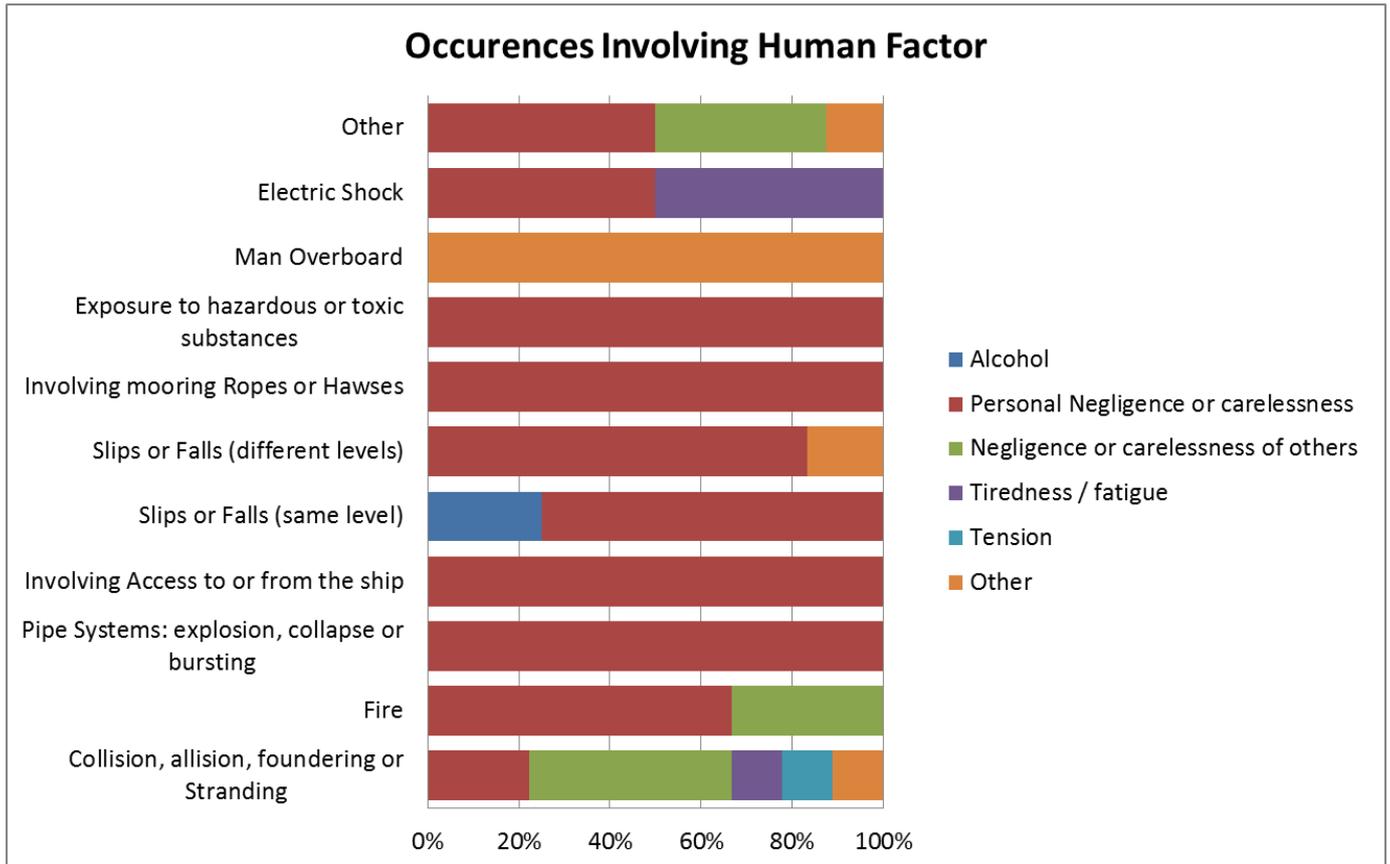
## 8.3 Occurrences by Movement About the Ship



The chart above shows that the predominant "movement about the ship" cause has been attributed to 'other' slippery surfaces and "equipment or stores not properly secured". Where appropriate masters should ensure that deck working areas have non-slip surfaces. This can be achieved by either clearing/cleaning the deck, placing non-slip mats or use of non-slip paint mixes. Crew members should also be aware of any associated risks of slipping when moving about the ship under various conditions.

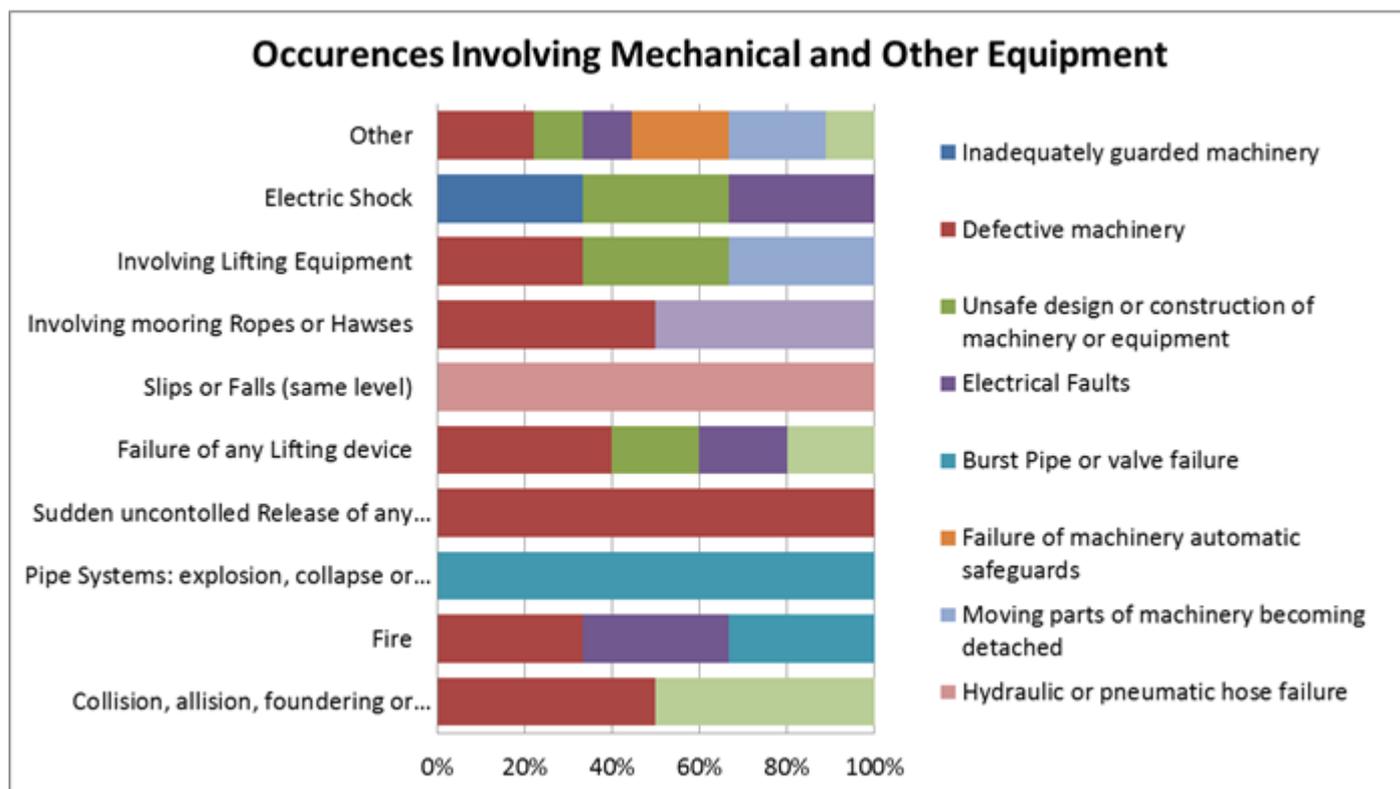
Effective securing of equipment should be second nature to seafarers to avoid potential hazards occurring when the vessel's motion is great particularly in heavy weather.

## 8.4 Occurrences by Human Factor



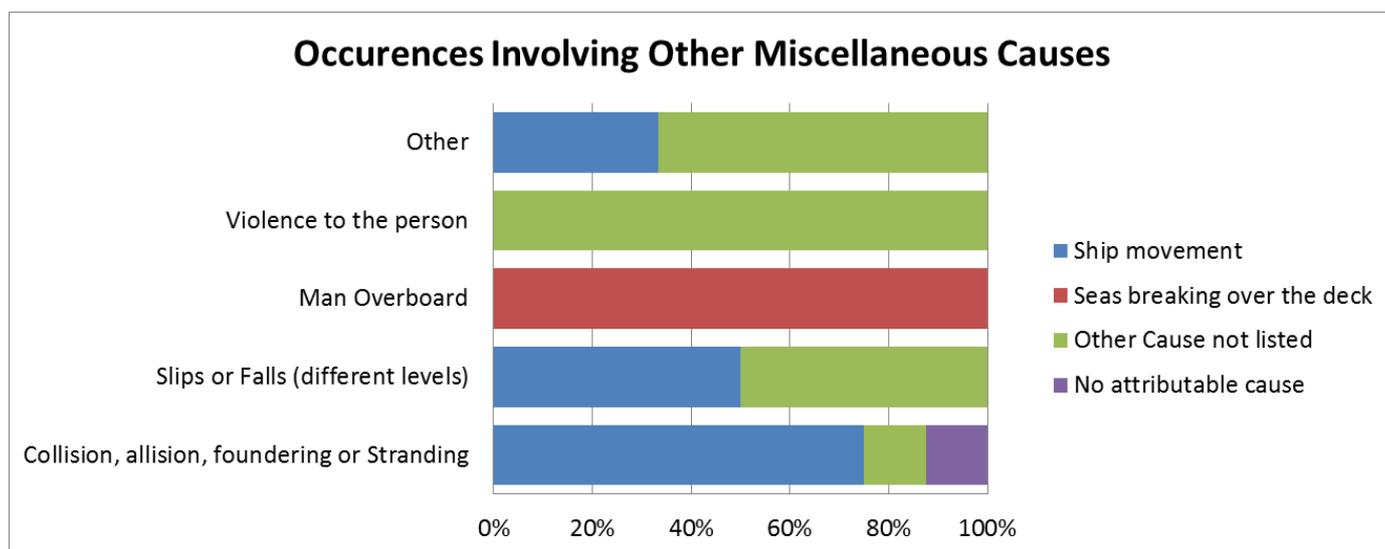
The chart above shows the predominant human factor cause has been attributed to “personal negligence or carelessness”. By “human factor” we mean the act or omission of a person to do something that leads to the occurrence happening. This stresses the need for adequate knowledge and training associated with the particular work activity, for the crew member to be made aware of any associated risks and for the crew member to pay attention to what they are doing.

## 8.5 Occurrences by Mechanical & Other Equipment



The chart above shows an approximately even spread with various mechanical, electrical, ropes and associated equipment malfunctioning. This stresses the need for effective inspection and maintenance to ensure they are in good condition and fit for purpose.

## 8.6 Occurrences by Other Miscellaneous Causes



The chart above shows that the predominant other miscellaneous cause has been attributed to the ship movement and "other cause not listed". Crew members should take into consideration the movement of the vessel when planning and carrying out work activities. If the movement of the vessel is too great the work activity should not be attempted or consideration should be given to manoeuvring the vessel to reduce the vessel's movement to an acceptable level.

## 9 Conclusion

Despite best efforts it is an unfortunate fact of life that occurrences will always happen. 2011 saw more casualties and incidents reported compared to the previous year together with a slight fall in the number of accidents reported.

Many of the ARFs received show that a large proportion of occurrences are attributed to the "human factor" whereby personal negligence and carelessness remains prevalent and therefore highlight the importance of effective care and attention. Occurrences involving slips and falls (same and different levels) features heavily each year, again highlighting the importance of effective care and attention.

2011 also saw a reduction in the number of cases involving a 'man over board' compared to 2010. Any man-overboard case presents a high risk of death. Masters and ship operators are strongly encouraged to ensure their procedures for any job involving the risk of man over board are adequate and strictly adhered to on board with appropriate personal protective equipment (PPE) being worn.

The number of collisions and groundings rose emphasising the need for proper and effective application of the Collision Regulations (COLREGS). In particular, emphasis on keeping a good lookout is very important without distractions, taking timely and effective action to assess the risk of collision and early action being taken to avoid collision in accordance with the COLREGS. Some of the collisions and groundings that occurred in 2011 were in part the result of poor Bridge Team Management. Good team work and effective communication amongst the bridge team, which includes local pilots, is vitally important to the safe navigation of a vessel.

Seafarers should be aware of their own abilities and limitations and the limitations of the equipment they use. Seafarers should not attempt any work activity where they perceive the risks to be unacceptable. Should unacceptable risks present themselves, then the work should not commence until the risks are investigated and measures introduced to reduce the risks to an acceptable level. Risk assessments are designed to be used for this purpose. If the vessel has an appointed safety officer then he or she should be informed and the circumstances investigated. It is important to remember that if the risks cannot be reduced to an acceptable level then the work activity should not go ahead. Should this occur, then specialist advice should be sought.

Seafarers should not take any unnecessary risks with their safety in order to get the job done or take unsafe shortcuts in order to get the job done more quickly. Safety on board a vessel should be everyone's concern. Seafarers should be able to observe and monitor their own safety effectively and where possible the safety of those around them.

Where a vessel has established safety procedures, it is important that these are observed correctly. Appropriate personal protective equipment (PPE) should always be worn and used correctly. Any dedicated safety equipment should be regularly maintained and inspected before use. The Code of Safe Working Practices for Merchant Seamen is always a valuable reference source for most work activities conducted on board and should be consulted frequently. Risk assessments, Permits to Work and plain old common sense are all important factors in reducing the level of risk posed by work activities.

If you are in any doubt about the safety concerned with a particular work activity, stop and re-evaluate.

## Additional Information

- Manx Shipping Notice 003 – Accident Reporting
- Code of Safe Working Practices for Merchant Seamen published by the UK Maritime and Coastguard Agency
- Master's / Yacht Master's Handbook (available free on the IOMSR website)
- Merchant Shipping (Accident Reporting and Investigation) Regulations 2001 SD815/01 (available free on the IOMSR website)
- Isle of Man Ship Registry website – [www.iomshipregistry.com](http://www.iomshipregistry.com)
- Contacting the Isle of Man Ship Registry – email [marine.survey@gov.im](mailto:marine.survey@gov.im)

The information in this report can be provided in large print or on audio tape, on request.

### Copyright Notice

The contents of this report are the property of the Isle of Man Ship Registry and should not be copied without its permission.