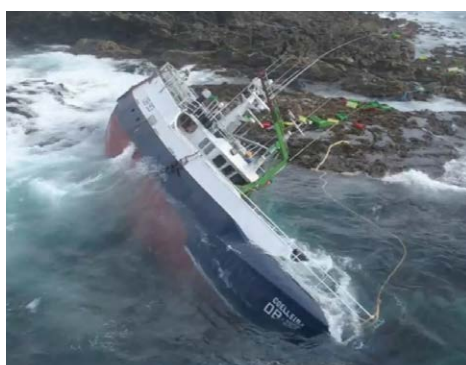
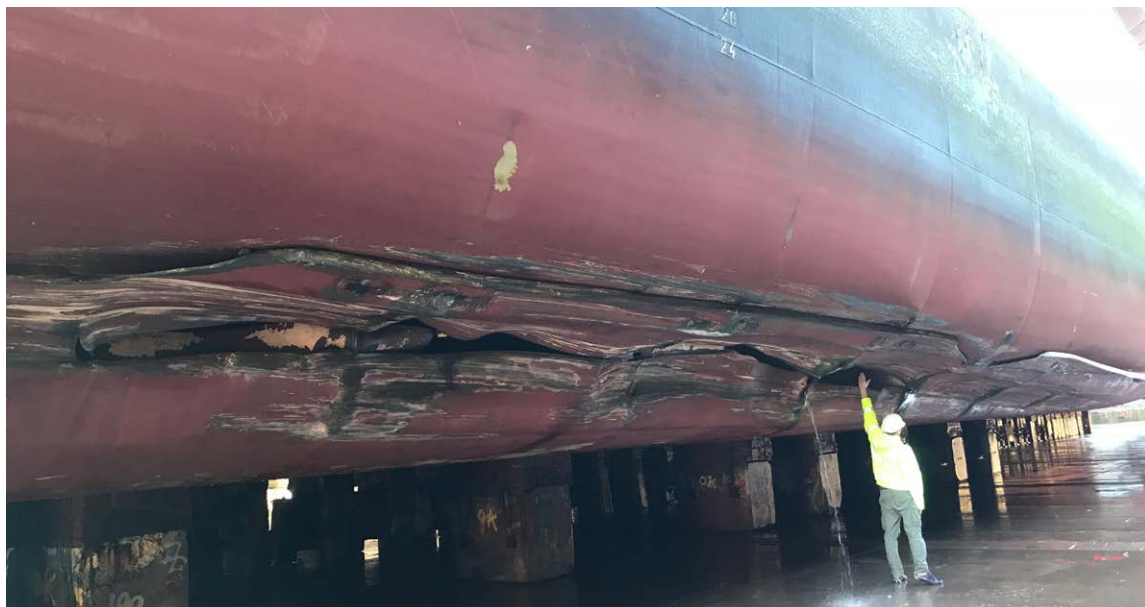


2019

Marine Accident Statistics



This document is posted on our website: www.gov.uk/maib

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November 2020

MARINE ACCIDENT INVESTIGATION BRANCH

MARINE ACCIDENT STATISTICS 2019

The Marine Accident Investigation Branch (MAIB) examines and investigates all types of marine accidents to or on board UK vessels worldwide, and other vessels in UK territorial waters.

Located in offices in Southampton, the MAIB is a separate, independent branch within the Department for Transport (DfT). The head of the MAIB, the Chief Inspector of Marine Accidents, reports directly to the Secretary of State for Transport.

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CONTENTS

CHIEF INSPECTOR'S STATEMENT	1
PART 1 - 2019: CASUALTY REPORTS TO MAIB	2
Statistical overview	2
PART 2: STATISTICS	5
UK vessels: accidents involving loss of life	5
UK merchant vessels $\geq 100\text{gt}$	7
UK merchant vessels $< 100\text{gt}$	16
UK Fishing vessels	17
Non-UK commercial vessels	25
ANNEX A - STATISTICS COVERAGE	26
ANNEX B - SUPPORTING INFORMATION	27
GLOSSARY OF ABBREVIATIONS, ACRONYMS AND TERMS	32
FURTHER INFORMATION	33

CHIEF INSPECTOR'S STATEMENT

The statistical part of the MAIB's Annual Report 2019 is being published later than usual due to difficulties in quality assuring the underlying data, which had to be repatriated from the European Marine Casualty Information Platform into a newly built UK accident database as a result of the UK leaving the European Union.

The year saw 1 090 accidents reported, a reduction on 2018 (1 227). 22 investigations were started, compared with 23 in 2018, and 21 in 2017.

For the tenth successive year, no UK merchant vessels of 100gt or more were lost. The overall accident rate for UK merchant vessels of 100gt or more was 74 casualties per 1 000 vessels (compared to 64 per 1 000 vessels in 2018 and 75 per 1 000 vessels in 2017). No passengers lost their lives due to accidents involving UK merchant vessels of 100gt or more during 2019. However, three crew lost their lives on UK merchant vessels of 100gt or more: two fatalities occurred during self-mooring / unmooring operations; and, one fatality occurred as a result of being struck by a moving gantry crane on deck.

Five commercial fishing vessels were recorded as lost in 2019, compared with eight in 2018 and six in 2017. The loss rate of fishing vessels remains low at 0.09% of the fleet. Five commercial fishermen lost their lives during the year due to accidents (six in 2018, five in 2017), though a shore-based engineer also lost his life in the engine room of a fishing vessel.



Captain Andrew Moll
Chief Inspector of Marine Accidents

PART 1 - 2019: CASUALTY REPORTS TO MAIB

In 2019, 1 090 accidents (casualties and incidents¹) to UK vessels or in UK coastal waters were reported to the MAIB. These involved 1 192 vessels.

433 are not included in this overview e.g. they were accidents to people that did not involve any actual or potential casualty to the vessel.

There were 657 accidents involving 730 commercial vessels that involved actual or potential casualties to vessels. These are broken down in the following overview:

¹ As defined in Annex B on page 27.

Chart 1: UK accidents - commercial vessels

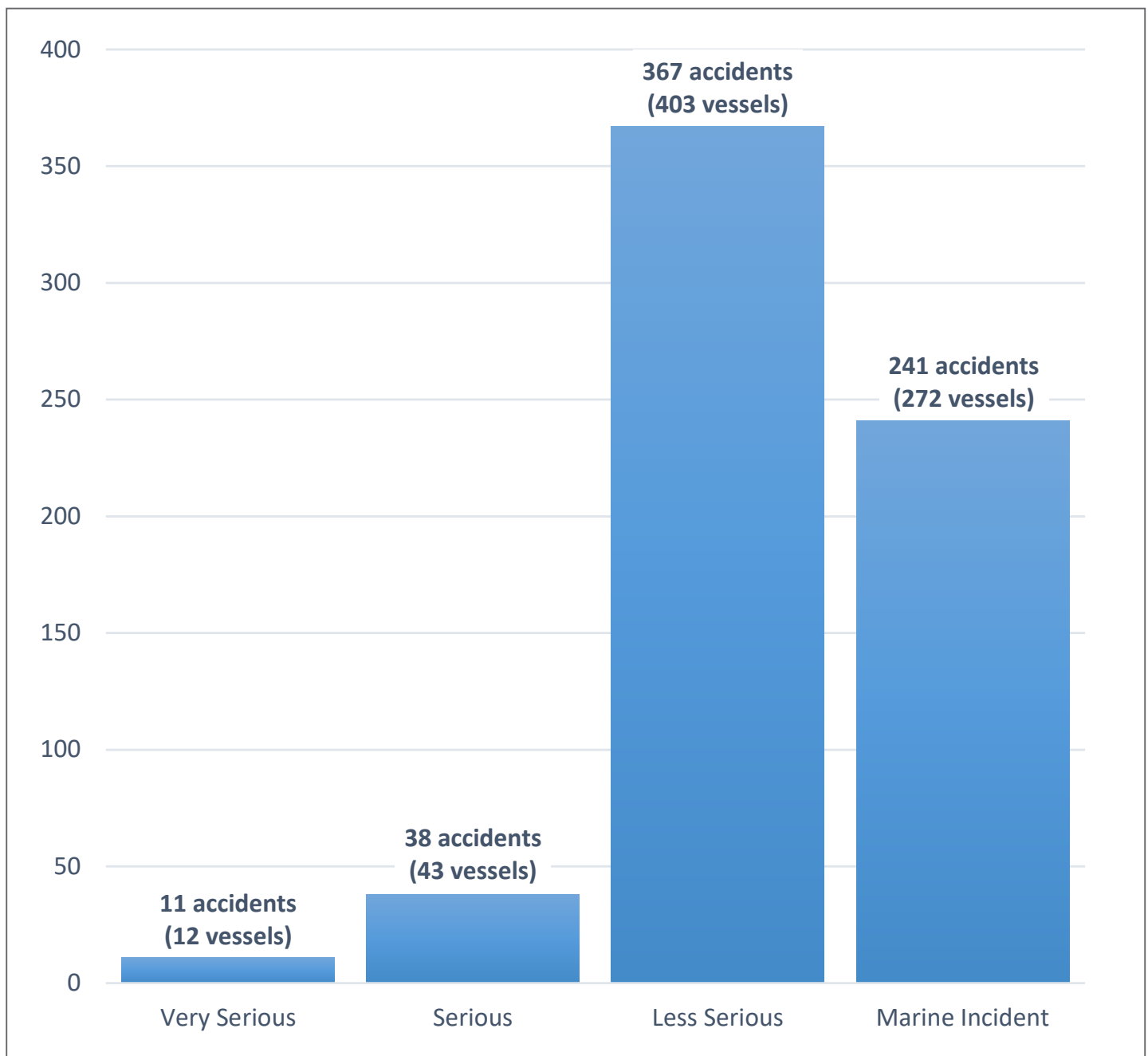


Chart 2: UK merchant vessels of 100gt or more

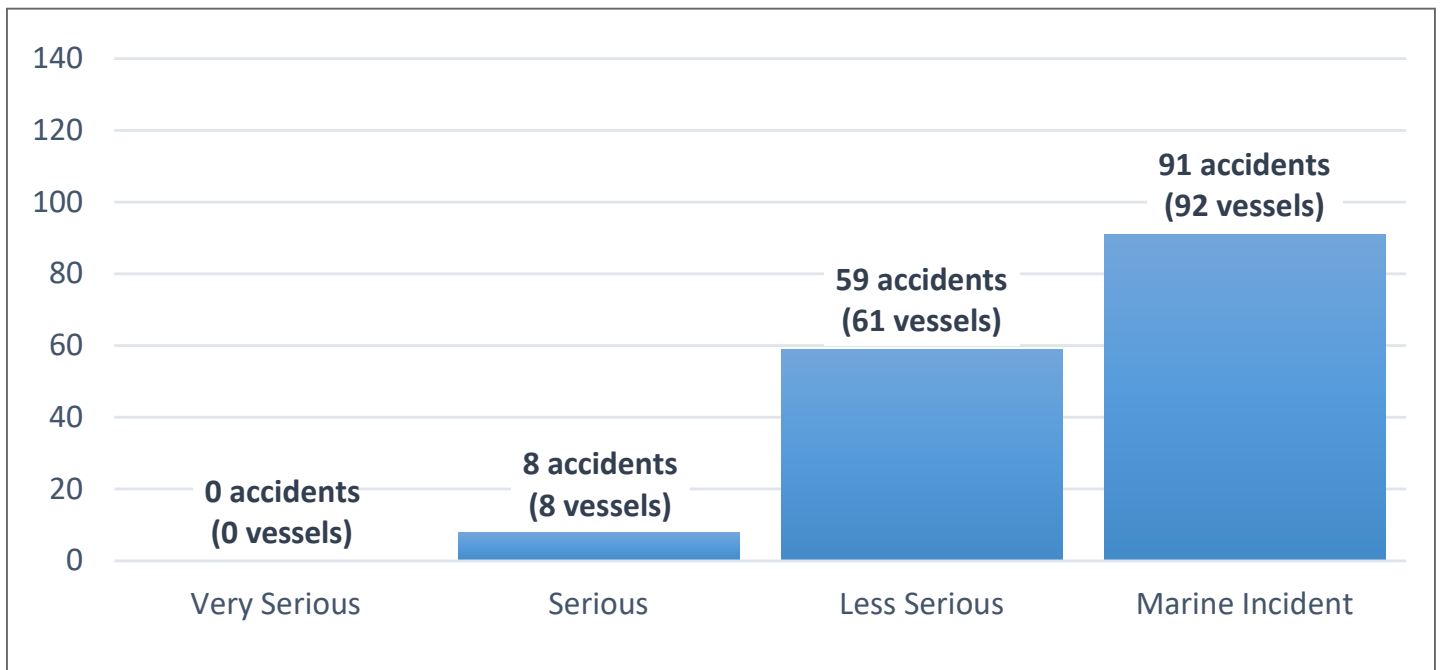


Chart 3: UK merchant vessels of under 100gt

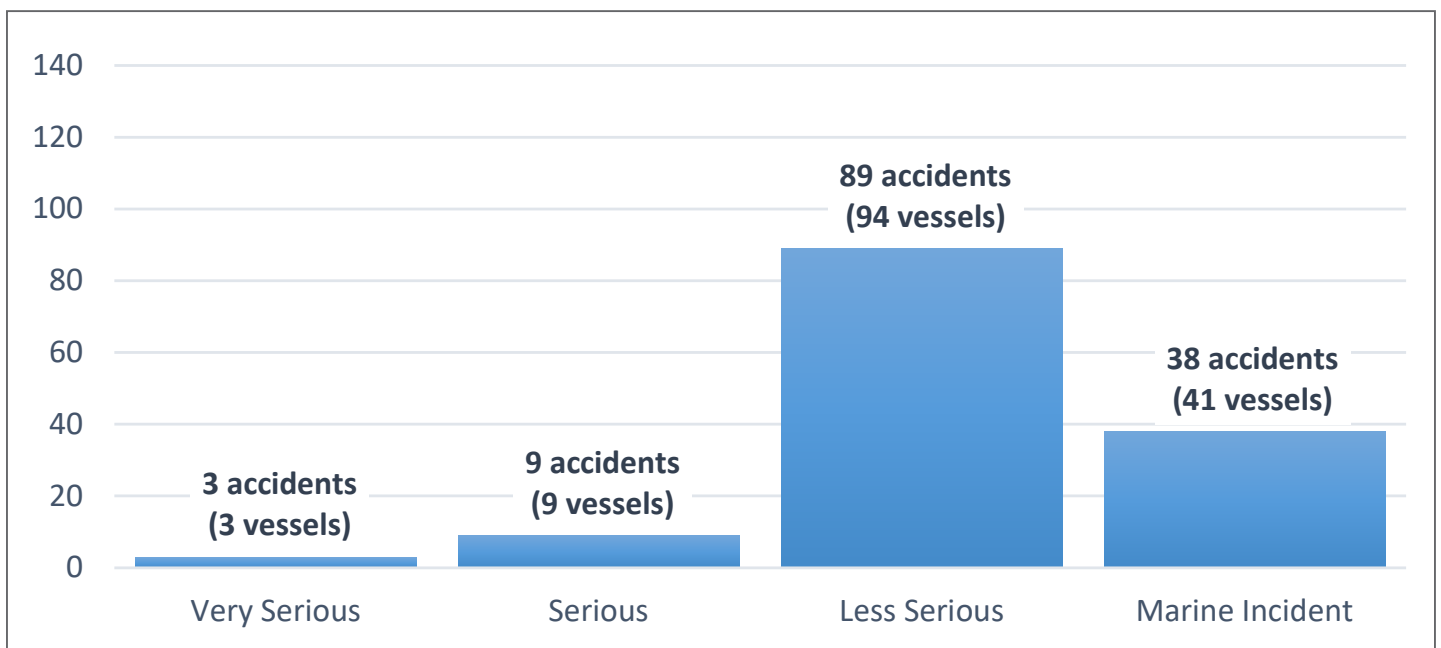


Chart 4: UK fishing vessels

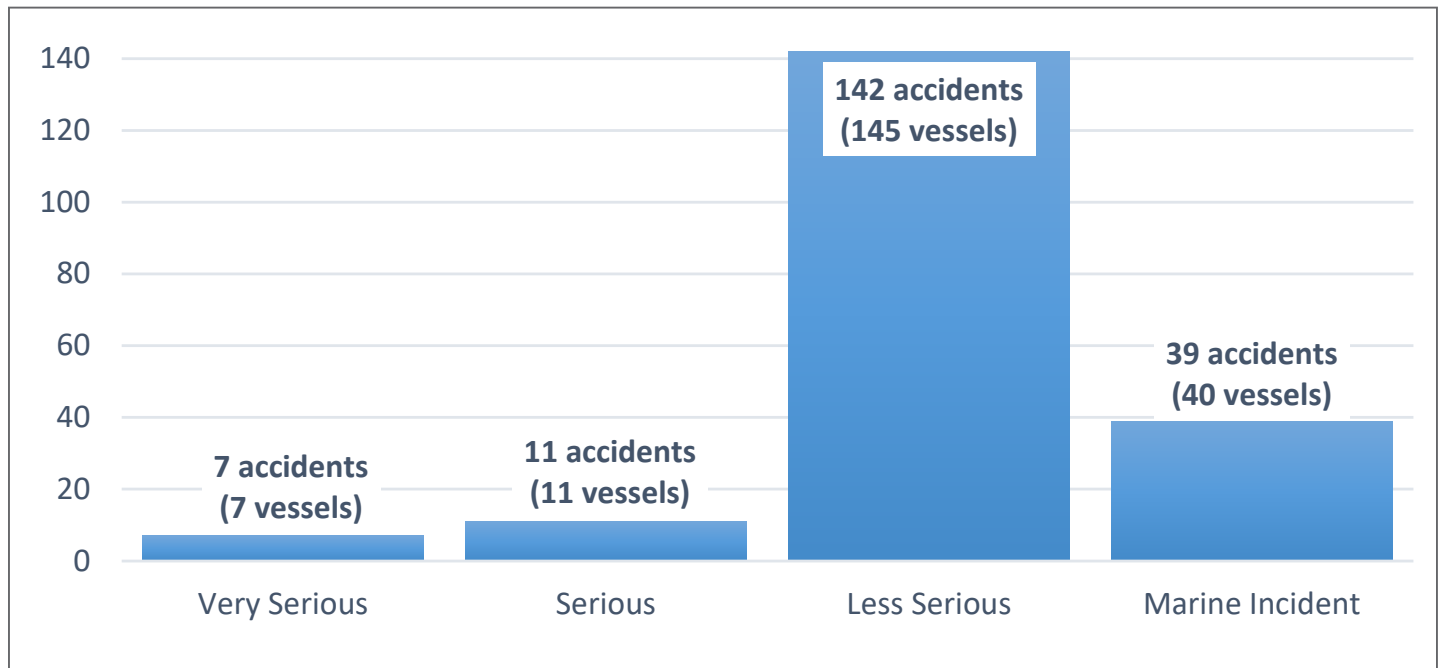
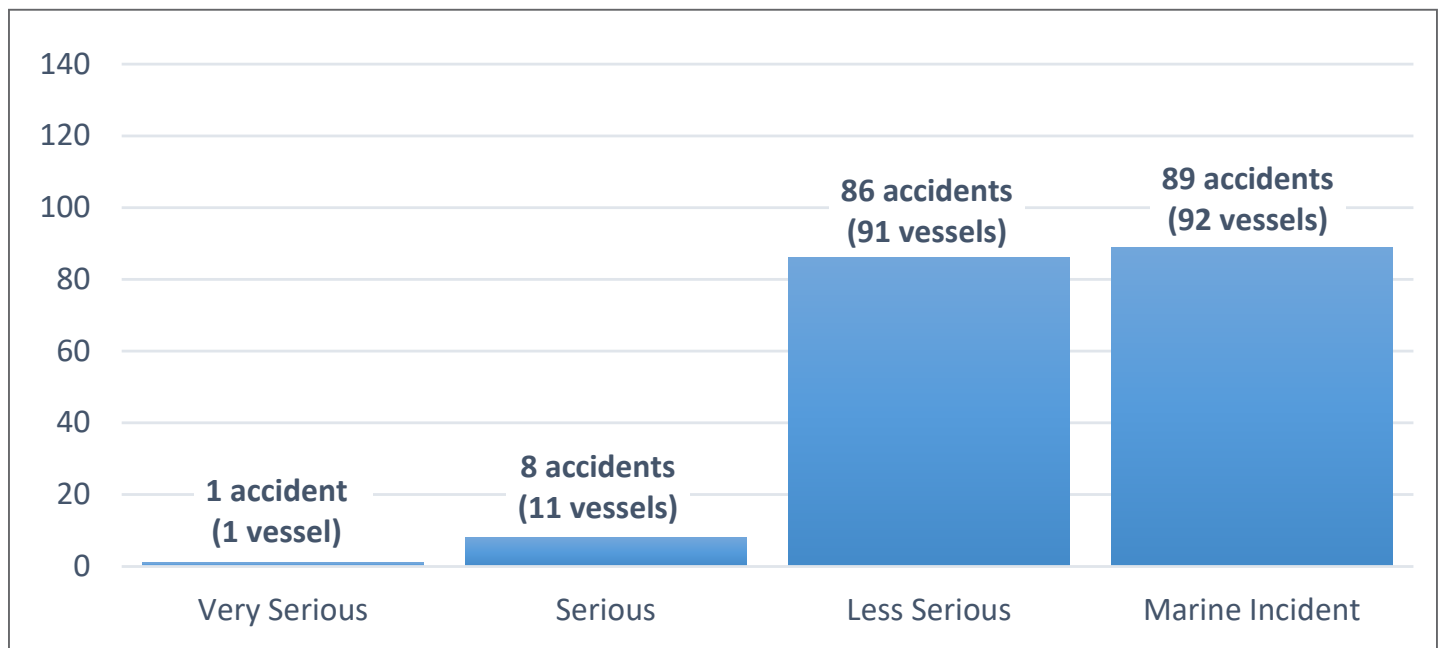


Chart 5: Non-UK commercial vessels - in UK 12 mile waters



PART 2: STATISTICS

For details of reporting requirements and terms used in this section please see the annex - Statistics Coverage on page 26 and the glossary on page 32.

Table 1: Loss of life in 2019 reported to the MAIB

Date	Name of vessel	Type of vessel	Location	Accident description
Merchant vessels 100gt and over				
27 Jan	Millgarth (9144122)	Tug	North oil stage at Tranmere Oil Terminal, Birkenhead, England	After releasing mooring lines, a crew member fell into the water as he tried to re-board the vessel and died of cold water shock.
28 Feb	Cherry Sand (6811059)	Grab hopper dredger	Port Babcock Rosyth, Scotland	Master fell while attempting to step ashore to assist with the berthing operation and was fatally crushed between the vessel and the jetty.
24 May	Karina C (9558000)	General cargo	Sevilla, Spain	Crew member crushed by deck crane during cargo operations.
Merchant vessels under 100gt (including commercial recreational)				
25 May	Minx	Motor yacht	Île Sainte-Marguerite, near Cannes, France	Fatal injury to crew member following a collision between two large motor yachts.
17 Aug	-	Open angling boat	Loch Awe, Scotland	A rental dinghy capsized leaving the three occupants in the water. Two were able to swim to shore but one drowned.
17 Sep	-	Zodiac inflatable boat	River Cleddau, Milford Haven, Wales	A firefighter sustained fatal injuries when two fire and rescue service boats - a 4.7m inflatable boat and a 6.4m rigid inflatable boat - collided while undertaking boat training and familiarisation.
27 Oct	Agnes	Narrowboat	Lock 26, South Stratford Canal, Stratford-upon-Avon, England	Casualty found deceased in water after falling overboard.
Fishing vessels				
27 Mar	Sea Mist (BF918)	Creel boat	Off Macduff, Aberdeenshire, Scotland	Skipper drowned when he was hauled overboard after becoming entangled in a back rope while shooting creels from his single-handed boat.
29 Apr	Artemis (FR809)	Stern trawler	Kilkeel, Northern Ireland	Skipper fell through the internal wheelhouse hatch on to the deck below and suffered a fatal head injury.
28 Jun	Olivia Jean (TN35)	Scallop dredger	39nm east of Aberdeen, Scotland	Crew member was struck on the head by a dredge beam resulting in a fatal injury.
24 Jul	May C (SY213)	Creel boat	Loch Carnan, Outer Hebrides, Scotland	Skipper drowned when he fell overboard from his single-handed boat, most likely while attempting to clear an obstruction from the propeller.
23 Sep	Anne Marie II (WK 8750)	Creel boat	Brora river, Brora, Scotland	Boat broached and capsized while entering a river mouth, throwing its skipper and crew member overboard. The crew member was able to swim to shore but the skipper drowned.

UK VESSELS: ACCIDENTS INVOLVING LOSS OF LIFE

Date	Name of vessel	Type of vessel	Location	Accident description
15 Nov	Resurgam (PZ1001)	Beam trawler	Newlyn, Cornwall, England	An apprentice from the owner's shore-based support team died following the inadvertent discharge of a condensed aerosol fire extinguishing system during its installation on the vessel.
Recreational craft (excluding commercial recreational)				
26 Jan	Misty Jack	Cabin cruiser	River Bure, Wroxham, Norfolk, England	Man overboard resulting in one fatality.
03 Apr	Toledo Bay	Sailing yacht	60nm west of Ile d'Ouessant, Brittany, France	Man overboard from sailing yacht resulting in one fatality.
23 Apr	-	Canoe	River Thames, London, England	Canoe capsized during race resulting in one fatality.
06 Jun	GMK	Angling vessel	Thames Estuary, Southend-On-Sea, England	Presumed man overboard after casualty found in the water near an unoccupied angling vessel.
12 Jun	-	RS Venture Connect sailing dinghy	Windermere, Lake District, England	Capsize and full inversion of a self-righting keelboat, fatally trapping the disabled helmsman under the hull.
02 Sep	-	Canoe	Loch Lochy, Lochaber Scotland	Canoe capsized resulting in the death of one of the two canoeists.
05 Sep	-	Laser sailing dinghy	Outside Christchurch Harbour, England	The sailor was found unconscious in the water when a dinghy capsized. He subsequently died.
04 Dec	Diversion	Motor cruiser	River Ouse, York, England	Two men were overcome by a high level of carbon monoxide gas and died shortly after entering the boat's cabin. A diesel-fuelled heater had been leaking exhaust fumes into the cabin while they had been ashore.
08 Dec	-	Open motor boat	Off Gourock, Scotland	One man died after his boat got into difficulties in poor weather conditions.

Table 2: Merchant vessel total losses

Date	Name of vessel	Type of vessel	loa	Casualty event
There were no losses of UK merchant vessels >= 100GT reported to the MAIB in 2019				

Table 3: Merchant vessel losses — 2010-2019

	Number lost	UK fleet size	Gross tonnage lost
2010	-	1 520	-
2011	-	1 521	-
2012	-	1 450	-
2013	-	1 392	-
2014	-	1 361	-
2015	-	1 385	-
2016	-	1 365	-
2017	-	1 356	-
2018	-	1 332	-
2019	-	929	-

Table 4: Merchant vessels in casualties by nature of casualty and vessel category²

	Liquid cargo ship	Solid cargo ship	Passenger ship	Service ship	Commercial recreational	Total
Collision	2	2	-	16	-	20
Contact	-	-	1	1	-	2
Damage to ship or equipment	-	-	1	3	-	4
Fire/explosion	-	-	3	2	-	5
Flooding/foundering	-	1	-	1	-	2
Grounding	2	2	3	8	-	15
Loss of control	-	7	9	4	1	21
Total	4	12	17	35	1	69³

² Vessel groups include vessels operating on inland waterways.

³ 69 casualties represents a rate of 74 casualties per 1 000 vessels on the UK Fleet.

Table 5: Deaths and injuries to merchant vessel crew — 2010-2019⁴

	Number of crew injured	Of which resulted in death
2010	222	3
2011	185	5
2012	186	3
2013	134	1
2014	142	-
2015	141	2
2016	133	2
2017	153	-
2018	114	-
2019	105	3

⁴ From 2012 this table excludes injuries/fatalities that were not in connection with the operation of a ship.

Table 6: Deaths and injuries of merchant vessel crew by rank

Rank/specialism	Number of crew
Master	3
Chief engineer	3
Officer, deck	1
Officer, engineering	4
Chief mate	1
Rating	14
Other crew	79
Total	105

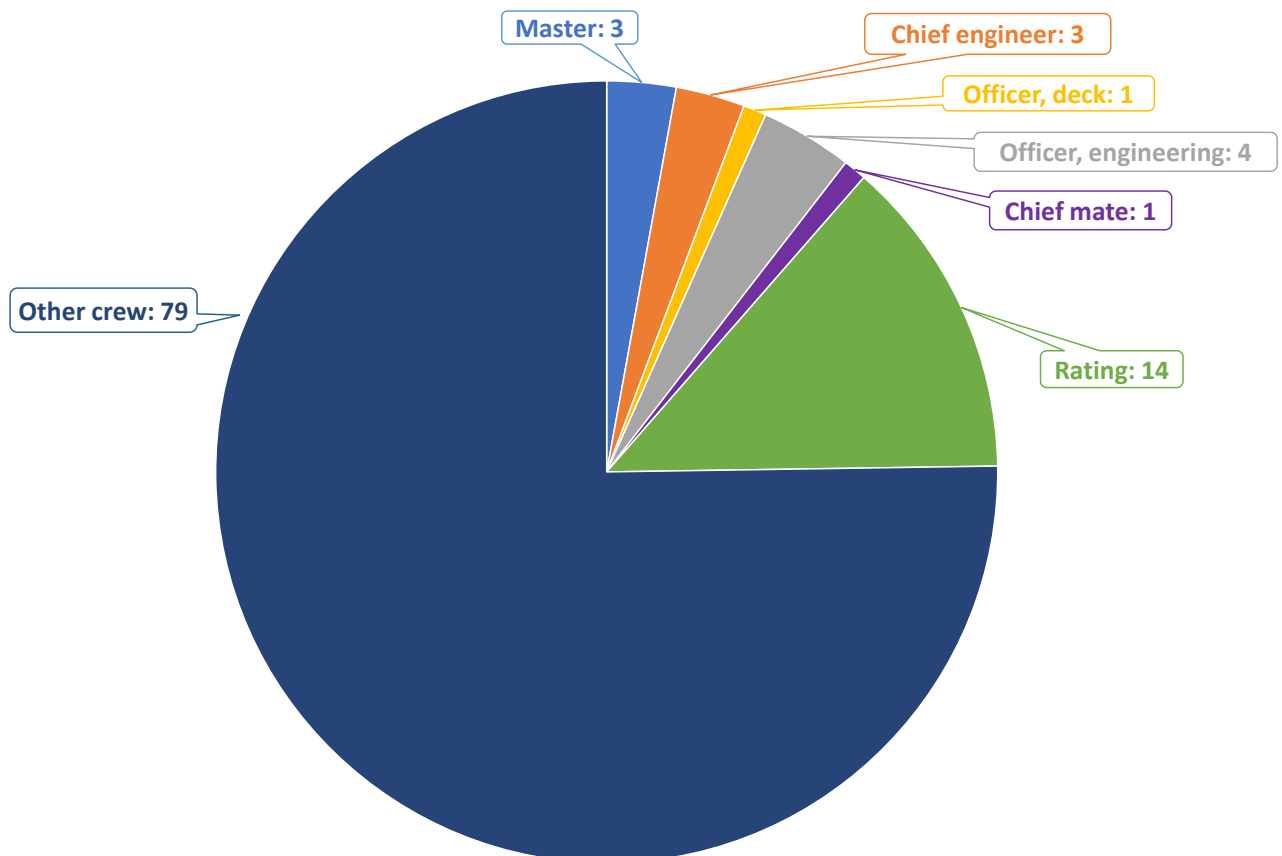


Chart 6

Table 7: Deaths and injuries of merchant vessel crew by place

Place	Number of crew	Place	Number of crew	Place	Number of crew
Accommodation		Cargo and tank areas		Ship	
Alleyway	1	Cargo hold	1	Deck	26
Bathroom, shower, toilet	2	Open deck cargo space	2	Gangway	2
Cabin space - crew	8	Vehicle cargo space	1	Stairs/ladders	7
Cabin space - passengers	1	Engine department		Other	14
Galley spaces	12	Engine room	9	Other	
Restaurant/bar	4	Workshop/stores	1	Over side	3
Stairway/ladders	1	Pump room	1	Unknown	3
Theatre	2			Total	
Other	4			105	

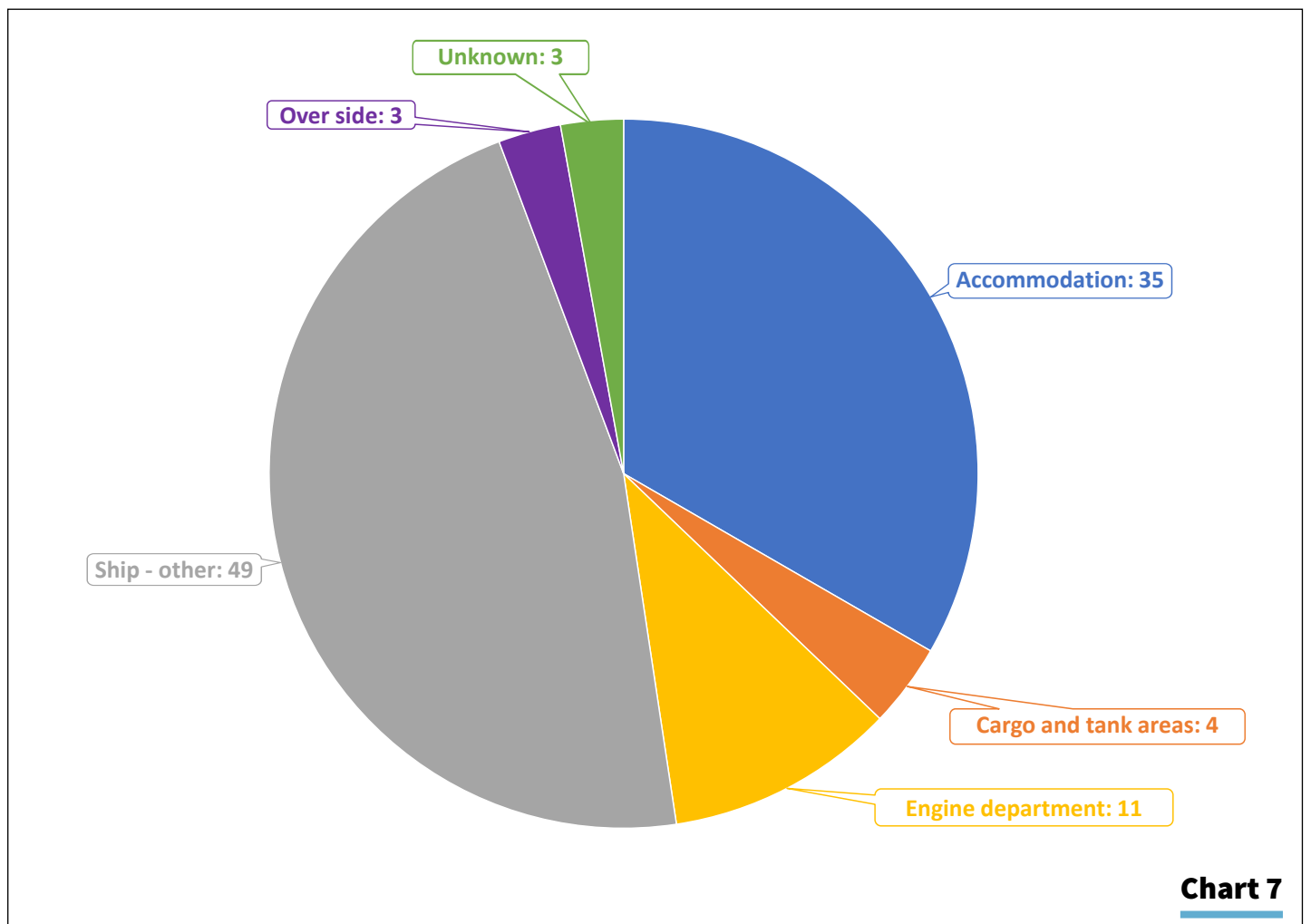


Table 8: Deaths and injuries of merchant vessel crew by part of body injured

Part of body injured	Number of crew
Whole body and multiple sites	
Whole body (systemic effects)	4
Multiple sites of the body affected	6
Head	
Eye(s)	2
Facial area	2
Head, brain and cranial nerves and vessels	2
Upper limbs	
Finger(s)	14
Hand	11
Wrist	8
Arm, including elbow	3
Shoulder and shoulder joints	7
Back	
Back, including spine and vertebrae in the back	11
Torso and organs	
Chest area including organs	3
Rib cage, ribs including joints and shoulder blade	4
Torso, multiple sites affected	1
Lower limbs	
Ankle	10
Foot	4
Leg, including knee	10
Lower extremities, multiple sites affected	1
Other	
Other parts of body injured, not mentioned above	2
Total	105

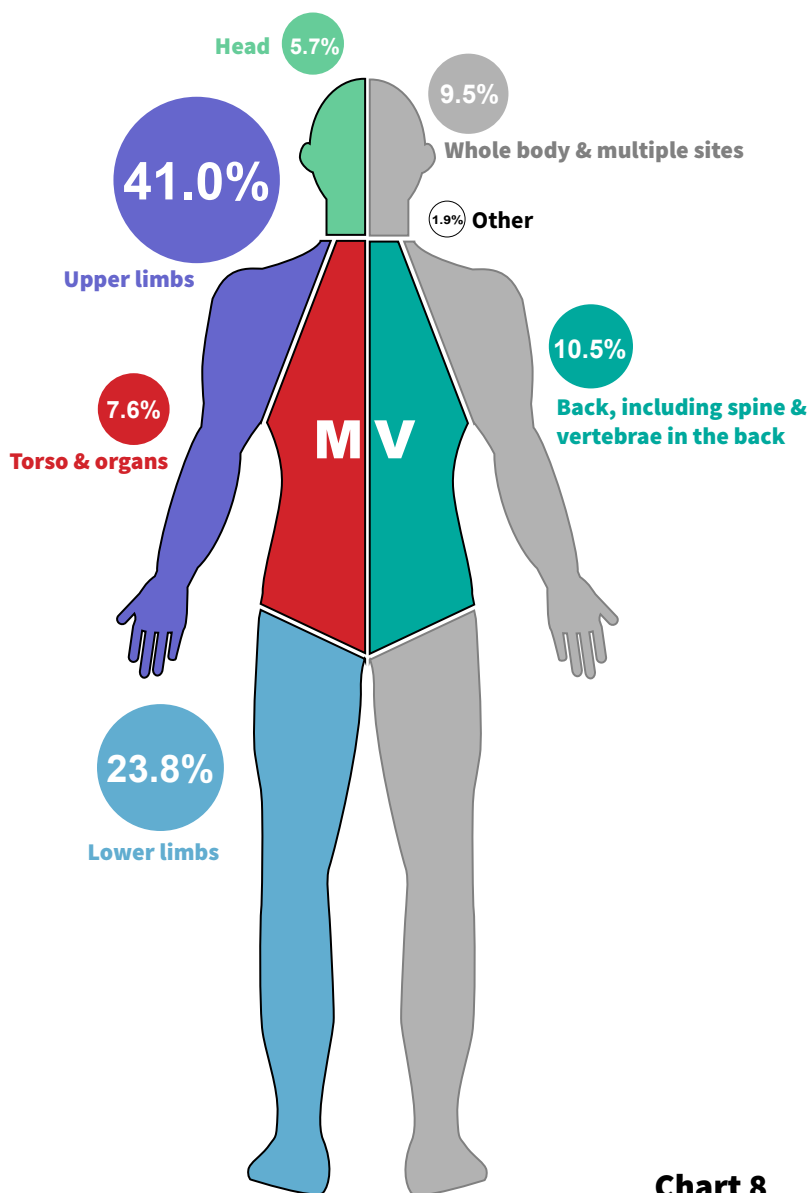
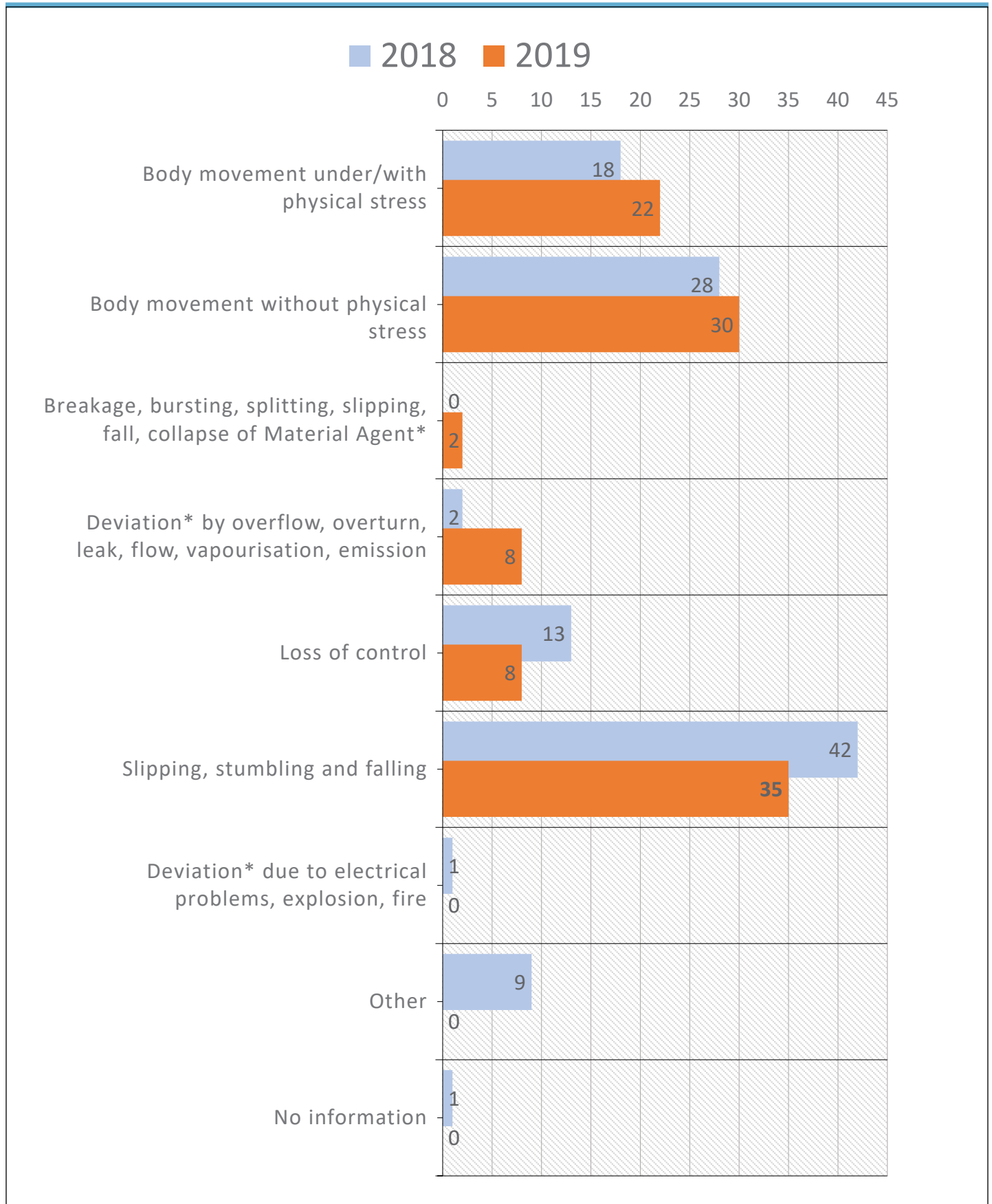
**Chart 8**

Table 9: Deaths and injuries of merchant vessel crew by deviation*

Deviation*		Number of crew
Body movement under or with physical stress (generally leading to an internal injury)	Lifting, carrying, standing up	5
	Pushing, pulling	3
	Treading badly, twisting leg or ankle, slipping without falling	7
	Twisting, turning	4
	Other	3
Body movement without any physical stress (generally leading to an external injury)	Being caught or carried away, by something or by momentum	24
	Kneeling on, sitting on, leaning against	1
	Uncoordinated movements, spurious or untimely actions	3
	Other	2
Breakage, bursting, splitting, slipping, fall, collapse of material agent	Slip, fall, collapse of material agent - from above (falling on the victim)	1
	Slip, fall, collapse of material agent - on the same level	1
Deviation* by overflow, overturn, leak, flow, vaporisation, emission	Gaseous state - vaporisation, aerosol formation, gas formation	3
	Liquid state - leaking, oozing, flowing, splashing, spraying	5
Loss of control (total or partial)	Of object (being carried, moved, handled, etc.)	5
	Of hand-held tool (motorised or not) or of the material being worked by the tool	1
	Other	2
Slipping - stumbling and falling - fall of persons	Fall of person - to a lower level	16
	Fall overboard of person	2
	Fall of person - on the same level	17
Total		105

*See "Terms" on page 32

Chart 9: Deaths and injuries of merchant vessel crew by deviation*



*See "Terms" on page 32

Table 10: Deaths and injuries of merchant vessel crew by type of injury

Main injury		Number of crew
Drowning and asphyxiation	Drowning and non-fatal submersions	1
Bone fractures	Closed fractures	35
Burns, scalds and frostbites	Burns and scalds (thermal)	8
	Chemical burns (corrosions)	1
Concussion and internal injuries	Concussion and intracranial injuries	2
	Internal injuries	5
Dislocations, sprains and strains	Dislocations and subluxations*	6
	Sprains and strains	24
Wounds and superficial injuries*	Open wounds	9
	Superficial injuries*	9
Poisonings and infections		2
Traumatic amputations (loss of body parts)		2
Multiple injuries		1
Total		105

*See "Terms" on page 32

Table 11: Deaths and injuries to passengers — 2010-2019⁵

	Number of injured passengers	Of which resulted in death
2010	92	2
2011	109	1
2012	50	-
2013	46	-
2014	56	1
2015	55	1
2016	51	1
2017	26	-
2018	81	-
2019	107	-

⁵ From 2012 this table excludes injuries/fatalities that were not in connection with the operation of a ship.

Table 12: Deaths and injuries of passengers by type of injury

Main injury	Number of passengers
Bone fractures	Closed fractures
	Open fractures
Concussion and internal injuries	
Dislocations, sprains and strains	Dislocations and subluxations*
	Sprains and strains
Wounds and superficial injuries*	Open wounds
	Superficial injuries
Unknown or unspecified	
Total	

*See "Terms" on page 32

Table 13: Merchant vessels < 100gt — total losses

Date	Name of vessel	Type of vessel	loa	Casualty event
There were no losses of UK merchant vessels < 100GT reported to the MAIB in 2019				

Table 14: Merchant vessels < 100gt by nature of casualty and vessel category

	Solid cargo ship	Passenger ship	Recreational craft Power	Recreational craft Sail	Recreational craft propulsion unspecified	Service ship Search and Rescue (SAR) craft	Service ship Tug (Towing/Pushing)	Service ship Other	Total
Capsizing/listing	-	-	1	-	2	1	-	-	4
Collision	1	-	4	4	2	5	1	4	21
Contact	-	1	1	-	1	-	2	1	6
Damage to ship or equipment	-	1	-	-	-	-	-	-	1
Fire/explosion	-	-	-	-	-	-	-	4	4
Flooding/foundering	-	1	-	-	-	-	-	3	4
Grounding	-	3	2	15	1	7	-	5	33
Loss of control	-	10	8	5	3	1	-	6	33
Total per vessel type	1	16	16	24	9	14	3	23	106
Deaths	-	-	1	-	2	1	-	-	4
Injuries	2	5	10	15	3	10	-	6	51

There were 5 484 UK registered fishing vessels at the end of 2019. During 2019, 163 casualties to vessels involving these vessels were reported to the MAIB. Figures in the following tables show casualties to vessels and injuries to crew involving UK registered vessels that were reported to the MAIB in 2019.

5 fishing vessels were reported lost (0.09% of the total fleet) and there were 5 fatalities to crew.

Table 15: Fishing vessel total losses by vessel length

Date	Name of vessel	Age	Gross tonnage	Casualty event
Under 15m length overall (loa)				
16 Jul	<i>Ocean Harvest</i>	34	14.17	Fire
25 Sep	<i>Emulous</i>	30	10.09	Collision
15m length overall - under 24m registered length (reg)				
17 Jun	<i>Colinne</i>	61	81.00	Foundering
18 Aug	<i>Ocean Quest</i>	37	163.00	Foundering
Over 24m registered length (reg)				
4 Aug	<i>Coelleira</i>	49	210.00	Grounding

Table 16: Fishing vessel losses — 2010-2019⁶

	Under 15m loa	15m loa to <24m reg	24m reg and over	Total lost	UK registered	% lost
2010	11	3	-	14	5 902	0.24
2011	17	7	-	24	5 974	0.40
2012	5	4	-	9	5 834	0.15
2013	15	3	-	18	5 774	0.31
2014	9	3	-	12	5 715	0.21
2015	8	5	-	13	5 746	0.23
2016	5	2	1	8	5 745	0.14
2017	5	1	-	6	5 700	0.11
2018	8	-	-	8	5 603	0.14
2019	2	2	1	5	5 484	0.09

Table 17: Fishing vessels in casualties — by nature of casualty

	Number of vessels involved	Incident rate per 1 000 vessels at risk (to one decimal place)
Capsizing/listing	2	0.4
Collision	13	2.4
Contact	2	0.4
Damage to ship or equipment	1	0.2
Fire/explosion	8	1.5
Flooding/foundering	14	2.6
Grounding	21	3.8
Loss of control	102	18.6
Total	163	29.7

⁶ From 2012 this table excludes losses that were not in connection with the operation of a ship.

Table 18: Fishing vessels in casualties — by nature of casualty and by length range

	Number of vessels involved	Incident rate per 1 000 vessels at risk (to one decimal place ⁷)
Under 15m length overall (loa) — <i>vessels at risk: 4 930</i>		
Capsizing/listing	2	0.4
Collision	7	1.4
Contact	2	0.4
Fire/explosion	4	0.8
Flooding/foundering	10	2.0
Grounding	12	2.4
Loss of control	61	12.4
Total under 15m	98	19.9
15m loa - 24m registered length (reg) — <i>vessels at risk: 428</i>		
Collision	5	11.7
Damage to ship or equipment	1	2.3
Fire/explosion	3	7.0
Flooding/foundering	4	9.3
Grounding	8	18.7
Loss of control	36	84.1
Total 15m to 24m	57	133.2
24m reg and over — <i>vessels at risk: 126</i>		
Collision	1	7.9
Fire/explosion	1	7.9
Grounding	1	7.9
Loss of control	5	39.7
Total 24m or more	8	63.5
Fleet total⁸	163	29.7

⁷ Rates may not add up due to rounding⁸ Total number of UK registered fishing vessels: 5 484

Table 19: Deaths and injuries to fishing vessel crew by type of injury

Main injury		Number of crew
Drowning and asphyxiation	Drowning and non-fatal submersions	6
Multiple injuries		2
Traumatic amputations (loss of body parts)		4
Bone fractures	Closed fractures	1
	Open fractures	1
Burns, scalds and frostbites	Burns and scalds (thermal)	1
Concussions and internal injuries	Concussion and intracranial injuries	7
	Internal injuries	3
Dislocations, sprains and strains	Sprains and strains	1
Wounds and superficial injuries*	Open wounds	4
	Superficial injuries*	3
Unknown or unspecified		3
Total		36

*See "Terms" on page 32

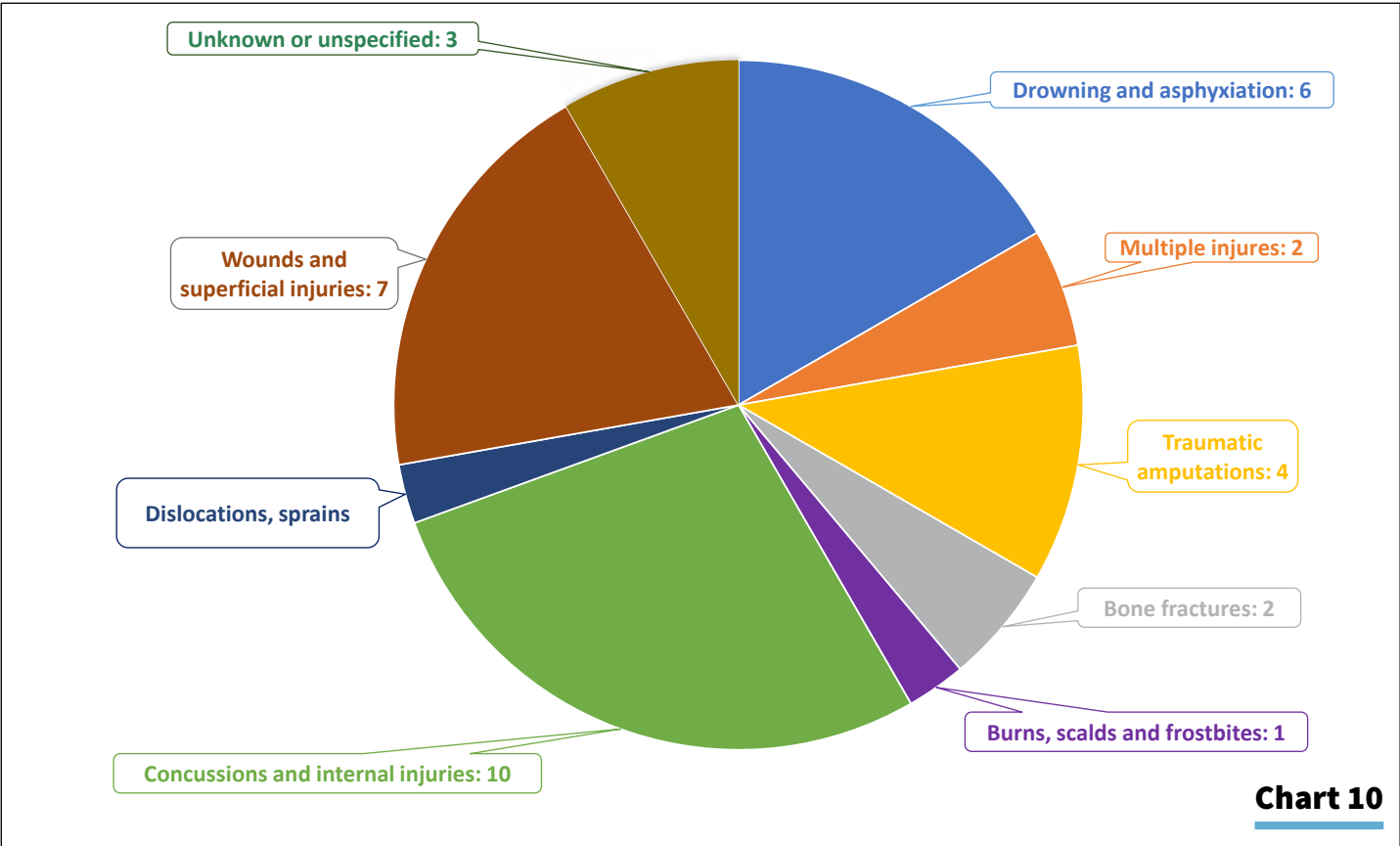
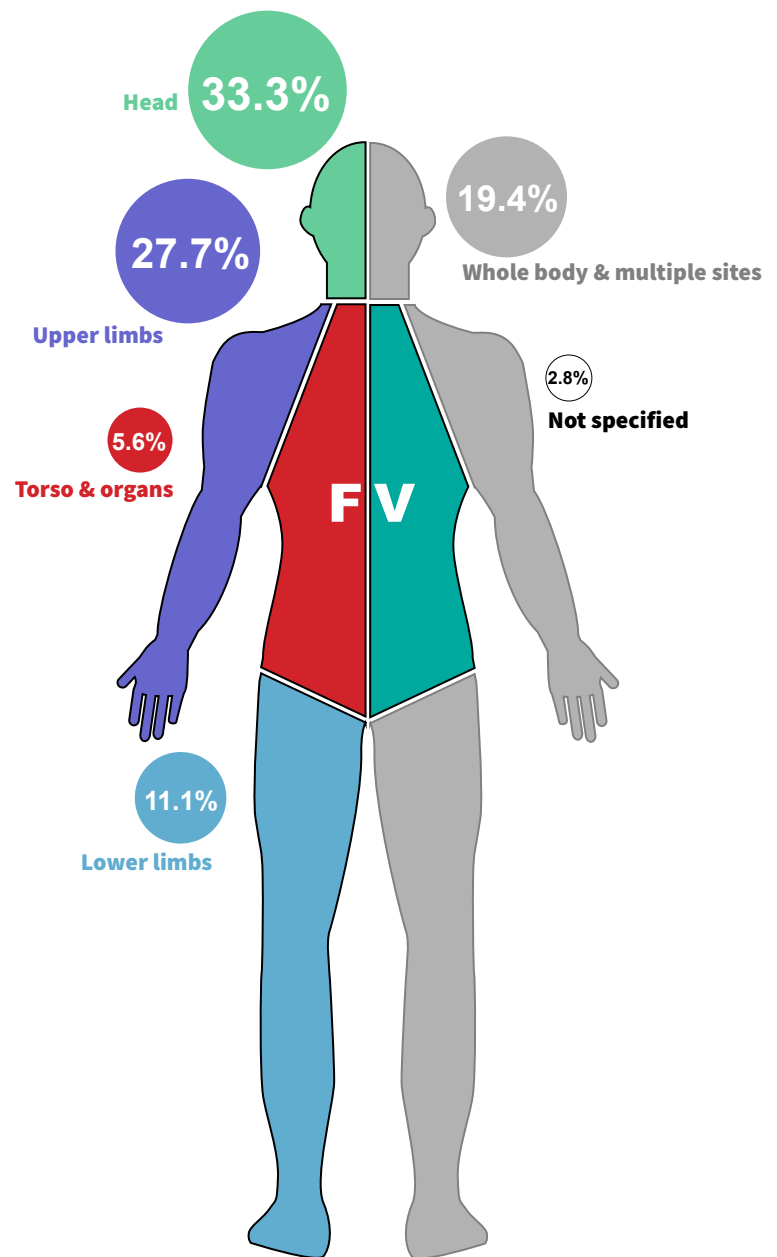


Table 20: Deaths and injuries to fishing vessel crew by part of body injured

Part of body injured	Number of crew
Whole body and multiple sites	
Whole body (systemic effects)	5
Multiple sites of the body affected	2
Head	
Eye(s)	1
Facial area	1
Head, brain and cranial nerves and vessels	9
Head, multiple sites affected	1
Upper limbs	
Finger(s)	8
Hand	1
Arm, including elbow	1
Torso and organs	
Chest area including organs	1
Torso, other parts not mentioned above	1
Lower limbs	
Leg, including knee	2
Ankle	1
Lower extremities, multiple sites affected	1
Other	
Not specified	1
Total	36



Note: Rates may not add up to 100% due to rounding

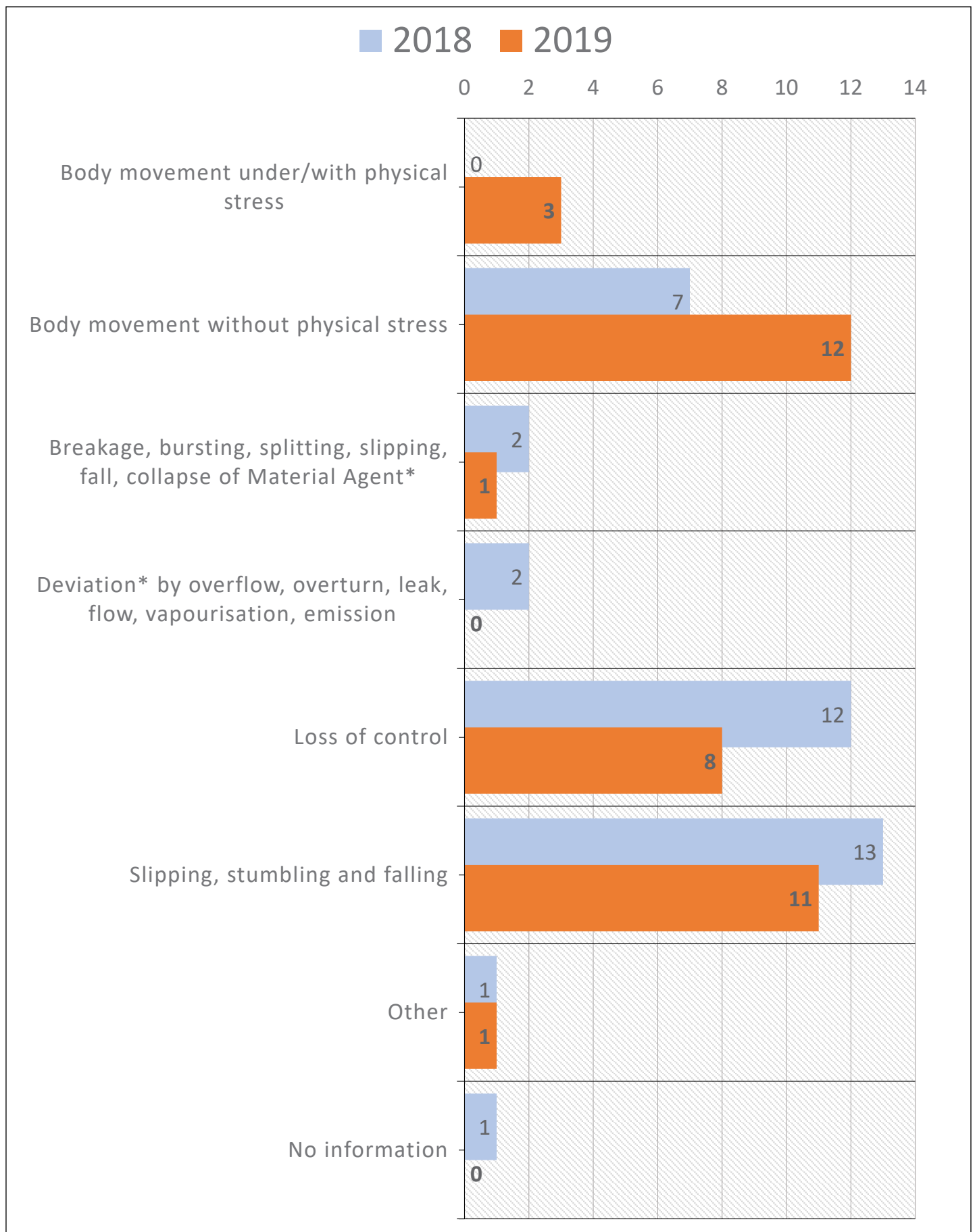
Chart 11

Table 21: Deaths and injuries of fishing vessel crew by deviation*

Deviation*		Number of crew
Body movement under or with physical stress (generally leading to an internal injury)	Lifting, carrying, standing up	1
	Treading badly, twisting leg or ankle, slipping without falling	1
	Other	1
Body movement without any physical stress (generally leading to an external injury)	Being caught or carried away, by something or by momentum	10
	Other movements not mentioned above	2
Breakage, bursting, splitting, slipping, fall, collapse of material agent*	Slip, fall, collapse of material agent* - from above (falling on the victim)	1
Loss of control (total or partial)	Of machine (including unwanted start-up) or of the material being worked by the machine	3
	Of means of transport or handling equipment, (motorised or not)	3
	Of object (being carried, moved, handled, etc.)	1
	Other	1
Slipping - stumbling and falling - fall of persons	Fall of person - to a lower level	5
	Fall overboard of person	5
	Fall of person - on the same level	1
Other		1
Total		36

*See "Terms" on page 32

Chart 12: Deaths and injuries of fishing vessel crew by deviation*



*See "Terms" on page 32

Table 22: Deaths and injuries to fishing vessel crew by vessel length (of which, deaths shown in brackets) 2010-2019⁹

	Under 15m loa		15m loa - under 24m reg		24m reg and over		Total	
2010	22	(4)	10	-	13	(1)	45	(5)
2011	20	(7)	27	(1)	11	-	58	(8)
2012	21	(4)	22	(2)	7	-	50	(6)
2013	13	(3)	13	(1)	7	-	33	(4)
2014	22	(5)	14	(3)	10	-	46	(8)
2015	10	(4)	17	(1)	8	(2)	35	(7)
2016	16	(7)	19	(2)	5	-	40	(9)
2017	13	(3)	8	(2)	11	-	32	(5)
2018	14	(4)	18	(1)	6	(1)	38	(6)
2019	12	(3)	18	(1)	6	(1)	36	(5)

⁹ From 2012 this table excludes injuries/fatalities that were not in connection with the operation of a ship.

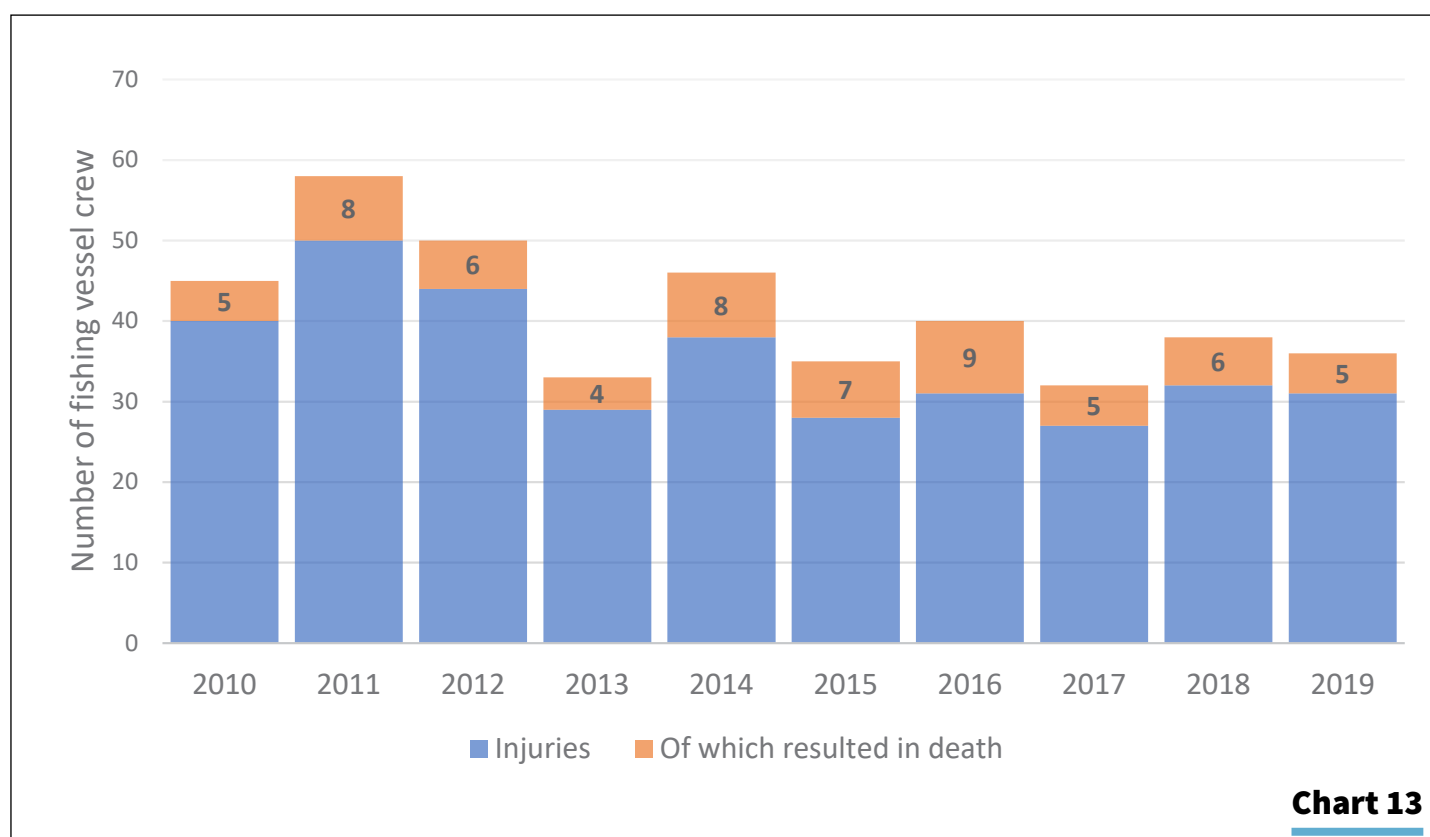


Table 23: All non-UK commercial vessels total losses in UK waters

Date	Name of vessel	Type of vessel	Flag	loa	Casualty event
23 Oct	<i>Dillon Owen</i>	Trawler	Ireland	23.2m	Grounding

Table 24: All non-UK commercial vessels in UK waters — by vessel type and by nature of casualty

	Solid cargo ship	Liquid cargo ship	Passenger ship	Service ship	Fishing vessel	Recreational commercial	Total
Capsizing/listing	2	-	-	-	-	-	2
Collision	20	7	-	5	2	-	34
Contact	5	2	-	2	-	-	9
Damage to ship or equipment	2	-	1	1	-	-	4
Fire/explosion	1	-	1	-	-	-	2
Flooding/foundering	1	-	-	1	-	-	2
Grounding	12	3	-	4	3	-	22
Hull failure	-	-	-	1	-	-	1
Loss of control	14	4	1	1	5	2	27
Total per vessel type	57	16	3	15	10	2	103
Deaths	2	-	-	-	2	-	4
Injuries	15	2	9	6	6	-	38

ANNEX A - STATISTICS COVERAGE

1. Data is presented by the year in which the incident was reported to the MAIB. Historic data tables contain information from the past 10 years.
2. Not all historical data can be found in this report. Further data is contained in previous MAIB Annual Reports.
3. United Kingdom ships are required by the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012¹⁰ to report accidents to the MAIB.
4. Accidents are defined as being Marine Casualties or Marine Incidents, depending on the type of event(s) and the results of the event(s). See Casualty definitions (see Annex B on page 27) or MAIB's Regulations for more information.
5. Details of vessel types and groups used in this Annual Report can be found in Annex B - supporting information on page 30.
6. Non-UK flagged vessels are not required to report accidents to the MAIB unless they are within a UK port/harbour or within UK 12 mile territorial waters and carrying passengers to or from a UK port. However, the MAIB will record details of, and may investigate, significant accidents notified to us by bodies such as H.M. Coastguard.
7. The Maritime and Coastguard Agency, harbour authorities and inland waterway authorities have a duty to report accidents to the MAIB.
8. In addition to the above, the MAIB monitors news and other information sources for relevant accidents.

¹⁰<https://www.gov.uk/government/organisations/marine-accident-investigation-branch/about#regulations-and-guidance>

ANNEX B - SUPPORTING INFORMATION

Casualty definitions used by the UK MAIB - from 2012

Marine Casualty¹¹

An event or sequence of events that has resulted in any of the following and has occurred directly by or in connection with the operation of a ship:

- the death of, or serious injury to, a person;
- the loss of a person from a ship;
- the loss, presumed loss or abandonment of a ship;
- material damage to a ship;
- the stranding or disabling of a ship, or the involvement of a ship in a collision;
- material damage to marine infrastructure external of a ship, that could seriously endanger the safety of the ship, another ship or any individual;
- pollution, or the potential for such pollution to the environment caused by damage to a ship or ships.

A Marine Casualty does not include a deliberate act or omission, with the intention to cause harm to the safety of a ship, an individual or the environment.

Each Marine Casualty is categorised as ONE of the following:

Very Serious Marine Casualty (VSMC)

Marine Casualty which involves total loss of the ship, loss of life, or severe pollution.

Serious Marine Casualty (SMC)

Marine Casualty where an event results in one of:

- immobilisation of main engines, extensive accommodation damage, severe structural damage, such as penetration of the hull underwater, etc., rendering the ship unfit to proceed;
- pollution;
- a breakdown necessitating towage or shore assistance.

Less Serious Marine Casualty (LSMC)

This term is used by MAIB to describe any Marine Casualty that does not qualify as a VSMC or a SMC.

Marine Incident (MI)

A Marine Incident is an event or sequence of events other than those listed above which has occurred directly in connection with the operation of a ship that endangered, or if not corrected would endanger the safety of a ship, its occupants or any other person or the environment (e.g. close quarters situations are Marine Incidents).

Accident

Under current Regulations⁶ Accident means any Marine Casualty or Marine Incident. In historic data, Accident had a specific meaning, broadly equivalent to (but not identical to) Marine Casualty.

Operation of a ship

To qualify as a Marine Casualty an event/injury etc must be in connection with the operation of the ship on which it occurs. MAIB's interpretation of this includes any "normal" activities which take place on board the vessel (e.g. a chef who cuts himself while preparing food is considered in connection with the operation of the ship).

¹¹ <http://www.legislation.gov.uk/uksi/2012/1743/regulation/3/made>

Changes to UK MAIB Casualty Event Definitions - with introduction of EU Directive 2009/18/EC1 (the Directive).

Collisions/Contacts – Until 2012 the UK defined a collision as a vessel making contact with another vessel that was subject to the collision regulations, after 2012 a collision is any contact between two vessels, i.e.

Until 2012

Collision - vessel hits another vessel that is underway, floating freely or is anchored.

Contact - vessel hits an object that is not subject to the collision regulations e.g. buoy, post, dock, floating logs, containers etc. Also another ship if it is tied up alongside. In order to qualify as the equivalent of a Marine Casualty the contact must have resulted in damage.

From 2013

Collision - a casualty caused by ships striking or being struck by another ship, regardless of whether the ships are underway, anchored or moored.

This type of casualty event does not include ships striking underwater wrecks. The collision can be with other ship or with multiple ships or ship not underway.

Contact - a casualty caused by ships striking or being struck by an external object. The objects can be: floating object (cargo, ice, other or unknown); fixed object, but not the sea bottom; or flying object.

Injury - The **EU** requires injuries to be reported if they are “3 day” injuries. This is described in more detail in section 4.2 of the European Statistics on Accidents at Work (ESAW) Summary methodology¹² (Note that in this context the term “Accident” means an injury.)

“Accidents at work with more than three calendar days’ absence from work. Only full calendar days of absence from work have to be considered, excluding the day of the accident. Consequently, ‘more than three calendar days’ means ‘at least four calendar days’, which implies that only if the victim resumes work on the fifth (or subsequent) working day after the date on which the accident occurred should the incident be included.”

UK injury data also includes “serious” injuries. In addition to “3 day” injuries these are:

- any fracture, other than to a finger, thumb or toe;
- any loss of a limb or part of a limb;
- dislocation of the shoulder, hip, knee or spine;
- loss of sight, whether temporary or permanent;
- penetrating injury to the eye;
- any other injury -
 - leading to hypothermia or unconsciousness,
 - requires resuscitation, or
 - requiring admittance to a hospital or other medical facility as an inpatient for more than 24 hours;

In the **IMO** Casualty Investigation Code¹³ (section 2.18) **Serious injury** means an injury which is sustained by a person in a casualty resulting in incapacitation for more than 72 hours commencing within seven days from the date of injury.

Due to the special working conditions of seafarers, injuries to seafarers while off-duty are considered to be occupational accidents in MAIB Annual Reports¹⁴.

¹²<http://ec.europa.eu/eurostat/en/web/products-manuals-and-guidelines/-/KS-RA-12-102>

¹³[https://wwwcdn.imo.org/localresources/en/OurWork/MSAS/Documents/Res.MSC.255\(84\)CasualtyInvestigationCode.pdf](https://wwwcdn.imo.org/localresources/en/OurWork/MSAS/Documents/Res.MSC.255(84)CasualtyInvestigationCode.pdf)

¹⁴ http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:91:0:::P91_SECTION:MLC_A4 (Article II 1.(f) & Standard A4.3)

Machinery failure/Loss of control/Damage to equipment

Until 2012

The UK used the generic term “machinery failure” to describe most mechanical failures that caused problems to a vessel. In order to be considered the equivalent of a Marine Casualty the vessel needed to be not under command for a period of more than 12 hours, or the vessel needed assistance to reach port.

From 2013

While the IMO does not specify machinery failure in its list of serious casualty events (MSC-MEPC.3/Circ.3¹⁵), it does define a Marine Casualty by the results and uses the term “etc” in the list of serious casualty events.

The European Union and the UK may interpret machinery failures as either:

- Loss of control - a total or temporary loss of the ability to operate or manoeuvre the ship, failure of electric power, or to contain on board cargo or other substances:
 - Loss of electrical power is the loss of the electrical supply to the ship or facility;
 - Loss of propulsion power is the loss of propulsion because of machinery failure;
 - Loss of directional control is the loss of the ability to steer the ship;
 - Loss of containment is an accidental spill or damage or loss of cargo or other substances carried on board a ship.

or,

- Damage to equipment - damage to equipment, system or the ship not covered by any of the other casualty types.

Stranding/Grounding

Until 2012

Grounds means making involuntary contact with the ground, except for touching briefly so that no damage is caused.

From 2013

Grounding/stranding - a moving navigating ship, either under command, under power, or not under command, drifting, striking the sea bottom, shore or underwater wrecks.

Persons overboard

Until 2012

Any fall overboard from a ship or ship's boat was the equivalent of a Marine Casualty.

From 2013

Any fall overboard from a ship or ship's boat (that does not result in injury or fatality) is a Marine Incident.

¹⁵ <https://wwwcdn.imo.org/localresources/en/OurWork/MSAS/Documents/MSC-MEPC.3-Circ.3.pdf> [note: link auto downloads PDF]

Vessel Types included in MAIB Annual Report statistics from 2013 to date

1. MAIB use definitions in line with those used by EMSA and IMO. EXCEPT that the data presented in the MAIB Annual Reports includes certain vessel types that are outside the scope of EU Directive 2009/18/EC¹⁶ (the Directive).
2. Vessel types outside the scope of the Directive that are INCLUDED in MAIB Annual Report statistics:
 - Fishing vessels of under 15 metres;
 - Government owned vessels used on government service (except Royal Navy vessels);
 - Inland waterway vessels operating in inland waters;
 - Ships not propelled by mechanical means;
 - Wooden ships of primitive build;
 - Commercial recreational craft with fewer than 13 persons on board.
3. Vessel types outside the scope of the Directive that are EXCLUDED from MAIB Annual Reports:
 - Royal Navy vessels;
 - Fixed offshore drilling units.
4. Vessel Types (potentially) inside the scope of the Directive that are EXCLUDED from MAIB Annual Report statistics:
 - Recreational craft | Personal watercraft;
 - Recreational craft | Sailing surfboards;
 - Ships permanently moored which have no master or crew.
5. One “vessel” type, offshore drilling rigs, are inside the scope of the Directive, but usually outside the scope of MAIB. For UK-flagged installations, broadly, if an accident occurs while the installation is in transit MAIB investigate and record details, otherwise the Health and Safety Executive (HSE) is responsible for investigating and recording details. More information can be found on pages 40 to 41 of the Operational Working Agreement between MAIB, MCA & HSE¹⁷.
6. Until 2012 the MAIB considered SAR craft to be non-commercial. From 2013 onwards they are considered commercial.

¹⁶ <http://emsa.europa.eu/emsa-documents/legislative-texts/72-legislative-texts/28-directive-200918ec.html>

¹⁷ Refer to pages 11 and 12 of the Operational Working Agreement between HSE, MCA and MAIB:
<http://www.hse.gov.uk/aboutus/howwework/framework/mou/owa-hse-mca-maib.pdf>

Vessel categories used in MAIB Annual Report statistics from 2013 to date

Merchant vessels $\geq 100\text{gt}$

Trading and non-trading vessels of 100 gross tonnage (gt) or more (excluding fish processing and catching). Note that this category includes vessel types such as inland waterway vessels and vessels on government service that are specifically excluded from the scope of the Directive¹². It excludes Royal Navy vessels and platforms and rigs that are in place.

Merchant vessels $<100\text{gt}$

Vessels of under 100gt known, or believed to be, operated commercially (excluding fish processing and catching).

Commercial recreational

May be a subset of either of the above two entries. Those over 100gt may be, for instance, a tall ship or luxury yacht. Those under 100gt may be a chartered yacht or a rented dinghy.

UK fishing vessels

Commercial Fishing Vessels Registered with the UK Maritime and Coastguard Agency's Registry of Shipping and Seamen. Note that this category includes under 15 metre fishing vessels that are specifically excluded from the scope of the Directive.

Passenger

In addition to seagoing passenger vessels this category also includes inland waterway vessels operating on inland waters.

Service ship

Includes, but not limited to, dredgers, offshore industry related vessels, tugs and SAR craft.

Recreational craft

Recreational craft may be commercial or non-commercial. In the statistics section of each Annual Report only "Table 1: Loss of life..." includes non-commercial recreational craft.

Non-UK vessels in UK waters

Vessels that are not known, or believed to be, UK vessels, and the events took place in UK territorial waters (12 mile limit).

GLOSSARY OF ABBREVIATIONS, ACRONYMS AND TERMS

Abbreviations and Acronyms

Circ.	-	Circular
EMSA	-	European Maritime Safety Agency
ESAW	-	European Statistics on Accidents at Work
EU	-	European Union
gt	-	gross tonnage
HSE	-	Health and Safety Executive
IMO	-	International Maritime Organization
loa	-	length overall
LSMC	-	Less Serious Marine Casualty
m	-	metre
MCA	-	Maritime and Coastguard Agency
MI	-	Marine Incident
MSC	-	Maritime Safety Committee
reg	-	registered length
SAR	-	Search and Rescue
SMC	-	Serious Marine Casualty
UK	-	United Kingdom
VSMC	-	Very Serious Marine Casualty

Terms

Deviation	-	The last event differing from the normal working process and leading to an injury/fatality.
Material agent	-	A tool, object or instrument.
Subluxation	-	Incomplete, or partial dislocation.
Superficial injuries	-	Bruises, abrasions, blisters etc.
the Directive	-	EU Directive 2009/18/EC

FURTHER INFORMATION

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Press enquiries (out of office hours)

+44 (0)20 7944 4292

Online resources



www.gov.uk/maib



<https://twitter.com/maibgovuk>



www.facebook.com/maib.gov



www.youtube.com/user/maibgovuk



www.linkedin.com/company/marine-accident-investigation-branch

