

NOTICE OF THE SWEDISH MARITIME ADMINISTRATION

No. 2 2004

Summary of reported marine casualties, near-accidents and accidents to persons - Swedish merchant and fishing vessels

2003



Swedish Maritime Safety Inspectorate,
Maritime Casualty Investigation Division

ACCIDENTS TO PERSONS

Summary of reported accidents to persons

2003

Accidents to persons

This section of the summary shows reported occupational injuries including those resulting in the loss of life of on-board personnel in merchant and fishing vessels and accidents to passengers and other persons on board vessels in 2003.

PERSONS EMPLOYED ON BOARD	Number
OCCUPATIONAL INJURIES (occupational accidents/work-related diseases, incl. off duty on board/off duty ashore) incl. deaths	278
occupational accidents	218
<i>occupational accidents resulting in death</i>	-
work-related diseases	60
<i>deaths (illness/suicide)</i>	-
DISAPPEARANCES	-
COMMERCIAL FISHERMEN	Number
OCCUPATIONAL INJURIES (occupational accidents/work-related diseases) including deaths	15
occupational accidents	8
<i>occupational accidents resulting in death</i>	2
work-related diseases	7
PASSENGERS	Number
DEATHS (illness/suicide)	5
DISAPPEARANCES	-
PHYSICAL INJURIES <i>physical injuries resulting in death</i>	6 1
PERSONS IN ADJACENT AREAS	Number
PHYSICAL INJURIES <i>physical injuries resulting in death</i>	1 1

Occupational injuries while on ship-duty

In this section, the Swedish Maritime Safety Inspectorate's Maritime Casualty Investigation Division presents statistics on occupational injuries sustained by persons while on ship-duty in 2003 in Swedish merchant and fishing vessels. Occupational injuries sustained by commercial fishermen are reported under a separate heading.

The statistical source material is taken from InformationsSystemet om Arbetsskador ISA – (The Occupational Injury Information System) which is handled by the Swedish Work Environment Authority. The data were extracted on 7 September 2004.

New system as from 2002 for reporting and registering occupational injuries

As from the year 2002 occupational injuries are reported and registered in a new manner. New definitions and variables are practiced. In addition a new form for reporting occupational injuries is used, which in part holds other information or changed type of information. Hereunder the most important changes are described, which influence the statistics as from 2002 and its comparability with previous statistics.

Report on occupational injury

The basic material for coding is the information given in the report on occupational injury. In the form for reporting a disability occurred during official service is stated i.a. information on the injured person, employer, work situation, scope of damage and course of events at the occurrence. In 2001 a new and revised form for report on occupational injuries was introduced. The new form is designed for improved registration of today's working environment factors and risks on the working site. It is also adapted to facilitate mechanical interpretation of the information.

Variables

At introduction of the new registration system also some new variables and classifications have been introduced. These are in most cases based on recommendations from EU's statistical office EUROSTAT. Below is a short description of the most important variables used in the present publication.

Deviation

As from 2002 the deviation, which has caused an accident, is coded. The coding of the variable **Deviation** is based upon a classification, which is developed and recommended by EU's statistical office EUROSTAT. The variable **Occurrence**, which has earlier been used when reporting occupational accidents, is not coded after 2001.

A deviation describes what has diverged from normal in a course of events. It may also be a deviation from the normal way of carrying out a task, where this deviation is a contributory cause to the accident. **Deviation** and **occurrence** (which were coded up till 2001) partly describe different things. If for example a person should fall from a ladder due to a material defect, this was generally regarded as a deviation. In the old classification, however, this type of misfortune would be considered a downfall accident.

Scope and registration of the statistics

The new registration system, which was introduced in 2002, is adapted to the new occupational injury r are included, which means that within the group *fishermen* also self-employed persons and family members working in the business are included.

By occupational injuries are meant accidents and sicknesses, which are the result of injurious influence at work. At ship work more or less all accidents, which have occurred during off-duty hours report and the new EU classifications. All occupational injuries among gainfully employed on board or in connection with certain organized recreational activities ashore, are considered as occupational injuries. This is due to the special working conditions of seafarers.

The statistics comprise:

- reported occupational injuries causing minimum one day on the sick-list
- reported occupational sickness regardless of days on the sick-list but with injury date 1992 or later.

As regards reported occupational injuries with no days on the sick-list (so called zero injuries) in addition to the exemptions mentioned above, only the total number is accounted for.

Collection of data

The basic information for the statistics is the **REPORT on occupational injury**. New registration routines are applied from April 1, 2002. As from that date all reports received are scanned. This means that photographs are taken of reports on occupational injuries and that certain information in the report is automatically registered, e.g. social security number and date of injury. Later on a manual review is made and corrections, if needed, are made in the automatically generated data. Furthermore a supplementary codification of certain information in the report is made. Occupational diseases will in the future be registered in the year that the report was scanned and not, as earlier, at the time when the occupational injury was reported by the employer. In practice this is not likely to have any great influence from the accounting point of view, since it will make a difference only for reports made just before the turn of the year. However, the occupational injuries will in the future, as in the past, be accounted for by date of injury. The employer/shipping company shall ensure that the occupational injuries are reported to the National Social Insurance Office.

Information on the number of signed-on crew on a certain day can be obtained from the Seamen's Register.

Using specific data

The present information system has been developed both for official statistical use and to make it possible to process the data according to the needs for other users. Each piece of information, which has been recorded from the notification form, can be used to select the group of injuries that interests the user. The selected injuries can then be listed with all or portions of the registered information regarding curves or tables, according to different combinations of variables. For example, a specific ship-owner can obtain information regarding occupational injuries in its vessels. Someone working with the construction of, or regulations for, ladders can find material about accidents involving ladders. Specially processed data on injuries related to ship-duty can be ordered from the Swedish Work Environment Authority.

When providing material and tables, consideration must always be given to the fact that the work injury notifications are protected by the Official Secrets Act.

Persons employed on board

Total occupational injuries in relation to manning of merchant vessels, (occupational accidents occurring on-duty/off-duty and work-related diseases).

A total of **278** ship-duty occupational injuries were reported in 2003 (excluding commercial fishermen). Out of the total number of accidents, **218** were occupational accidents (on-duty/–/off-duty) and **60** were work-related diseases. The number of reported occupational accidents without absence from work, so called zero injuries, which have not been included in the statistical summary, was **175** for 2003 and **203** for 2002. A further explanation can be found in the section "Scope and registration of the statistics".

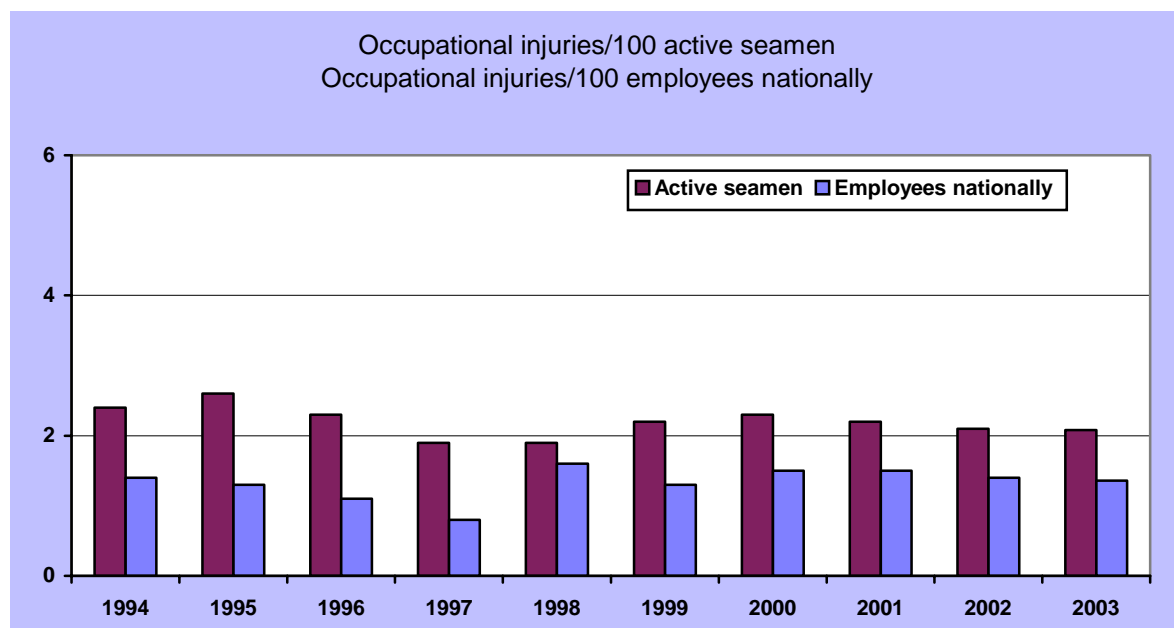
The number of *active seamen* in 2003 was **13 337** (in 2002 it was **13 789**) (the information is taken from the *Seamen's Register*). By *active seaman* is meant that the person has worked in that capacity for at least 3 of the preceding 18 consecutive months.

Signed-on crew on merchant and special purpose vessels having a gross tonnage of 300 and over (the information taken from the Seamen's Register)

Masters	Mates	Deck crew	Engineers	Engine crew	Catering	Total
355	653	1313	778	605	3045	6749

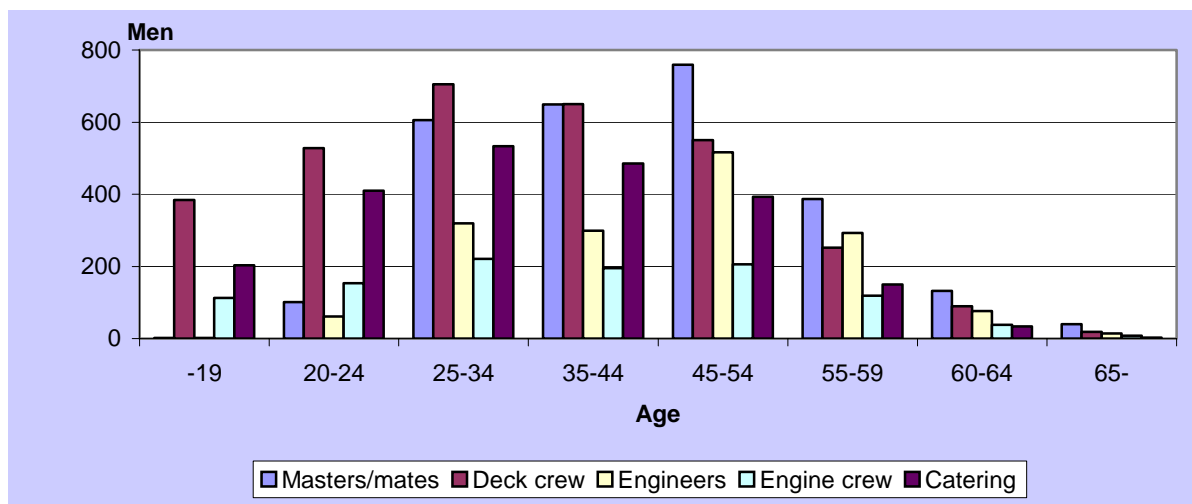
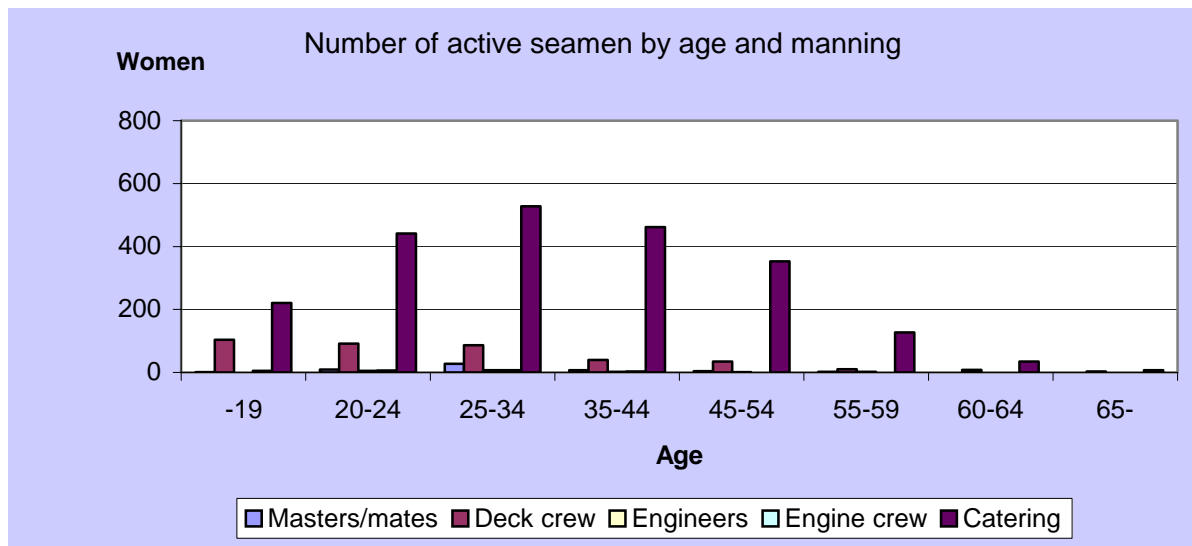
Frequency of injuries 1994 – 2003

The frequency of injuries is defined as the number of occupational injuries/100 active seamen. The figure shows the number of occupational injuries/100 employees nationally. (Information taken from the Swedish Work Environment Authority, ISA)



Number of active seamen by age and manning

Age	< 19	20	25	35	45	55	60	65 >	Total
		-24	-34	-44	-54	-59	-64		
Manning									
Masters/mates	3	110	633	656	763	389	132	40	2 726
Deck crew	488	619	791	690	585	262	98	22	3 555
Engineers	2	66	326	301	517	295	76	14	1 597
Engine crew	118	159	228	198	206	119	38	8	1 074
Catering	424	851	1 061	947	746	277	69	10	4 385
Total	1 035	1 805	3 039	2 792	2 817	1 342	413	94	13 337



Injuries by occupational accidents/work-related diseases and on-duty/off-duty in 1999-2003

Year	Total occupational accidents	Work-related diseases		Total
		<i>of which deaths</i>		
1999	251	-	63	314
2000	217	2	63	280
2001	202	-	80	282
2002	207	2	85	292
2003	218	-	60	278
Total	1 095	4	351	1 446

Injuries by sex and occupational accidents/work-related diseases and on-duty/off-duty in 2003

Manning	Total occupational accidents	Work-related diseases		Total
		<i>of which deaths</i>		
Masters	6	-	2	8
Mates	7	-	6	13
Deck crew	56	-	7	63
Engineers	15	-	7	22
Engine crew	28	-	9	37
Catering	106	-	29	135
Total	218	-	60	278

Women

Manning	Total occupational accidents		Work-related diseases	Total
		<i>of which deaths</i>		
Masters	-	-	-	-
Mates	-	-	-	-
Deck crew	4	-	-	4
Engineers	-	-	-	-
Engine crew	-	-	-	-
Catering	66	-	20	86
Total	70	-	20	90

Men

Manning	Total occupational accidents		Work-related diseases	Total
		<i>of which deaths</i>		
Masters	6	-	2	8
Mates	7	-	6	13
Deck crew	52	-	7	59
Engineers	15	-	7	22
Engine crew	28	-	9	37
Catering	40	-	9	49
Total	148	-	40	188

Occupational accidents

Here the registered occupational accidents during ship work (*during working hours and off-duty hours on board/ashore*) for seagoing personnel are accounted for. Occupational accidents as from 2002 are reported by deviation, see explanation under the heading “**New system in 2002 for report and registration of occupational accidents**”.

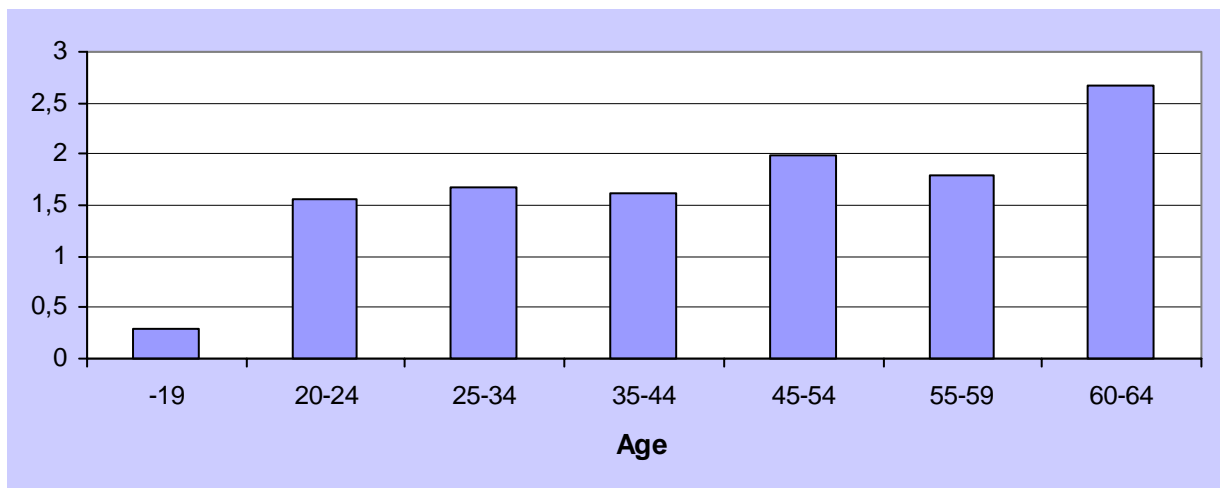
Number of occupational accidents by manning and discrepancy

Manning Discrepancy	Master	Mates	Deck crew	Engineers	Engine crew	Cater- ing	Total
Leakage, outflow	-	-	3	1	1	3	8
Collapse, fall, bursting in material	-	-	4	1	2	4	11
Lost control of machine	-	-	1	-	3	-	4
Lost control of vehicle, means of transport	1	-	-	-	-	6	7
Lost control of hand tool, utensil	-	1	2	-	3	5	11
Lost control of treated object	-	-	6	1	3	12	22
Lost control, other	-	-	-	-	3	1	4
Fall of person	4	5	19	3	4	27	62
Movement of body with no physical overloading	-	-	1	3	1	8	13
Movement of body with physical overloading	1	1	16	5	6	34	63
Physical violence, attack, traumatic experience	-	-	-	-	-	3	3
Other, unidentified	-	-	4	1	2	3	10
Total	6	7	56	15	28	106	218

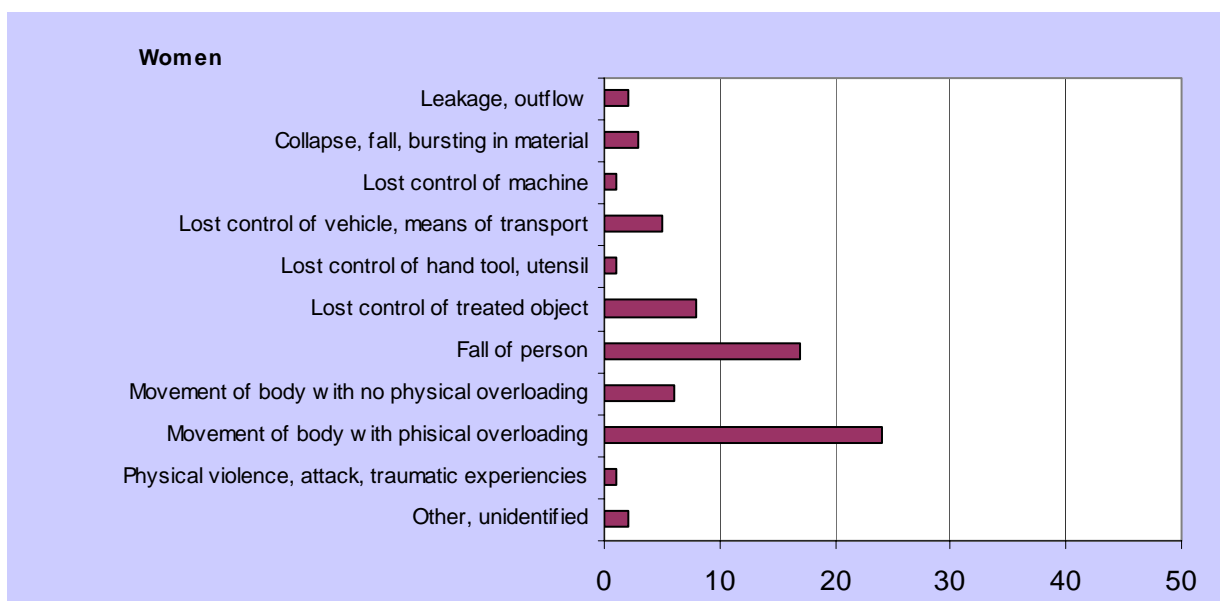
The number of active seamen and number of occupational accidents by age

Age	-19	20-24	25-34	35-44	45-54	55-59	60-64	65-	Total
Number of active seamen	1 035	1 805	3 039	2 792	2 817	1 342	413	94	13 337
Number of occupational accidents	3	28	51	45	56	24	11	-	218

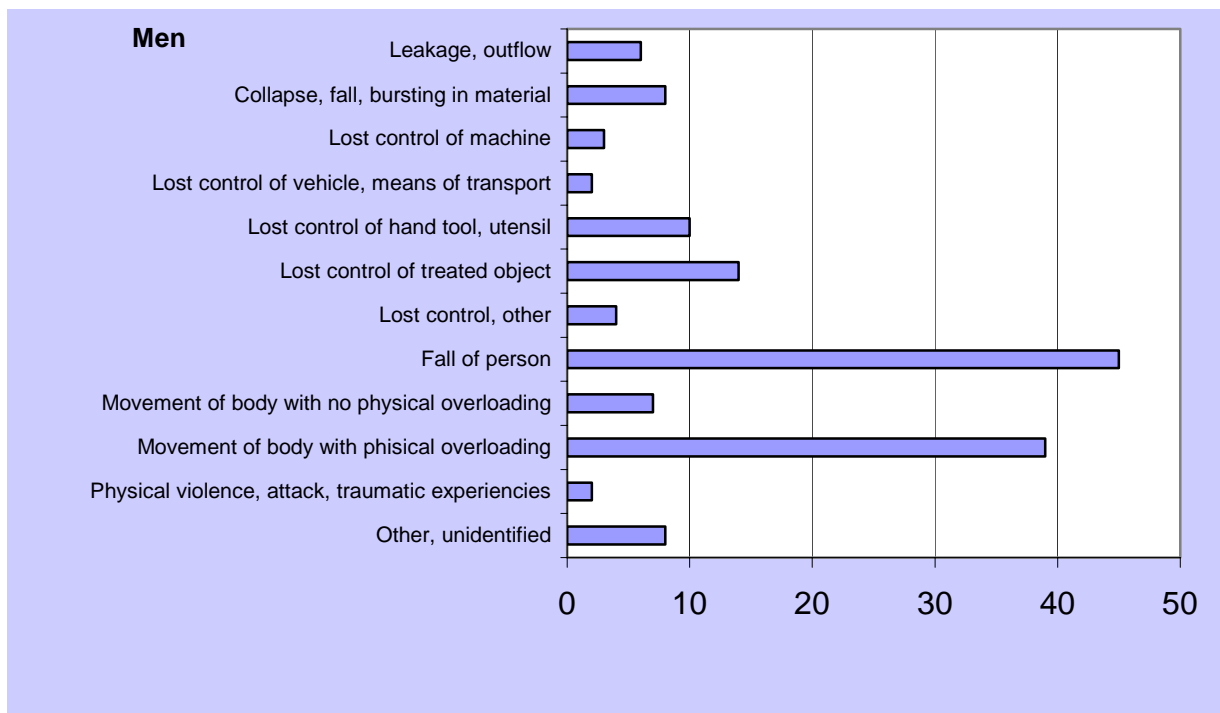
Number of occupational accidents/100 active seamen by age



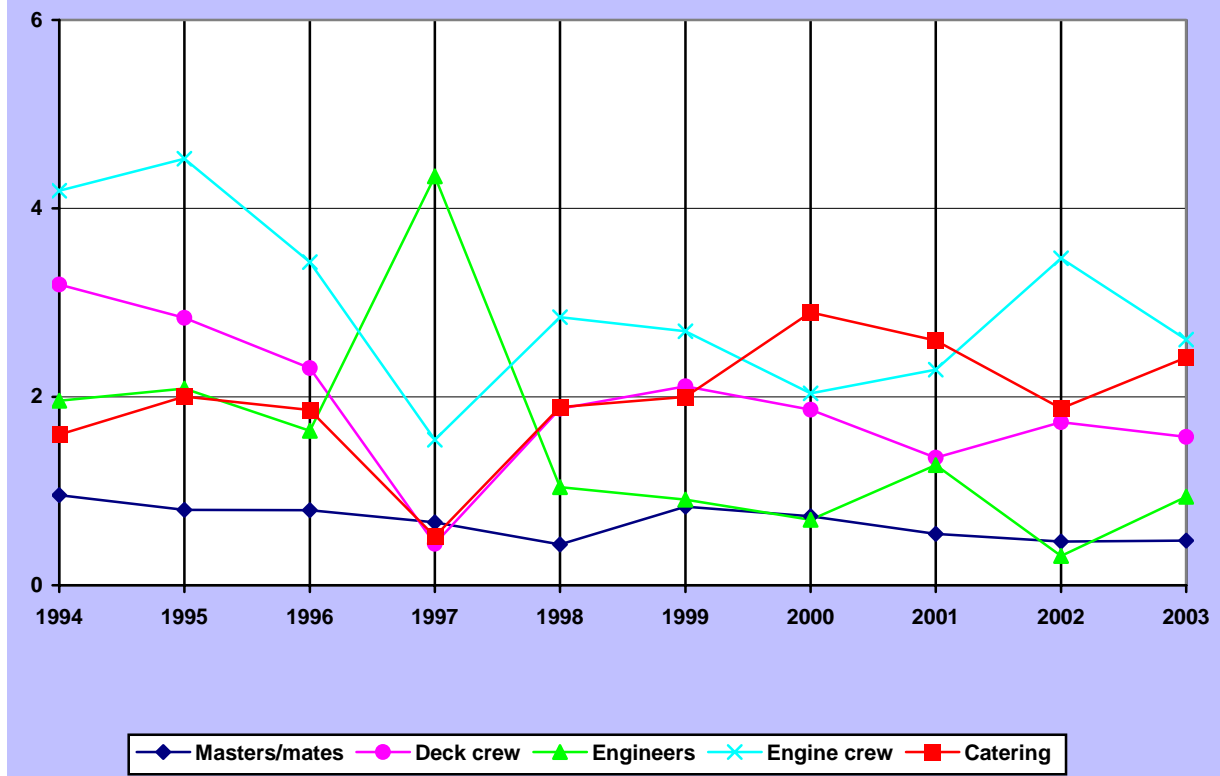
Occupational accidents by deviation and sex



Occupational accidents by deviation and sex

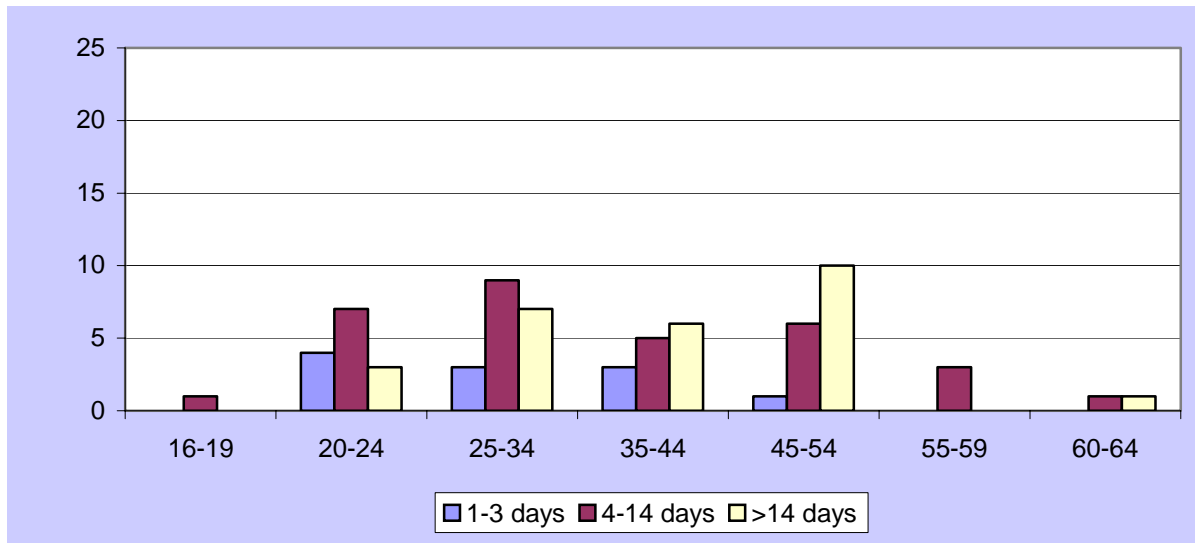


Frequency of injuries 1994-2003 number of occupational accidents/100 active seamen

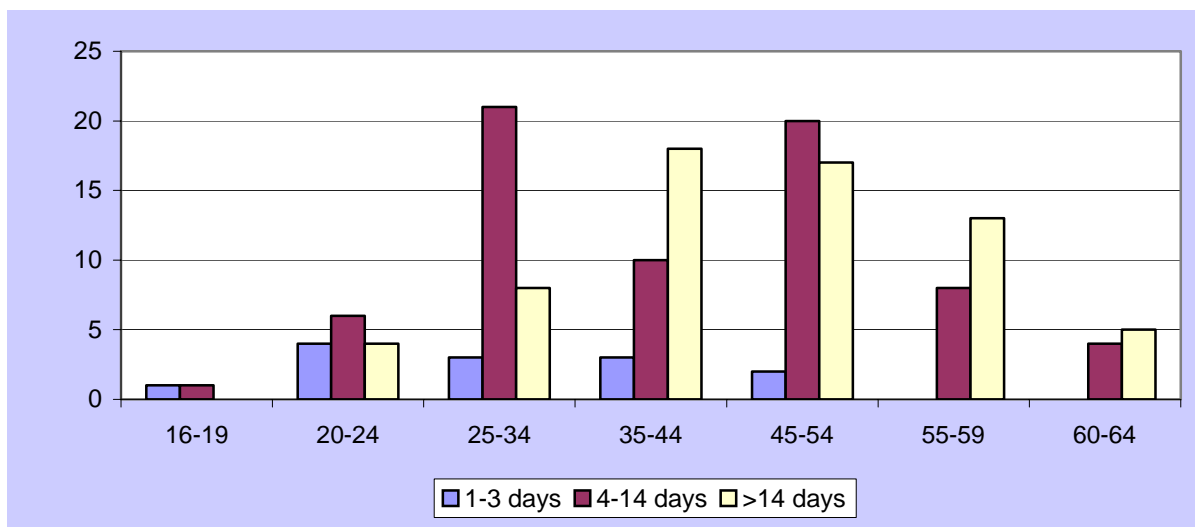


Reported occupational injuries shown by age group, sex and estimated absence

Women



Men



Occupational accidents by age, manning and sex

Women

Age	-19	20-24	25-34	35-44	45-54	55-59	60-64	65-	Total
Manning									
Masters	-	2	1	1	-	-	-	-	4
Mates	-	-	-	-	-	-	-	-	-
Deck crew	-	-	-	-	-	-	-	-	-
Engineers	-	-	-	-	-	-	-	-	-
Engine crew	-	-	-	-	-	-	-	-	-
Catering	1	12	18	13	17	3	2	-	66
Total	1	14	19	14	17	3	2	-	70

Men

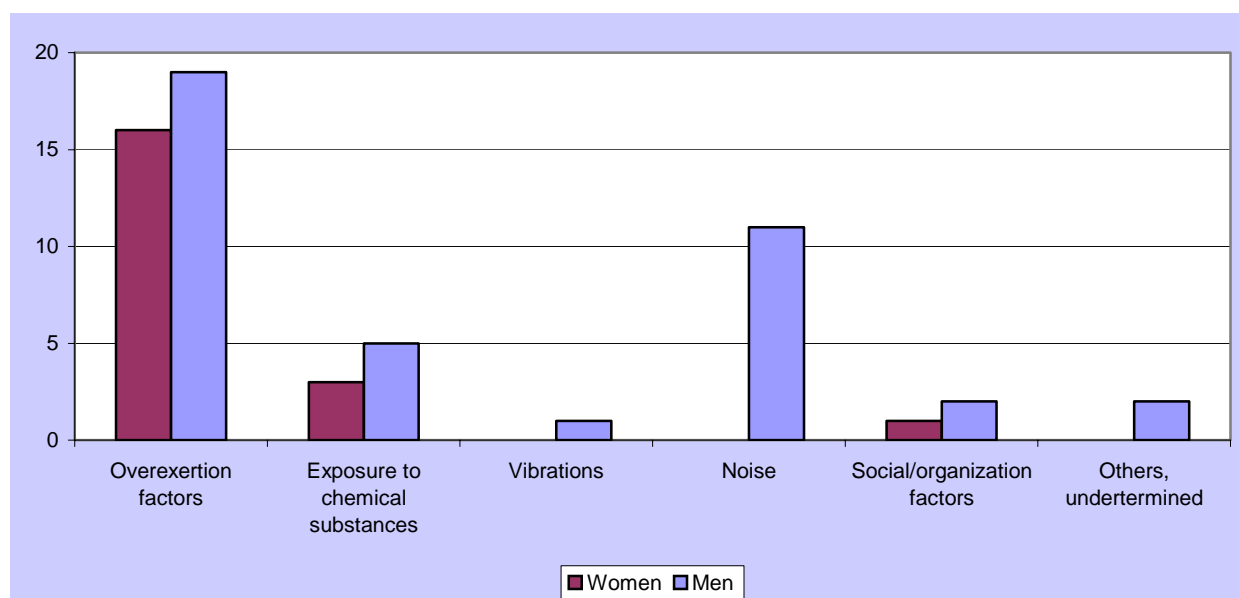
Age	-19	20-24	25-34	35-44	45-54	55-59	60-64	65-	Total
Manning									
Masters	-	-	1	-	3	1	1	-	6
Mates	-	-	1	3	2	1	-	-	7
Deck crew	2	4	6	11	15	12	2	-	52
Engineers	-	1	4	2	5	3	-	-	15
Engine crew	-	4	6	6	7	2	3	-	28
Catering	-	5	14	9	7	2	3	-	40
Total	2	14	32	31	39	21	9	-	148

Work-related diseases

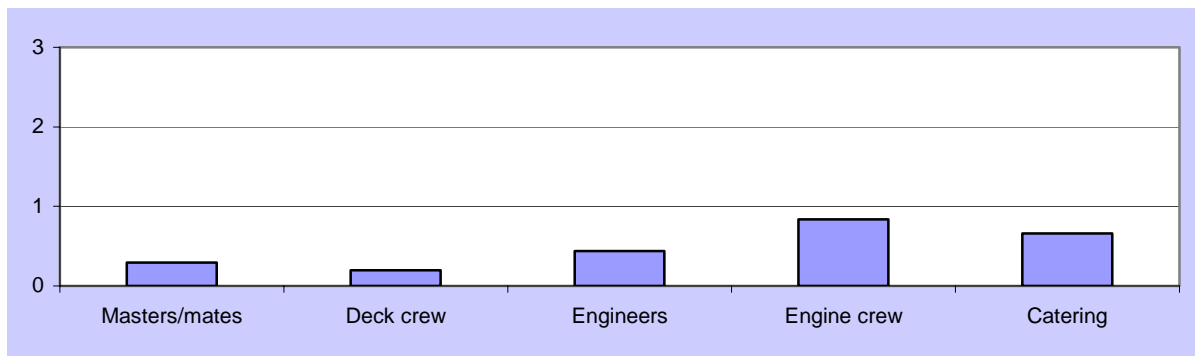
Number of work-related diseases for on-board personnel during 1999-2003

Cause	Year 1999	2000	2001	2002	2003
Overexertion factors	33	39	48	59	35
Exposure to chemical substances	12	10	13	7	8
Vibrations	-	-	-	-	1
Noise	12	8	10	10	11
Social/organization factors	2	3	4	8	3
Others, undetermined	4	3	5	1	2
Total	63	63	80	85	60

Work-related diseases by sex and cause



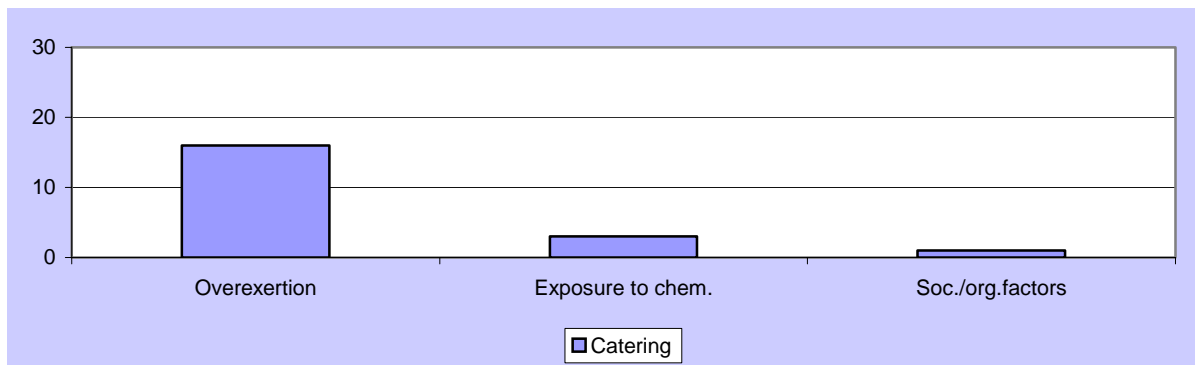
Frequency of injuries – number of work-related diseases/100 active seamen



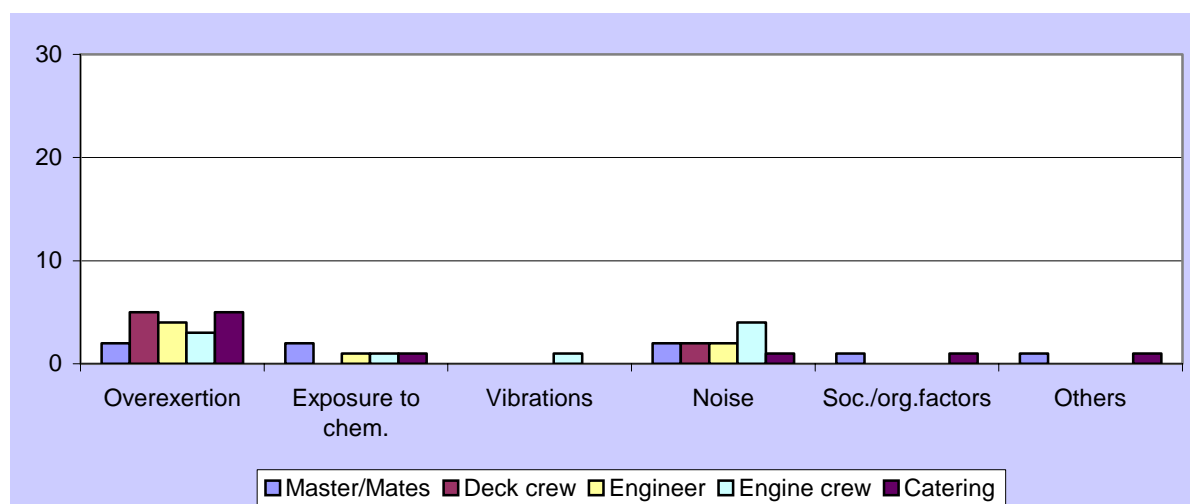
Work-related diseases by cause – manning

Cause	Over-exertion factors	Exposure to chemical substances	Vibrations	Noise	Social/organization factors	Others	Total
Manning							
Masters	-	-	-	1	1	-	2
Mates	2	2	-	1	-	1	6
Deck crew	5	-	-	2	-	-	7
Engineers	4	1	-	2	-	-	7
Engine crew	3	1	1	4	-	-	9
Catering	21	4	-	1	2	1	29
Total	35	8	1	11	3	2	60

By cause – manning, women



By cause – manning, *men*



Work-related diseases by manning, age and sex

Women

Age	Manning	Master s	Mates	Deck crew	Engineers	Engine crew	Catering	Total
< 19		–	–	–	–	–	–	–
20 – 24		–	–	–	–	–	1	1
25 – 34		–	–	–	–	–	4	4
35 – 44		–	–	–	–	–	8	8
45 – 54		–	–	–	–	–	4	4
55 – 59		–	–	–	–	–	4	4
60 – 64		–	–	–	–	–	2	2
65 >		–	–	–	–	–	–	–
Total		–	–	–	–	–	20	20

Men

	Manning	Masters	Mates	Deck crew	Engineers	Engine crew	Catering	Total
Age								
< 19	–	–	–	–	–	–	–	–
20 – 24	–	–	–	–	–	–	1	1
25 – 34	–	–	–	–	3	–	–	3
35 – 44	–	–	2	–	–	–	3	5
45 – 54	1	1	4	1	1	1	2	10
55 – 59	–	1	3	1	4	3	–	12
60 – 64	1	1	–	2	4	–	–	8
65 >	–	1	–	–	–	–	–	1
Total	2	6	7	7	9	9	9	40

Commercial fishermen

Number of occupational accidents during 1999 – 2003

Year	Occupational accidents of which deaths	Work-related diseases	Total	
1999	19	1	2	21
2000	15	2	1	16
2001	16	2	3	19
2002	14	1	3	17
2003	8	2	7	15
Total	72	8	16	88

Occupational accidents – by primary cause 2003

Commercial fishermen reported **8** occupational accidents in 2003 and **7** work-related diseases. The diagrams below show the accidents by kind of event. Two fishermen died; narrative of occupational accident resulting in death will be found on next page.

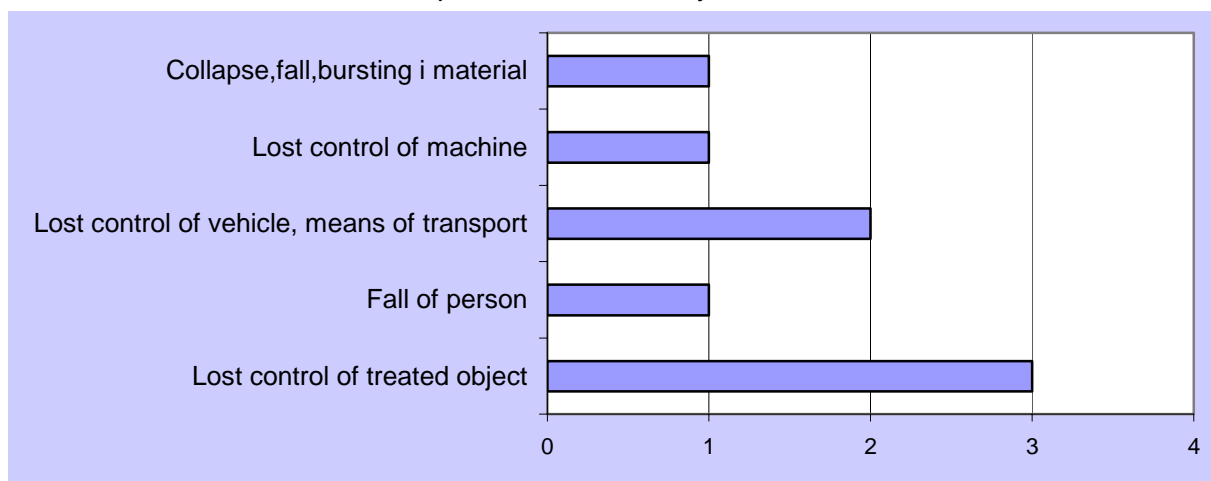
Four fishing vessels were completely lost during 1999–2003, two fishermen died in connection with one of these events. One of the fishermen was of Estonian nationality.

Number of vessels registered with fishing vessels licensed and number of fishermen 2003

Information is taken from the National Board of Fisheries.

Size of vessel	< 12 m	12 – 24 m	> 24 m
Number of fishing vessels	1 409	223	83
Number of fishermen	1 165	534	539

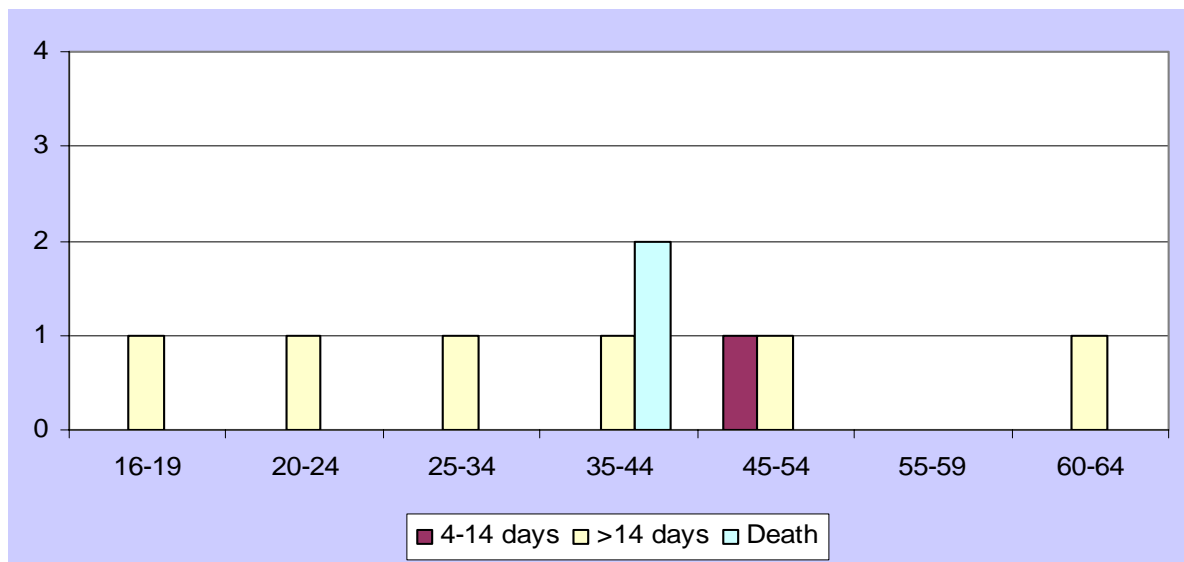
Occupational accidents by deviation



Narrative of occupational accident resulting in death

Date Local time Location and/or vessel's activity	Call sign/number Vessel's name Type of vessel Gross tonnage Year built	Narrative
2003 Jan. 11 1400 Fishing	SFB-5264 DROTT Wood – 1946 (rebuilt in 1995)	The ship sank, probably due to icing. The hatch cover, which had not been battened down, was found close to the ship. At the accident the hatch cover had been washed off and the ship filled with water. The ship would probably not have gone down if the hatch had been battened. The master was found dead whereas the other person on board, of Estonian nationality, is still missing. At the time of the accident they were setting cod nets. N 57° 14.19' E 017° 50.35'

Occupational accidents by age and absence due to illness



Work-related diseases

Three work-related diseases were reported in 1999–2003.

Year	1999	2000	2001	2002	2003
Over-exertion factors	2	1	2	3	6
Exposure to chemical substances	–	–	–	–	–
Noise	–	–	1	–	–
Others	–	–	–	–	1
Total	2	1	3	3	7

Work-related diseases by cause – age

Cause	Over-exertion factors	Exposure to chemical substance	Noise	Others	Total
Age					
< 19	–	–	–	–	–
20 – 24	–	–	–	–	–
25 – 34	1	–	–	–	1
35 – 44	–	–	–	–	–
45 – 54	2	–	–	–	2
55 – 64	3	–	–	1	4
65 >	–	–	–	–	–
Total	6	–	–	1	7

Passengers

By type of vessel

Deaths					
Type of vessel	Passenger	Tanker	Gen. cargo	Other	Total
Illness/ suicide	5	-	-	-	5
Disappearance*	-	-	-	-	-
Personal injury <i>resulting in death</i>	6	-	-	-	6
	1				1
	<p>The ship lay at berth and was used as a pub. The restaurant to which it belonged was located ashore. One person went on board to buy beer. As he went back on the gangway he fell and bumped his head against the quay. He fell between the ship and the quay. A diver found the man at the bottom of the sea. Attempts to bring him back to life were in vain. Safety devices at the gangway seem not to have been satisfactorily fixed.</p>				

* Suicide cannot be excluded in the case of disappearance.

Individuals in adjacent areas

Personal injury <i>resulting in death</i>	
Passenger	<p>The ship was manoeuvred along the quay. The aft spring was put on a bollard. The boatman on the quay stood between the slack rope and the quay-edge to unfasten the heaving line. When the rope tightened it hit the boatman's legs so he fell on the quay or on the rope and further over the quay-edge. He sank and was found drowned on the sea bottom.</p>