

Safety Statistics for IMCA Members

Report for the period 1 January – 31 December 2012

Contents

1	Introduction	1
2	What's New	1
3	Executive Summary	2
4	Distribution of Contributors.....	3
5	Environmental Indicators.....	5
6	Lost Time Injury Frequency Rate (LTIFR).....	7
7	Total Recordable Injury Rates (TRIR).....	14
8	Fatal Accident Rate (FAR).....	14
9	Hours Worked Banding.....	16
10	Comparison with Other Published Figures	19
11	Leading Performance Indicators	19
	Appendix 1: IMCA Environmental Performance Indicators	25
	Appendix 2: Individual Company LTIFR and TRIR Statistics	29
	Appendix 3: Definitions – Lagging Safety Statistics	33
	Appendix 4: Definitions – Leading Safety Statistics.....	35

1 Introduction

IMCA produces an annual report of safety statistics (covering fatalities and injuries) supplied by members. This information note reports detailed annual statistics for 2012. A short executive summary of the figures for 2012 is available as Information Note IMCA SEL 05/13.

Safety statistics are a useful insight into the performance of a company and industry sector in the areas of health, safety and environment. The purpose of these statistics is to record the safety performance of IMCA contractor members each year and to enable IMCA members to benchmark their performance. Statistics were provided by 227 companies and organisations, representing around 64% of the marine contractor membership. 61 companies and organisations took part for the first time. IMCA would like to thank all those who took part in this important annual benchmarking exercise.

2 What's New

This year IMCA has collected data using a revised Excel template which separated out into three separate worksheets the data for lagging indicators, leading indicators and environmental indicators. Near miss incidents are no longer included in the annual report; arrangements will be made in due course for collection of members' near miss incident data on a quarterly basis. For the first time we have collected data on contractor members' environmental performance. This has been broadly based on the principles outlined in IMCA document SEL 010 *Guidelines for the use of environmental performance indicators*. See Section 5 for more details.

2.1 Definitions

Full definitions of the leading and lagging indicators calculated from statistics collected from IMCA members can be found in full at Appendix 3 and 4. The definition of injuries used is that of the U.S Occupational Safety and Health Administration (OSHA).

It should be noted that IMCA uses one million rather than 200,000 man-hours as a basis for the calculation of Lost Time Injury Frequency Rate (LTIFR) and Total Recordable Injury Frequency Rate (TRIR).

3 Executive Summary

Overall Lost Time Injury Frequency Rate (overall LTIFR)	0.51	(0.64)
Overall number of Lost Time Injuries	467	(370)
Overall Total Recordable Injury Rate (TRIR)	1.93	(2.40)
Overall Fatal Accident Rate (FAR)	1.69	(0.52)
Offshore Lost Time Injury Frequency Rate (offshore LTIFR)	0.57	(0.71)
Offshore Fatal Accident Rate (FAR)	2.14	(0.70)
Offshore Total Recordable Injury Rate (TRIR)	1.95	(2.63)
Onshore Lost Time Injury Frequency Rate (onshore LTIFR)	0.39	(0.44)
Onshore Total Recordable Injury Rate (TRIR)	1.90	(1.76)

Table 1: Summary of IMCA safety statistics for 2012 (last year's figures in brackets)

The 2012 dataset is drawn from 227 IMCA contractor members, based upon 945 million man-hours of work overall (655 million man-hours offshore). This is a significant (62%) increase in man-hours on the previous year, primarily due to improvements in data collection techniques. Onshore data was provided by 176 of 227 companies (77%).

For the purposes of comparison, the safety statistics recorded here by IMCA members are consistent with those of other main industry trade associations, the OGP & IADC. Further details of the results published by these organisations can be found in Section 10.

It should be noted that although IMCA encourages all contractor members to take part in this safety statistics exercise, doing so is not mandatory, and statistics are submitted on a voluntary basis on the understanding of complete anonymity. This year a number of fatalities have been reported including one single incident which unfortunately involved seven fatalities. This one incident has significantly increased the Fatal Accident Rate for this year to a higher level than is representative of the industry. Additionally, two of the fatalities reported were medical in nature (non-work related) rather than work-place incidents. IMCA is pleased that members feel free to report incidents, injuries and fatalities, and will continue to share information from incidents and fatalities in our sector, even those not reported in these statistics, through our normal communications such as Safety Flashes.

IMCA is continuing to publish detailed statistical analysis of the safety data as a separate appendix. As in previous years, data are separated into offshore and onshore activity to improve consistency in the data collected. The offshore statistics cover offshore work only, whereas the inclusion of onshore work covers such areas as fabrication yards and office work. The statistics over the past sixteen years have been as follows:

	Contractors	Overall							Offshore					Onshore				
		Million hours worked	LTIs	LTIFR	Fatalities	Fatal Accident Rate	Recordable injuries	TRIR	Million hours worked	LTIs	LTIFR	Fatal Accident Rate	Recordable injuries	TRIR	Million hours worked	LTIFR	Fatal Accident Rate	TRIR
1997	23	47.6	236	4.96	3	6.3												
1998	32	52.9	257	4.86	2	3.8												
1999	28	52.8	196	3.72	4	7.6												
2000	31	65.6	227	3.46	5	7.6				4.25	10.1				1.05			
2001	32	54.5	162	2.97	4	7.3				3.77	10.1				0.86			
2002	32	197	244	1.24	3	1.52		62		2.96	4.83			135	0.44	0		
2003	31	200	198	0.99	5	2.49		66	133	2	6.03			134	0.49	0.75		
2004	36	145	164	1.13	3	2.06	645	72	120	1.65	2.75		8.87	72	0.61	1.39		
2005	51	160	189	1.18	6	3.13	864	5.42	102	172	1.69	3.93	742	7.29	58	0.29	1.73	2.1
2006	74	221	226	1.02	6	2.72	914	4.14	186	196	1.06	3.23	807	4.35	35	0.86	0	3.05
2007	100	310	339	1.09	6	1.94	1356	4.38	252	315	1.25	2.38	1180	4.68	58	0.42	0	3.05
2008	129	612	433	0.72	7	1.14	1531	2.5	465	341	0.74	1.08	1176	2.53	148	0.64	1.35	2.4
2009	152	602	395	0.67	6	1.00	1530	2.54	474	340	0.73	1.27	1291	2.72	127	0.43	0	1.88
2010	172	547	393	0.73	7	1.28	1499	2.74	389	328	0.86	1.29	1240	3.19	158	0.43	1.27	1.64
2011	195	583	370	0.64	3	0.51	1400	2.40	431	303	0.71	0.70	1133	2.63	152	0.44	0.00	1.76
2012	227	945	467	0.51	16	1.69	1825	1.93	655	357	0.57	2.14	1274	1.95	291	0.39	0.69	1.90

Table 2: Summary of IMCA safety statistics 1997-2012

4 Distribution of Contributors

4.1 By Geographical Region

IMCA's regional sections enable members to communicate at a regional level, sharing best practice, networking and co-ordinating discussions with local client and regulatory bodies. IMCA members join one of five geographical regions, based roughly around time-zones, depending on where their primary areas of operations are based. ICO members are international contractor members. These are the highest level international companies who are members of IMCA and who conduct work in all regions of the world. It should be noted that the regional breakdown of statistics here refers to the office location of the member company submitting statistics, and may only broadly correspond to the actual location of operations.

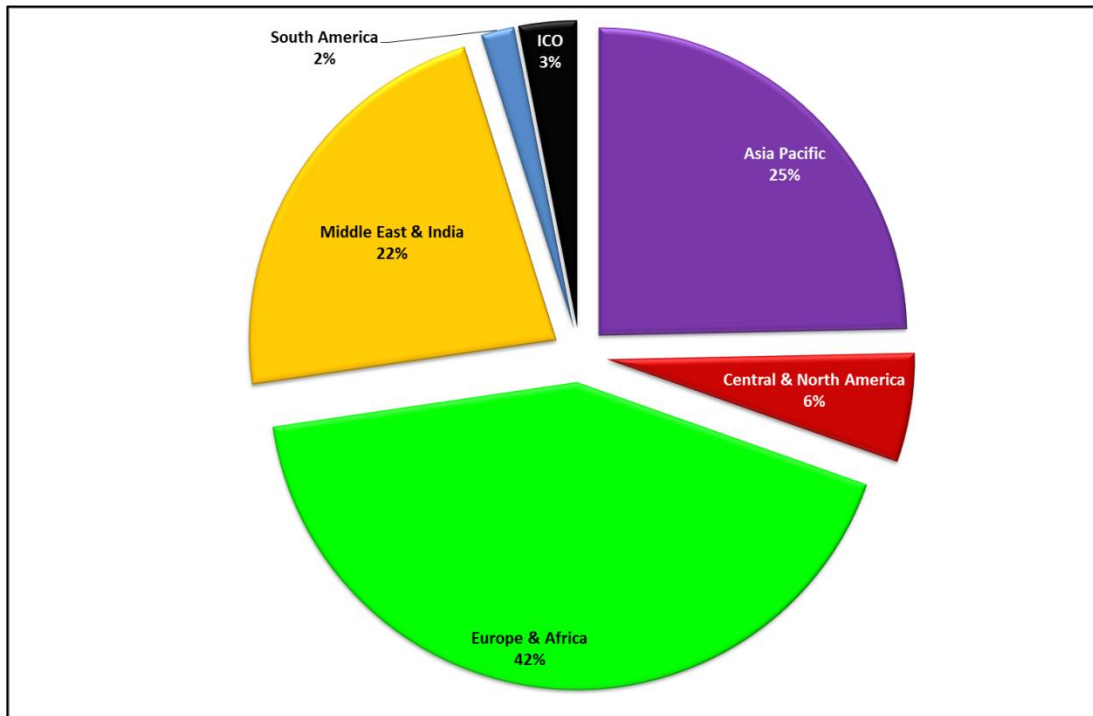


Figure 1 Contributors by IMCA geographical region

Key (Please refer to the Appendix for further definition of these rates and acronyms)

FAR	Fatal Accident Rate
TRIR	Total Recordable Injury Frequency Rate
LTIFR	Lost Time Injury Frequency Rate
RAL	Reporting Activity Level
SOFR	Safety Observation Frequency
MVR	Management Visit Ratio
LLR	Lessons Learnt Ratio

IMCA region	Contributors
Asia Pacific (AP)	56 (57)
Central & North America (CNA)	13 (11)
Europe & Africa (EA)	96 (85)
Middle East & India (MEI)	51 (32)
South America (SA)	4 (2)
International Contractors (ICO)	7 (8)

Table 3: Contributors by region (last year in brackets)

	FAR	LTIFR	TRIR	FAR	LTIFR	TRIR	FAR	LTIFR	TRIR
		Offshore			Overall			Onshore	
AP	4.60	0.44	1.81	2.93	0.41	1.89	0.00	0.35	2.02
CNA	0.00	0.34	1.83	0.00	0.45	2.45	0.00	1.51	8.58
EA	3.25	0.73	2.40	2.62	0.68	2.26	0.00	0.45	1.71
MEI	2.15	0.64	1.74	2.41	0.58	2.07	2.95	0.44	2.76
SA	0.00	0.48	2.14	0.00	0.54	2.15	0.00	1.10	2.21
ICO	0.00	0.34	1.40	0.00	0.30	1.26	0.00	0.26	1.11

Table 4: Lagging safety indicators by geographical region

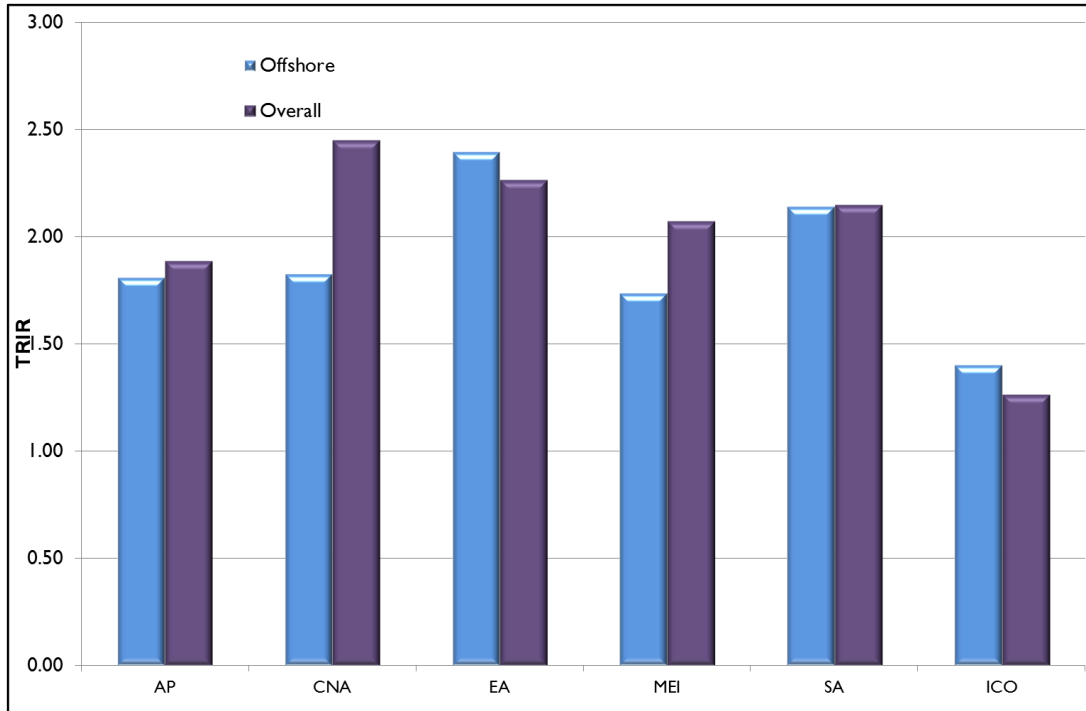


Figure 2: Overall and Offshore TRIR by geographical region

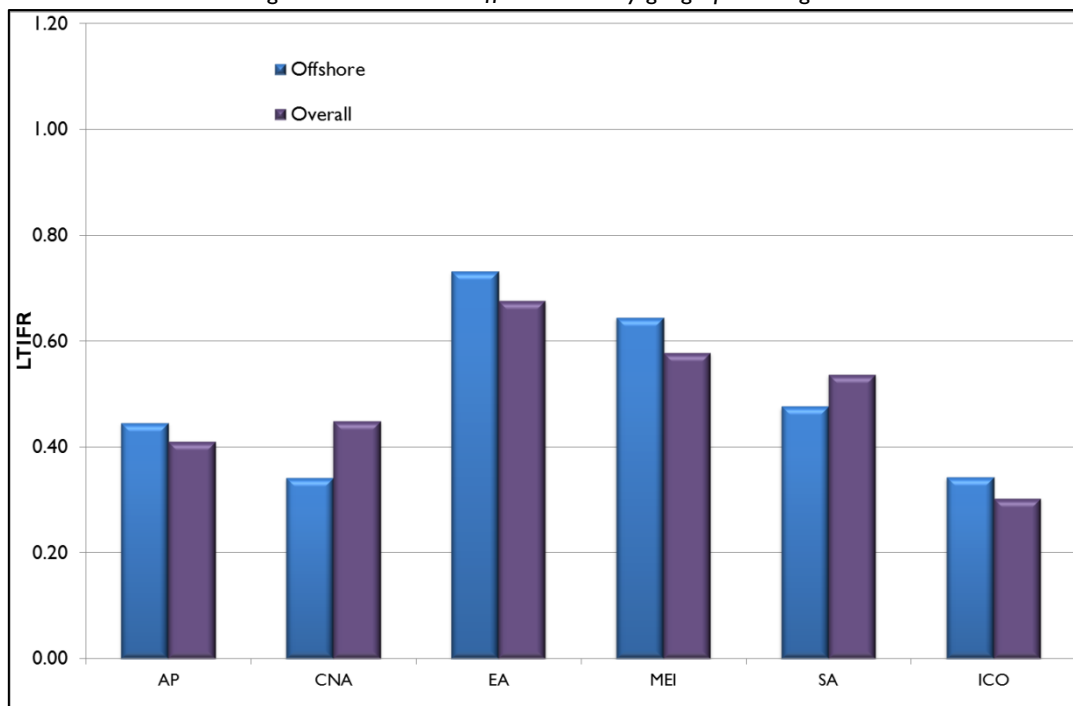


Figure 3: Overall and Offshore LTIFR by geographical region

4.2 By IMCA Technical Division

IMCA members join one or more of the four technical divisions, Diving, Marine, Offshore Survey, and Remote Systems & ROV, depending on the work they are conducting. ICO members belong to all four technical divisions, as they tend to conduct work in all four technical disciplines.

It is not possible, owing to the fact that members can join in one or more of the four technical divisions, to draw any conclusions about the safety performance of members in different divisions.

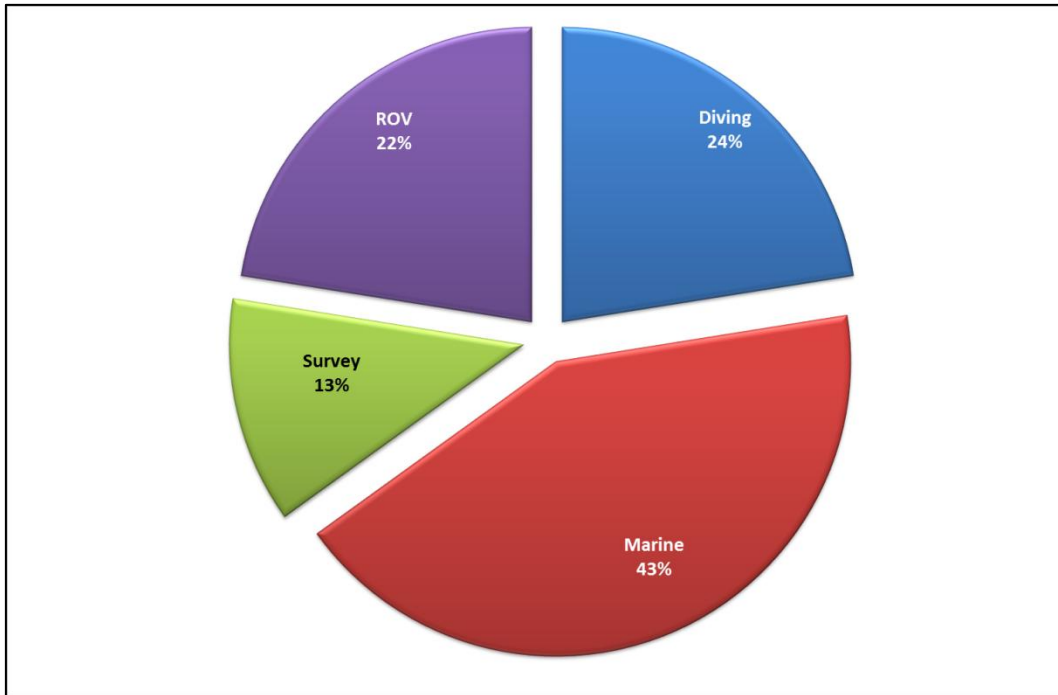


Figure 4: Contributors by IMCA technical division

5 Environmental Indicators

This year, for the first time, IMCA has collected information from contractor members on their environmental performance. The information we have sought to collect has been broadly based on IMCA SEL 010 *Guidelines for the use of environmental performance indicators*. We have collected data on the following:

- ◆ Number of spills and amount spilt;
- ◆ Bunkers used (by volume or by weight);
- ◆ Electricity consumed onshore;
- ◆ Non-hazardous and hazardous waste generated.

We have normalised the collected data against 1,000,000 man-hours to develop performance indicators, which will provide a baseline for members' future reference. As this is the first year these have been used, the results are necessarily limited in scope. A number of contractors may have misunderstood the units required for reporting; where clarification and correction has not been possible, these data have been excluded from the IMCA calculations. See below for further details.

5.1 Definitions

The environmental indicators are broadly based on the suggestions in IMCA document SEL 010 *Guidelines for the use of environmental performance indicators*:

- ◆ Number of spills per million man-hours worked;
- ◆ Amount spilt (litres) per million man-hours worked;
- ◆ Bunkers used (tonnes) per million offshore man-hours worked (converting cubic metres into tonnes at a nominal rate of 0.86m³/tonne);
- ◆ Megawatt-hours per million onshore man-hours worked;
- ◆ Non-hazardous waste per million overall (offshore and onshore) man-hours worked;
- ◆ Hazardous waste per million overall (offshore and onshore) man-hours worked.

Given the quantities being reported, all weights reported are taken to be in *tonnes* (1000 kg) rather than the US *short ton* (907 kg) or the UK *long ton* (1016 kg).

5.2 Spills (Offshore)

55 contractors reported having spilt oil, and 52 reported the quantity spilt. IMCA members reported a total of 568 oil spills, to a total quantity of 23,868 litres.

5.3 Bunkers

Amount of bunkers used was reported by 109 contractors, of whom eight reported by both weight and volume. Bunkering data from four contractors was excluded from the IMCA calculation as being an improbably large quantity of fuel to consume in one year when compared against the published offshore man-hours from that contractor. This conclusion was reached by drawing some reasonable assumptions about fuel consumption (18-20 tonnes per day) and utilisation (80%), which enabled a working figure for how many vessels might be supplied by the amount of bunkers reported.

The indicator was based on volume being converted to weight at 0.86m³/tonne, which was the average figure calculated from the eight members who reported both weight and volume.

5.4 Electricity Consumed (Onshore)

Data on onshore electricity consumption was provided by 81 contractors. Data from four contractors was excluded from the IMCA calculation as being impossibly high electricity consumption when compared against published onshore man-hours. A further five contractors supplied a figure for electricity consumed, but provided no onshore man-hours against which to calculate a rate. A number of contractors supplied data in kWh rather than MWh – these figures were corrected and included where possible.

5.5 Waste Disposal (Overall)

Ninety-eight (98) contractors reported the amount of non-hazardous waste disposed of, and eighty contractors reported the amount of hazardous waste disposed of. Seventy-nine reported both. Data from three contractors was excluded from the IMCA calculation as being impossibly high amounts of non-hazardous waste when compared against published overall man-hours.

	No. of contributors	Environmental Performance indicators			
		Minimum	Maximum	Average	IMCA
Spills	55	0.03	63.5	5.45	0.90
Amount spilt	52	0.05	4319	320.9	36.46
Bunkers (volume and weight)	109	8.07	659126.9	20874.7	8342.8
Electricity (MWh)	81	1.03	86206.9	3364.2	1042.0
Non-hazardous waste	98	0.02	7785.4	318.5	254.17
Hazardous waste	80	0.037	3875.97	168.35	97.65

Table 5: Environmental indicators at a glance

See Appendix I for further details.

6 Lost Time Injury Frequency Rate (LTIFR)

The offshore LTIFR for 2012 has improved to 0.57 from 0.71 in 2011, and the overall LTIFR has improved from 0.64 in 2011 to 0.51 this year.

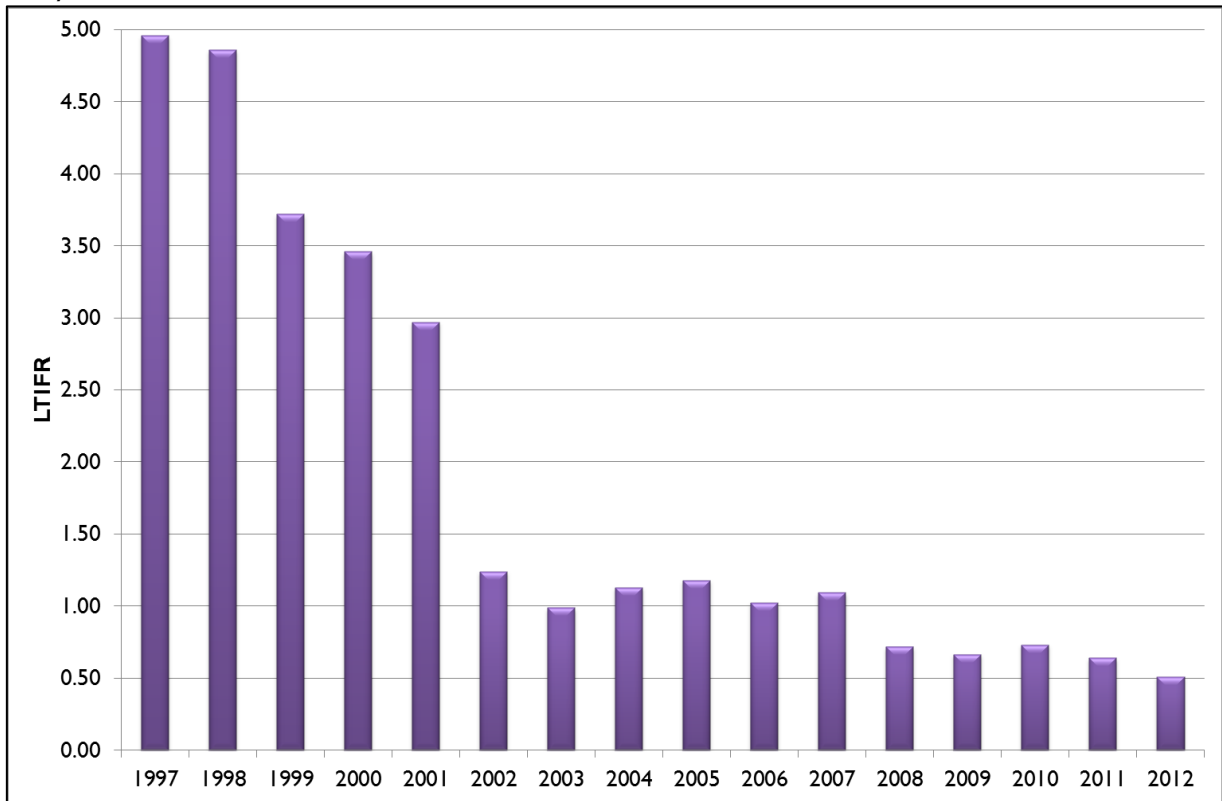


Figure 5: Overall LTIFR

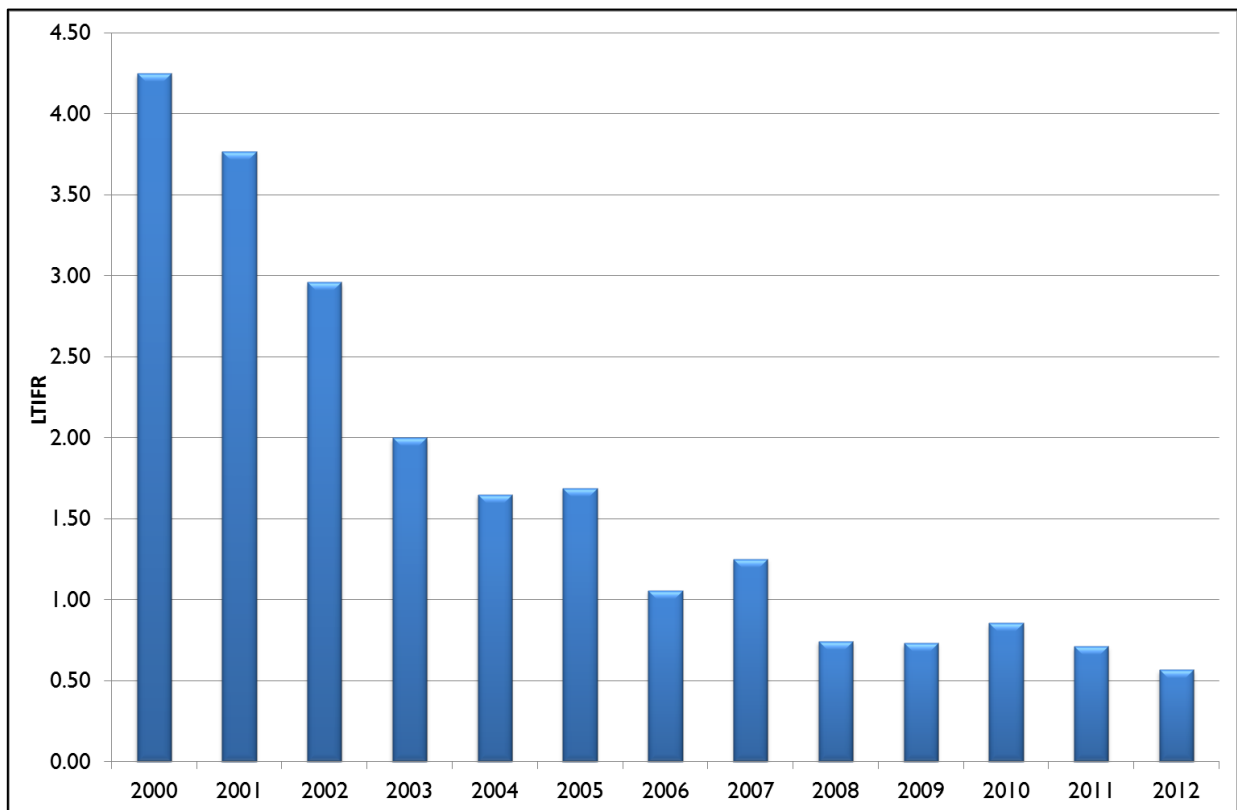


Figure 6: Offshore LTIFR

6.1 Direct Causes of Lost Time Injuries

IMCA categorises information on the direct causes of Lost Time Injuries into 12 categories agreed by the SEL Core Committee, as tabulated below.

LTI Category	No of LTIs						total
	AP	CNA	EA	MEI	SA	ICO	
A) Falls from height	5	2	17	8	1	12	45
B) Falls on the same level (including slips & trips)	3	6	60	26	1	19	115
C) Struck against	5	6	21	13	1	5	51
D) Struck by moving/falling objects	11	4	44	21	1	20	101
E) Exposure to mechanical vibration	0	0	0	3	0	0	3
F) Exposure to sound	0	0	1	0	0	0	1
G) Muscle stress and repetitive movement	2	1	7	15	0	1	26
H) Contact with electricity	0	0	3	0	0	1	4
I) Contact/exposure to heat/cold	0	0	3	9	0	0	12
J) Contact/exposure with hazardous substances	2	0	1	0	0	0	3
K) Entrapment	2	1	7	0	2	13	25
L) Asphyxiation	0	0	0	0	0	0	0
M) None given	9	9	35	20	4	4	81
TOTAL	39	29	199	115	10	75	467

Table 6: Causes of LTIs by IMCA geographical region

There were 467 Lost Time Injuries recorded by IMCA members this year. “Falls on the same level” was the most common immediate cause of LTIs with 25% of recorded LTIs and “Struck by moving or falling objects” was the second most common direct cause of LTIs for contributors with 22% of recorded LTIs.

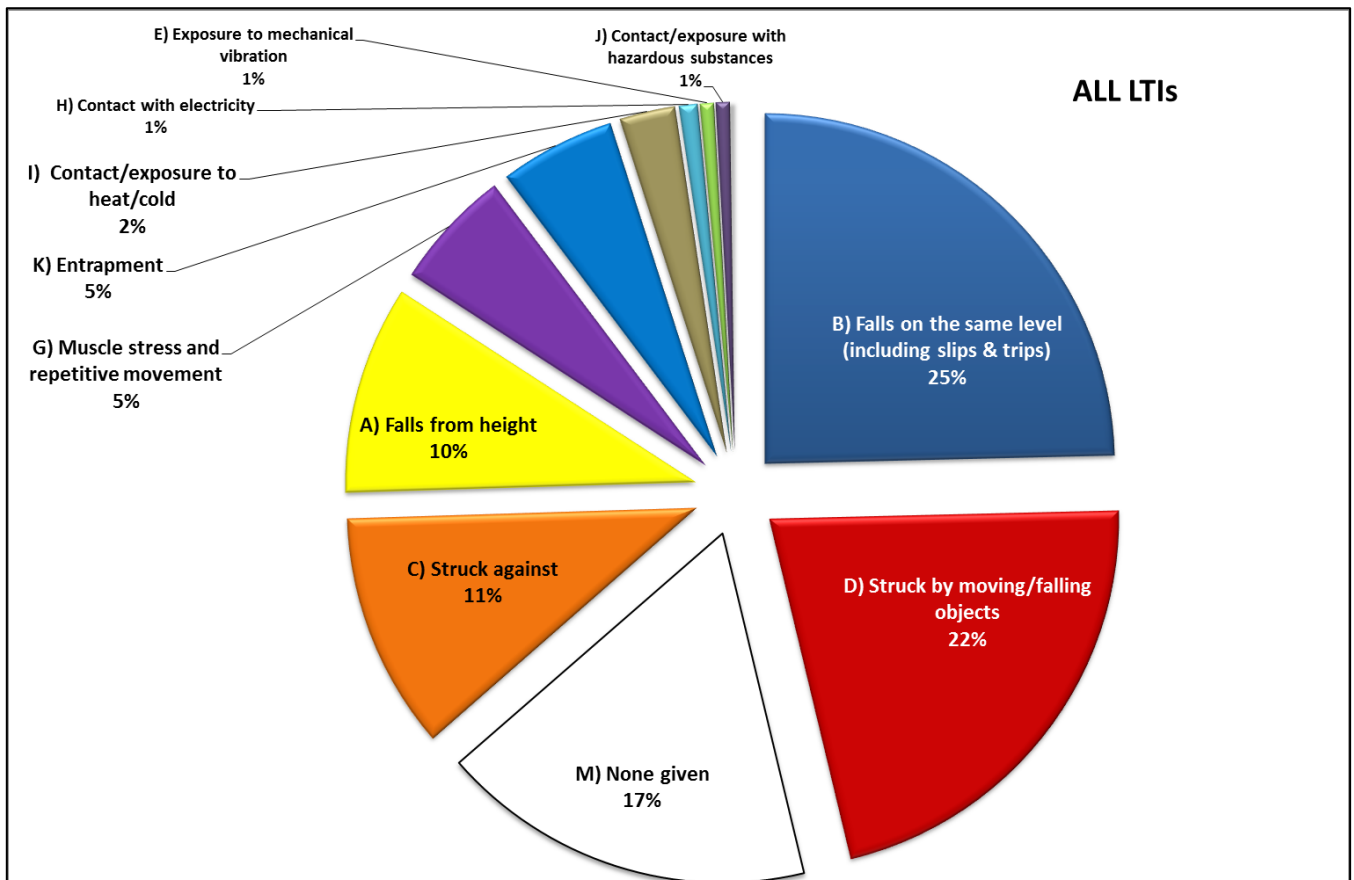


Figure 7: Direct causes of all reported Lost Time Injuries

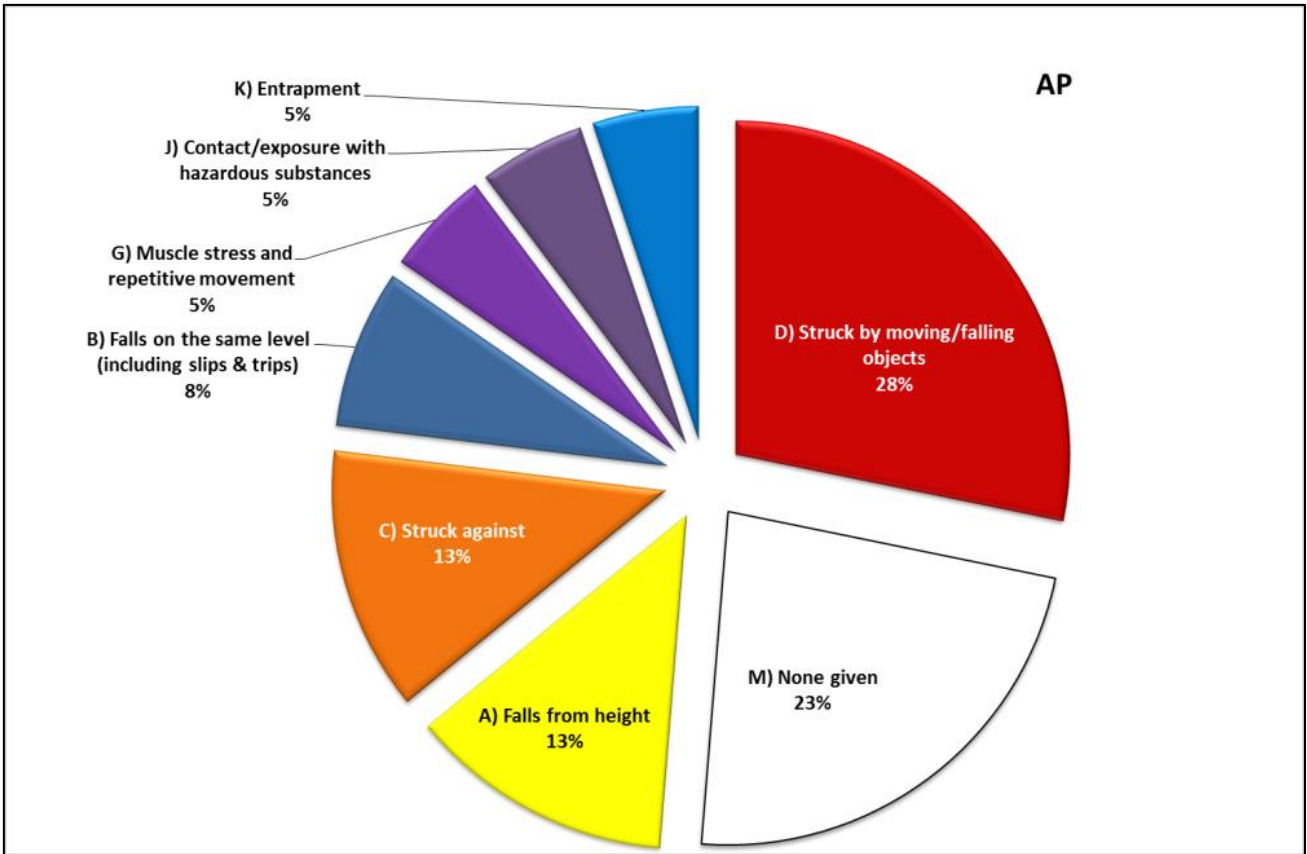


Figure 8: Causes of LTIs in Asia Pacific region

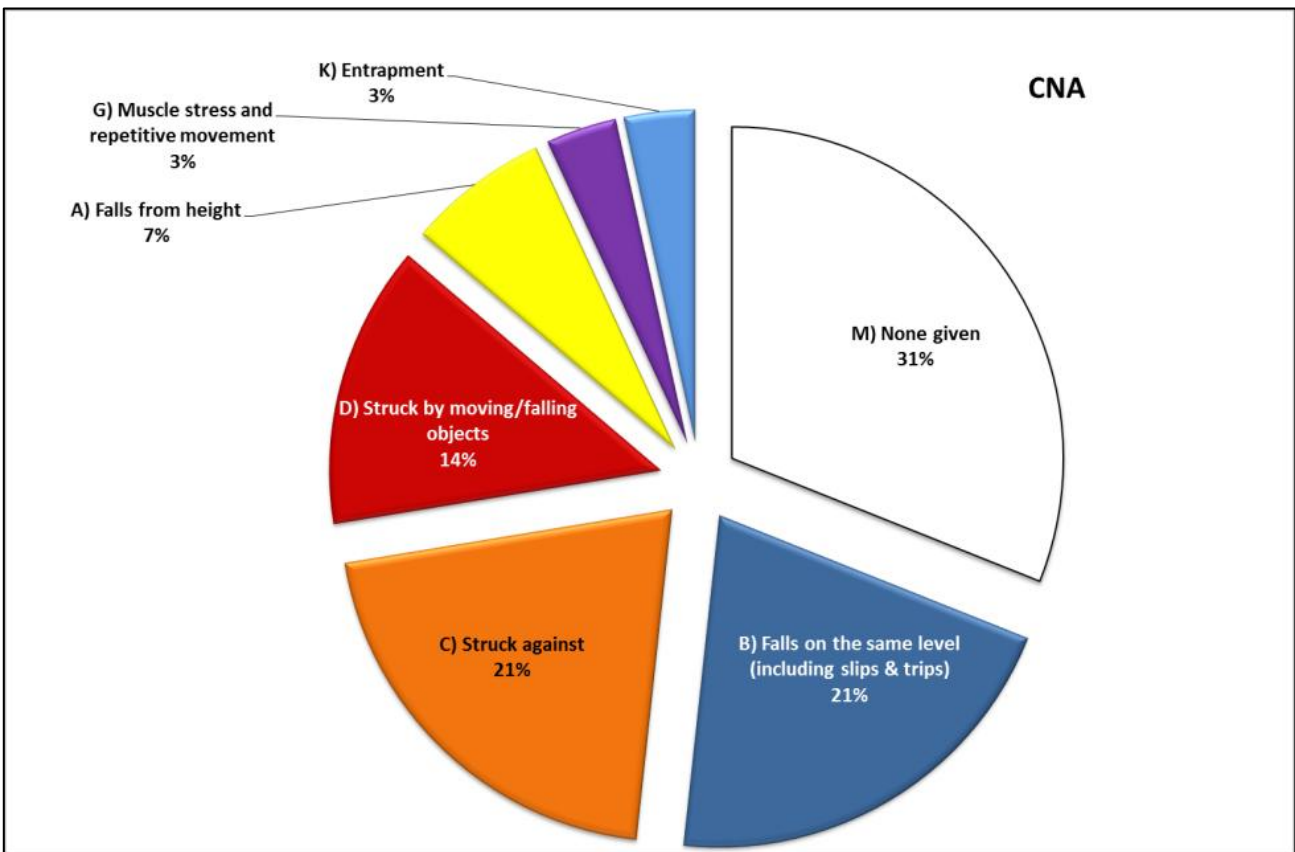


Figure 9: Causes of LTIs in Central & North America region

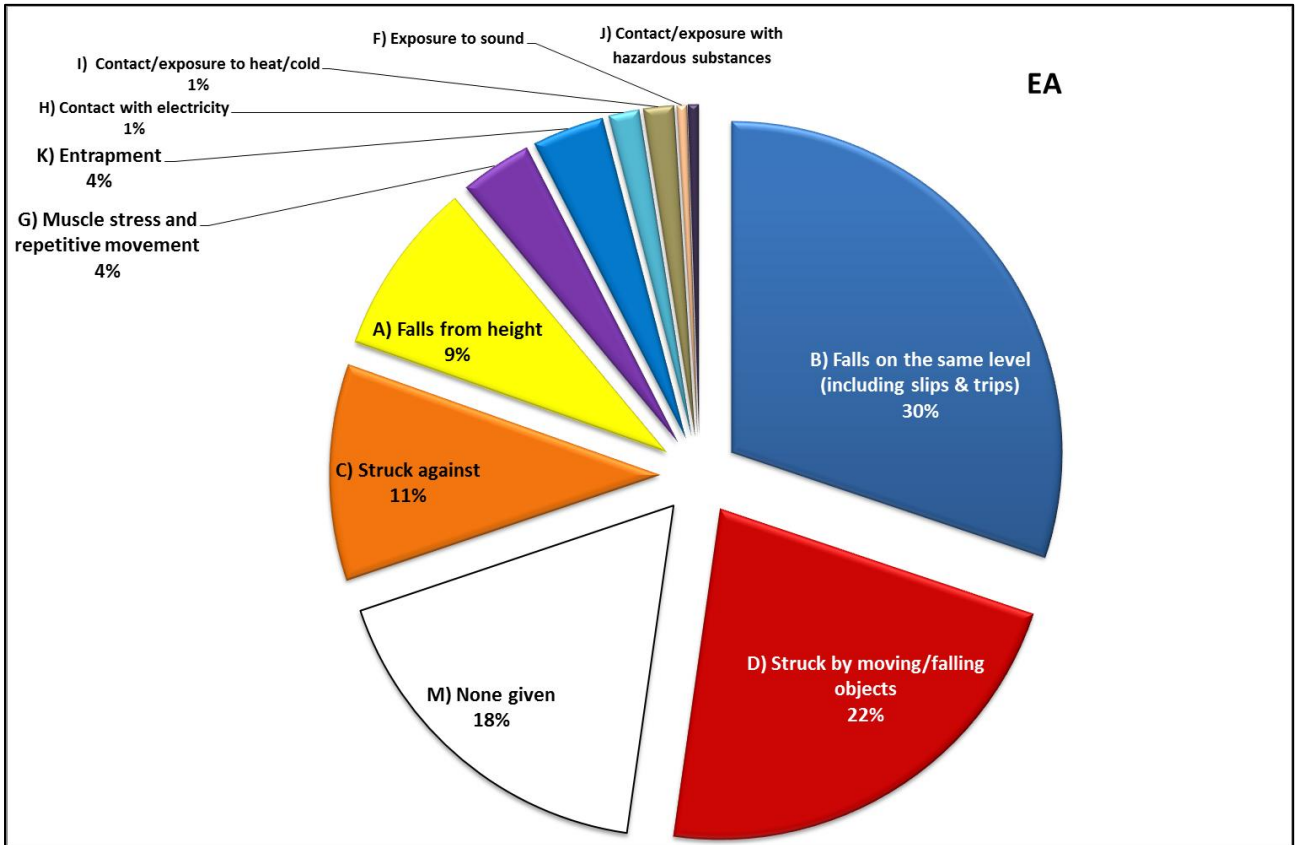


Figure 10: Causes of LTIs in Europe & Africa region

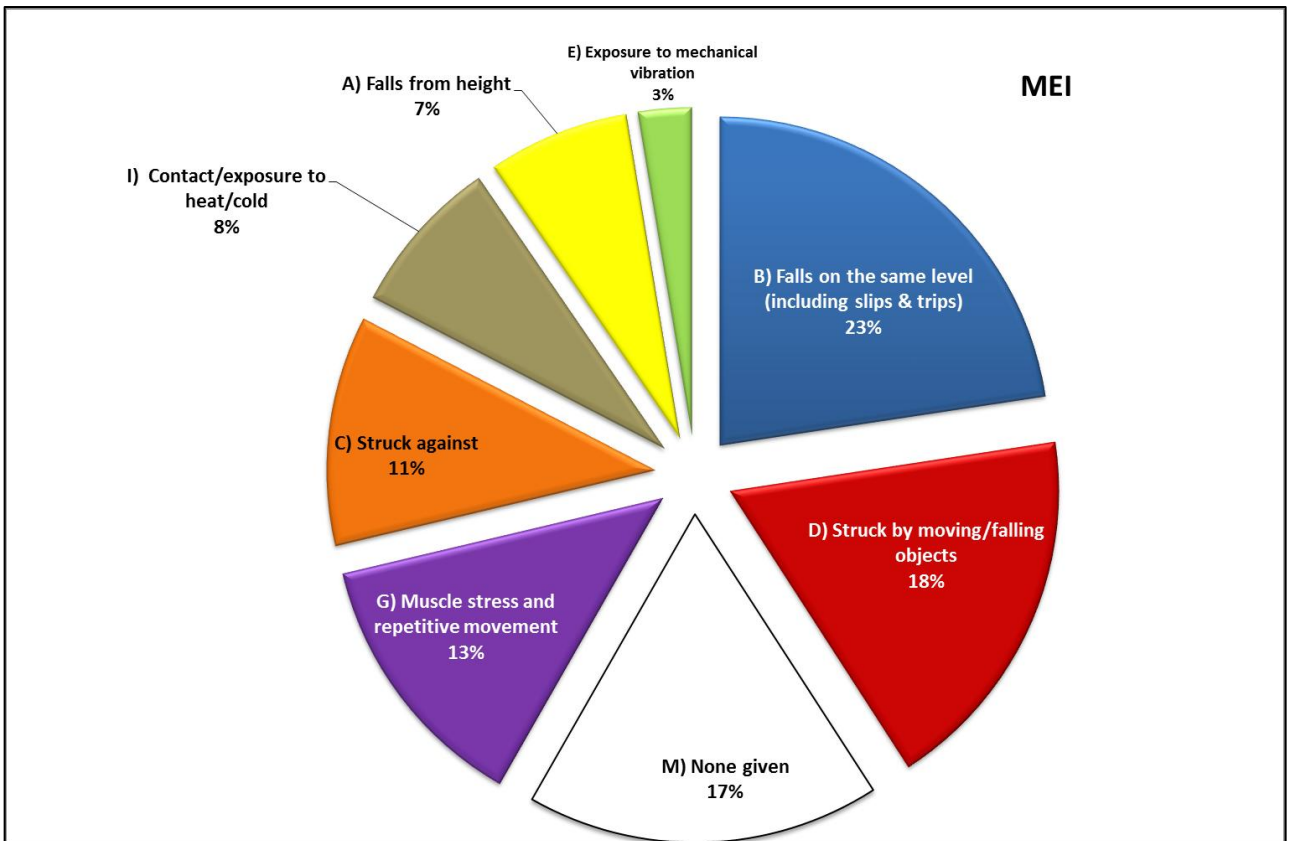


Figure 11: Causes of LTIs in Middle East & India region

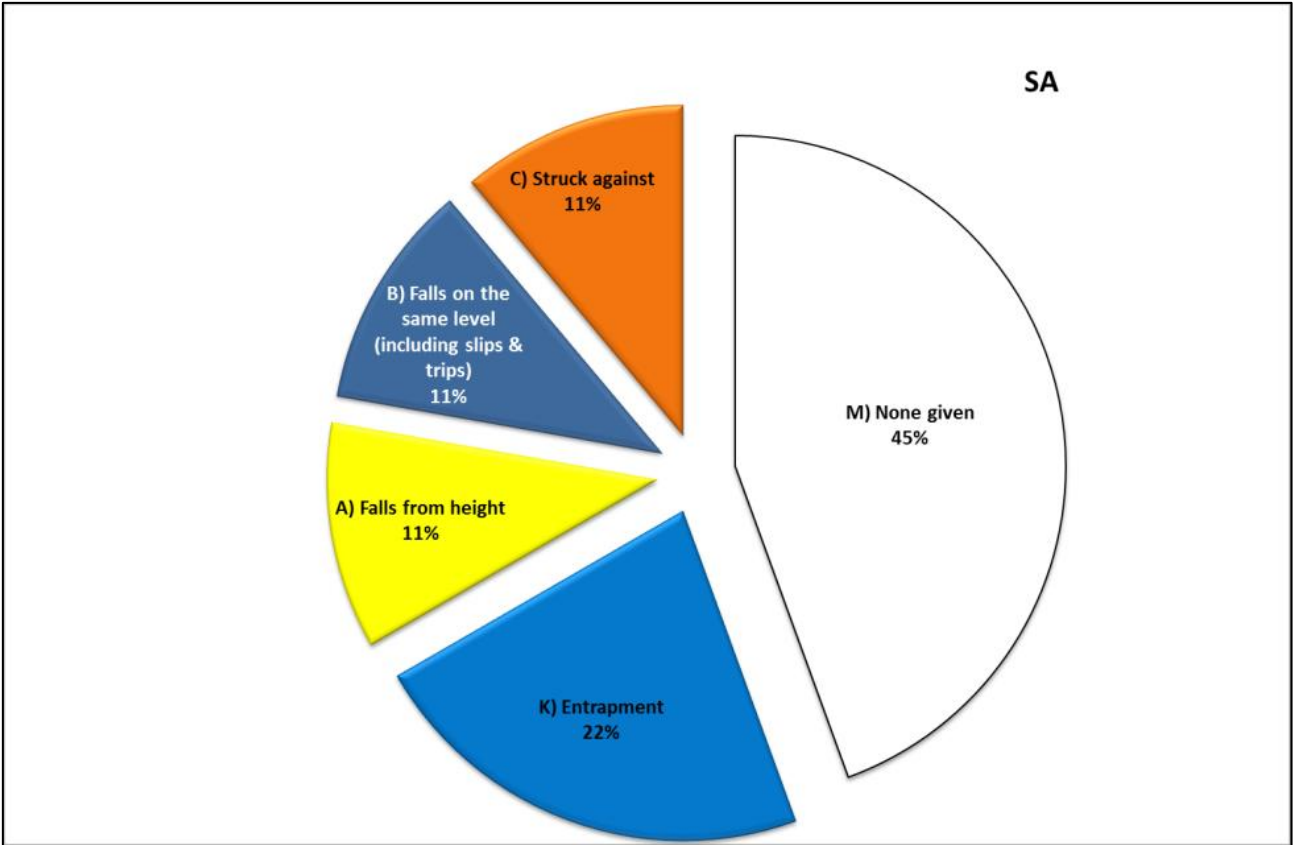


Figure 12: Causes of LTIs in South America region

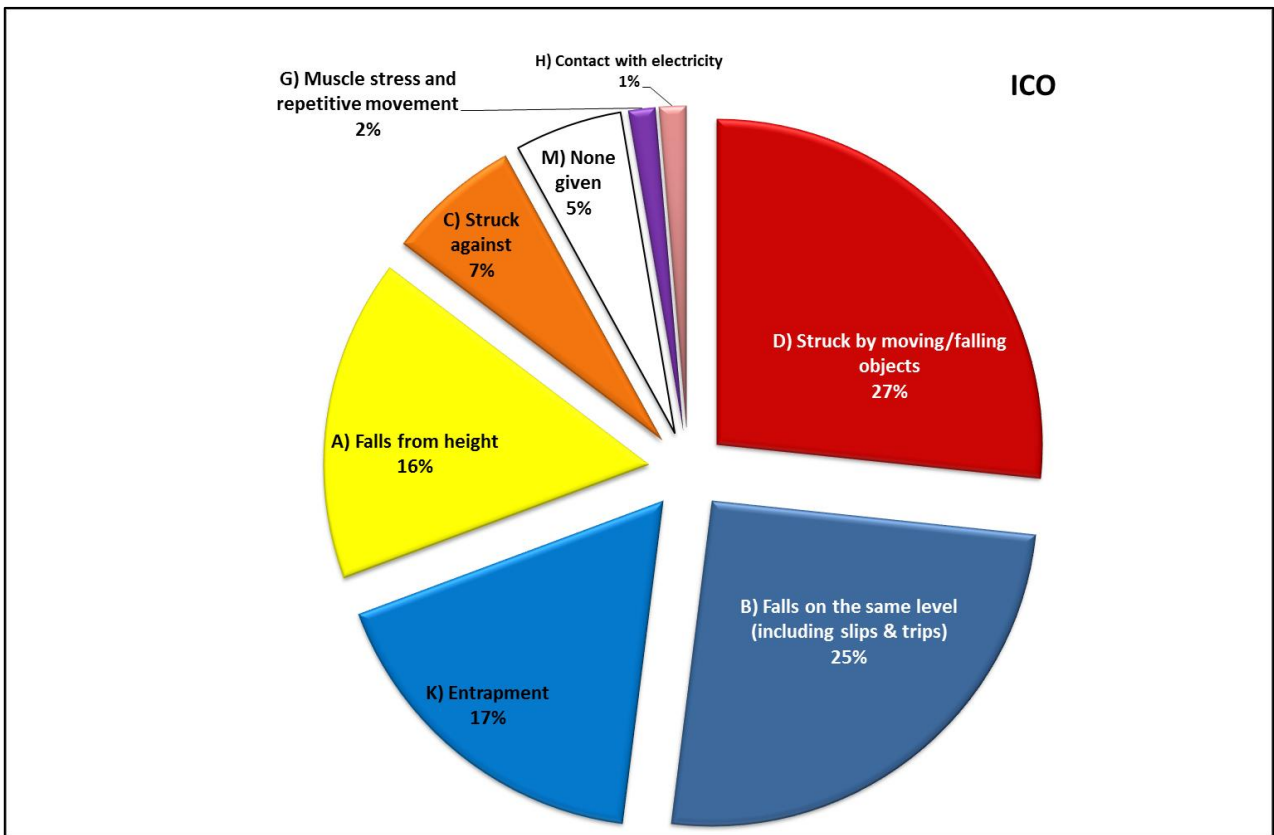


Figure 13: Causes of LTIs amongst ICO members

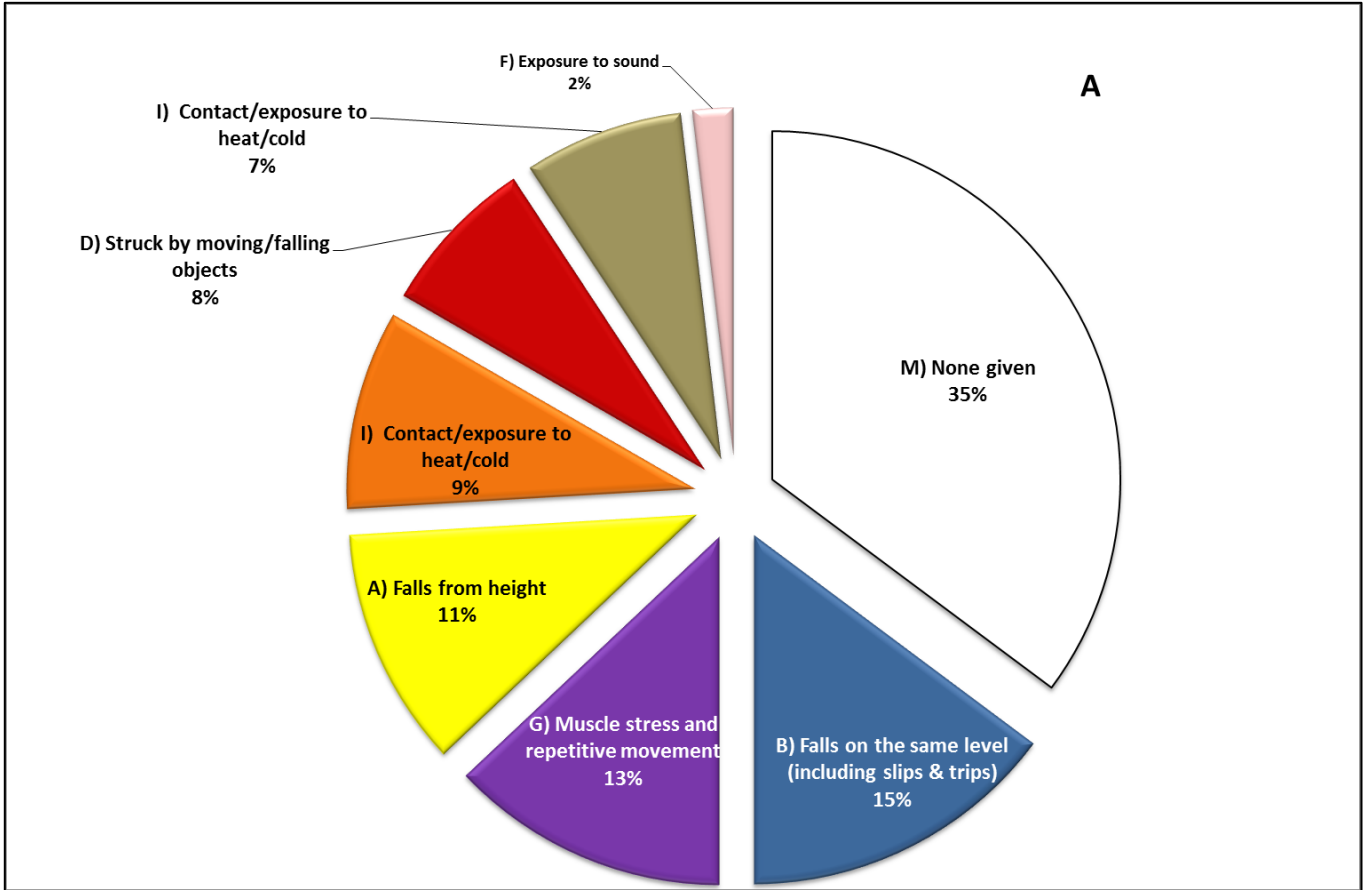


Figure 14: Causes of LTI in A-band members

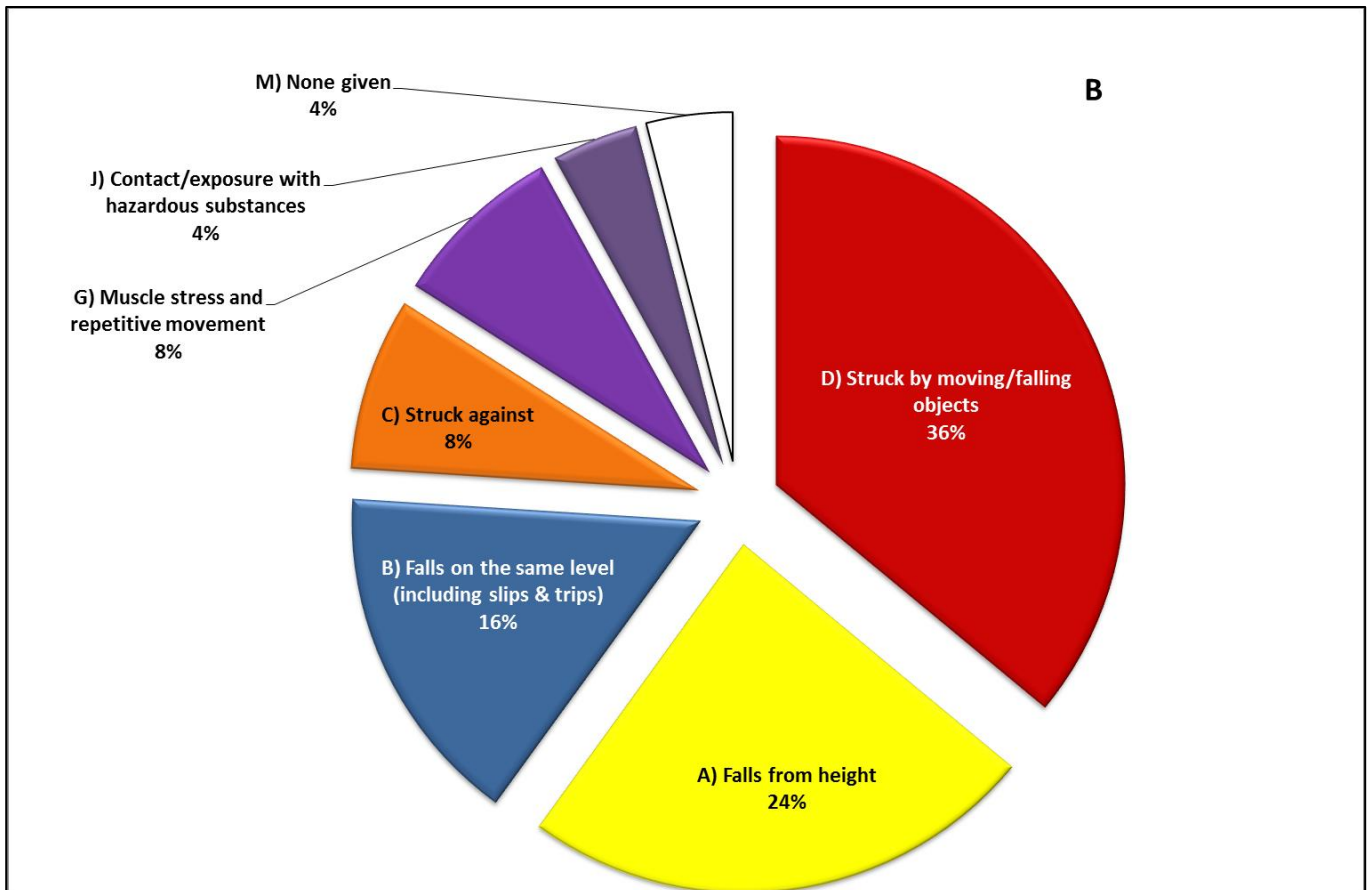


Figure 15: Causes of LTI in B-band members

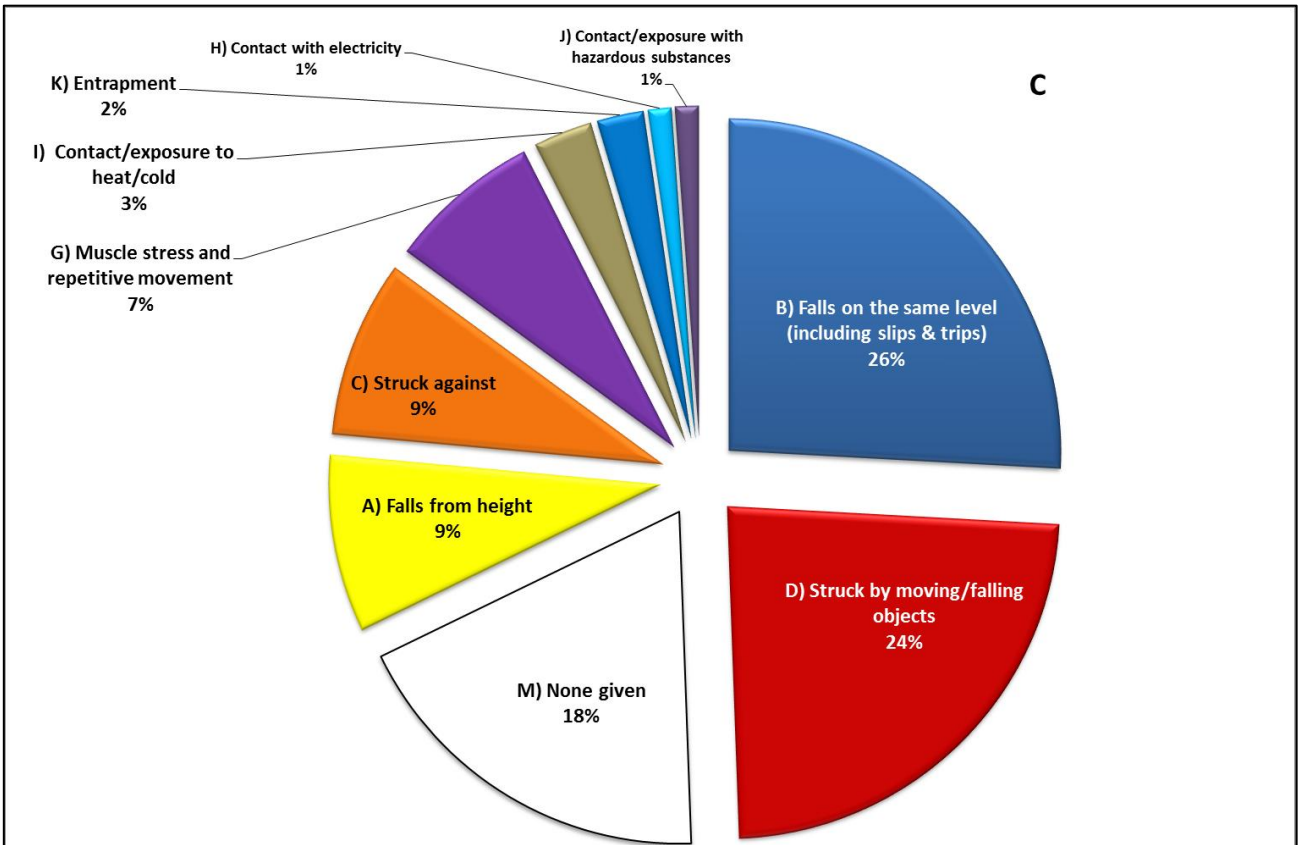


Figure 16: Causes of LTIs in C-band members

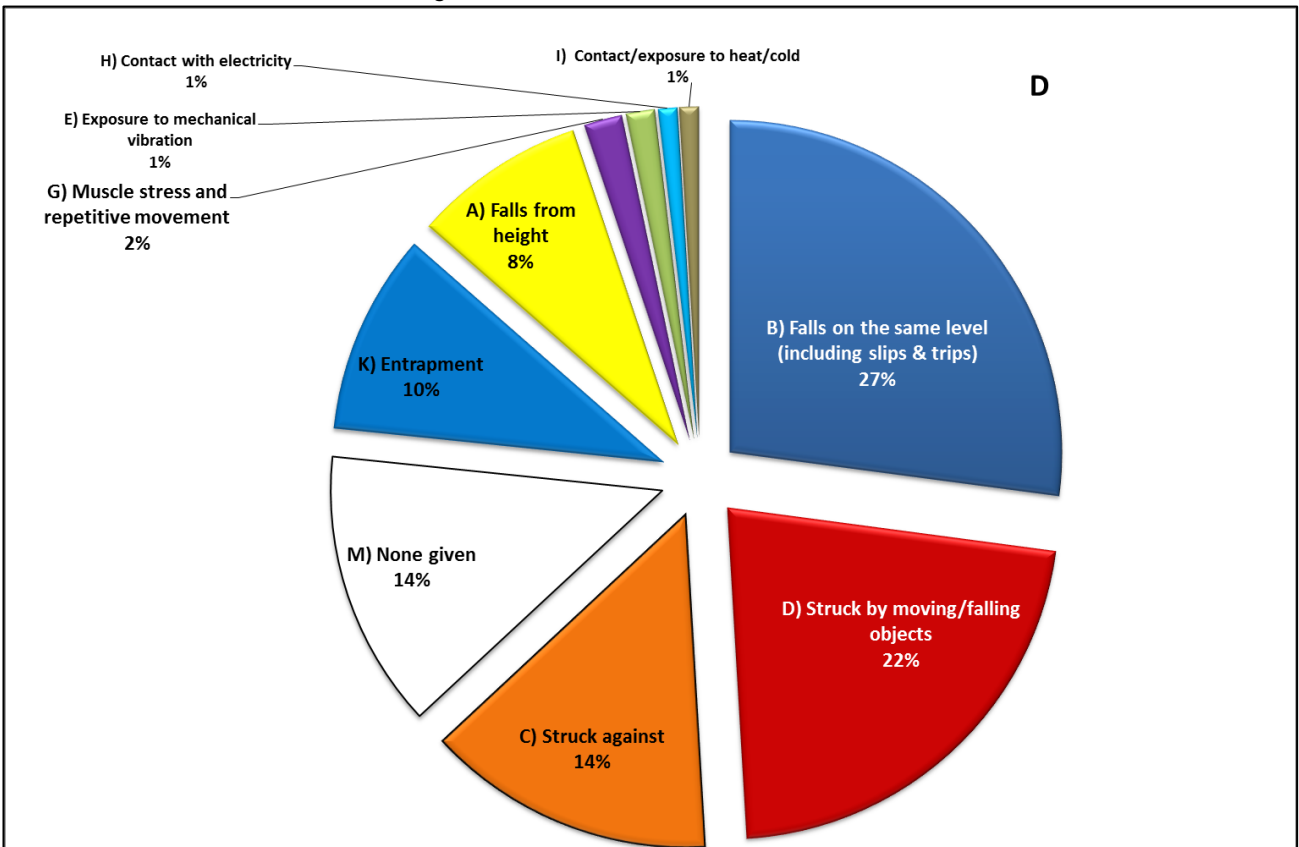


Figure 17: Causes of LTIs in D-band members

See Appendix 2 for individual company LTIFR and TRIR statistics.

7 Total Recordable Injury Rates (TRIR)

Total Recordable Injuries have been tracked for a number of years as a more reliable pointer to safety in the industry. In 2012, the **offshore TRIR** has improved to 1.95 from 2.63 in 2011. The **onshore TRIR** was 1.95, showing an increase in reported onshore incidents over two years (1.76 in 2001 and 1.64 in 2010). The **overall TRIR** was 1.93, an improvement on the 2011 figure of 2.40.

Year	Overall TRIR	Offshore TRIR	Onshore TRIR
2004		8.87	
2005	5.42	7.29	2.10
2006	4.14	4.35	3.06
2007	4.38	4.68	3.05
2008	2.50	2.50	2.40
2009	2.54	2.72	1.88
2010	2.74	3.19	1.64
2011	2.40	2.63	1.76
2012	1.93	1.95	1.95

Table 7 - Total Recordable Injury Rates (TRIR) 2004-2012

Year	Overall					Offshore				
	First aid	Medical treatment	RWC	Lost time injuries	Fatalities	First aid	Medical treatment	Lost time injuries	RWC	Fatalities
2003				198	5			133		4
2004				164	3			120		2
2005	1812	521	148	189	5	1703	436	172	130	4
2006	2072	492	190	226	6	1772	434	196	171	6
2007	3752	730	281	339	6	3200	607	315	252	6
2008	3877	745	345	433	7	2991	581	341	249	5
2009	4919	747	382	395	6	3911	631	340	314	6
2010	3759	831	378	393	7	2869	610	328	317	5
2011	4027	671	356	370	3	3077	542	303	285	3
2012	4319	843	499	467	16	3104	578	357	325	14

Table 8 - Recordable injuries and first aid cases 2003-2012

8 Fatal Accident Rate (FAR)

This year a number of fatalities have been reported including one single incident which unfortunately involved seven fatalities. This one incident has significantly increased the Fatal Accident Rate for this year to a higher level than is representative of the industry. Additionally, two of the fatalities reported were medical in nature (non-work related) rather than work-place incidents. Whilst all incidents should be seen as avoidable, it is important that companies are able to report incidents, injuries and fatalities without fear of commercial or other repercussions. IMCA continues to work closely with its members and other trade associations to ensure that all marine contracting industry work-place fatalities are properly recorded. IMCA members reported 14 offshore fatalities during 2012. Our focus remains on lessons learnt and information sharing, to ensure that these incidents never recur. To this end, IMCA is publishing brief and anonymous information on each of the fatality incidents reported this year:

Basic information on fatalities - 2012

- Six employees and a customer's contractor lost their lives in an explosion and subsequent fire onboard a vessel while assisting in a maintenance operation offshore a mooring buoy. (7)
- Crewman was dragged overboard by an oil hose which sank and fouled the vessel's propeller. He was recovered but subsequently died as a result of serious injuries sustained. (1)
- While subsea cutting a vertical diagonal pipe, the pile guide hit the diver on the back of his head and knocked his helmet off his head causing him to drown. (1)
- Crewman fell to his death from a Billy Pugh personnel transfer basket during transfer when the basket was swinging vigorously. (1)
- Crewman fatally injured when he was crushed between the ship's hull and the lifting frame of the ship's fast rescue craft. (1)
- Heart attack during diving operations. (1)
- Fatality during diving operations. (1)
- Heart attack (1)
- Fall from height (8m) leading to fatal injuries. (1)
- Operator fell out of wheel loader on uneven surface resulting in serious trauma in his chest and thighs that led to his fatality. (1)

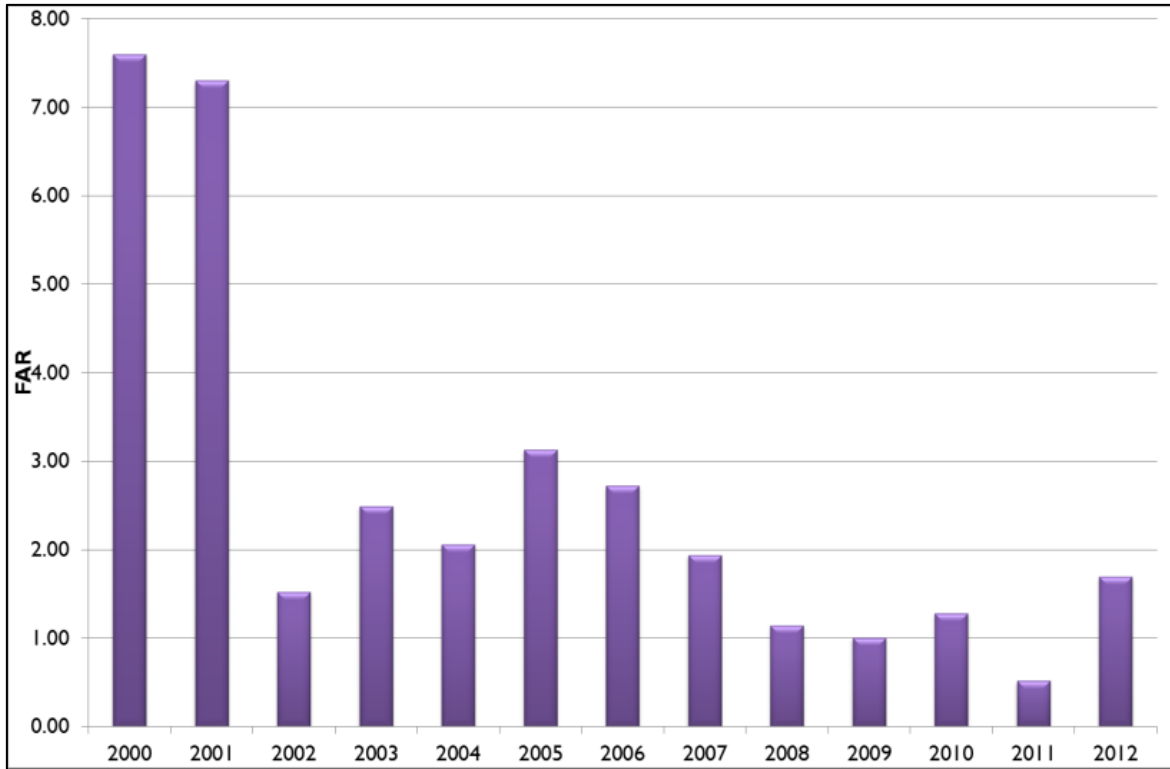


Figure 18: Overall FAR 2000-2012

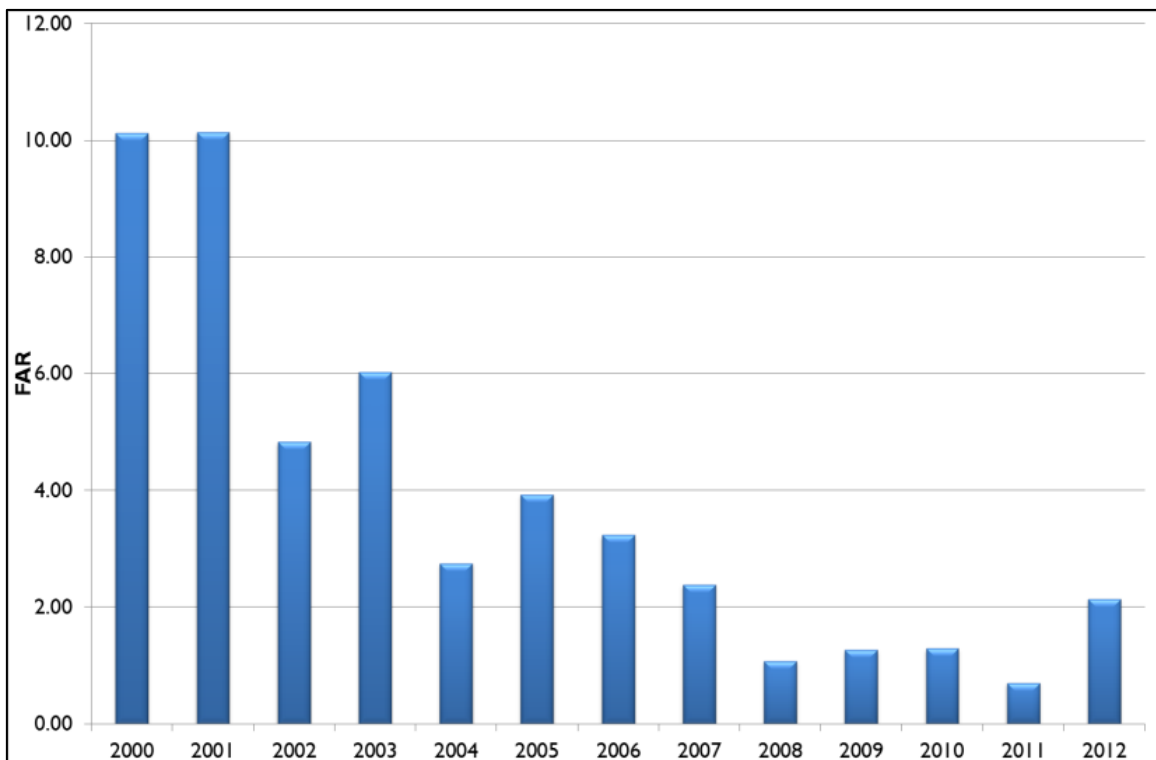


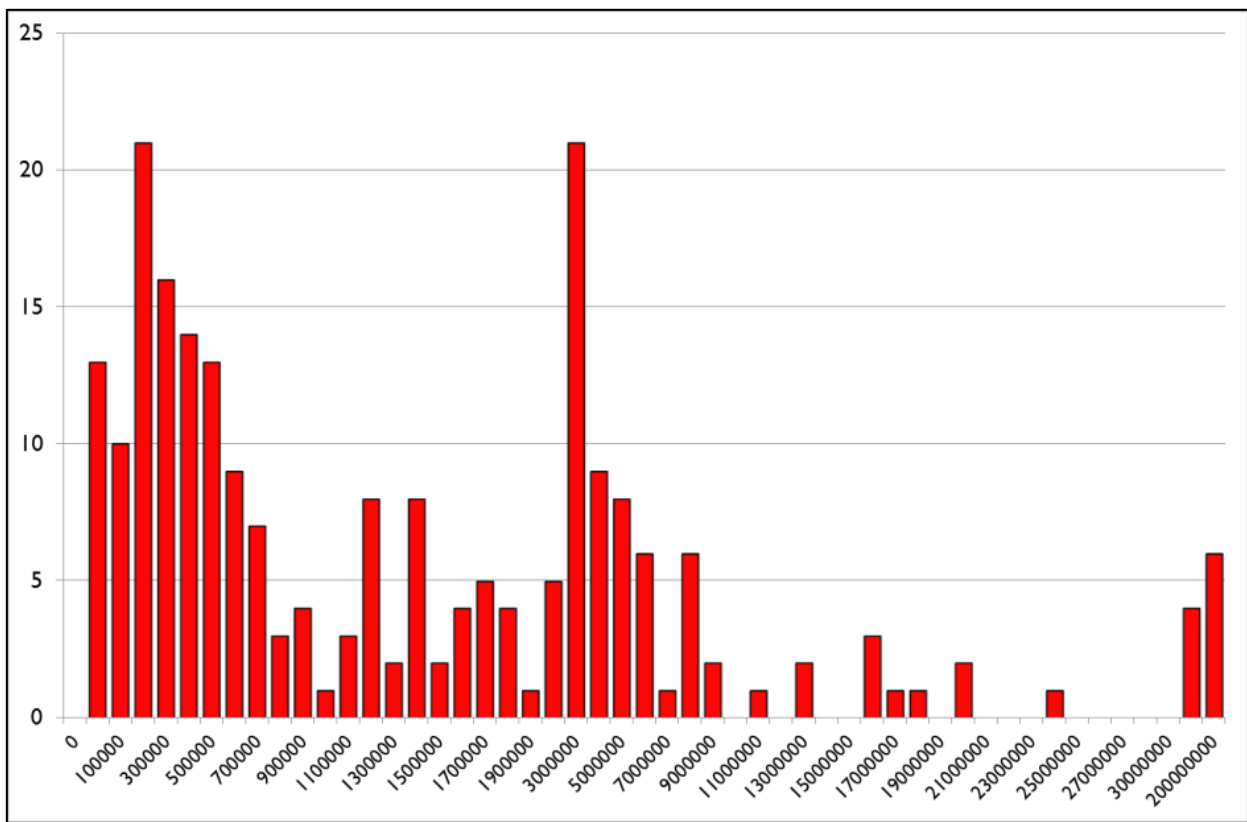
Figure 19: Offshore FAR 2000-2012

9 Hours Worked Banding

In order for members to identify how their company compares to others of similar size, contributing contracting companies have been divided into four bands, according to the overall man-hours reported. A “pareto” or “80-20” analysis of the contributed man-hours tells us that around a fifth of the companies taking part (45 of 227) contributed 81% of the man-hours. Eleven of the largest contributors worked half of all the 945 million man-hours.

Banding		Companies in band									
band	Hours worked	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
A	<500,000	11	15	17	27	33	44	64	69	74	86
B	500,000-1,000,000	4	3	9	13	18	13	17	25	27	25
C	1,000,000-5,000,000	9	11	16	21	30	47	42	52	68	80
D	>5,000,000	7	7	9	13	19	25	29	26	26	36

Table 9 - No. of companies in each band



9.1 Indicators and Statistics by Company Bands

	FAR	LTIFR	TRIR	LTI	TRI	Medical treatment	RWC	First Aid
Offshore								
Band A	0.00	3.50	10.22	50	146	16	80	264
Band B	22.46	1.50	4.72	17	63	6	37	79
Band C	1.30	1.04	3.27	158	502	127	215	1273
Band D	1.90	0.30	1.19	132	563	176	246	1488
Onshore								
Band A	0.00	1.00	3.50	4	14	3	7	81
Band B	0.00	2.65	3.31	8	10	0	2	22
Band C	0.00	0.64	1.77	16	44	8	20	153
Band D	0.77	0.32	1.87	82	483	163	236	959
Overall								
Band A	0.00	2.95	8.75	54	160	19	87	345
Band B	18.32	1.71	4.46	25	73	6	39	101
Band C	1.12	0.99	3.06	174	546	135	235	1426
Band D	1.50	0.31	1.43	214	1046	339	482	2447

Table 10 - Lagging indicators and statistics by company band 2012

N.B. Actual numbers of fatal accidents have been omitted to assist with preserving anonymity

	Safety Obs	SOFR	Management Visits	RAL	MVR	Safety Bulletins	LLR
Band A	40510	519.55	1163	64.13	14.92	447	5.73
Band B	14111	210.05	525	26.27	7.81	655	9.75
Band C	450040	570.22	6910	30.11	8.76	1996	2.53
Band D	572216	226.36	15264	14.90	6.04	1813	0.72
Total/IMCA	1076877	312.34	23862	19.78	6.92	4911	1.42

Table 11 - Leading indicators and statistics by company band 2012

Key: Please refer to Appendix 3 and Appendix 4 for further definition of these rates and acronyms.

FAR	Fatal Accident Rate	RWC	Restricted workday cases
TRI	Total Recordable Injuries	TRIR	Total Recordable Injury Frequency Rate
LTI	Lost Time Injury	LTIFR	Lost Time Injury Frequency Rate
SOFR	Safety Observation Frequency	RAL	Reporting Activity Level
MVR	Management Visit Ratio	Med trt	Medical treatment cases
LLR	Lessons Learnt Ratio	RWC	Restricted Workday case

9.2 Overall LTIFR and TRIR in Company Bands

Table 12 shows the overall LTIFR and TRIR of companies within the defined bands of number of hours worked.

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LTIFR	Band A	8.91	5.14	3.88	3.87	2.85	2.64	2.21	3.29	2.14	3.36	2.63	2.95
	Band B	3.13	5.15	0.96	2.71	3.07	2.02	1.34	1.62	1.39	1.24	1.55	1.71
	Band C	4.37	1.75	0.92	1.65	1.59	1.37	1.44	1.19	1.42	1.02	1.10	0.99
	Band D	2.15	1.10	0.87	1.53	0.83	0.74	0.94	0.56	0.44	0.52	0.35	0.31
TRIR	Band A					11.0	10.16	11.74	9.76	6.86	11.81	10.54	8.75
	Band B					11.3	8.29	7.86	6.29	4.86	5.13	5.04	4.46
	Band C					6.02	5.08	6.07	3.79	4.66	3.62	3.58	3.06
	Band D					4.57	3.19	3.42	2.02	1.91	2.01	1.52	1.43

Table 12 - Overall LTIFR and TRIR by company band

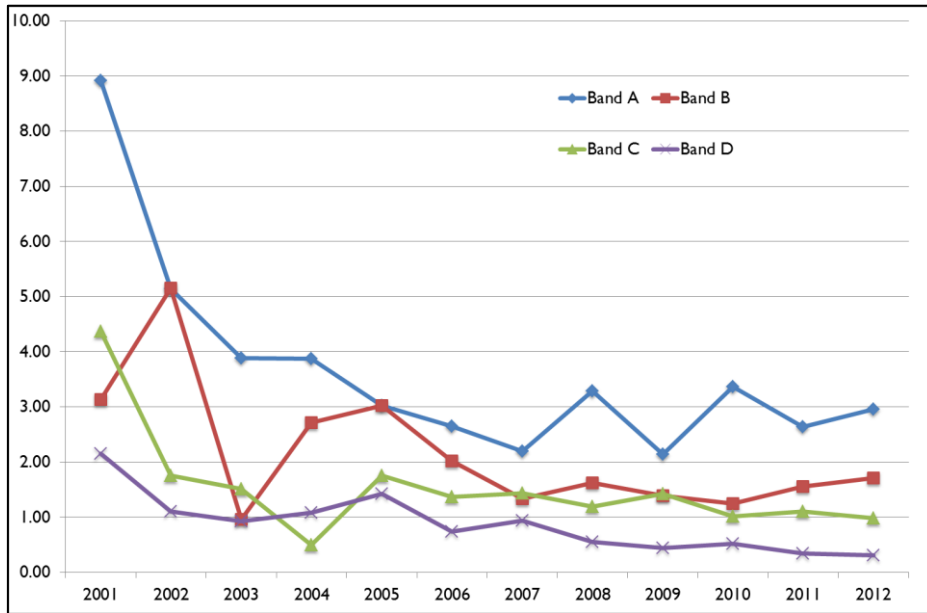


Figure 21: Overall LTIFR for company bands

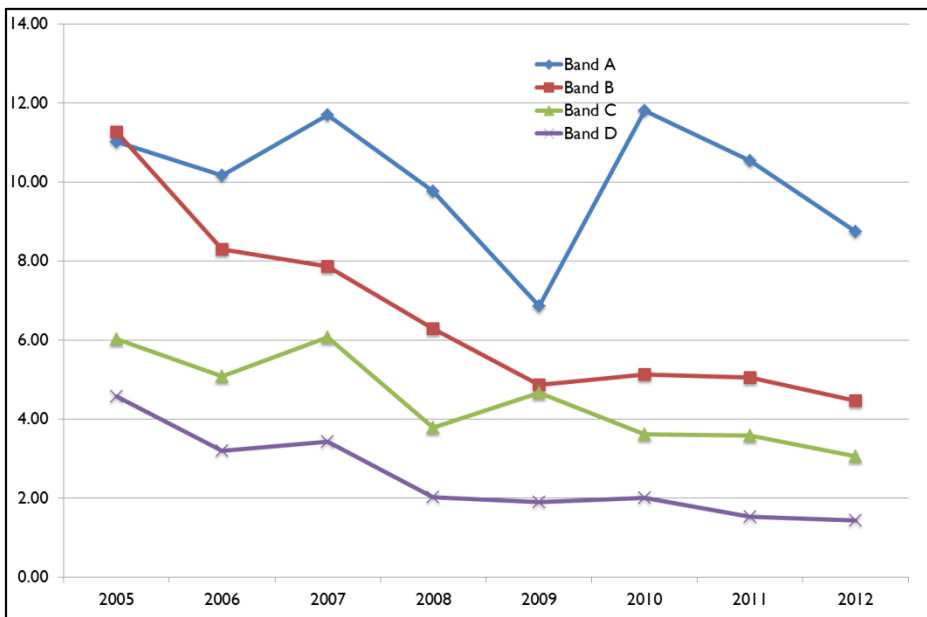


Figure 22: Overall TRIR for company bands

10 Comparison with Other Published Figures

10.1 International Association of Oil & Gas Producers (OGP) - 2012

Draft 2012 figures from OGP indicate an Overall TRIR of 1.74. The Overall LTIFR was 0.48. OGP members recorded 88 fatalities – an Overall (onshore and offshore) Fatal Accident Rate of 2.38 This information is based on 3691 million man-hours of work.

The Offshore TRIR recorded by OGP members was 2.53; the Offshore LTIFR was 0.81 and the Offshore FAR 0.89, based upon 903 million man-hours of offshore work.

Comparison of Overall Total Recordable Injury Frequency Rates (TRIR) between Trade Associations								
	2005	2006	2007	2008	2009	2010	2011	2012
IMCA	5.41	4.14	4.38	2.50	2.54	2.74	2.40	1.93
OGP	3.05	2.92	2.68	2.08	1.75	1.68	1.76	1.74
IADC	11.71	10.85	10.24	9.11	6.12	6.55	4.17	

Table 13 - Comparison of trade association TRIR

11 Leading Performance Indicators

11.1 Overall

IMCA has been collecting Leading Performance Indicator data for ten years. The table below shows how the Leading Performance Indicators have changed over that time. This table was recalculated in 2009 to show the leading performance indicators based on 200,000 man-hours.

	SOFR	RAL	MVR	LLR
2003	160.95	160.65	2.25	0.36
2004	160.44	113.80	4.27	0.66
2005	190.19	70.14	7.32	2.29
2006	159.49	51.11	3.46	1.70
2007	153.02	67.30	4.10	2.27
2008	216.63	28.92	6.31	1.77
2009	209.25	39.84	13.61	1.29
2010	258.39	41.67	13.59	1.61
2011	265.20	30.79	5.81	1.23
2012	312.34	19.78	6.92	1.42

Table 14 - Leading Performance Indicators 2003-2012

	SOFR	RAL	MVR	LLR
AP	452.27	16.23	5.65	3.22
CNA	545.47	31.74	8.32	1.02
EA	235.11	23.26	5.73	1.16
MEI	172.56	12.86	3.70	1.03
NA	929.55	29.57	0.68	4.59
ICO	342.05	15.49	12.82	1.21
IMCA	312.34	19.78	6.92	1.42

Table 15 - Leading safety indicators (overall) by region

11.2 Safety Observation Frequency Rate (SOFR)

Safety Observations are defined as reports identifying at-risk behaviour, unsafe conditions or similar, e.g. STOP cards, and were provided by 206 of the 227 contributing contractors. We continue to see widely variant interpretations of the definition of a “safety observation”, and data from two contractors have been excluded from the IMCA calculation, as being a highly improbable number of safety observations given the man-hours reported.

There is still very wide variation in reporting levels and in the Safety Observation Frequency Rate thus calculated, which varies over four orders of magnitude, from 0.5 to 7148.

Analysis of the data shows that the average rate of observations per person offshore (based on 12 hour shifts for 180 days a year) is 5.9, with a maximum of 45 observations per person in 2012. Both average and maximum are convincing and realistic figures.

SOFR is a rate that should rise year on year – whilst working to create an accident-free and injury-free workplace, there will always be room for improvement and subsequent reporting of that improvement. It is this positive and proactive reporting that needs to be encouraged.

No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR
1	22957	3058	58	2158	547.4	115	2046	954.2	172		
2	12	125.71	59	61163	1393	116	13954	332.1	173	19	28.27
3	7401	740.47	60	307	74.3	117	20811	550.4	174	29	34.27
4			61	1465	736.2	118	1381	998.9	175	48	0.545
5			62	22	2.126	119	4	2.151	176	38	74.51
6	1563	623.48	63	209	203.8	120	4241	2566	177		
7	5	0.7666	64	1046	93.96	121	11454	2389	178	848	297.4
8	590	742.79	65	29	398.8	122	995	439.1	179	125	7015
9			66	24819	128.1	123			180	289	165.4
10	57	446.43	67	125	84.61	124	9461	278.5	181	9916	1724
11	34017	1830.3	68	731	495.3	125	46	33.88	182	2759	341.5
12	437	49.625	69	390	1565	126	5774	424.6	183	5320	16.92
13	1708	162.63	70	2779	137.2	127	46	27.21	184	45	134
14	8	15.932	71	3843	440.6	128	19482	682.3	185		
15	475	1751.1	72	116	64.06	129	42	76.23	186		
16	5	3.119	73	3540	194	130	1002	143.3	187	1	2.234
17	30	36.174	74	2051	957.7	131	17514	2089	188	1400	191.3
18	37235	442.46	75	384	56.83	132	849	111.6	189	56	97.09
19	12	75.245	76	182	13.72	133			190		
20	1395	38.75	77	35	57.79	134	84	16.32	191	728	831.1
21			78	108	92.14	135	1587	109.8	192	2	1.343
22	350	200.11	79	10764	785.3	136	1899	1169	193	2	0.92
23	3245	386.79	80	110	16.31	137	5	134	194	52	30.16
24	5030	463.61	81	244	45.46	138			195	4790	455.2
25	6542	744.4	82			139	6254	64.99	196	32	17.3
26			83	18546	1336	140	17976	508.9	197	13558	368.1
27	1452	8.4055	84	3	263.2	141	353	175.6	198	223	49.63
28	21228	1097.5	85	202	17.35	142	4385	158.6	199	12	77.67
29			86	4591	702.2	143	30	12.61	200	615	85.07
30	153	57.438	87	12	3.032	144	1054	659.4	201	574	274.7
31	7074	340.1	88	12360	1620	145	26162	225.6	202	120	52.87
32	126	89.818	89	523	232.1	146	12674	2656	203	3886	650
33	104	622.16	90	5031	479.8	147	15187	2977	204	2917	3785
34	1425	576.76	91	90	17.94	148	999	578.1	205	2984	455.2
35	3531	397.5	92	32148	2366	149	2250	4172	206	38965	2391
36	1184	152.72	93	65530	1893	150	52662	614.1	207	2010	242.2
37	540	889.42	94	8	2.607	151	1005	265.1	208	59	10.29
38	36	8.1381	95	1678	1632	152	20860	804.8	209	2003	348.3
39	3631	176.64	96	3204	177	153	7593	358.8	210	2667	1344
40	270	184.67	97	113	17.78	154	134	141.2	211	35	35.23
41	35	393.08	98	10802	55.06	155	566	2382	212		
42	207	5.4206	99	11547	1110	156	150	32.05	213	1919	687.1
43	230	29.79	100			157	1538	381.9	214	6957	3157
44	3172	4137	101	207	802.5	158	103	68.54	215		
45	8760	362.41	102	4	7.349	159	80	15.15	216	9003	906
46	25318	1409.5	103	4850	335.3	160	422	520.7	217	1037	191.9
47			104	29	13	161	733	12.1	218	2380	31.57
48	148	99.564	105	68	46.16	162	13729	323.8	219	200	16.46
49	455	2.4407	106	55	5.769	163	2667	595.6	220	6250	294.1
50	3138	134.89	107	80	3.462	164	2890	1722	221	791	1947
51	27315	502.47	108	4	1.426	165	325	38.12	222	1009	12.74
52			109			166	36239	2626	223	6	9.857
53	398	32.34	110	189	149.7	167	4	48.06	224	199	69.7
54	8	55.21	111	5	4.587	168	7	19.36	225	719	7.522
55	524	503.59	112	674	104.6	169	317	7178	226	54	11.66
56	183	965.19	113	399	31.54	170	78827	1475	227	131	13.69
57	4272	541.87	114	600	1977	171	80	337.8	IMCA	1076877	312.34

Table 16 - Safety Observation Frequency Rate (SOFR) 2012

11.3 Reporting Activity Level (RAL)

The Reporting Activity Level, designed as an indicator of how good a company's "reporting culture" is, is calculated as a rate. The number of hours over which it is normalised changed in 2009 from 1,000,000 to 200,000 to maintain consistency with the other leading indicators. The definition of FNMR, MTR and RWIR can be found in the Appendix. The number of man-hours used in the calculation depends on whether the contractor states that leading indicators are based on overall (combined offshore and onshore) man-hours, or on offshore man-hours.

Reporting Activity Level (RAL) = ((5 × FNMR) + (20 × MTR) + (100 × RWIR)). In the past this has been calculated per million man-hours; it is now calculated per **200,000 man-hours** and the results from previous years have been recalculated.

Med					Med				
Co	trt	RWP	First Aid	RAL	Co	trt	RWP	First Aid	RAL
1	1	1	3	17.98	115	5	0	0	46.64
2	0	0	1	52.38	116	14	5	82	28.32
3	6	0	3	13.51	117	11	1	82	19.31
4	0	0	0	0.00	118	11	0	10	195.30
5	0	0	2	7.49	119	2	0	7	40.32
6	2	0	1	17.95	120	1	0	8	36.30
7	1	2	6	38.33	121	3	2	15	69.88
8	1	0	5	56.65	122	0	0	0	0.00
9	0	0	0	0.00	123	1	0	1	21.51
10	0	0	0	0.00	124	3	0	8	2.94
11	3	0	20	8.61	125	2	2	2	184.15
12	2	2	9	32.36	126	2	0	0	2.94
13	3	3	23	45.23	127	0	1	0	59.16
14	1	0	0	39.83	128	16	15	27	68.47
15	0	0	0	0.00	129	0	1	0	181.50
16	4	0	4	62.38	130	1	1	13	26.46
17	0	0	0	0.00	131	2	0	27	20.87
18	14	9	131	21.81	132	9	0	14	32.88
19	0	0	0	0.00	133	8	0	0	4.48
20	4	0	3	2.64	134	0	0	0	0.00
21	0	0	0	0.00	135	1	2	23	23.19
22	7	3	5	265.87	136	2	0	1	27.71
23	1	2	12	33.37	137	0	0	3	401.93
24	2	1	20	22.12	138	0	0	0	0.00
25	0	2	25	36.98	139	0	5	16	6.03
26	0	0	0	0.00	140	10	12	59	47.98
27	5	0	19	1.13	141	0	0	1	2.49
28	4	3	44	31.02	142	3	2	15	12.11
29	0	0	0	0.00	143	0	0	2	4.20
30	1	2	7	95.73	144	0	0	0	0.00
31	1	0	11	3.61	145	24	28	233	38.32
32	1	0	1	17.82	146	0	0	5	5.24
33	0	0	0	0.00	147	5	1	19	57.83
34	3	0	9	42.50	148	0	0	6	17.36
35	4	0	20	20.26	149	0	0	0	0.00
36	5	5	12	85.13	150	17	14	198	31.84
37	0	0	0	0.00	151	0	0	11	14.51
38	2	0	19	30.52	152	8	5	0	25.46
39	3	2	18	17.03	153	1	0	6	2.36
40	1	0	1	17.10	154	1	0	0	21.08
41	0	0	0	0.00	155	0	0	0	0.00
42	6	0	2	3.40	156	1	0	3	7.48
43	1	2	11	35.62	157	0	0	0	0.00
44	4	2	18	482.56	158	0	1	1	69.87
45	9	0	0	7.45	159	1	1	13	35.04
46	3	0	0	3.34	160	0	0	0	0.00
47	0	0	0	0.00	161	1	1	10	2.81
48	1	0	1	16.82	162	9	5	10	17.22
49	0	2	7	1.26	163	0	0	0	0.00
50	7	5	30	33.96	164	0	0	0	0.00
51	4	10	83	27.50	165	0	0	4	2.35
52	0	0	1	3.57	166	4	1	40	27.53
53	1	5	15	48.35	167	0	0	0	0.00
54	0	0	0	0.00	168	1	0	0	55.33
55	2	2	2	240.26	169	0	0	0	0.00
56	0	0	1	26.37	170	14	5	50	19.28
57	0	0	12	7.61	171	0	0	0	0.00
58	2	0	0	10.15	172	0	0	0	0.00
59	8	2	85	17.88	173	0	0	0	0.00
60	7	0	0	33.88	174	0	0	0	0.00
61	1	0	4	20.10	175	4	0	31	2.67
62	1	0	11	7.25	176	0	0	0	0.00

Co	Med trt	RWP	First Aid	RAL	Co	Med trt	RWP	First Aid	RAL
63	0	0	1	4.88	177	12	10	15	124.85
64	2	3	9	34.58	178	0	0	0	0.00
65	0	0	0	0.00	179	1	1	0	6734.01
66	11	14	93	10.76	180	0	1	0	57.22
67	0	0	1	3.38	181	4	1	57	80.84
68	0	0	1	3.39	182	4	0	11	16.71
69	0	0	1	20.07	183	13	6	37	3.32
70	8	0	45	19.00	184	1	0	0	59.55
71	2	2	48	55.03	185	3	0	18	25.40
72	0	0	6	16.57	186	0	0	0	0.00
73	1	0	1	1.37	187	2	0	2	111.68
74	0	0	2	4.67	188	6	1	20	43.72
75	1	0	0	2.96	189	0	0	2	17.34
76	2	0	1	3.39	190	2	0	10	28.85
77	0	0	4	33.02	191	0	0	0	0.00
78	0	0	3	12.80	192	0	0	0	0.00
79	3	3	71	52.17	193	0	0	1	2.30
80	6	3	13	71.91	194	17	2	20	371.14
81	1	0	0	3.73	195	2	2	25	34.69
82	0	0	5	10.15	196	0	1	3	62.18
83	8	2	27	35.67	197	2	4	87	23.76
84	0	0	0	0.00	198	0	2	4	48.96
85	9	10	19	109.53	199	0	0	0	0.00
86	7	0	5	25.24	200	0	2	7	32.50
87	4	1	0	45.47	201	0	0	1	2.39
88	3	2	24	49.80	202	1	0	1	11.01
89	0	1	4	53.24	203	0	0	3	2.51
90	1	1	5	13.83	204	0	0	1	6.49
91	0	0	0	0.00	205	0	2	3	32.80
92	1	7	17	59.25	206	4	11	92	100.63
93	1	11	47	39.14	207	1	1	1	15.06
94	4	0	3	30.96	208	1	0	15	16.57
95	1	1	5	141.03	209	1	0	14	15.65
96	17	4	101	68.77	210	1	0	3	17.63
97	0	0	3	2.36	211	1	1	3	135.87
98	27	26	177	20.51	212	1	1	1	23.49
99	2	2	4	24.99	213	2	0	7	26.85
100	1	0	1	2.56	214	0	0	0	0.00
101	0	0	1	19.38	215	0	0	0	0.00
102	0	0	0	0.00	216	0	1	10	15.09
103	0	2	40	27.65	217	3	0	2	12.95
104	6	0	8	71.71	218	21	36	94	59.57
105	0	0	0	0.00	219	0	2	1	16.87
106	3	1	11	22.55	220	2	0	40	11.29
107	13	4	34	35.92	221	5	0	124	1772.00
108	0	0	3	5.35	222	15	0	10	4.42
109	0	0	0	0.00	223	5	0	2	180.71
110	2	0	52	237.56	224	0	2	0	70.05
111	1	0	2	27.52	225	2	3	10	4.08
112	11	2	25	84.61	226	0	0	23	24.84
113	7	3	18	41.90	227	1	2	7	26.64
114	0	1	1	346.05	IMCA	843	499	4319	19.78

Table 17 - Reporting Activity level (RAL) 2012

11.4 Management Visit Ratio (MVR)

Management Visit Ratio (MVR) = No. of Managerial Visits per 200,000 man-hours.

Management visit data was provided by 207 of the 227 contractors. Data from 16 contractors has been excluded from the IMCA calculation as somewhat improbable given the man-hours reported and criteria for a management visit which were stated in the guide to contributors. These are repeated here:

- ◆ The visiting manager has commercial or production responsibility for the company (e.g. Managing Director);
- ◆ The visiting manager is directly responsible for the conduct of the project (e.g. Project Manager);
- ◆ The visiting manager is directly responsible for the operational or service support activities of the particular offshore barge or ship (e.g. Operations Manager);
- ◆ The visiting manager has responsibility for health, safety and environmental processes or other key process within the company;

- ◆ The visits should be made offshore during operational activities and be of at least 24 hours duration;
- ◆ The visit must include a safety briefing or presentation to the majority of the offshore people;
- ◆ The visit may also involve the manager making a safety performance check of the site with the people who manage or supervise the activities.

Co	M/visits	MVR	Co	M/visits	MVR	Co	M/visits	MVR	Co	M/visits	MVR
1	6	0.80	58	14	3.55	115	116	54.10	172		
2			59	1523	34.69	116	172	4.09	173	28	41.67
3	12	1.20	60	26	6.29	117		0.00	174	15	17.73
4	7	37.81	61	58	29.15	118	7	5.06	175	154	1.75
5		0.00	62	13	1.26	119	10	5.38	176	7	13.73
6	1	0.40	63	8	7.80	120	26	15.73	177		0.00
7	25	3.83	64	2	0.18	121	6	1.25	178	113	39.62
8	4	5.04	65			122	86	37.95	179	0	0.00
9	5	11.07	66	2721	14.05	123		0.00	180	11	6.29
10	0	0.00	67			124	35	1.03	181	187	32.51
11	529	28.46	68	20	13.55	125	31	22.83	182	21	2.60
12	13	1.48	69	14	56.18	126	25	1.84	183		0.00
13	69	6.57	70	92	4.54	127	20	11.83	184	6	17.86
14	8	15.93	71			128	557	19.51	185		0.00
15	6	22.12	72	29	16.02	129	6	10.89	186		0.00
16	32	19.96	73	155	8.49	130	54	7.72	187	6	13.40
17	18	21.70	74	2	0.93	131	34	4.05	188	17	2.32
18			75	23	3.40	132	15	1.97	189	25	43.34
19	0	0.00	76	12	0.90	133		0.00	190	30	9.62
20	5	0.14	77	4	6.60	134	115	22.34	191	3	3.42
21			78	8	6.82	135	32	2.21	192	2	1.34
22	60	34.31	79	54	3.94	136	1	0.62	193	12	5.52
23	117	13.95	80	250	37.07	137	2	53.59	194	4	2.32
24	40	3.69	81	39	7.27	138		0.00	195	20	1.90
25	330	37.55	82		0.00	139	9	0.09	196	3	1.62
26		0.00	83	64	4.61	140		0.00	197	123	3.34
27	35	0.20	84			141	12	5.97	198	24	5.34
28	37	1.91	85	78	6.70	142	10	0.36	199	2	12.94
29		0.00	86	215	32.89	143	10	4.20	200	224	30.98
30	18	6.76	87	0	0.00	144			201	14	6.70
31	550	26.44	88	40	5.24	145	435	3.75	202	81	35.69
32	10	7.13	89	35	15.53	146		0.00	203	15	2.51
33	4	23.93	90	92	8.77	147	23	4.51	204	12	15.57
34	21	8.50	91	12	2.39	148	86	49.76	205		
35	192	21.61	92	51	3.75	149			206	766	47.00
36	14	1.81	93		0.00	150	635	7.40	207	8	0.96
37	12	19.76	94	7	2.28	151	14	3.69	208	60	10.47
38	48	10.85	95	54	52.52	152	190	7.33	209	85	14.78
39	89	4.33	96	10	0.55	153	91	4.30	210	39	19.65
40	12	8.21	97	166	26.12	154	10	10.54	211	5	5.03
41	6	67.39	98	5034	25.66	155	10	42.08	212		0.00
42	17	0.45	99	59	5.67	156	5	1.07	213	20	7.16
43	20	2.59	100	140	14.36	157	15	3.72	214	25	11.34
44	33	43.04	101	20	77.54	158	15	9.98	215		0.00
45			102	12	22.05	159	266	50.38	216	114	11.47
46	109	6.07	103	58	4.01	160	2	2.47	217	53	9.81
47	9	6.68	104	9	4.03	161	13	0.21	218	0	0.00
48	2	1.35	105	15	10.18	162	900	21.23	219	5	0.41
49	22	0.12	106	27	2.83	163	4	0.89	220	130	6.12
50	30	1.29	107	307	13.29	164	37	22.04	221		
51	323	5.94	108	21	7.49	165	200	23.46	222	28	0.35
52			109		0.00	166	434	31.45	223	2	3.29
53		0.00	110	22	17.42	167	3	36.04	224	9	3.15
54	9	62.11	111	18	16.51	168			225	24	0.25
55			112	50	7.76	169	4	90.58	226	20	4.32
56	4	21.10	113		0.00	170	1669	31.24	227	69	7.21
57	136	17.25	114	3	9.89	171	2	8.45	IMCA	23810	6.91

Table 18 - Management visit ratio (MVR) data 2012

11.5 Lessons Learnt Ratio (LLR)

193 of 227 contractors contributed data on safety bulletins. Data from 2 contractors has been excluded from the IMCA calculation as somewhat improbable.

Lessons Learnt Ratio (LLR) = Number of bulletins issued per 200,000 man-hours. In the past this has been calculated per 100,000 man-hours; it is now calculated per **200,000 man-hours** and the results from previous years have been recalculated.

Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR
1	0	0.00	58	75	19.03	115		0.00	172	0	0.00
2	0	0.00	59	21	0.48	116	163	3.88	173	14	20.83
3	7	0.70	60	2	0.48	117	15	0.40	174	8	9.45
4		0.00	61	0	0.00	118	0	0.00	175	65	0.74
5		0.00	62	6	0.58	119	1	0.54	176	1	1.96
6	0	0.00	63	0	0.00	120	40	24.20	177		0.00
7		0.00	64	2	0.18	121	0	0.00	178	6	2.10
8	24	30.22	65	0	0.00	122	2	0.88	179	0	0.00
9	0	0.00	66	9	0.05	123		0.00	180		0.00
10	12	93.98	67	10	6.77	124	10	0.29	181	64	11.13
11	39	2.10	68	0	0.00	125	20	14.73	182	16	1.98
12	4	0.45	69	48	192.63	126	21	1.54	183	7	0.02
13	0	0.00	70	32	1.58	127		0.00	184	0	0.00
14	0	0.00	71		0.00	128	19	0.67	185		0.00
15	10	36.87	72	12	6.63	129	0	0.00	186		0.00
16	0	0.00	73	32	1.75	130	0	0.00	187	0	0.00
17	8	9.65	74	13	6.07	131	12	1.43	188		0.00
18	60	0.71	75		0.00	132	9	1.18	189	7	12.14
19	4	25.08	76	34	2.56	133		0.00	190	2	0.64
20	24	0.67	77	0	0.00	134	0	0.00	191	0	0.00
21	0	0.00	78	1	0.85	135	67	4.64	192	0	0.00
22	0	0.00	79	0	0.00	136	1	0.62	193	0	0.00
23	1	0.12	80	18	2.67	137	0	0.00	194		0.00
24	4	0.37	81	17	3.17	138		0.00	195	62	5.89
25	12	1.37	82		0.00	139	24	0.25	196	12	6.49
26		0.00	83	0	0.00	140		0.00	197	141	3.83
27	10	0.06	84			141	70	34.81	198	0	0.00
28	0	0.00	85	12	1.03	142	14	0.51	199	6	38.83
29		0.00	86	146	22.33	143		0.00	200	32	4.43
30	16	6.01	87	4	1.01	144		0.00	201	7	3.35
31	40	1.92	88	42	5.50	145	140	1.21	202	35	15.42
32	0	0.00	89	3	1.33	146	15	3.14	203		0.00
33		0.00	90	40	3.81	147	31	6.08	204	25	32.44
34			91	5	1.00	148	0	0.00	205	8	1.22
35	155	17.45	92	0	0.00	149	0	0.00	206	1	0.06
36	0	0.00	93	3	0.09	150	742	8.65	207	1	0.12
37	22	36.24	94	18	5.87	151	20	5.27	208	49	8.55
38	12	2.71	95	0	0.00	152	10	0.39	209	76	13.22
39	147	7.15	96		0.00	153	45	2.13	210	2	1.01
40	3	2.05	97	41	6.45	154	4	4.22	211	21	21.14
41	14	157.23	98	66	0.34	155	0	0.00	212		0.00
42	17	0.45	99	25	2.40	156	2	0.43	213	3	1.07
43	14	1.81	100		0.00	157	12	2.98	214	0	0.00
44	1	1.30	101		0.00	158	1	0.67	215		0.00
45	60	2.48	102	12	22.05	159	0	0.00	216	0	0.00
46	26	1.45	103	318	21.99	160	12	14.81	217	12	2.22
47	0	0.00	104	12	5.38	161	5	0.08	218	2	0.03
48	9	6.05	105	12	8.15	162	25	0.59	219	2	0.16
49	2	0.01	106		0.00	163	0	0.00	220	50	2.35
50	4	0.17	107	0	0.00	164	5	2.98	221	14	34.46
51	0	0.00	108	5	1.78	165	5	0.59	222	50	0.63
52	0	0.00	109		0.00	166	43	3.12	223	12	19.71
53	12	0.98	110	0	0.00	167	0	0.00	224	2	0.70
54	15	103.52	111	7	6.42	168	0	0.00	225	0	0.00
55	12	11.53	112	36	5.59	169	9	203.80	226	6	1.30
56	1	5.27	113	78	6.17	170		0.00	227	81	8.46
57	18	2.28	114	0	0.00	171	4	16.89	IMCA	4556	1.32

Table 19 - Lessons learnt ratio (LLR) data 2012

Appendix I: IMCA Environmental Performance Indicators

The following tables show the new IMCA environmental performance indicators, as supplied by those companies that were able to do so. More information is available in Section 5.

Co	IMCA environmental performance indicators					
	spills	amount spilt	Fuel used offshore	Power used onshore	Overall non-hazardous waste	Overall hazardous waste
1				270.00		
2						
3			10122.49	9609.91	268.15	13.54
4						
5						
6			6658.77			
7			53348.45	110.00	327.12	130.85
8			30121.42	0.99	3289.06	
9				70.00	686.63	2.17
10				38.00		
11			20131.51			
12	0.57	2067.35	85709.00			
13			21722.32		1309.22	
14				25.00	3.87	
15			7065.18	2.00	9.96	0.50
16			8583.48	250.00	68.90	
17			46122.12	900.00	1134.40	
18	1.19	201.95				
19						
20	1.11	25.56				
21				37.27	29.85	
22			1229.27			
23	1.79	4.77	8091.60			
24	25.81	70.35	18963.36	443.00	83.90	301.76
25	0.57	2.84	27549.07		2767.88	84.77
26						
27	0.03	0.58	865.93	282.00		0.04
28	4.65	19.17				
29						
30			8334.16	160.50	1.43	
31			36058.28			
32						
33						
34				21.42	63.99	
35						
36						
37						
38	2.26		5498.91	168.47	150.56	61.16
39	2.04		5357.35		511.77	176.35
40			10902.00	237.00	19.33	12.08
41			5312.22	32.20	22.38	4.48
42			282.19	2.65	36.62	9.06
43			35401.15	0.21	58.28	1.30
44	13.04	1891.12	659126.95			
45			4164.78		0.02	
46						
47						
48						
49			92.11	117490.00	4.13	4.98
50			4651.61		400.66	129.17
51	0.86	16.46	18658.67		0.62	1.39
52						
53			130.35	926.00	30.80	22.02
54						
55						
56			3771.10		10.55	31.65
57	2.54	166.80	37478.86	143.41	453.50	575.90
58	0.00					
59	1.48	74.76	1964.19	49139.46	1179.09	291.10
60	4.84	24.20				
61						
62	0.48	9.66				
63			6834.18			
64	1.35	549.74	69072.86			
65				35.16	369.33	0.04
66	0.39	6.61	9937.33	1750.00	692.67	223.45
67						

IMCA environmental performance indicators						
Co	spills	amount spilt	Fuel used offshore	Power used onshore	Overall non-hazardous waste	Overall hazardous waste
68	14.88	4319.97	10691.44	179.30	67.76	3875.97
69						
70	7.55	18.99	6102.18	2327.00		
71					114.11	
72					19.96	1.66
73			12087.83			
74						
75			2865.72	54.73	12.77	
76						
77			12474.57	10.74	220.67	8.88
78	5.31	2653.56			8.02	4.05
79						
80						
81						
82						
83	3.96	4.68	18756.10	310.00		
84				1.73		
85			113.40		201.88	34.36
86			3288.58	86.40	32.50	6.50
87						
88	1.31	437.03				
89			42469.14			
90						
91				0.09	1.84	0.58
92	0.37	0.37	68638.76	3250.00	1069.05	2001.64
93	1.01	2.04	11895.80	2468.00	43.14	17.51
94						
95	9.73	24.32	10209.94		715.02	27.23
96	0.28	19.33	11798.96		432.67	81.06
97	3.15	18.10		195.34	4.39	3.01
98	1.12	8.55	4619.43	8859.10	110.29	53.40
99			10552.96	1830.29	102.86	51.54
100						
101			25142.09		1.62	0.19
102						
103					83.72	814.3
104						
105			110.93	127.83	611.97	
106						
107	1.95	19.69	31594.30	363.17	729.13	
108				0.03	427.23	36.59
109						
110			48.44	161.65	1389.75	1.19
111	5.09	50.92				
112			9829.15	105.00	264.29	15.88
113	0.79	43.48	5115.42			
114						
115						
116	2.50	144.69	20477.02	628.00	147.07	7.00
117				8623.69	2275.08	326.40
118						
119			6056.99		349.46	
120	63.53	235.10	8.07			
121			9236.80	227.75		
122			2223.12		192.39	
123						
124			10594.61	5376.90	859.49	49.47
125						
126			21015.12		224.95	1.65
127			31770.08		1231.32	343.21
128			63097.68			
129						
130	0.90	0.45				
131						
132					40.41	18.63
133						
134			19.43	6.00	9.70	
135						
136						
137			1186.76	97.27	133.98	61.63
138						
139	0.31	0.05	43740.84			
140	1.42	10.76				

Co	IMCA environmental performance indicators					Overall hazardous waste
	spills	amount spilt	Fuel used offshore	Power used onshore	Overall non-hazardous waste	
141						
142					503.42	185.80
143						
144						
145	3.69	26.14	2772.19		1.39	272.71
146						
147			18857.79			
148			6760.78	241.00	5.79	2.89
149						
150	4.08	45.48	8703.23	28262.00	80.17	40.19
151			7951.68			
152	2.12	25.46				
153						
154						
155	21.04	63.13		181.42	2.30	0.31
156	1.07	2.14				
157			17970.28			
158			25759.48	3.87	3057.77	482.14
159						
160				1144.80		
161						
162	3.54	36.62	8797.02			
163			864.32		155.50	
164			6271.57	277.00	8.04	
165	0.59	0.29		200.00		
166	13.04	74.63				
167						
168	17.34	173.37	4472.88	7.00	345.80	
169			70.11	34.18	80.96	16.19
170	0.28	61.77	12147.50	40128.69	609.80	311.76
171					3.40	
172						
173			4090.77		2136.75	131.31
174			33884.08	1.80	95.10	12.43
175						
176			73411.96	518.47	22021.54	32.47
177						
178						
179					15.43	1402.92
180						
181					22.95	1.15
182			12935.73		420.88	
183			8974.86	1711.92		
184			9005.06	60.00		62.22
185						
186						
187		1627.94				
188	4.10					
189				0.10	39.83	5.15
190			3215.35			
191						
192						
193			3795.09		260.57	72.22
194			9079.27		150.78	1.45
195	7.13	2343.38	21772.38	300.00	18.99	2.32
196			337.93	12.00	71.60	5.97
197			17249.72		7785.41	398.43
198						
199				47.30	18.83	
200			5433.97	224.00	169.44	34.58
201	7.14	35.72		773.90	16.70	
202						
203			7018.68	99.21	13.38	58.55
204			2808.92		619.40	76.63
205						
206	3.07	168.09				
207			4120.07	140.98	0.60	0.04
208	2.34	11.70	3606.48	430.00		
209						
210						
211						
212			34293.55			
213			23863.23	90.00	3254.15	16.27

IMCA environmental performance indicators						
Co	spills	amount spilt	Fuel used offshore	Power used onshore	Overall non- hazardous waste	Overall hazardous waste
214	2.27	2.27		7062.90	251.66	
215						
216	0.60	601.02	10231.78	467.71	150.69	7.45
217						
218			6305.23	8341.40	126.03	103.41
219			2335.49		35.95	4.00
220			626.62	4017.60	235.25	470.49
221	17.44	87.22	68300.42	30.45	859.26	44380.05
222			3575.09	1568.19	41.50	5.68
223			4408.08			
224			6711.60	244.00	45.20	0.09
225			107.72	123429.00		
226	4.32	105.22	16170.91		559.08	142.94
227						
IMCA	0.90	36.46	8342.8	1042.0	254.17	97.65

Table 20: IMCA Environmental performance indicators, 2012

Appendix 2: Individual Company LTIFR and TRIR Statistics

The following tables show the important statistical rates for each of the 227 companies with an identifying number and a letter indicating the band into which they fall.

In order for members to identify how their company compares to others of like size, four bands are used for contributing contracting companies, categorised by their annual amount of overall working hours.

Band	Hours worked
A	<500,000
B	500,000-1,000,000
C	1,000,000-5,000,000
D	>5,000,000

Table 21 - Hours worked bands

A letter has accompanied this report, addressed to each contributing member, which lets each recipient know only its own identifying number.

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
1	C	0.00	0.00	0.00	1.33	1.45	1.39
2	B	0.00	10.59	10.24	0.00	12.35	11.95
3	C	1.50	0.00	1.40	4.50	0.00	4.20
4	A	27.00	0.00	13.86	27.00	0.00	13.86
5	A	0.00	0.00	0.00	0.00	4.39	2.02
6	B	0.00	0.00	0.00	4.38	0.00	3.99
7	C	0.77	0.00	0.73	3.07	14.04	3.63
8	A	0.00	0.00	0.00	6.49	0.00	6.29
9	A	0.00	0.00	0.00	0.00	0.00	0.00
10	A	0.00	0.00	0.00	0.00	0.00	0.00
11	C	0.89	0.00	0.81	1.78	0.00	1.61
12	C	0.00	0.00	0.00	2.27	0.00	2.07
13	C	0.48		0.48	3.33		3.33
14	A	0.00	0.00	0.00	9.96	0.00	7.74
15	A	0.00	0.00	0.00	0.00	0.00	0.00
16	A	0.00	0.00	0.00	12.48	0.00	11.02
17	A	0.00	0.00	0.00	0.00	0.00	0.00
18	D	0.06		0.06	1.43		1.43
19	A	0.00	0.00	0.00	0.00	0.00	0.00
20	D	0.28		0.28	0.83		0.83
21	A	0.00	0.00	0.00	0.00	0.00	0.00
22	A	42.88		42.88	71.47		71.47
23	C	2.38	0.00	1.82	4.17	0.00	3.18
24	C	0.46	0.00	0.44	1.84	0.00	1.77
25	C	0.00		0.00	1.14		1.14
26	A	0.00	0.00	0.00	0.00	0.00	0.00
27	D	0.03	0.00	0.03	0.17	0.00	0.17
28	C	0.52		0.52	2.33		2.33
29	A	0.00	0.00	0.00	0.00	0.00	0.00
30	C	0.00	0.00	0.00	5.63	3.47	4.29
31	C	0.48		0.48	0.72		0.72
32	A	3.56		3.56	7.13		7.13
33	A	0.00	0.00	0.00	0.00	0.00	0.00
34	B	0.00	0.00	0.00	6.07	0.00	5.82
35	C	0.00	0.00	0.00	2.85	0.00	2.25
36	C	1.93		1.93	8.38		8.38
37	A	0.00		0.00	0.00		0.00
38	C	1.13	0.00	0.94	3.39	0.00	2.82
39	C	0.51	0.00	0.49	1.53	5.45	1.70
40	B	0.00	0.00	0.00	3.42	0.00	1.61
41	A	0.00	0.00	0.00	0.00	0.00	0.00
42	D	0.14	0.00	0.13	0.42	8.86	0.92
43	C	3.89		3.89	5.83		5.83
44	A	0.00		0.00	39.13		39.13
45	D	0.62	1.03	0.69	2.48	2.05	2.41
46	C	0.00	0.00	0.00	0.84	0.00	0.72
47	A	3.71		3.71	3.71		3.71
48	A	0.00		0.00	3.36		3.36

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
49	D	0.00		0.00	0.05		0.05
50	C	0.21	0.00	0.21	2.79	5.50	2.90
51	D	0.86	0.00	0.83	2.09	2.76	2.12
52	B	0.00	0.00	0.00	0.00	0.00	0.00
53	C	0.47	0.00	0.41	2.80	3.16	2.84
54	A	0.00	0.00	0.00	0.00	0.00	0.00
55	B	0.00	0.00	0.00	19.22	0.00	7.62
56	A	0.00		0.00	0.00		0.00
57	C	0.00	0.00	0.00	0.00	0.00	0.00
58	B	0.00		0.00	2.54		2.54
59	D	0.23	0.09	0.11	1.37	0.97	1.05
60	B	7.26		7.26	15.73		15.73
61	B	0.00	0.00	0.00	2.51	0.00	1.99
62	C	0.48	0.00	0.47	0.97	0.00	0.93
63	A	4.88		4.88	4.88		4.88
64	C	2.25	0.00	1.61	4.49	0.00	3.22
65	A	0.00	18.63	14.66	0.00	37.25	29.31
66	D	0.10	0.00	0.09	0.75	0.00	0.68
67	A	0.00	0.00	0.00	0.00	0.00	0.00
68	A	0.00	0.00	0.00	0.00	0.00	0.00
69	A	0.00	0.00	0.00	0.00	0.00	0.00
70	C	1.57	0.00	1.23	3.78	1.15	3.21
71	C	0.00	2.24	0.46	2.29	11.20	4.11
72	B	5.52	4.19	4.99	5.52	4.19	4.99
73	C	2.20	72.93	2.47	2.48	72.93	2.74
74	A	0.00	0.00	0.00	0.00	0.00	0.00
75	C	0.74	0.00	0.65	1.48	0.00	1.31
76	C	2.64	37.92	3.33	3.39	37.92	4.07
77	A	8.26	0.00	6.83	8.26	0.00	6.83
78	A	0.00	0.00	0.00	0.00	0.00	0.00
79	C	0.36	0.00	0.27	2.55	1.11	2.20
80	C	1.48		1.48	8.15		8.15
81	C	0.93	0.00	0.79	1.86	0.00	1.58
82	C	0.00	0.80	0.67	0.00	2.00	1.67
83	C	2.88	0.00	2.78	6.49	0.00	6.25
84	A	0.00	0.00	0.00	0.00	0.00	0.00
85	C	4.72		4.72	12.89		12.89
86	C	0.76	0.00	0.65	6.12	0.00	5.20
87	B	0.00	0.00	0.00	6.32	0.00	6.03
88	C	1.31	0.00	1.11	4.59	0.00	3.88
89	A	2.47	0.00	2.22	4.94	0.00	4.44
90	C	0.55	0.00	0.48	1.65	0.00	1.43
91	C	0.00	0.00	0.00	0.00	0.00	0.00
92	C	0.37	0.00	0.34	3.31	0.00	3.04
93	D	0.43	1.92	0.54	2.17	1.92	2.15
94	B	1.72	0.00	1.63	6.89	30.01	8.15
95	A	0.00		0.00	9.73		9.73
96	C	1.10		1.10	6.90		6.90
97	C	0.00	0.00	0.00	0.00	11.89	0.74
98	D	0.45	0.47	0.46	1.83	1.78	1.81
99	C	0.48	0.00	0.36	2.40	0.00	1.81
100	C	0.51		0.51	1.03		1.03
101	D	0.00	0.00	0.00	0.00	0.00	0.00
102	A	0.00	0.00	0.00	0.00	0.00	0.00
103	C	0.35		0.35	1.04		1.04
104	B	0.00	0.00	0.00	13.45	0.00	12.00
105	A	0.00	0.00	0.00	0.00	10.25	2.55
106	C	1.05		1.05	3.15		3.15
107	D	1.73	0.00	1.55	5.41	0.00	4.85
108	B	1.78	0.00	1.77	1.78	0.00	1.77
109	A	0.00		0.00	0.00		0.00
110	A	0.00	0.00	0.00	0.00	11.53	7.92
111	A	0.00	0.00	0.00	5.09	0.00	4.59
112	C	1.55	0.00	1.20	11.64	0.00	8.99
113	C	2.77		2.77	6.72		6.72
114	A	0.00	0.00	0.00	16.48	0.00	9.58
115	A	2.33	0.00	2.17	13.99	0.00	13.00
116	D	0.36	0.00	0.34	2.62	0.00	2.52
117	D	0.13	0.40	0.36	1.72	2.76	2.62
118	A	3.62		3.62	43.40		43.40
119	A	5.38		5.38	10.75		10.75
120	A	0.00	0.00	0.00	3.03	11.36	4.78
121	C	2.09	0.00	1.47	7.30	0.00	5.15
122	A	3.44	6.16	4.41	3.44	6.16	4.41
123	A	0.00		0.00	4.30		4.30

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
124	D	0.00	0.57	0.32	0.44	3.19	1.99
125	A	20.75	11.42	14.73	41.51	22.84	29.46
126	C	0.00	0.00	0.00	0.74	2.25	0.95
127	A	0.00		0.00	2.96		2.96
128	D	0.70		0.70	6.13		6.13
129	A	0.00	0.00	0.00	14.52	0.00	9.07
130	C	0.90	0.00	0.72	2.69	0.00	2.15
131	C	1.19	0.00	1.01	2.38	0.00	2.03
132	C	1.32	0.00	1.13	7.23	0.00	6.19
133	D	0.00	0.00	0.00	0.43	36.82	1.12
134	C	0.00	0.00	0.00	0.00	0.00	0.00
135	C	0.35	0.00	0.30	1.38	0.00	1.22
136	A	0.00	0.00	0.00	6.16	0.00	4.70
137	A	0.00		0.00	0.00		0.00
138	A	0.00	0.00	0.00	0.00	0.00	0.00
139	D	0.62		0.62	0.88		0.88
140	D	0.28	0.33	0.32	3.40	1.61	1.90
141	B	0.00	0.00	0.00	0.00	0.00	0.00
142	D	0.18	0.00	0.18	1.08	5.76	1.23
143	B	0.00	0.00	0.00	0.00	0.00	0.00
144	A	9.38	0.00	7.93	9.38	0.00	7.93
145	D	0.42	1.89	0.69	1.21	10.65	2.93
146	C	0.00	0.00	0.00	0.00	0.00	0.00
147	C	0.98	0.00	0.80	6.86	0.00	5.63
148	A	0.00	0.00	0.00	0.00	0.00	0.00
149	A	11.13	0.00	9.27	11.13	0.00	9.27
150	D	0.70	0.12	0.41	2.51	0.52	1.51
151	B	1.32		1.32	1.32		1.32
152	D	0.58		0.58	3.09		3.09
153	D	0.00	0.00	0.00	0.24	0.00	0.19
154	A	0.00	0.00	0.00	5.27	0.00	2.11
155	A	126.25	0.00	46.05	126.25	0.00	46.05
156	B	1.07	0.00	1.04	2.14	0.00	2.07
157	B	1.24	0.00	1.13	1.24	0.00	1.13
158	A	0.00	0.00	0.00	3.33	0.00	2.64
159	C	0.00	0.00	0.00	1.89	0.00	1.81
160	A	0.00	0.00	0.00	0.00	0.00	0.00
161	D	0.41		0.41	0.58		0.58
162	D	0.00		0.00	1.65		1.65
163	C	0.00	0.00	0.00	0.00	0.00	0.00
164	A	0.00	0.00	0.00	0.00	0.00	0.00
165	C	0.59	0.00	0.58	0.59	0.00	0.58
166	C	1.81	2.19	1.94	3.62	5.10	4.11
167	A	0.00	0.00	0.00	0.00	0.00	0.00
168	A	0.00	0.00	0.00	17.34	0.00	13.83
169	A	0.00	0.00	0.00	0.00	0.00	0.00
170	D	1.03	0.30	0.44	2.81	1.11	1.43
171	A	21.11	0.00	6.81	21.11	0.00	6.81
172	A	0.00	0.00	0.00	0.00	0.00	0.00
173	A	0.00	0.00	0.00	0.00	0.00	0.00
174	A	0.00	0.00	0.00	0.00	0.00	0.00
175	D	0.23	0.00	0.23	0.46	0.00	0.45
176	A	0.00	0.00	0.00	0.00	0.00	0.00
177	C	3.80		3.80	14.24		14.24
178	B	1.75	0.00	1.63	1.75	0.00	1.63
179	A	0.00		0.00	561.17		561.17
180	A	13.56	0.00	11.44	16.95	0.00	14.30
181	D	0.00	0.00	0.00	4.35	2.11	2.32
182	C	1.24		1.24	3.71		3.71
183	D	0.00	0.48	0.02	0.30	0.48	0.31
184	A	0.00	0.00	0.00	14.89	0.00	10.41
185	C	1.69	4.05	2.39	4.23	6.08	4.78
186	A	0.00		0.00	0.00		0.00
187	A	22.34	0.00	22.15	44.67	0.00	44.31
188	C	0.68		0.68	5.46		5.46
189	A	8.67	0.00	4.69	8.67	0.00	4.69
190	B	0.00	12.14	1.42	3.21	12.14	4.25
191	A	0.00	0.00	0.00	0.00	0.00	0.00
192	A	0.00	0.00	0.00	0.00	0.00	0.00
193	A	2.30		2.30	2.30		2.30
194	A	8.70		8.70	63.79		63.79
195	C	2.85	0.00	2.78	4.75	0.00	4.63
196	B	0.00	0.00	0.00	2.70	0.00	1.49
197	D	1.09	0.00	1.05	1.90	0.00	1.84
198	B	5.56		5.56	7.79		7.79

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
199	A	0.00	0.00	0.00	0.00	0.00	0.00
200	C	0.00	0.00	0.00	1.91	0.00	1.38
201	A	0.00	0.00	0.00	0.00	0.00	0.00
202	B	0.00	0.00	0.00	2.20	0.00	1.90
203	C	0.00	0.00	0.00	0.00	0.00	0.00
204	A	0.00	0.00	0.00	0.00	0.00	0.00
205	C	1.53		1.53	3.05		3.05
206	C	0.61	0.84	0.67	5.22	2.51	4.49
207	C	0.60	0.00	0.50	1.81	0.00	1.49
208	C	0.00	2.78	1.74	2.34	2.78	2.62
209	C	0.00	0.00	0.00	0.87	0.00	0.85
210	A	0.00		0.00	2.52		7.56
211	A	0.00	0.00	0.00	10.06	0.00	9.72
212	C	1.88	0.00	1.77	3.76	0.00	3.54
213	B	1.79	0.00	1.63	5.37	0.00	4.88
214	D	0.00	0.00	0.00	0.00	1.34	1.26
215	A	0.00	0.00	0.00	0.00	0.00	0.00
216	C	0.00	0.00	0.00	0.00	3.09	0.50
217	C	0.00	0.00	0.00	2.78	0.00	2.51
218	D	2.21	0.00	1.46	5.94	3.89	5.24
219	C	0.00	0.00	0.00	0.82	0.00	0.59
220	C	3.06		3.06	3.53		3.53
221	A	0.00	0.00	0.00	87.22	0.00	61.53
222	D	0.07	5.48	0.69	0.07	13.70	1.64
223	A	0.00		0.00	41.07		41.07
224	C	0.00	0.00	0.00	3.50	0.00	1.76
225	D	0.00	0.00	0.00	0.19	0.68	0.26
226	C	1.08	2.60	1.77	1.08	2.60	1.77
227	C	0.52	0.00	0.44	2.09	0.00	1.74
IMCA		0.57	0.39	0.51	1.95	1.90	1.93

Table 22 - Individual Company LTIFR and TRIR Statistics 2012

Appendix 3: Definitions – Lagging Safety Statistics

In order to compile meaningful statistics, it is important that standard, consistent, well defined terms are used. For the purposes of compiling the IMCA statistics the following definitions are used:

Hours Worked

- ◆ for offshore operations – the ‘actual hours worked’ based on a 12-hour day;
- ◆ for onshore operations – the actual hours worked, including overtime hours.

Number of Fatalities – the total number of employees and others who died as a result of an incident in the workplace.

Fatal Accident Rate (FAR) – number of fatalities per 100,000,000 hours worked

Number of Lost Time Injuries (LTIs) – comprises all accidental injuries (including fatalities and lost work day cases but excluding restricted work day cases) where:

- ◆ A lost work day case is any work-related accidental injury other than a fatal injury which results in a person being unfit for work on the next shift/day; and
- ◆ A restricted workday case is any work-related injury other than a fatality or lost work day case which results in a person being unfit for full performance of a regular job on the shift/day after the injury. Work might be:
 - an assignment to a temporary job;
 - working in the regular job, but not performing all the usual duties of the job;
 - NB Where no meaningful restricted work is being performed, the incident should be recorded as a lost work day case.

Lost Time Injury Frequency Rate (LTIFR) – analysed separately as offshore, onshore and overall statistics

$$\frac{\text{Lost time injuries} \times 1,000,000}{\text{hours worked}}$$

Total Recordable injury Rate (TRIR) – the number of injuries and/or illnesses per 100 full-time workers and is calculated as:

$$\frac{\text{total number of recordable injuries} \times 1,000,000}{\text{total hours worked}}$$

Occupational Safety and Health Administration definition of ‘total recordable injuries’

from the American Bureau of Labor Statistics – www.bls.gov/iif/oshdef.htm

Work-related injuries and illnesses

Work-related injuries and illnesses are events or exposures in the work environment that caused or contributed to the condition or significantly aggravated a pre-existing condition.

Recordable cases

Recordable cases include work-related injuries and illnesses that result in:

- ◆ Death
- ◆ Loss of consciousness
- ◆ Days away from work
- ◆ Restricted work activity or job transfer
- ◆ Medical treatment (beyond first aid)
- ◆ Significant work related injuries or illnesses that are diagnosed by a physician or other licensed health care professional. These include any work related case involving cancer, chronic irreversible disease, a fracture or cracked bone, or a punctured eardrum.
- ◆ Additional criteria that can result in a recordable case include:
 - Any needlestick injury or cut from a sharp object that is contaminated with another person's blood or other potentially infectious material.
 - Any case requiring an employee to be medically removed under the requirements of an OSHA health standard.

- Tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis.
- ◆ Days away from work, days of restricted work activity or job transfer
- ◆ Days away from work, days of restricted work activity or job transfer are cases that involve days away from work, or days of restricted work activity or job transfer, or both.
- ◆ Cases involving days away from work are cases requiring at least one day away from work with or without days of job transfer or restriction.
- ◆ Job transfer or restriction cases occur when, as a result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

Total Recordable Injury Rate (TRIR)

Total Recordable Injury Rate (TRIR) is the number of injuries and/or illnesses per 100 full-time workers and is calculated as: $(N/EH) \times 200,000$ where:

N = total number of recordable injuries - injuries and/or illnesses
 EH = total hours worked by all employees during the calendar year
 200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

NB the primary difference between the IMCA TRIR and that of OSHA is that IMCA follows the practice of referencing Recordable injuries against one million man-hours rather than 200,000 man-hours.

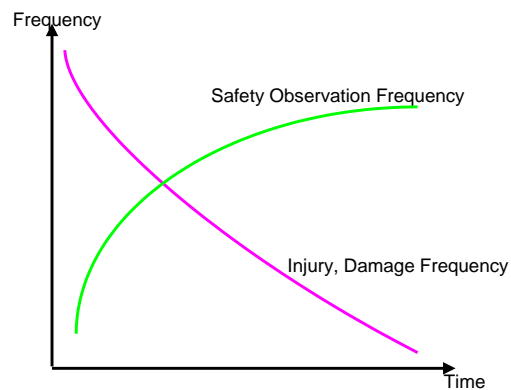
Appendix 4: Definitions – Leading Safety Statistics

IMCA's Leading Performance indicators have been developed by members of the Safety, Environment & Legislation (SEL) Core Committee and have been subject to periodic update and review since their initial development in 2002. The most recent change, made last year, was to harmonise all the Leading Performance Indicators with the Safety Observation Frequency and calculate them using 200,000 man-hours. Prior to 2010, the various leading indicators were calculated with a number of different baselines.

Safety Observations Frequency Rating (SOFR)

If we are to eliminate injuries, damage or near miss incidents, we need to focus on at-risk acts and unsafe conditions, which have not yet caused loss or harm but have the potential to. Thus we need a systematic approach to observing, correcting and recording such at-risk behaviour or unsafe situations.

This is generally called safety observation (or hazard observation). The expected result is that by increasing safety observation, there would be a reduction in injuries, damage or near misses – the undesired events. **See the accompanying graph.**



The measure used by IMCA is based on the number of safety observation records made over the course of 12 months. The measure is directly related to operational work man-hours and as such the measure should be based on frequency. The definitions for the determination of operational work man-hours are defined in information note IMCA SEL 38/02.

Since pro-active worksites are expected to generate a high level of reporting (perhaps several hundred in a year) the frequency basis shall be:

$$\begin{aligned} \text{SOFR} &= \text{Number of Safety Observation per 200,000 man hours} \\ &= \frac{\text{Number of Safety Observations} \times 200,000}{\text{Total Man-hours}} \end{aligned}$$

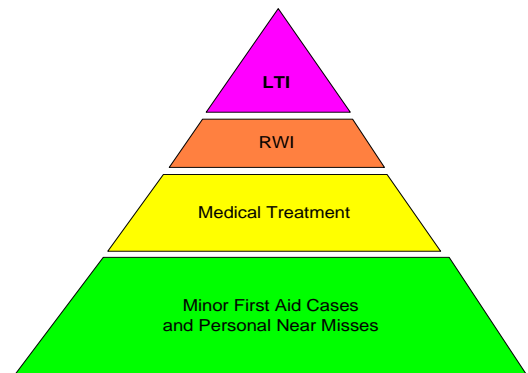
Definitions

SOFR	Safety observation frequency rating
Safety observation	Report identifying at-risk behaviour, or an unsafe condition to prevent loss or harm e.g. STOP card.
Observational work man-hours	for onshore operations – 'actual' hours worked, including overtime hours for offshore operations – the hours worked, based on a 12-hour exposure day

Injury Events Reporting Level

In a mature safety culture, where all injuries, damage or near misses (undesired events) get reported, regardless of their severity, it would be expected that there would be a much greater number of non-serious events for every serious event.

Ultimately we do not want any form of undesired event and those companies with low numbers of actual injuries, damage events or near miss incidents should not be penalised because they have a low number of reports per man-hours worked. In addition we need to consider the case where all events are not reported. The balance in straight numbers of events shown in the diagram below is not a fair comparison.

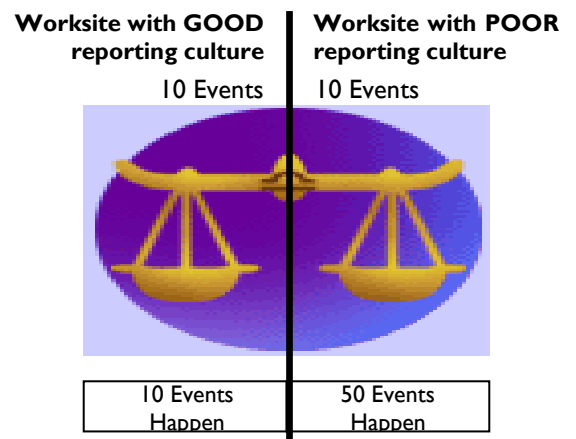


It may cause a degree of controversy that a leading indicator measure should be based on a series of lagging indicators but in order to demonstrate that a mature culture exists, we need to assure ourselves that every undesired event is being reported. We cannot equate one company which reports everything and has suffered a certain number of injuries with another company where few injuries are reported to achieve the same number.

Thus to show an active worksite, the basis of the reporting level could be a ratio of less serious events to serious events. This can be converted to a number, which expresses the activity level from sums of “weighted” products representing injury severity and is defined as shown below:

$$\text{RAL} = ((5 \times \text{FNMR}) + (20 \times \text{MTR}) + (100 \times \text{RWIR})) \text{ per } 200,000 \text{ man-hours}$$

The number of hours over which the RAL is referenced is 200,000. The definition of FNMR, MTR and RWIR remain unchanged.



Definitions

RAL	Reporting activity level.
FNMR	Number of first aid injuries and personal near-miss reports.
MTR	Number of medical treatment reports.
RWIR	Number of restricted work injury reports.
First aid injury	A one-time treatment for the purpose of dealing with minor scratches, cuts, burns, splinters etc. which do not ordinarily require medical care.
Medical treatment injury	Is work related injury, which requires attention from a medical practitioner (not necessarily a doctor) but does not result in either a lost time injury or a restricted work injury.
Restricted work injury	Is a work related injury, which causes the injured person to be assigned to another job on a temporary basis or to work at his normal job less than full time or not necessarily undertaking all of the normal duties
Lost time injury (LTI)	A work related injury which causes the injured person to be absent from work for at least one normal shift* after the event because he is unfit to perform any duties.

* This should take into account travel time in attending the doctor to assess the injury

Line Management Visits Rating (MVR)

Line managers have overall accountability for the safety of people and the protection of equipment on their worksites. They are responsible for ensuring a safe system of work but are equally responsible for listening to people's concerns with regard to safety and to then act on them. It is also accepted that managerial leadership in demonstrating their interest and involvement in issues is a key factor in improving general behavioural aspects.

Thus a measure of a pro-active safety culture is seen to be adequate qualitative visits by relevant managers to their operational worksites. The measure should not only be related to the operational man-hours expended on the site but should also link to management focus on serious undesired events. After all, sites where serious events happen, should expect a higher number of visits to correct such situations.

Thus the measure proposed is:

MVR = No. of Managerial Visits per 200,000 man-hours

Criteria

- ◆ The manager has commercial or production responsibility for the company (e.g. Managing Director);
- ◆ The manager has responsibility for health, safety and environmental processes or other key process within the company;
- ◆ The manager is directly responsible for the operational or service support activities of the particular offshore barge or ship (e.g. Operations Manager);
- ◆ The manager is directly responsible for the conduct of the project (e.g. Project Manager).

Definitions

MVR

Managerial visit rating.

MV

Managerial visits may be counted if the managers meet the criteria provided below. The visits should be made offshore during operational activities and be of at least 24 hours duration. (Management visits during port visits are seen as routine). The visit must include a safety briefing or presentation to the majority of the offshore people. It may also involve the manager making a safety performance check of the site with the people who manage or supervise the activities.

Lessons Learnt Rating (LLR)

As a result of reporting undesired events, accident investigations, findings from managerial visits and inspection/audits, actions will be identified to improve safety performance. Sites where safety is given high priority or focus will be keen to see such events closed within a reasonable timescale and to pass on the lesson to others.

The lessons learnt from a series of similar events or from a more serious injury or near miss is usually notified to other worksites via a safety bulletin or safety flash. A simple measure of activity is therefore the number of bulletins issued. To be included in the IMCA leading safety performance indicator, the bulletin must have been issued to IMCA. IMCA safety flashes covering more than one subject count as a single bulletin. The lessons learnt rating is defined as:

LLR = Number of bulletins issued per 200,000 man-hours

Definitions

LLR Lessons learnt rating.