

Safety Statistics for IMCA Members

Report for the Period 1 January–31 December 2010

Contents

1	Introduction	1
2	Executive Summary	1
3	Distribution of Contributors.....	3
4	Lost Time Injury Frequency Rates (LTIFR).....	5
5	Total Recordable Injury Rates (TRIR).....	12
6	Fatal Accident Rate (FAR).....	13
7	Hours Worked Banding.....	15
8	Comparison with Other Published Figures	18
9	Leading Performance Indicators	19
	Appendix 1: Individual Company LTIFR and TRIR Statistics	25
	Appendix 2: Definitions – Lagging Safety Statistics	29
	Appendix 3: Definitions – Leading Safety Statistics	30

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 2010. A short executive summary of the figures for 2010 is available as information note [IMCA SEL 07/11](#).

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 172 companies and organisations, representing well over half of the marine contractor membership. Forty-four 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 Executive Summary

Overall lost time injury frequency rate (overall LTIFR)	0.73
Overall number of lost time injuries	393
Overall total recordable injury rate (TRIR)	2.74
Overall fatal accident rate (FAR)	1.28
Range of overall LTIFR (second highest-second lowest)	37.11-0.058
Range of overall TRIR (second highest-second lowest)	334.7-0.26
Offshore lost time injury frequency rate (offshore LTIFR)	0.86
Offshore fatal accident rate (FAR)	1.29
Offshore total recordable injury rate (TRIR)	3.19
Onshore lost time injury frequency rate (onshore LTIFR)	0.43
Onshore total recordable injury rate (TRIR)	1.64

Table 1 – Summary of IMCA safety statistics for 2010

The 2010 dataset is drawn from 172 IMCA contractor members, based upon 547 million man-hours of work overall (389 million man-hours offshore). In terms of man-hours worked, this is less than the 2009 figures, although the number of contributors has increased roughly in line with membership, rising from 152 in 2009 to 172 in 2010.

Onshore data was provided by 136 of 172 companies (79%).

The safety statistics recorded here by IMCA members are consistent with those of other main industry trade associations, the International Association of Oil & Gas Producers (OGP) and the International Association of Drilling Contractors (IADC). Further details of the results published by these organisations can be found in Section 7.

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. Members should also note that the data recorded here, though broadly representative of marine contractors, is the combined safety statistics only of the 172 contractor members who actually took part. It should be recalled that these statistics necessarily will not capture all the incidents, including fatalities, which may have taken place within the marine contracting industry during 2010. IMCA continues 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.

Members have asked for clarification regarding the extent members should be responsible for reporting safety incidents that occurred within their sub-contractors or further down the supply chain. There is no 'cut and dried' answer, but if there was direct management control of the operations of a sub-contractor, then the incident reporting should remain the responsibility of the contractor. If a contractor's management had no 'prevailing influence' over the operations of sub-contractors, then the responsibility for reporting safety incidents generally remains with the sub-contractor.

IMCA is continuing to publish detailed statistical analysis of the safety data as a separate appendix. As in previous years, data is 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 fourteen years have been as follows:

Contractors	Overall							Offshore					Onshore					
	Million hours worked	LTI's	LTIFR	Fatalities	Fatal accident rate	Recordable injuries	TRIR	Million hours worked	LTI's	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		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

Table 2 – Summary of IMCA safety statistics 1997-2010

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 2. The definition of injuries used is that of the US Occupational Safety & 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 Distribution of Contributors

3.1 By Geographical Region

IMCA's regional sections enable members to communicate at a regional level, sharing best practice, networking and co-ordinating discussions with 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, rather than the actual location of operations.

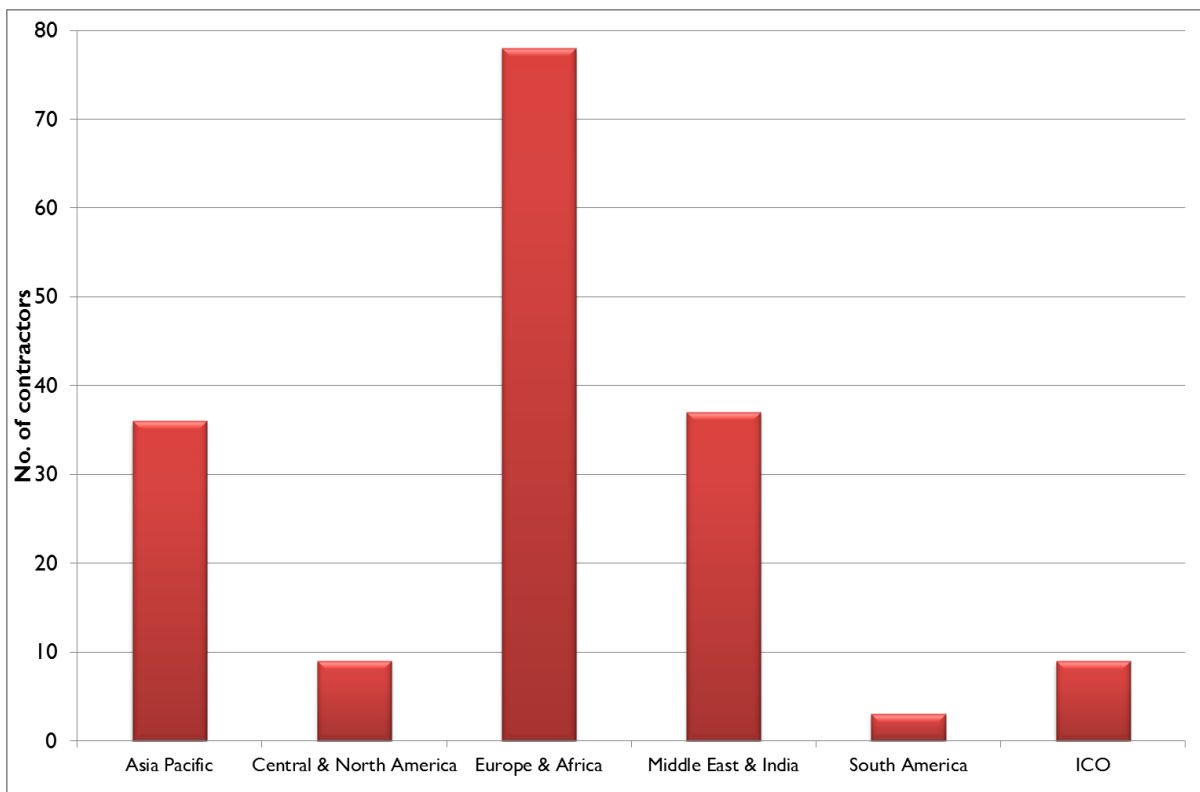


Figure 1 – Contributors by IMCA geographical region

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)	36
Central & North America (CNA)	9
Europe & Africa (EA)	78
Middle East & India (MEI)	37
South America (SA)	3
International Contractors (ICO)	9

Table 3 – Contributors by region

	FAR	LTIFR	TRIR	FAR	LTIFR	TRIR	FAR	LTIFR	TRIR
	<u>Offshore</u>			<u>Overall</u>			<u>Onshore</u>		
AP	2.49	0.32	2.91	1.86	0.28	2.5	0	0.15	1.26
CNA	5.55	0.72	2.28	4.39	0.66	2.57	0	0.42	3.69
EA	1.11	1.05	3.57	1.51	1.02	3.41	5.18	0.78	1.92
MEI	0	0.79	2.9	0	0.81	2.97	0	1.01	3.47
SA	0	1.97	4.16	0	1.48	3.12	0	0	0
ICO	0	0.7	3.02	0.6	0.48	1.95	0.95	0.35	1.33

Table 4 – Lagging safety indicators by IMCA region

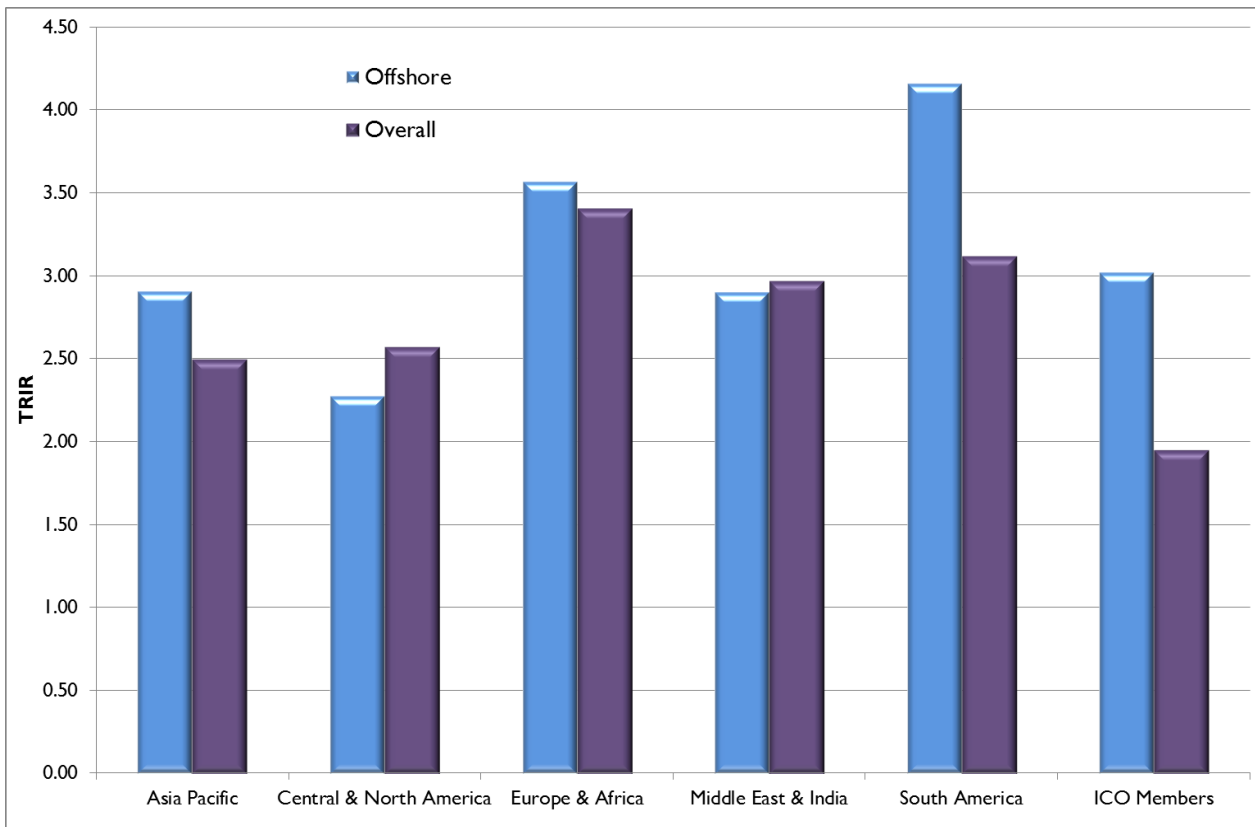


Figure 2 – Overall and offshore TRIR by region

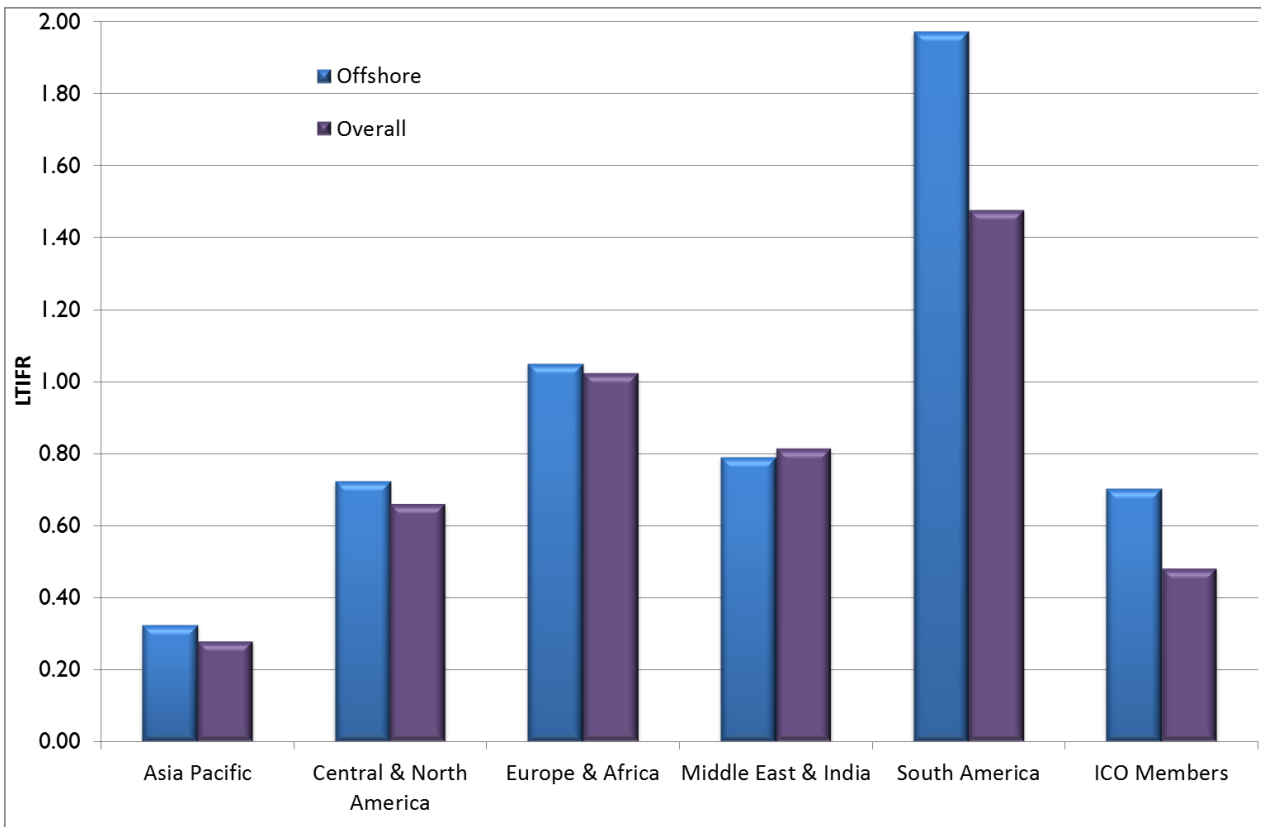


Figure 3 – Overall and offshore LTIFR by region

3.2 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.

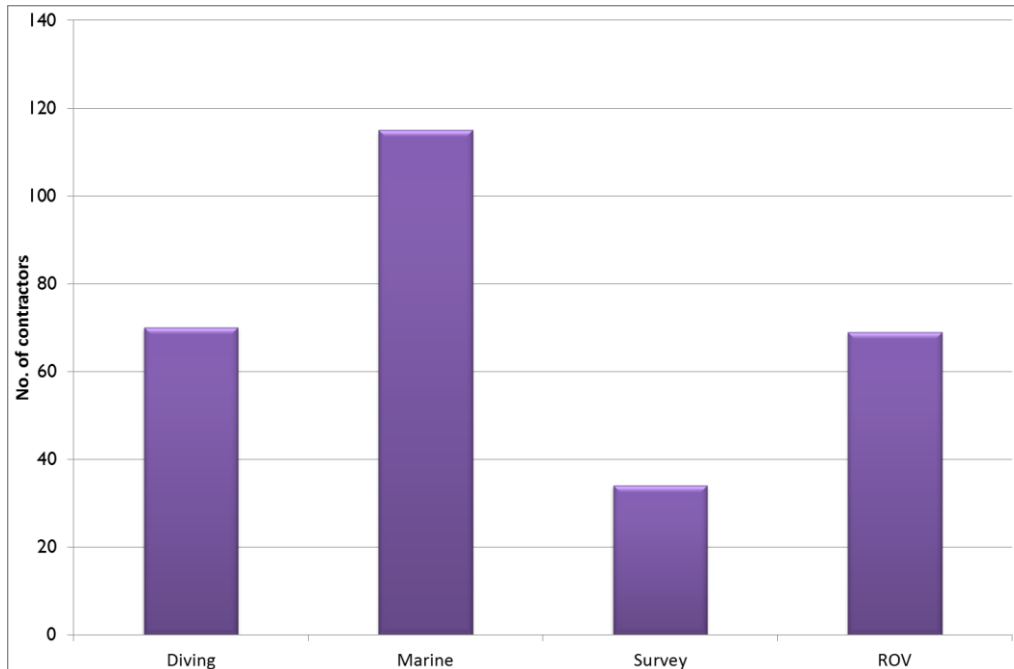


Figure 4 – Contributors by IMCA technical division

4 Lost Time Injury Frequency Rates (LTIFR)

The offshore LTIFR for 2010 has increased to 0.86 from 0.74 in 2009, and the overall LTIFR has increased slightly from 0.67 in 2009 to 0.73 this year.

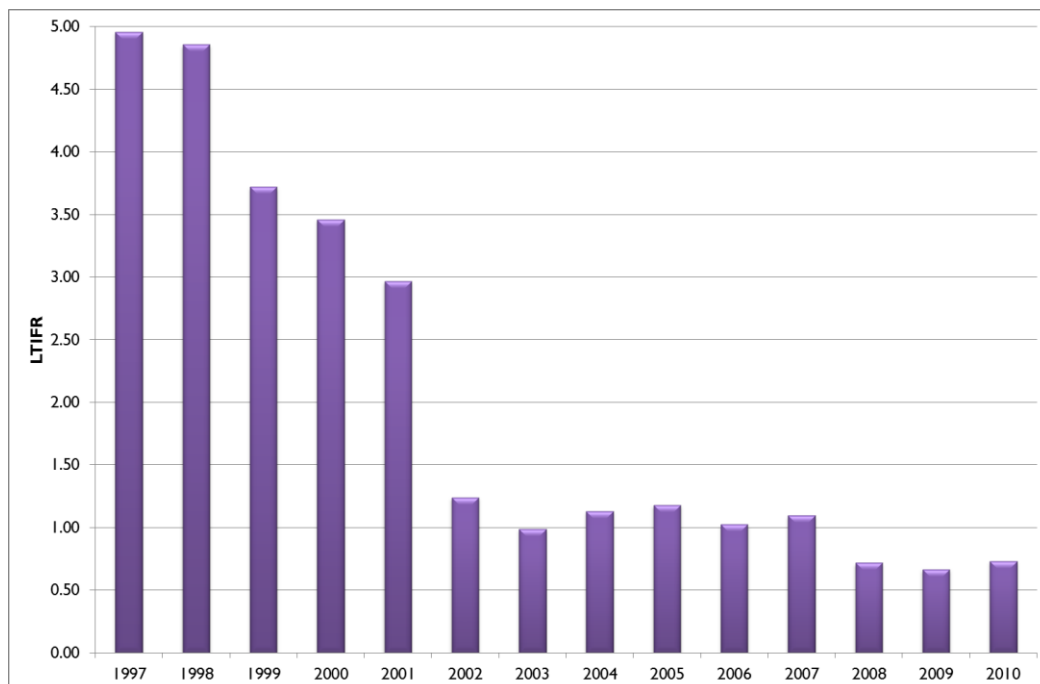


Figure 5 – Overall LTIFR

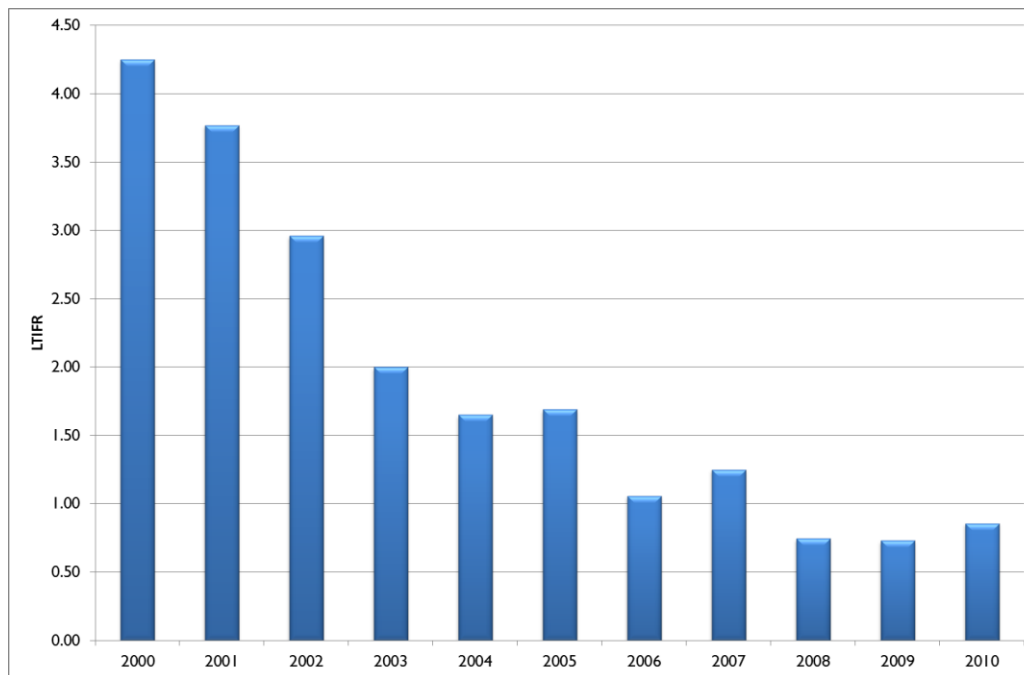


Figure 6 – Offshore LTIFR

4.1 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	Number of LTIs						Total
	AP	CNA	EA	MEI	SA	ICO	
A) Falls from height	0	2	26	6	1	6	41
B) Falls on the same level (including slips & trips)	4	4	48	16	0	14	86
C) Struck against	0	0	39	5	1	3	48
D) Struck by moving/falling objects	4	9	41	20	5	25	104
E) Exposure to mechanical vibration	0	0	0	1	0	0	1
F) Exposure to sound	0	0	0	0	0	0	0
G) Muscle stress and repetitive movement	1	2	18	3	0	2	26
H) Contact with electricity	0	1	2	0	0	1	4
I) Contact/exposure to heat/cold	0	0	2	2	0	1	5
J) Contact/exposure with hazardous substances	0	3	1	1	0	2	7
K) Entrapment	3	3	3	3	0	17	29
L) Asphyxiation	0	0	0	0	0	0	0
M) Other	2	4	21	5	2	8	42
TOTAL	14	28	201	62	9	79	393

Table 5 – Causes of LTIs by IMCA geographical region

There were 393 lost time injuries recorded by IMCA members for 2010. ‘Struck by moving or falling objects’ was the most common direct cause of LTIs for contributors, causing 104 of 393 or 26% of recorded LTIs. ‘Falls on the same level’ formed the second most common direct cause of LTIs, with 86 recorded LTIs or 22% of the total. The third most common cause was ‘Struck against’ with 12% of LTIs.

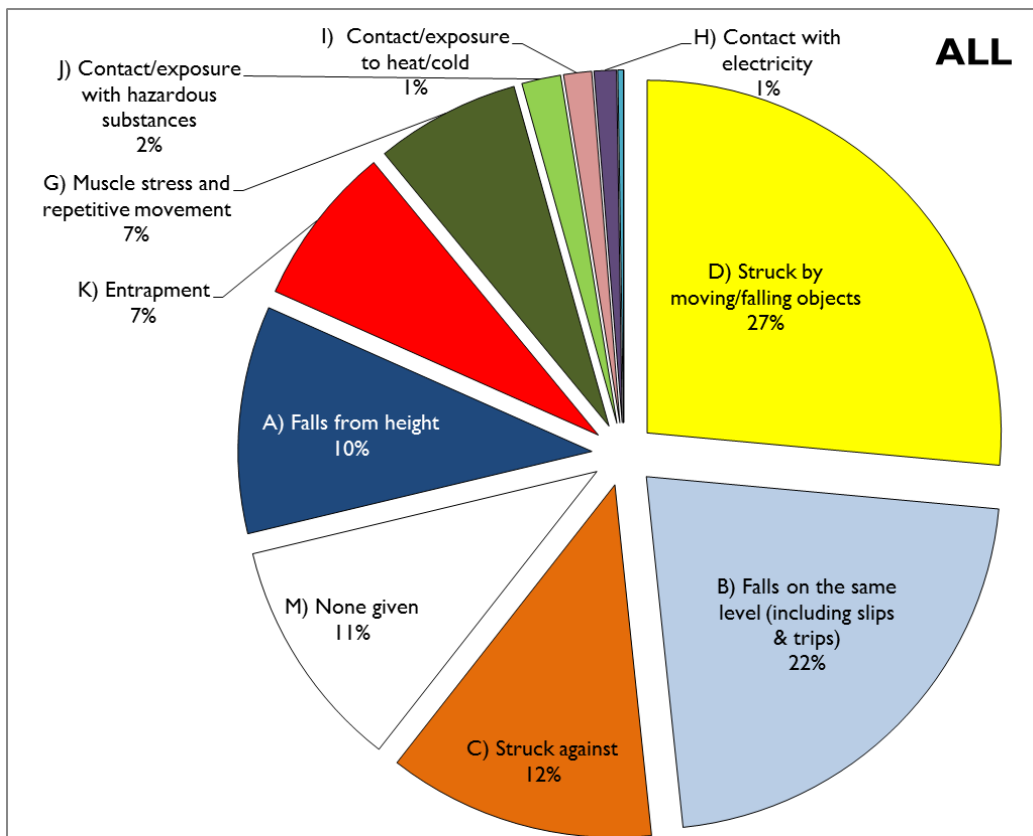


Figure 7 – Direct causes of all reported lost time injuries

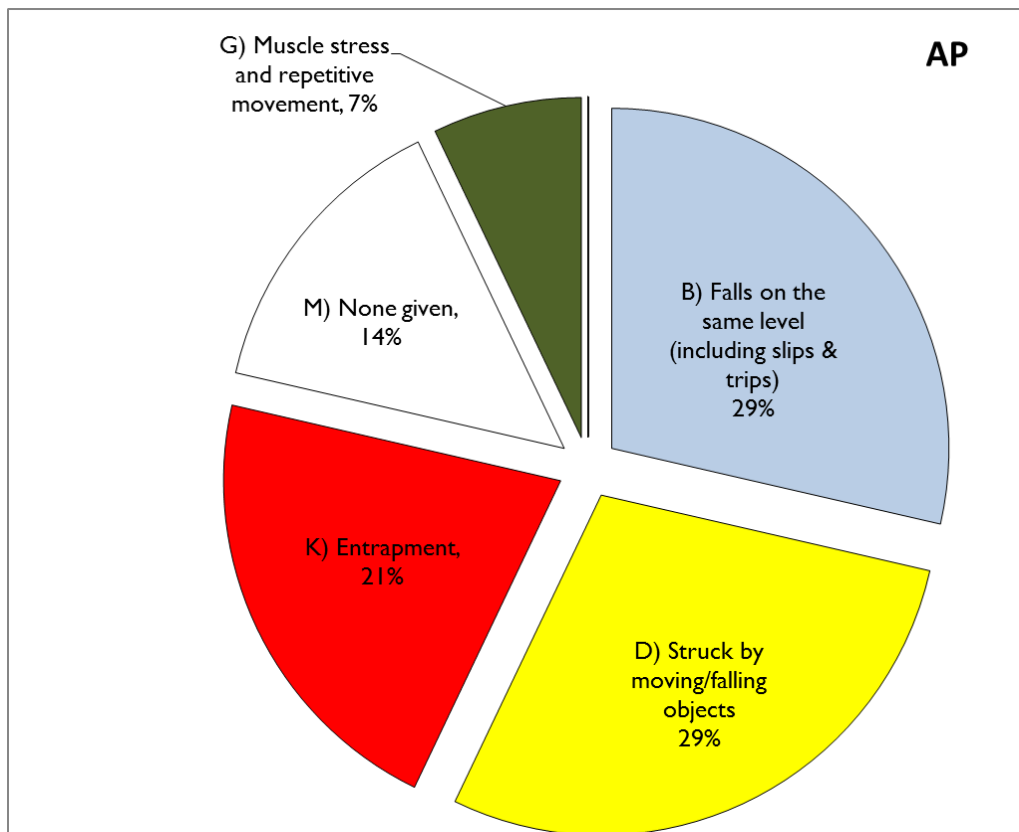


Figure 8 – Causes of LTIs in Asia-Pacific region

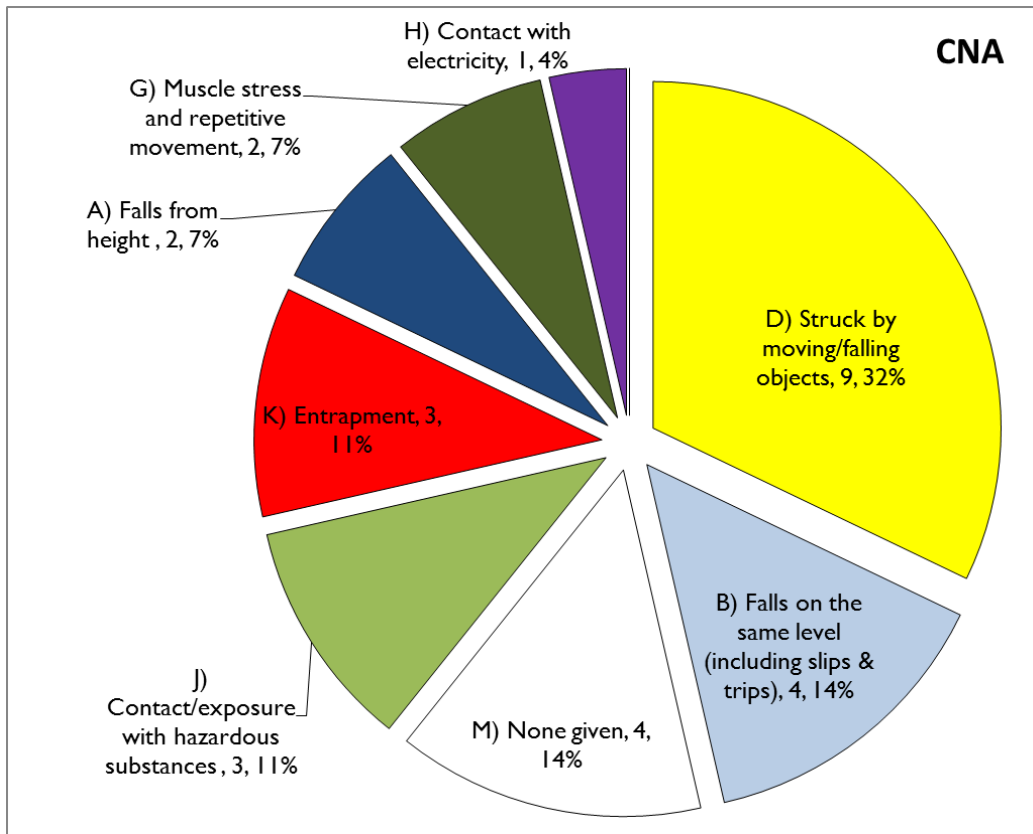


Figure 9 – Causes of LTIs in Central & North America region

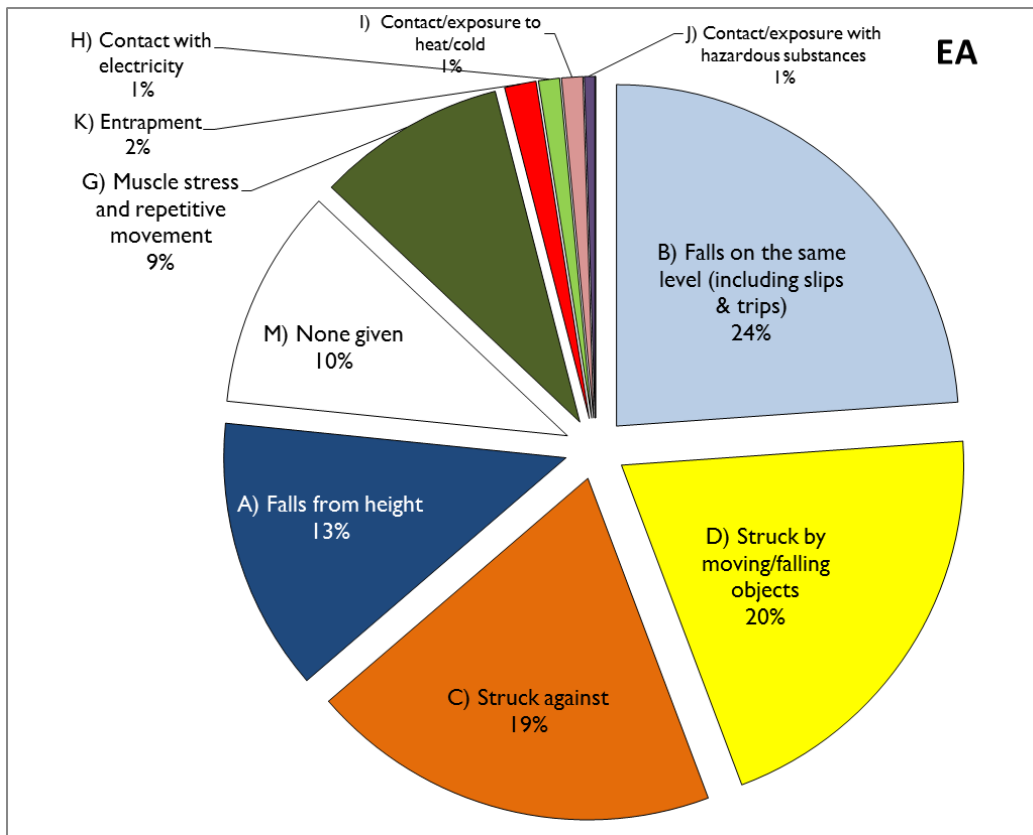


Figure 10 – Causes of LTIs in Europe & Africa region

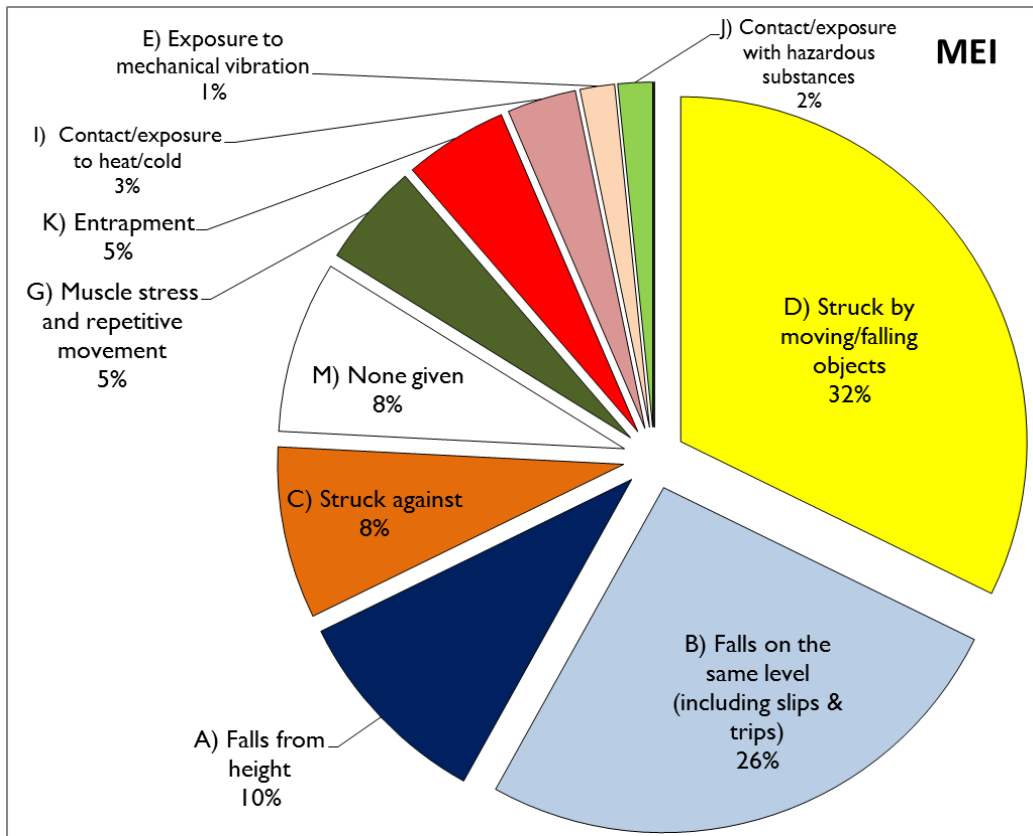


Figure 11 – Causes of LTIs in Middle East & India region

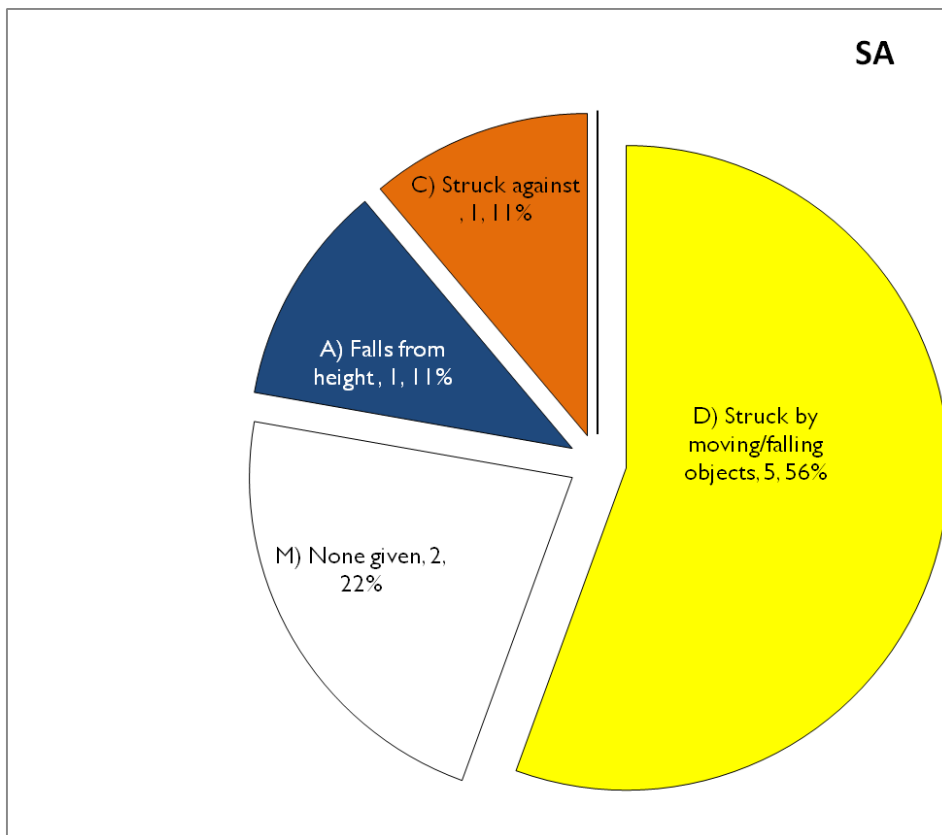


Figure 12 – Causes of LTIs in South America region

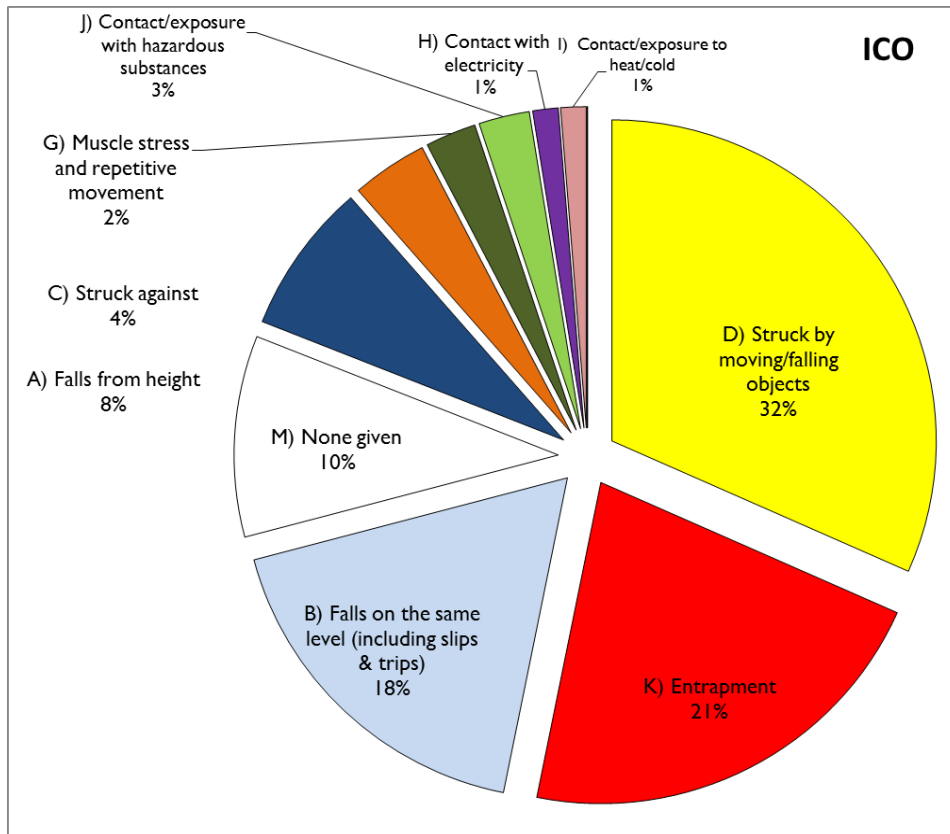


Figure 13 – Causes of LTIs amongst ICO members

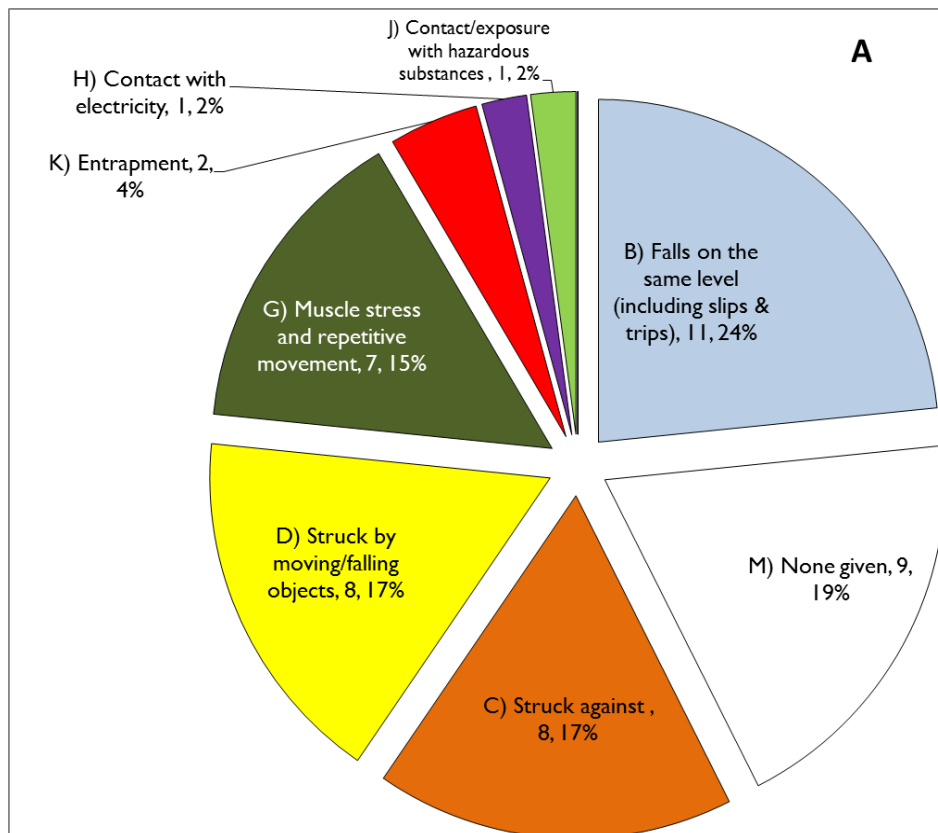


Figure 14 – Causes of LTIs in A-band members

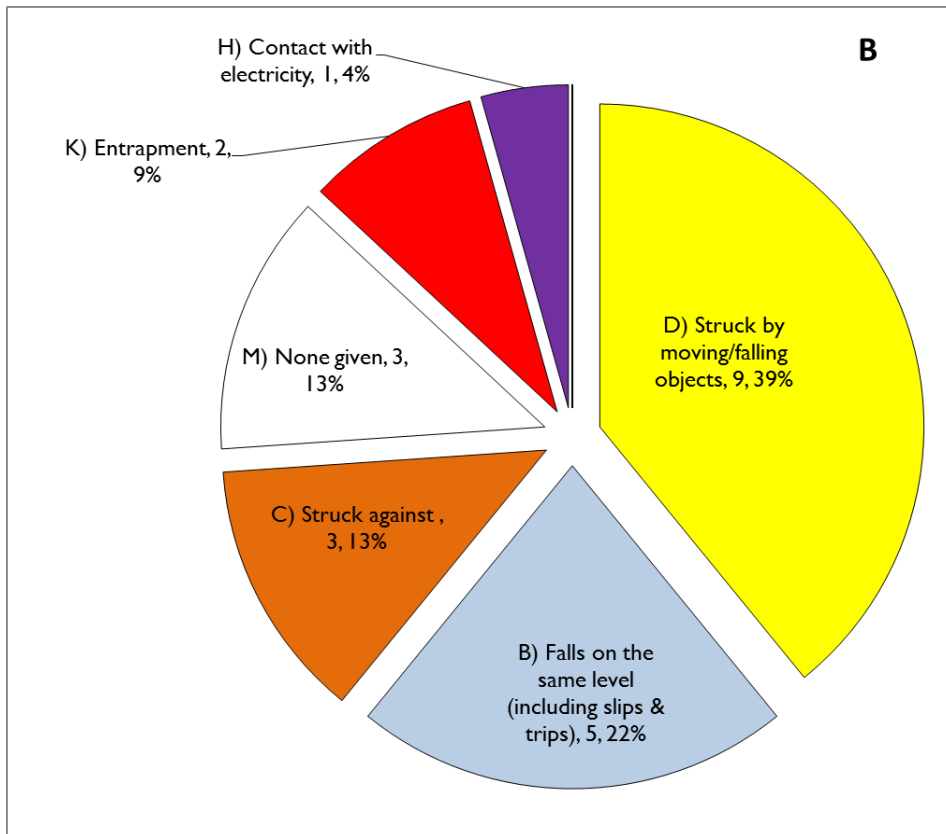


Figure 15 – Causes of LTIs in B-band members

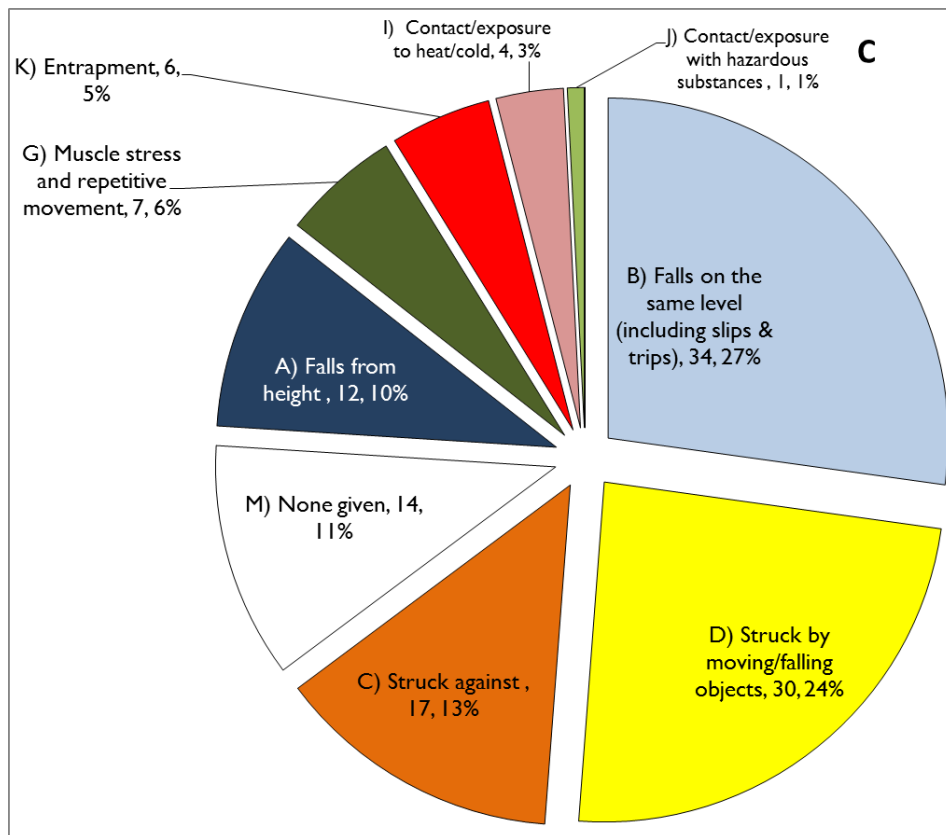


Figure 16 – Causes of LTIs in C-band members

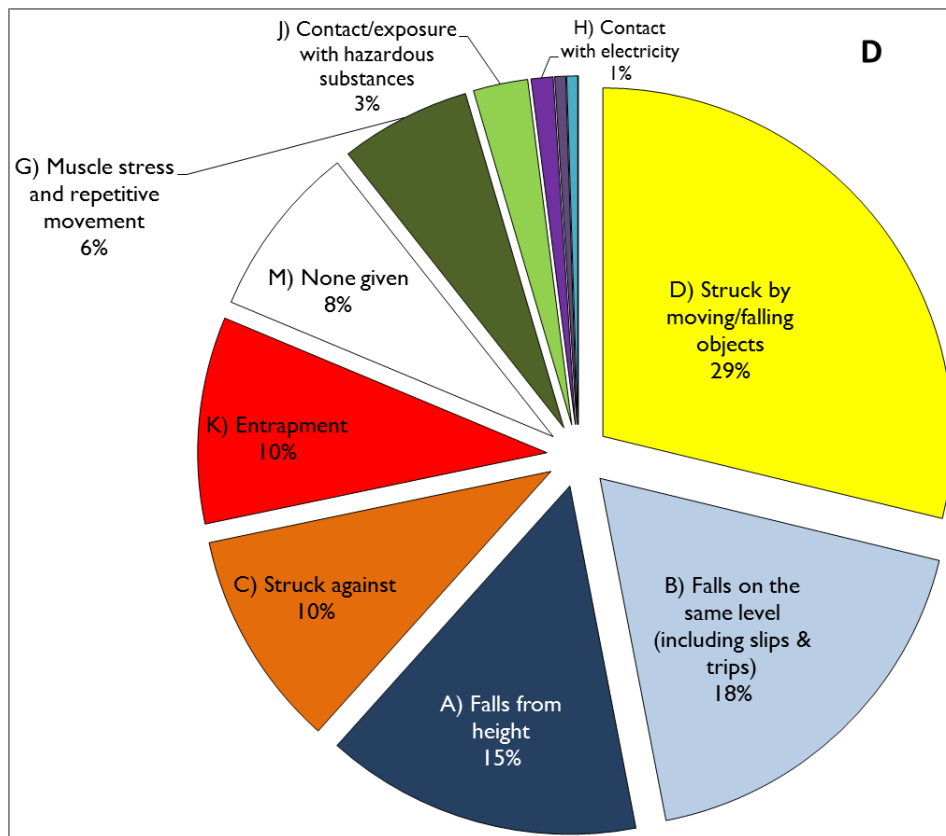


Figure 17 – Causes of LTIs in D-band members

5 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 2010, the offshore TRIR has increased to 3.19 from 2.72 in 2009. The onshore TRIR was 1.64, an improvement on the 2009 figure of 1.88, and the overall TRIR was 2.74, an increase on the 2009 figure of 2.54.

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

Table 6 – Total recordable injury rates (TRIR) 2005-2010

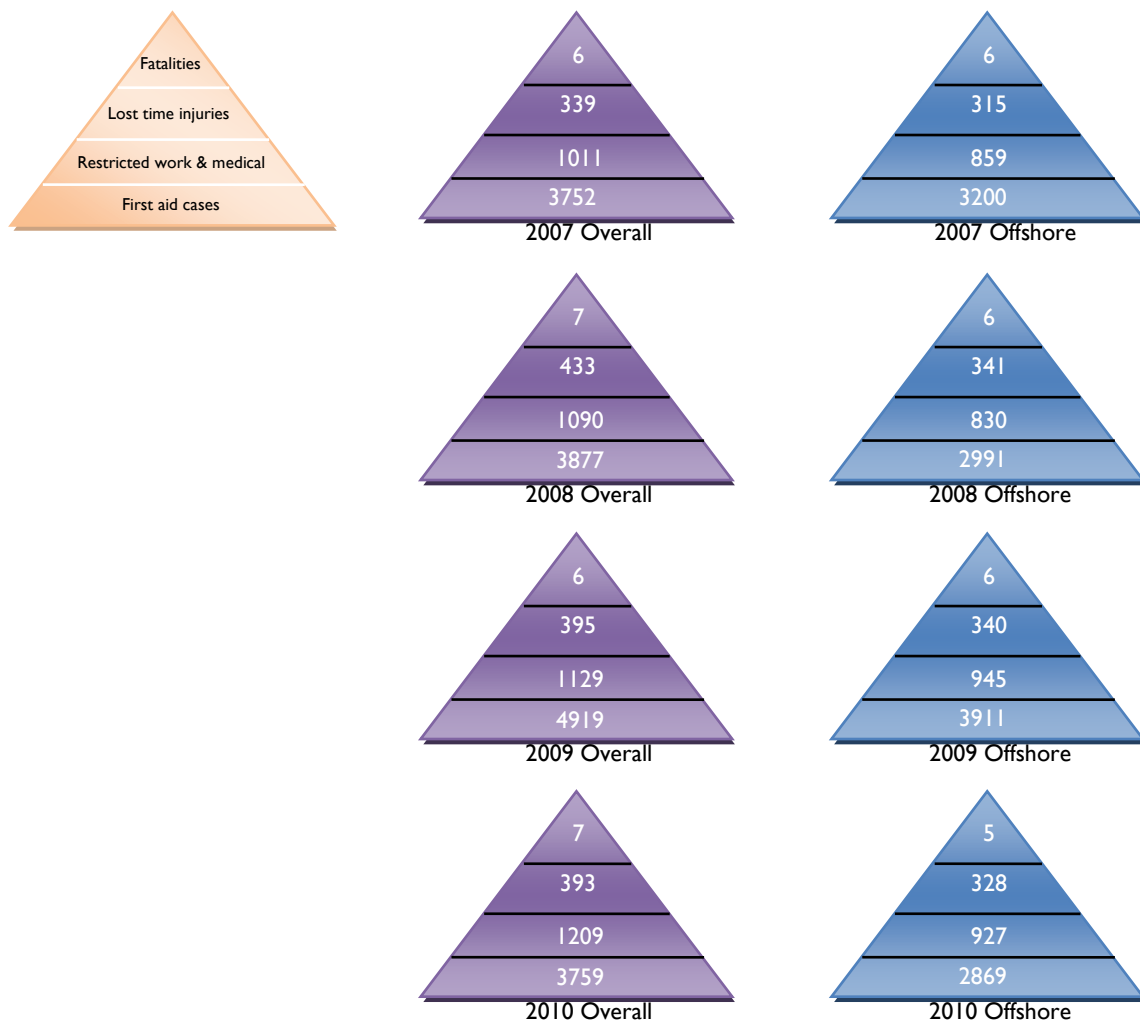
- ◆ There were 610 offshore medical treatment cases reported in 2010. This is a decrease in reporting compared to 2009, when there were 631 offshore medical treatment cases reported;
- ◆ There were 317 offshore restricted work injury reports reported in 2010, compared to 249 offshore restricted work injury reports reported in 2009;
- ◆ Members reported that there were 2,869 offshore first aid cases in 2010 compared with 2,911 in 2009, and 7,389 offshore near miss reports in 2010, compared with in 3,469 in 2009;
- ◆ There were 3,759 first aid cases overall and 8,102 near miss reports overall during 2010, compared to 4,919 first aid cases overall and 4,848 near miss reports overall during 2009.

5.1 Accident Triangles

Accident triangles can be used to demonstrate the relationship between fatalities and minor accidents.

Year	Overall				Offshore			
	First Aid	RWC/ Med Trt	Lost Time Injuries	Fatalities	First Aid	RWC/ Med Trt	Lost Time Injuries	Fatalities
2010	3759	1209	393	7	2869	927	328	5
2009	4919	1129	395	6	3911	945	340	6
2008	3877	1090	433	7	2991	830	341	6
2007	3752	1011	339	6	3200	859	315	6
2006	2072	682	226	6	1772	605	196	6
2005	1812	669	189	5	1703	566	172	5
2004			164	3	1938	523	120	2
2003			198	5	3776	466	133	4

Table 7 – Accident triangle data 2007-2010



6 Fatal Accident Rate (FAR)

It should be noted when considering the fatal accident rate and the safety statistics as a whole that slightly less than half of all IMCA contractor members did not take part in the safety statistics exercise. There has been considerable discussion of the importance of fully capturing all workplace fatalities, to work towards the goal of eliminating them completely. IMCA intends to work closely with its members and other trade associations to ensure that all marine contracting industry workplace fatalities are properly recorded.

IMCA members reported five offshore fatalities during 2010 and two onshore. 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 regarding the fatalities that have been recorded.

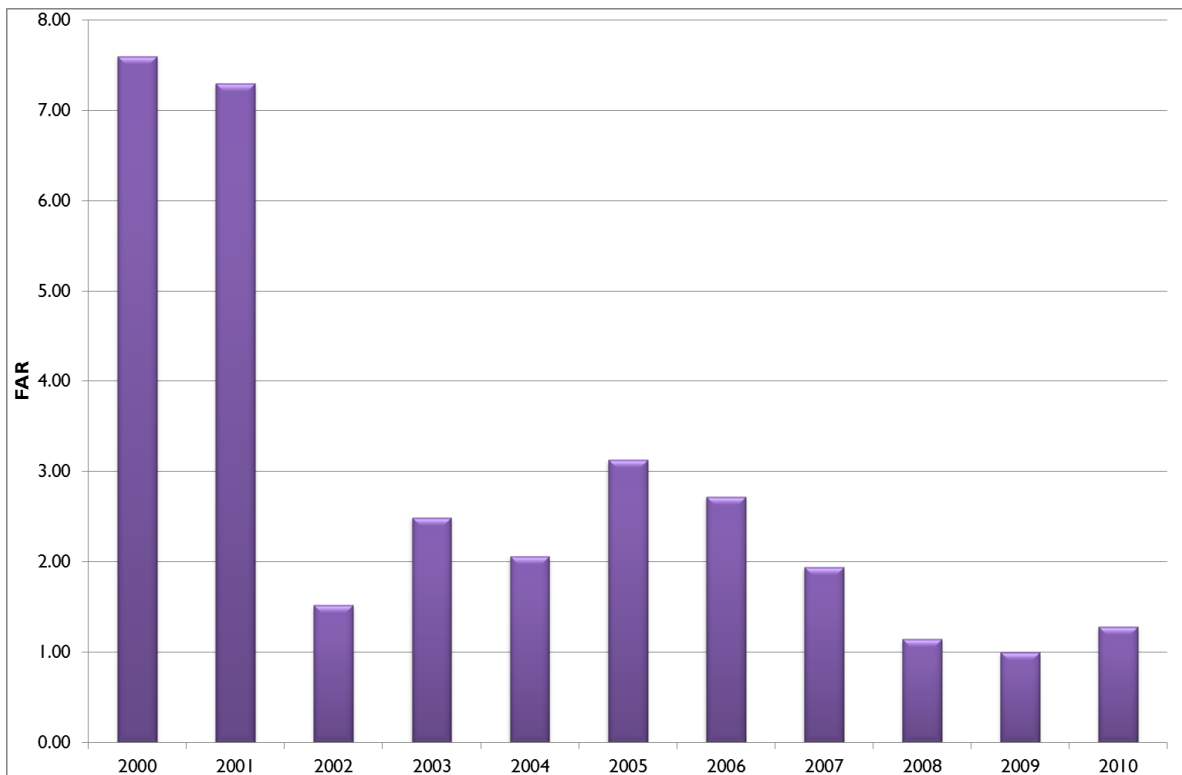


Figure 18 – Overall FAR 2000-2010

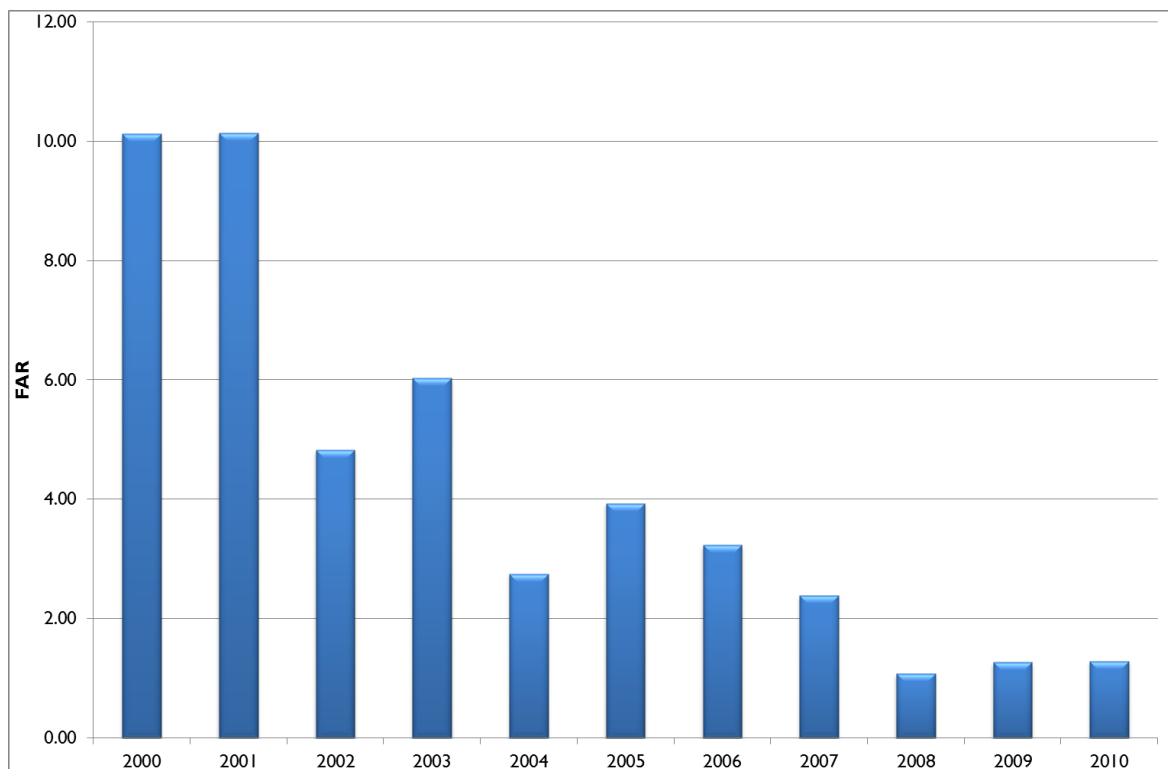


Figure 19 – Offshore FAR 2000-2010

6.1 Fatal Accident Information

The SEL Committee has suggested that basic information is collected about each fatality. This was accomplished for this year's statistics with the following results:

- ◆ Fatality occurred during duplex welding preparation – asphyxia by argon inhalation;
- ◆ Diver umbilical entangled in an air lift pipe when returning to basket for transport to surface. Umbilical got kinked with sudden air loss as a result;
- ◆ During anchor handling operation a suitcase hook struck an AB's head and upper arm causing fatal injuries;
- ◆ During unmooring operations, two deckhands became entangled in pick up line and were carried overboard and drowned;
- ◆ Crewman fell from scaffolding during salvage operations and was killed;
- ◆ Employee was struck by a collapsing stack of steel plates in a freight container and was killed.

7 Hours Worked Banding

In order for members to identify how their company compares to others of like size, contributing contracting companies have been divided into four bands, according to their annual number of overall working hours.

A 'pareto' or '80:20' analysis of the contributed man-hours tells us that 38 of the 172 companies taking part in the exercise contributed 80% of the man-hours. Eleven of the largest contributors worked half of all the contributed man-hours.

Fifteen contributors (18 last year and 15 in 2008) worked more than ten million man-hours. Two contributors worked more than 40 million man-hours.

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

Table 8 – Number of companies in each band

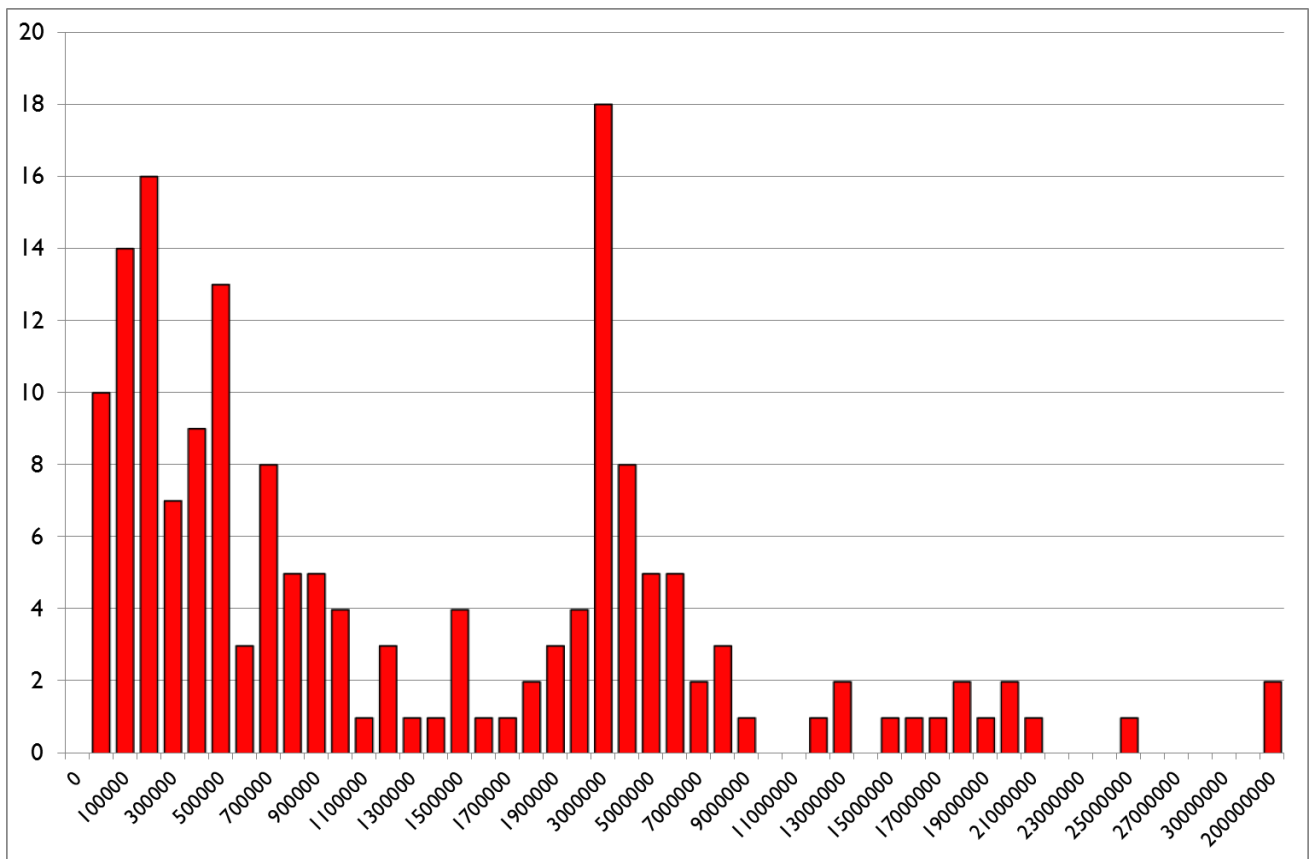


Figure 20 – No. of companies against size (overall man-hours)

7.1 Indicators and Statistics by Company Bands

	FAR	LTI	LTIFR	TRI	TRIR	Medical Treatment	RWC	First Aid	Near Miss
Offshore									
Band A	9.53	38	3.72	132	12.58	80	33	141	181
Band B	0.00	18	1.21	86	5.78	54	14	184	1234
Band C	0.91	120	1.10	434	3.93	198	115	1007	986
Band D	1.18	152	0.61	588	2.32	278	155	1537	4988
Onshore									
Band A	24.55	9	2.45	40	9.82	117	3	98	39
Band B	0.00	5	1.38	9	2.48	4	0	7	14
Band C	0.00	5	0.37	14	1.04	2	7	86	92
Band D	0.73	46	0.34	196	1.44	98	51	699	568
Overall									
Band A	13.73	47	3.36	172	11.81	197	36	239	220
Band B	0.00	23	1.24	95	5.13	58	14	191	1248
Band C	0.81	125	1.02	448	3.62	200	122	1093	1078
Band D	1.03	198	0.52	784	2.01	376	206	2236	5556

Table 9 – Lagging indicators and statistics by company band 2010

Note: Actual numbers of fatal accidents have been omitted to assist with preserving anonymity.

	Safety Obs	SOFR	Management Visits	MVR	RAL	Safety Bulletins	LLR
Band A	13902	218.09	3188	50.01	144.48	1152	18.07
Band B	37178	415.47	837	9.35	108.73	602	6.73
Band C	185814	303.92	4437	7.26	44.16	1262	2.06
Band D	457422	237.93	28068	14.60	34.34	1309	0.68
Total/IMCA	694316	258.42	36530	13.59	41.67	4325	1.61

Table 10 – Leading indicators and statistics by company band 2010

Key: Please refer to the appendices 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

7.2 LTIFR in Company Bands

Table 11 shows the overall LTIFR of companies within the defined bands of number of hours worked and, for the past four years, TRIR. Figure 21 shows that between 2007 and 2008 there was a significant increase in LTIFR amongst the smaller companies; it is pleasing to note that this trend has not continued and the LTIFR for A Band companies is once again falling.

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

Table 11 – Overall LTIFR and TRIR by company band

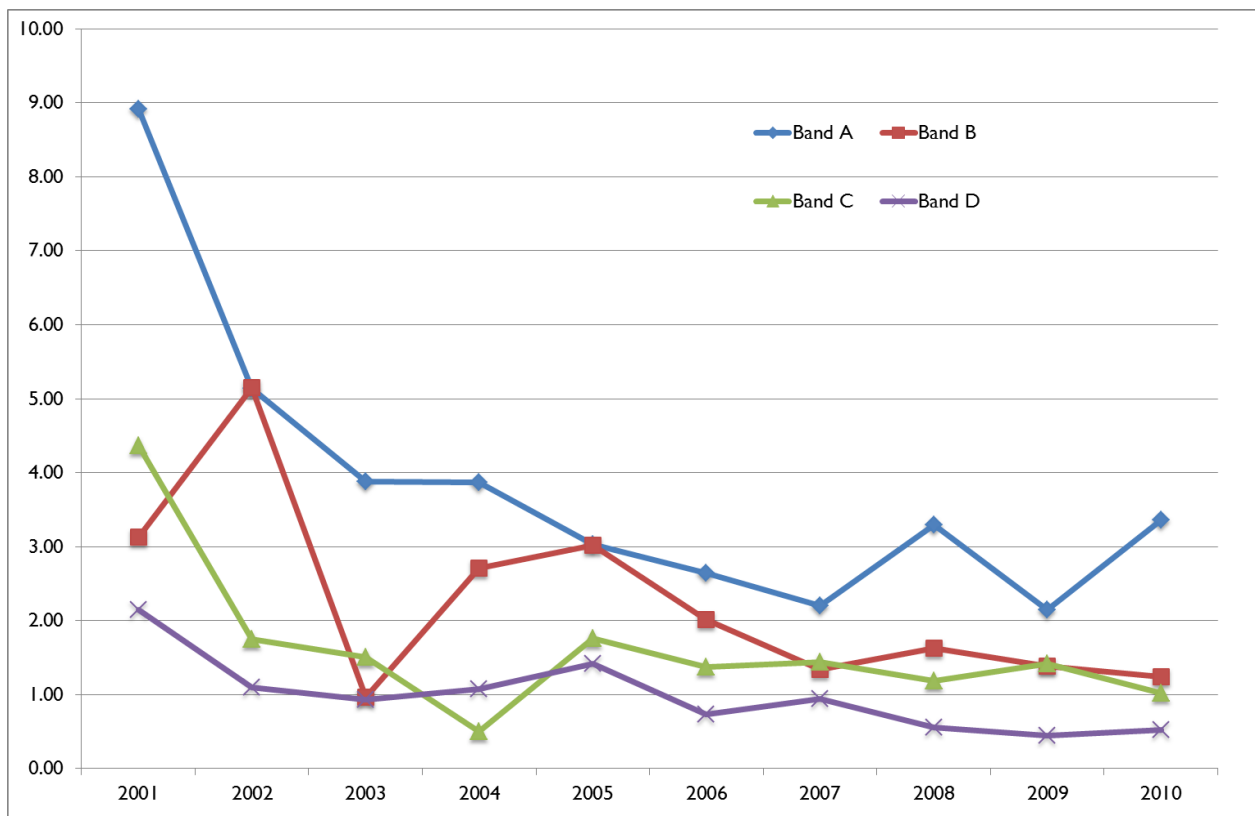


Figure 21 – Overall LTIFR for company bands

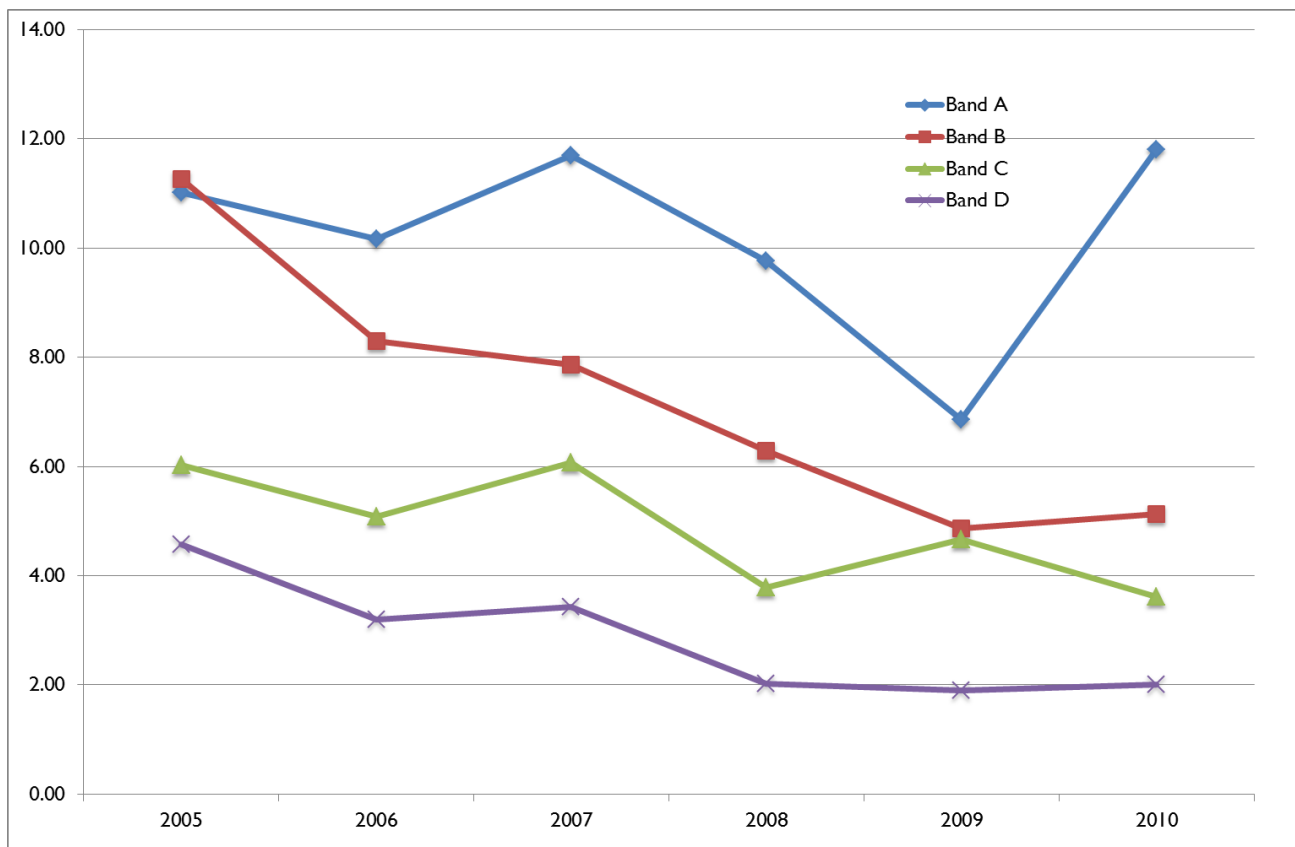


Figure 22 – Overall TRIR for company bands

8 Comparison with Other Published Figures

8.1 International Association of Drilling Contractors (IADC) – 2009

IADC represents offshore and onshore drilling contractors. In 2009 IADC members reported 2581 recordable injuries (of which 714 were offshore), 744 lost time injuries of which 208 were offshore, and 32 fatalities of which seven were offshore. Based on offshore hours of approximately 178 million man-hours and on a base figure of one million man-hours rather than 200,000, this equates to an offshore TRIR of 4.01 and LTIFR of 1.17.

Further detailed information on IADC's 2009 statistics can be downloaded from www.iadc.org/asp/documents/2009%20Final%20Summary%20Report.pdf. 2010 data was not available at the time of publication.

8.2 International Association of Oil & Gas Producers (OGP) – 2010

In 2010 OGP members recorded an overall TRIR of 1.68. The overall LTIFR was 0.42. OGP members recorded 23 company and 71 contractor fatalities – an overall (onshore and offshore) fatal accident rate of 2.76. This information is based on 3411 million man-hours of work.

The offshore TRIR recorded by OGP members was 2.45; the offshore LTIFR was 0.59 and the offshore FAR 3.15, based upon 28 offshore fatalities, 523 offshore LTIs and 2178 recordable injuries. This information is based upon 887 million man-hours of work.

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

Table 12 – Comparison of trade association TRIR

9 Leading Performance Indicators

9.1 Overall

This is the eighth year for which IMCA has collected leading performance indicator data. Table 13 shows how the leading performance indicators have changed over time. The data 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

Table 13 – Leading performance indicators 2003-2010

	SOFR	RAL	MVR	LLR
AP	323.33	32.37	5.44	2.92
CNA	680.51	87.71	100.07	0.75
EA	124.04	53.14	4.17	2.07
MEI	102.42	29.85	11.00	2.50
NA	534.08	41.03	7.19	1.18
ICO	337.40	23.47	5.01	0.52
IMCA	258.39	41.67	13.59	1.61

Table 14 – Leading safety indicators (overall) by region, 2010

9.2 Safety Observation Frequency Rate (SOFR)

Safety observations are defined as reports identifying at-risk behaviour, unsafe conditions or similar, e.g. STOP cards. 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 0.1 to 3,392. This suggests that there may be different interpretations of the definition of 'safety observation'. 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.

Co	Safety Observations	SOFR	Co	Safety Observations	SOFR	Co	Safety Observations	SOFR
1	4	0.71	58	25436	737.40	115	1094	306.62
2	423	194.89	59	12	13.07	116	359	32.57
3	63	499.52	60	24	666.67	117	108	100.78
4	1032	16.61	61	394	906.00	118	237	52.29
5	320	29.28	62	21	13.22	119	406	114.69
6	400	68.49	63	19	0.81	120	37087	1800.91
7	2143	446.79	64	63	19.96	121	0	0.00
8	0	0.00	65	5	21.19	122	1088	152.83
9	3615	239.41	66	242	67.06	123	30	33.72
10	1122	434.27	67	22641	1236.18	124	44	73.54
11	750	49.04	68	477	130.64	125	1703	1050.48
12	3	15.15	69	29491	331.48	126	7261	92.77
13	18	4.49	70	2318	139.10	127	11918	305.10
14	392	30.44	71	450	239.17	128	830	61.13
15	864	67.76	72	2391	96.83	129	10	12.63
16	179	15.97	73	28	25.10	130	0	0.00
17	2546	223.22	74	1527	474.01	131	2375	157.55
18	3800	1413.49	75	67	248.65	132	0	0.00
19	931	75.58	76	0	0.00	133	14	39.90
20	12	3.64	77	30201	700.22	134	15	2.03
21	1029	250.70	78	3258	86.24	135	52298	2087.03
22	814	259.12	79	15162	2382.01	136	815	8.68
23	854	69.02	80	69002	257.81	137	15	78.62
24	453	87.48	81	3	505.05	138	109	74.63
25	5547	762.74	82	1317	53.15	139	3	4.18
26	70333	2231.15	83	10407	1266.71	140	10	4.21
27	12077	166.87	84	19	7.42	141	8112	2370.38
28	69	51.07	85	581	793.26	142	223	105.95
29	1	0.13	86	4611	441.30	143	211	635.74
30	14167	1751.91	87	0	0.00	144	3782	184.53
31	204	99.96	88	6757	72.85	145	887	318.37
32	2	3.71	89	2	2.11	146	639	1601.02
33	28229	293.86	90	4	7.37	147	415	3305.06
34	26	36.11	91	1308	269.72	148	0	0.00
35	35	24.81	92	0	0.00	149	56	30.98
36	213	106.63	93	359	107.44	150	36	0.99
37	34	136.74	94	25	6.09	151	363	17.21
38	1688	2763.86	95	8155	292.04	152	0	0.00
39	43	24.64	96	540	382.41	153	5	7.29
40	0	0.00	97	674	43.46	154	0	0.00
41	34	8.90	98	341	21.33	155	13	10.42
42	41	4.46	99	59491	702.83	156	345	25.16
43	927	75.19	100	946	394.11	157	762	526.08
44	1765	60.40	101	303	131.08	158	294	26.06
45	1800	199.49	102	8133	359.60	159	3	33.44
46	91	102.14	103	2090	651.87	160	153	11.48
47	86	1.00	104	0	0.00	161	3	0.75
48	550	474.07	105	7588	874.96	162	2010	213.64
49	185	33.58	106	1712	180.16	163	10	96.96
50	0	0.00	107	1127	160.16	164	17804	2009.68
51	967	100.90	108	30040	140.49	165	11095	3392.86
52	8	15.24	109	0	0.00	166	452	2961.22
53	12	44.68	110	0	0.00	167	6393	482.47
54	0	0.00	111	262	61.66	168	1845	1237.46
55	0	0.00	112	312	143.82	169	20	92.30
56	22	52.05	113	3423	27.40	170	2610	52.54
57	2940	304.19	114	0	0.00	171	300	27.56
						172	24	54.10
IMCA	694316	258.39	IMCA	694316	258.39	IMCA	694316	258.39

Table 15 – Safety observation frequency rate (SOFR) 2010

9.3 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 has changed in 2009 from 1,000,000 to 20,000 to maintain consistency with the other leading indicators. The definition of FNMR, MTR and RWIR can be found in Appendix 3.

Reporting activity level (RAL) = $((5 \times \text{FNMR}) + (20 \times \text{MTR}) + (100 \times \text{RWIR}))$. 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.

Co	Med trt	RWP	First Aid	Near Miss	RAL	Co	Med trt	RWP	First Aid	Near Miss	RAL
1	0	0	4	0	3.57	87	0	0	0	3	31.00
2	0	0	1	1	4.61	88	12	9	75	183	26.20
3	0	0	0	0	0.00	89	1	0	0	1	26.33
4	4	2	14	8	6.28	90	2	0	0	4	110.58
5	9	0	19	44	45.29	91	0	0	1	1	2.06
6	2	1	0	2	25.69	92	3	3	2	0	40.77
7	1	0	1	4	9.38	93	1	0	3	2	13.47
8	0	0	0	0	0.00	94	2	0	0	0	9.75
9	7	3	62	28	58.94	95	7	2	68	19	27.75
10	1	0	5	4	25.16	96	0	0	0	11	38.95
11	1	0	5	17	8.50	97	10	0	152	64	82.53
12	2	0	0	0	201.95	98	12	4	33	97	80.68
13	0	0	6	6	14.98	99	13	9	147	36	24.51
14	3	1	7	2	15.92	100	0	0	9	0	18.75
15	6	4	24	23	59.21	101	1	0	7	8	41.10
16	2	5	17	2	56.64	102	2	6	6	12	32.28
17	3	3	46	0	51.73	103	1	0	1	1	9.36
18	6	1	9	4	106.01	104	0	0	0	1	0.82
19	1	7	30	1	71.03	105	4	2	15	31	58.81
20	1	0	1	1	9.09	106	1	5	7	0	58.41
21	3	1	23	1058	1355.82	107	5	3	9	24	80.29
22	0	0	10	0	15.92	108	29	11	234	120	16.14
23	4	0	12	15	17.38	109	0	0	0	0	0.00
24	1	1	12	1	35.73	110	18	22	119	15	200.88
25	0	1	11	0	21.31	111	2	2	5	0	62.37
26	6	2	107	14	29.34	112	3	0	3	2	39.18
27	17	9	131	3	26.39	113	4	4	0	0	3.84
28	0	0	3	0	11.10	114	3	0	0	11	51.00
29	3	0	16	6	21.91	115	0	0	10	3	18.22
30	0	0	23	75	60.59	116	0	0	7	49	25.40
31	0	2	6	6	127.41	117	0	0	1	4	23.33
32	0	0	0	1	9.28	118	5	0	4	29	58.46
33	20	8	143	68	23.47	119	4	1	5	5	64.97
34	1	0	7	12	159.72	120	5	9	121	10	80.37
35	1	0	11	9	85.06	121	37	3	53	328	30.10
36	2	0	10	8	65.08	122	0	0	44	18	43.55
37	0	0	0	0	0.00	123	1	0	0	3	39.33
38	0	1	3	0	188.30	124	8	0	18	36	718.68
39	1	0	4	0	22.92	125	0	0	0	0	0.00
40	0	0	0	0	0.00	126	14	7	90	5	18.59
41	3	0	8	20	52.34	127	8	3	24	41	20.10
42	0	1	10	7	20.11	128	2	0	1	47	20.62
43	3	8	56	27	103.42	129	0	0	1	2	18.94
44	12	0	7	0	9.41	130	0	0	0	0	0.00
45	2	0	7	27	23.27	131	11	0	25	114	60.70
46	0	0	0	0	0.00	132	7	0	8	34	32.37
47	5	48	0	0	57.14	133	0	0	0	0	0.00
48	0	0	9	1	43.10	134	0	0	4	2	4.06
49	1	1	4	1	26.32	135	7	6	182	382	142.07
50	9	8	48	0	20.46	136	2	0	8	8	1.28
51	8	0	1	3	18.78	137	0	0	0	0	0.00

Co	Med trt	RWP	First Aid	Near Miss	RAL	Co	Med trt	RWP	First Aid	Near Miss	RAL
52	0	0	0	4	38.10	138	2	21	2	0	1472.02
53	1	0	1	0	93.09	139	1	1	0	18	292.35
54	4	0	2	0	46.28	140	1	1	1	1	54.77
55	0	0	0	0	0.00	141	0	0	16	3	27.76
56	0	0	1	0	11.83	142	1	0	0	5	21.38
57	3	2	0	0	26.90	143	0	0	0	0	0.00
58	22	9	42	79	56.39	144	1	2	14	1	14.39
59	0	0	4	0	21.79	145	3	0	6	5	41.28
60	0	0	0	0	0.00	146	4	0	0	2	225.50
61	0	0	2	0	22.99	147	7	2	0	7	2986.50
62	0	1	0	2	69.27	148	0	1	0	0	484.07
63	0	1	0	1	4.45	149	121	0	97	0	1607.09
64	16	2	55	63	351.70	150	4	0	2	3	2.88
65	1	0	0	0	84.75	151	22	2	32	105	62.80
66	0	5	3	10	156.57	152	0	0	0	0	0.00
67	3	4	9	57	43.13	153	4	1	5	1	306.15
68	4	0	4	18	52.04	154	7	0	1	5	70.89
69	21	20	215	882	88.85	155	1	0	0	0	16.03
70	1	0	6	1	3.30	156	1	7	11	23	64.91
71	1	0	1	1	15.94	157	0	0	5	0	17.26
72	6	15	91	0	84.03	158	6	0	18	6	21.28
73	0	0	0	0	0.00	159	0	0	0	0	0.00
74	1	0	3	2	13.97	160	1	1	1	1	9.76
75	1	3	2	1	1243.27	161	1	1	1	1	32.68
76	0	0	0	0	0.00	162	1	0	3	1	4.25
77	6	2	44	23	15.19	163	0	0	2	0	96.96
78	2	2	30	3258	441.51	164	0	0	7	26	18.62
79	5	2	26	7	73.05	165	1	1	6	3	50.46
80	42	24	248	27	17.24	166	1	0	4	25	1080.97
81	0	0	0	0	0.00	167	5	4	22	38	60.37
82	3	1	116	31	36.12	168	1	0	0	2	20.12
83	13	6	12	5	115.02	169	0	0	0	0	0.00
84	1	0	5	4	25.39	170	56	0	4	12	24.15
85	0	0	0	2	13.65	171	0	0	1	0	0.46
86	2	1	2	6	17.23	172	0	0	0	0	0.00
IMCA	810	374	3620	8053	41.67	IMCA	810	374	3620	8053	41.67

Table 16 – Reporting activity level (RAL) 2010

9.4 Management Visit Ratio (MVR)

Management visit ratio (MVR) = number of managerial visits per 200,000 man-hours.

Co	Management Visits	MVR	Co	Management Visits	MVR	Co	Management Visits	MVR
1	150	26.78	58	139	4.03	115	12	3.36
2	5	2.30	59	47	51.20	116	21	1.91
3	8	63.43	60	10	277.78	117	10	9.33
4	53	0.85	61	5	11.50	118	7	1.54
5	11	1.01	62	10	6.30	119	4	1.13
6	24	4.11	63	80	3.39	120	530	25.74
7	5	1.04	64	159	50.38	121	0	0.00
8	8	32.94	65	5	21.19	122	14	1.97
9	14	0.93	66	80	22.17	123	24	26.97
10	0	0.00	67	845	46.14	124	1872	3128.76
11	51	3.33	68	42	11.50	125	486	299.78
12	3	15.15	69	75	0.84	126	175	2.24
13	21	5.24	70	22	1.32	127	134	3.43
14	0	0.00	71	12	6.38	128	31	2.28
15	44	3.45	72	146	5.91	129	12	15.15
16	6	0.54	73	28	25.10	130	4	67.80
17	524	45.94	74	100	31.04	131	673	44.64
18	0	0.00	75	8	29.69	132	35	3.24
19	21	1.70	76	12	26.83	133	4	11.40
20	2	0.61	77	90	2.09	134	6	0.81
21	76	18.52	78	5	0.13	135	1535	61.26
22	16	5.09	79	57	8.95	136	175	1.86
23	20	1.62	80	1751	6.54	137	6	31.45
24	78	15.06	81	0	0.00	138	11	7.53
25	130	17.88	82	6	0.24	139	12	16.71
26	199	6.31	83	47	5.72	140	8	3.37
27	420	5.80	84	6	2.34	141	8	2.34
28	37	27.39	85	45	61.44	142	7	3.33
29	4	0.52	86	10	0.96	143	4	12.05
30	142	17.56	87	4	8.27	144	51	2.49
31	6	2.94	88	875	9.43	145	20	7.18
32	12	22.26	89	6	6.32	146	18	45.10
33	499	5.19	90	5	9.22	147	20	159.28
34	9	12.50	91	106	21.86	148	0	0.00
35	13	9.21	92	102	11.24	149	18	9.96
36	2	1.00	93	20	5.99	150	2	0.05
37	28	112.61	94	80	19.50	151	121	5.74
38	24	39.30	95	66	2.36	152	1	4.99
39	10	5.73	96	24	17.00	153	11	16.04
40	7	7.17	97	0	0.00	154	0	0.00
41	11	2.88	98	33	2.06	155	7	5.61
42	83	9.02	99	20923	247.19	156	3	0.22
43	41	3.33	100	4	1.67	157	12	8.28
44	110	3.76	101	0	0.00	158	20	1.77
45	36	3.99	102	0	0.00	159	4	44.59
46	6	6.73	103	16	4.99	160	8	0.60
47	126	1.47	104	12	1.96	161	3	0.75
48	11	9.48	105	74	8.53	162	39	4.15
49	32	5.81	106	77	8.10	163	10	96.96
50	0	0.00	107	15	2.13	164	0	0.00
51	6	0.63	108	444	2.08	165	24	7.34
52	1	1.91	109	0	0.00	166	4	26.21
53	6	22.34	110	18	1.12	167	42	3.17
54	0	0.00	111	19	4.47	168	84	56.34
55	0	0.00	112	55	25.35	169	8	36.92
56	31	73.34	113	0	0.00	170	120	2.42
57	22	2.28	114	0	0.00	171	12	1.10
						172	24	54.05
IMCA	36530	13.59	IMCA	36530	13.59	IMCA	36530	13.59

Table 17 – Management visit ratio (MVR) data 2010

9.5 Lessons Learnt Ratio (LLR)

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
1	4	0.71	58	12	0.35	115	2	0.56
2	7	3.23	59	10	10.89	116	31	2.81
3	12	95.15	60	0	0.00	117	12	11.20
4	5	0.08	61	123	282.84	118	22	4.85
5	67	6.13	62	0	0.00	119	3	0.85
6	102	17.47	63	12	0.51	120	20	0.97
7	18	3.75	64	46	14.57	121	0	0.00
8	0	0.00	65		0.00	122	5	0.70
9	12	0.79	66	41	11.36	123	12	13.49
10	0	0.00	67	23	1.26	124	22	36.77
11	33	2.16	68	68	18.62	125	37	22.82
12	15	75.73	69	42	0.47	126	6	0.08
13	12	3.00	70	5	0.30	127	13	0.33
14	25	1.94	71	5	2.66	128	30	2.21
15	5	0.39	72	17	0.69	129	4	5.05
16	9	0.80	73	22	19.72	130	0	0.00
17	27	2.37	74	62	19.25	131	25	1.66
18	3	1.12	75		0.00	132	20	1.85
19	13	1.06	76	12	26.83	133	12	34.20
20	12	3.64	77	222	5.15	134	46	6.23
21	16	3.90	78	44	1.16	135	20	0.80
22	19	6.05	79	84	13.20	136	162	1.73
23	6	0.48	80	18	0.07	137	0	0.00
24	25	4.83	81	0	0.00	138	5	3.42
25	2	0.28	82	47	1.90	139	5	6.96
26	322	10.21	83	7	0.85	140	12	5.06
27	12	0.17	84	12	4.69	141	8	2.34
28	4	2.96	85	2	2.73	142	50	23.76
29	10	1.29	86	4	0.38	143	211	635.74
30	2	0.25	87	0	0.00	144	10	0.49
31	23	11.27	88	143	1.54	145	113	40.56
32	3	5.57	89	3	3.16	146	25	62.64
33	33	0.34	90	3	5.53	147	5	39.82
34	7	9.72	91	1	0.21	148	0	0.00
35	7	4.96	92	0	0.00	149	12	6.64
36	9	4.51	93	17	5.09	150	0	0.00
37	27	108.59	94	7	1.71	151	0	0.00
38	8	13.10	95	95	3.40	152	8	39.88
39	2	1.15	96	21	14.87	153	8	11.66
40	12	12.29	97	7	0.45	154	1	0.42
41	52	13.61	98	12	0.75	155	14	11.22
42	45	4.89	99	22	0.26	156	0	0.00
43	12	0.97	100	1	0.42	157	34	23.47
44	4	0.14	101	4	1.73	158	63	5.59
45	23	2.55	102	40	1.77	159	0	0.00
46	17	19.08	103	9	2.81	160	2	0.15
47	41	0.48	104	2	0.33	161	12	3.02
48	0	0.00	105	133	15.34	162	30	3.19
49	0	0.00	106	9	0.95	163	10	96.96
50	0	0.00	107	3	0.43	164	0	0.00
51	12	1.25	108	0	0.00	165	19	5.81
52	0	0.00	109	0	0.00	166	0	0.00
53	229	852.70	110	0	0.00	167	79	5.96
54	5	2.57	111	28	6.59	168	0	0.00
55	0	0.00	112	0	0.00	169	12	55.38
56	28	66.24	113	26	0.21	170	3	0.06
57	114	11.79	114	0	0.00	171	12	1.10
						172	20	45.05
IMCA	4325	1.61	IMCA	4325	1.61	IMCA	4325	1.61

Table 18 – Lessons learnt ratio (LLR) data 2010

Individual Company LTIFR and TRIR Statistics

The following tables show the important statistical rates for each of the 172 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 19 – Hours worked bands

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

	Band	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
1	C	2.68	0.00	2.68	2.68	0.00	2.68
2	A	0.00	0.00	0.00	0.00	0.00	0.00
3	A	0.00	0.00	0.00	0.00	0.00	0.00
4	D	0.00	0.00	0.00	0.27	2.63	0.48
5	C	8.69	0.00	8.69	12.81	0.00	12.81
6	C	0.00	0.00	0.00	2.57	0.00	2.57
7	B	0.00	0.00	0.00	1.12	0.00	1.04
8	A	0.00	0.00	0.00	0.00	0.00	0.00
9	C	1.66	0.00	1.66	4.97	0.00	4.97
10	B	0.00	0.00	0.00	1.94	0.00	1.94
11	C	0.65	0.00	0.65	0.98	0.00	0.98
12	A	0.00	0.00	0.00	0.00	113.44	50.49
13	B	6.83	18.58	9.99	6.83	18.58	9.99
14	C	0.90	0.00	0.78	2.71	0.00	2.33
15	C	0.00	0.00	0.00	4.32	0.00	3.92
16	C	1.48	0.00	1.34	4.94	0.00	4.46
17	C	0.00	0.00	0.00	2.68	2.42	2.63
18	B	0.00	0.00	0.00	16.69	0.00	13.02
19	C	0.47	0.00	0.41	3.78	2.89	3.65
20	B	4.16	0.00	1.51	4.16	2.38	3.03
21	B	0.00	0.00	0.00	5.25	0.00	4.87
22	B	0.00	0.00	0.00	0.00	0.00	0.00
23	C	0.00	2.97	0.40	1.87	2.97	2.02
24	C	2.46	0.00	1.93	4.91	0.00	3.86
25	C	0.00	0.00	0.00	0.84	0.00	0.69
26	D	1.27	0.00	1.27	2.54	0.00	2.54
27	D	0.38	0.45	0.41	2.94	1.36	2.21
28	A	0.00	0.00	0.00	0.00	0.00	0.00
29	C	3.89	0.00	1.93	7.77	0.00	3.87
30	C	0.00	0.00	0.00	0.00	0.00	0.00
31	A	0.00	0.00	0.00	4.90	4.90	4.90
32	A	0.00	0.00	0.00	0.00	0.00	0.00
33	D	1.30	0.31	0.62	5.04	0.69	2.08
34	A	6.94	0.00	6.94	13.89	0.00	13.89
35	A	10.63	0.00	10.63	14.18	0.00	14.18
36	A	0.00	0.00	0.00	0.00	8.73	5.01
37	A	0.00	0.00	0.00	0.00	0.00	0.00
38	A	0.00	0.00	0.00	8.19	0.00	8.19
39	A	0.00	3.99	2.86	0.00	7.99	5.73

	Band	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
40	A	0.00	0.00	0.00	0.00	0.00	0.00
41	B	1.37	0.00	1.31	5.50	0.00	5.23
42	C	1.09	0.00	0.86	1.63	0.00	1.30
43	C	3.59	0.00	3.24	8.54	0.00	7.71
44	D	0.17	0.00	0.17	2.22	0.00	2.22
45	C	0.00	0.00	0.00	1.11	0.00	1.11
46	A	0.00	0.00	0.00	0.00	0.00	0.00
47	D	0.06	0.00	0.06	3.17	0.00	3.15
48	A	0.00	0.00	0.00	0.00	0.00	0.00
49	C	0.00	0.00	0.00	2.29	0.00	1.81
50	D	0.56	0.30	0.42	3.56	0.46	1.84
51	C	0.00	7.58	0.52	4.48	7.58	4.70
52	A	0.00	18.01	9.53	0.00	18.01	9.53
53	A	18.62	21.26	20.53	37.24	56.68	51.32
54	A	5.48	0.00	5.14	16.44	0.00	15.43
55	A	14.94	661.38	29.21	14.94	661.38	29.21
56	A	12.03	0.00	11.83	12.03	0.00	11.83
57	C	1.61	0.00	1.55	4.30	0.00	4.14
58	D	0.47	0.75	0.58	4.48	6.01	5.07
59	A	0.00	0.00	0.00	0.00	0.00	0.00
60	A	0.00	0.00	0.00	0.00	0.00	0.00
61	A	0.00	0.00	0.00	0.00	0.00	0.00
62	A	3.15	0.00	3.15	6.30	0.00	6.30
63	C	0.00	0.00	0.00	0.21	0.00	0.21
64	B	1.61	0.00	1.58	30.66	0.00	30.10
65	A	21.19	0.00	16.78	42.38	0.00	33.56
66	B	1.52	0.00	1.39	9.13	0.00	8.31
67	C	0.00	0.00	0.00	2.20	1.06	1.91
68	B	0.00	0.00	0.00	5.48	5.48	5.48
69	D	0.76	0.55	0.67	1.81	4.67	2.98
70	C	0.00	0.00	0.00	0.34	0.00	0.30
71	A	0.00	0.00	0.00	2.85	0.00	2.66
72	D	1.62	0.00	1.49	5.87	0.00	5.41
73	A	0.00	0.00	0.00	0.00	7.89	2.86
74	B	0.00	0.00	0.00	1.75	0.00	1.55
75	A	45.72	0.00	37.11	137.17	0.00	111.34
76	A	0.00	0.00	0.00	0.00	0.00	0.00
77	D	0.00	0.00	0.00	1.35	0.84	0.93
78	D	0.93	0.00	0.93	1.46	0.00	1.46
79	C	0.93	0.00	0.79	7.41	0.00	6.28
80	D	0.96	0.41	0.50	2.87	1.50	1.74
81	A	0.00	0.00	0.00	0.00	0.00	0.00
82	D	0.20	0.00	0.17	1.01	1.12	1.03
83	C	3.04	0.00	2.60	14.61	0.00	12.49
84	B	0.00	0.00	0.00	1.95	2.82	2.31
85	A	0.00	0.00	0.00	0.00	0.00	0.00
86	C	0.00	0.00	0.00	1.44	0.00	1.44
87	A	0.00	0.00	0.00	0.00	0.00	0.00
88	D	0.14	0.00	0.11	1.58	0.00	1.24
89	A	5.27	0.00	4.42	10.53	0.00	8.84
90	A	9.22	0.00	8.54	27.65	0.00	25.61
91	B	0.00	0.00	0.00	0.00	0.00	0.00
92	C	1.65	0.00	1.65	4.96	0.00	4.96
93	B	5.99	0.00	5.99	7.48	0.00	7.48
94	B	1.22	0.00	1.18	3.66	0.00	3.53
95	D	1.25	0.00	1.25	2.86	0.00	2.86
96	A	0.00	0.00	0.00	0.00	0.00	0.00
97	C	0.64	0.00	0.64	3.87	0.00	3.87
98	C	1.98	0.00	1.88	7.27	0.00	6.88
99	D	0.24	0.00	0.24	1.54	0.00	1.54
100	A	0.00	0.00	0.00	0.00	0.00	0.00

	Band	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
101	A	0.00	0.00	0.00	2.53	0.00	2.16
102	C	0.66	0.00	0.66	2.43	0.00	2.43
103	B	0.00	0.00	0.00	1.80	0.00	1.56
104	C	0.00	0.00	0.00	0.00	0.00	0.00
105	C	0.58	0.00	0.58	4.04	0.00	4.04
106	C	3.68	0.00	3.68	6.84	0.00	6.84
107	C	0.00	0.00	0.00	6.20	4.54	5.68
108	D	0.14	0.14	0.14	2.61	0.78	1.08
109	A	0.00	0.00	0.00	0.00	0.00	0.00
110	C	3.42	0.00	3.42	15.86	0.00	15.86
111	B	0.00	0.00	0.00	4.71	0.00	4.01
112	A	0.00	0.00	0.00	6.91	0.00	6.91
113	D	0.04	0.00	0.04	0.36	0.00	0.36
114	A	0.00	0.00	0.00	8.40	0.00	6.65
115	B	0.00	0.00	0.00	0.00	0.00	0.00
116	C	0.00	0.00	0.00	0.00	0.00	0.00
117	A	0.00	0.00	0.00	0.00	0.00	0.00
118	B	1.42	0.00	1.10	8.51	0.00	6.62
119	B	0.00	5.95	1.41	9.26	5.95	8.47
120	C	2.51	0.00	1.70	6.10	3.00	5.10
121	D	2.50	0.00	2.43	4.55	4.73	4.55
122	C	1.08	0.00	0.70	1.08	0.00	0.70
123	A	0.00	0.00	0.00	5.97	0.00	5.62
124	A	83.57	0.00	24.03	150.42	0.00	43.25
125	A	12.56	0.00	6.17	12.56	0.00	6.17
126	D	0.21	4.23	0.51	1.52	5.92	1.85
127	D	1.28	0.00	1.28	2.69	0.00	2.69
128	C	0.00	0.00	0.00	0.85	0.00	0.74
129	A	6.31	0.00	5.92	6.31	0.00	5.92
130	A	0.00	0.00	0.00	0.00	0.00	0.00
131	C	0.66	0.00	0.64	4.31	0.00	4.16
132	C	1.39	0.00	1.39	4.62	0.00	4.62
133	A	0.00	0.00	0.00	0.00	0.00	0.00
134	C	0.68	0.00	0.68	0.68	0.00	0.68
135	D	3.65	0.00	2.59	7.02	0.69	5.19
136	D	0.16	0.00	0.16	0.27	0.00	0.26
137	A	0.00	0.00	0.00	0.00	0.00	0.00
138	A	0.00	0.00	0.00	78.74	0.00	64.54
139	A	0.00	0.00	0.00	16.24	0.00	13.92
140	A	0.00	21.06	4.21	5.27	21.06	8.43
141	B	0.00	0.00	0.00	0.00	0.00	0.00
142	A	0.00	0.00	0.00	3.17	0.00	2.38
143	A	0.00	0.00	0.00	0.00	0.00	0.00
144	C	0.00	0.00	0.00	0.98	0.00	0.73
145	B	1.79	0.00	1.68	7.18	0.00	6.73
146	A	0.00	478.93	12.21	50.11	957.85	73.25
147	A	0.00	0.00	0.00	492.13	0.00	358.38
148	A	0.00	0.00	0.00	24.20	0.00	14.46
149	A	0.00	0.00	0.00	7.99	80.89	30.43
150	D	0.27	0.00	0.27	0.82	3.94	0.93
151	C	1.42	0.00	1.30	7.11	0.00	6.51
152	A	0.00	0.00	0.00	0.00	0.00	0.00
153	A	0.00	0.00	0.00	38.01	31.29	36.45
154	A	2.29	0.00	2.08	18.29	0.00	16.68
155	A	4.01	0.00	4.01	8.02	0.00	8.02
156	C	1.90	0.00	1.46	5.71	0.00	4.38
157	A	0.00	0.00	0.00	0.00	0.00	0.00
158	C	0.89	0.00	0.89	3.55	0.00	3.55
159	A	0.00	0.00	0.00	0.00	0.00	0.00
160	C	0.00	21.31	1.07	0.75	21.31	1.78
161	B	1.26	0.00	1.20	3.77	0.00	3.60

	Band	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
162	C	1.15	0.00	1.06	1.73	0.00	1.59
163	A	436.30	32.11	193.16	436.30	32.11	193.16
164	C	0.00	0.00	0.00	0.00	0.00	0.00
165	B	3.13	0.00	3.06	6.27	0.00	6.12
166	A	0.00	0.00	0.00	32.76	22.18	24.13
167	C	0.51	0.00	0.38	5.15	0.00	3.77
168	A	0.00	0.00	0.00	3.35	0.00	2.20
169	A	0.00	0.00	0.00	0.00	0.00	0.00
170	D	0.10	1.48	0.40	5.74	3.33	5.22
171	C	0.00	0.00	0.00	0.00	0.00	0.00
172	A	0.00	0.00	0.00	0.00	112.15	32.14
	IMCA	0.86	0.43	0.73	3.19	1.64	2.74

Table 20 – Individual company LTIFR and TRIR statistics 2010

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	<ul style="list-style-type: none"> ◆ 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 accident
Fatal accident rate (FAR)	number of fatalities per 100,000,000 hours worked
Number of lost time injuries (LTIs)	<p>comprises all accidental injuries (including fatalities and lost work day cases but excluding restricted work day cases) where:</p> <ul style="list-style-type: none"> ◆ 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: <ul style="list-style-type: none"> – an assignment to a temporary job; – working in the regular job but not performing all the usual duties of the job. <p>Note: Where no meaningful restricted work is being performed, the incident should be recorded as a lost work day case.</p>
Lost time injury frequency rate (LTIFR)	<p>analysed separately as offshore, onshore and overall statistics</p> $\frac{\text{Lost time injuries} \times 1,000,000}{\text{hours worked}}$
Total recordable injury rate (TRIR)	<p>the number of injuries and/or illnesses per 100 full-time workers and is calculated as:</p> $= \frac{\text{total number of recordable injuries} \times 1,000,000}{\text{total hours worked}}$
The US Occupational Safety & Health Administration (OSHA) definition of ‘total recordable injuries’	<p><u>Work-related injuries and illnesses</u> – events or exposures in the work environment that caused or contributed to the condition or significantly aggravated a pre-existing condition.</p> <p><u>Recordable cases</u> – include work-related injuries and illnesses that result in:</p> <ul style="list-style-type: none"> ◆ 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: <ul style="list-style-type: none"> – 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 <p><u>Days away from work, days of restricted work activity or job transfer</u> are cases that involve days away from work, or days of restricted work activity or job transfer, or both</p> <ul style="list-style-type: none"> ◆ 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. <p><u>Total recordable injury rate (TRIR)</u> – the number of injuries and/or illnesses per 100 full-time workers and is calculated as: (N/EH) x 200,000 where:</p> <p>N = total number of recordable injuries and/or illnesses</p> <p>EH = total hours worked by all employees during the calendar year</p> <p>200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year)</p> <p>Note: 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</p>

Definitions – Leading Safety Statistics

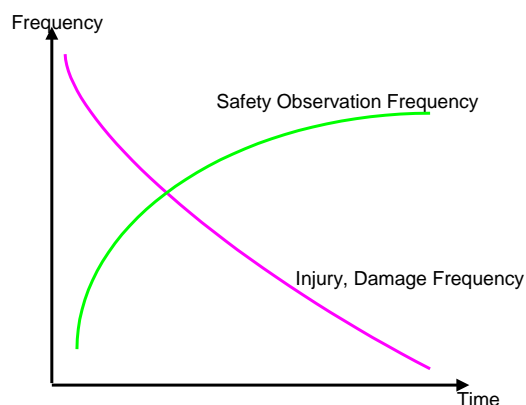
IMCA's leading performance indicators have been developed by members of the SEL Committee and have been subject to periodic update and review since their initial development in 2002. The most recent change, made in 2009, was to harmonise all the leading performance indicators with the safety observation 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 proactive worksites are expected to generate a high level of reporting (perhaps several hundred in a year), the frequency basis shall be:

$$\begin{aligned} \text{SOFR} &= \text{number of safety observations per 200,000 man-hours} \\ &= \frac{\text{number of safety observations} \times 200,000}{\text{Total man-hours}} \end{aligned}$$

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:

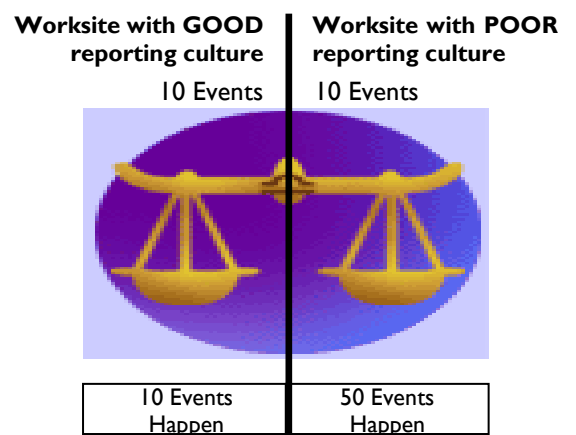
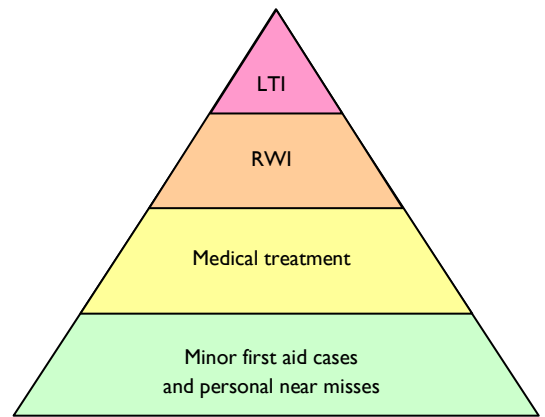
$$\text{RAL} = ((5 \times \text{FNMR}) + (20 \times \text{MTR}) + (100 \times \text{RWIR})) \text{ per } 200,000 \text{ man-hours}$$

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 proactive 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:

$$\text{MVR} = \text{number of managerial visits per } 200,000 \text{ man-hours}$$

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 processes 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:

$$\text{LLR} = \text{number of bulletins issued per } 200,000 \text{ man-hours}$$

Definitions

LLR	Lessons learnt rating
-----	-----------------------