WORK & SAFETY ANALYSIS 2025

irata International
Industrial Rope Access Trade Association

FOREWORD

We, the Industrial Rope Access Trade Association (IRATA) represent member companies working across a wide range of industries and regions. We work in collaboration with our members to gather data regarding hours of rope access activity, incidents and dangerous occurrences. This data is then analysed to understand the conditions in which incidents occur and to support continual safety improvements across our industry.

The purpose of the data collection and analysis is to:

- Foster a shared understanding of safety performance across the industry
- Identify recurring risks and areas requiring focused attention
- Inform training programmes, operational procedures, and industry guidance

Our enduring commitment to safety is at the heart of everything we do. IRATA exists to demonstrate that rope access is not only a highly efficient method for working at height, but also an inherently safe one. By consistently collecting and learning from operational data, we reinforce and evolve the safety credentials of rope access techniques.

At the core of our safety approach is a culture of continuous learning and collective responsibility. All IRATA member companies are required to report incidents, regardless of severity, as part of a wider effort to reduce harm and strengthen rope access as a trusted method for work at height. This systematic reporting supports ongoing evaluation, enabling member companies to learn not only from their own operations, but from the experiences of the global community.

Over time, this process helps us build a detailed, evidence-based picture of real world work environments and challenges. The insights gained from this data help shape meaningful improvements to training, equipment use, and operational planning, ultimately raising the standard of safety across the board.

We invite all readers involved in work at height, to engage with the findings in this report and consider how these lessons can be applied in your own organisation.

IRATA International
Global Authority in Rope Access

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Safety is a shared journey,

and through open exchange of knowledge and collective learning, we continue to refine best practice, raise the benchmark for excellence, strengthen global competence and foster a culture where **every worker returns home safe.**

Image on this spread courtesy of CAN © 2024.

ABSTRACT

This report provides analyses of employment, accident and incident data from IRATA International members for the period January-December 2024. IRATA members employed 32,715 rope access personnel working 33,665,594 hours.

Key Findings

Membership grew by 1.4% while employment increased by 18.2%, with Level 3 technician numbers growing by 31.3%. Working hours increased 2.7%.

A total of 279 incident reports were received (0.4 per member, down from 0.5 in 2023), which included: 2 fatalities, 2 major injuries, 16 over-7-day injuries, 89 less-than-7-day injuries, and 170 dangerous occurrences with no injury. 65% occurred “on rope,” 18% during training, and 17% in other activities.

Risk Areas

Human factors dominated (198 incidents), led by lapse of concentration (74 incidents) and failure to follow rules (50 incidents). Management factors affected 146 incidents, primarily failure to identify hazards (76) and inadequate communication (23). Most common immediate causes were falling/dropped objects (59), operator error (49), and contact with tools/equipment (40).

Recommendations

Recommendations are made in relation to:

- Behavioural competence training
- Hazard identification standards
- Dropped object and rope damage prevention
- Equipment reliability investigation
- Training safety oversight
- Fitness-to-work guidance
- Climate risk management
- Systematic learning from serious incidents

Independent Review by

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Appendix I provides a glossary of terms used throughout this report. Regional Advisory Committee data by employment, hours worked, and incident distribution is presented in Appendix II.

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1. INTRODUCTION

This summary report presents key employment, accident and incident data submitted by reporting members[1] of IRATA for the period January 2024 to December 2024.

When reporting is routine, safety becomes culture

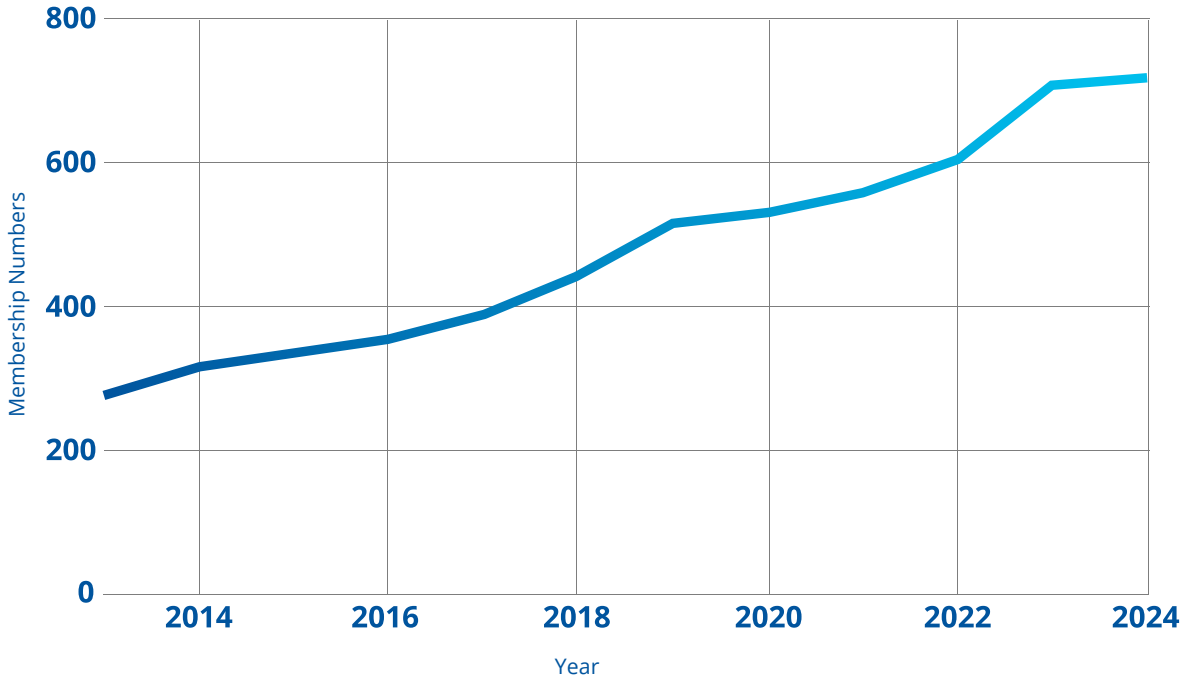
NOTE: Numerical data that has been presented in square brackets [NUMBERS] represents the data from the previous year, 2023.

2. IRATA MEMBERSHIP & EMPLOYMENT STATISTICS

2.1 MEMBERSHIP

IRATA membership has seen steady growth since 2013, with reporting members[1] growing from 277 in 2013 to 718 in Q4 2024 (see **Figure 1**).

Figure 1: IRATA membership numbers[1] at Q4 2024



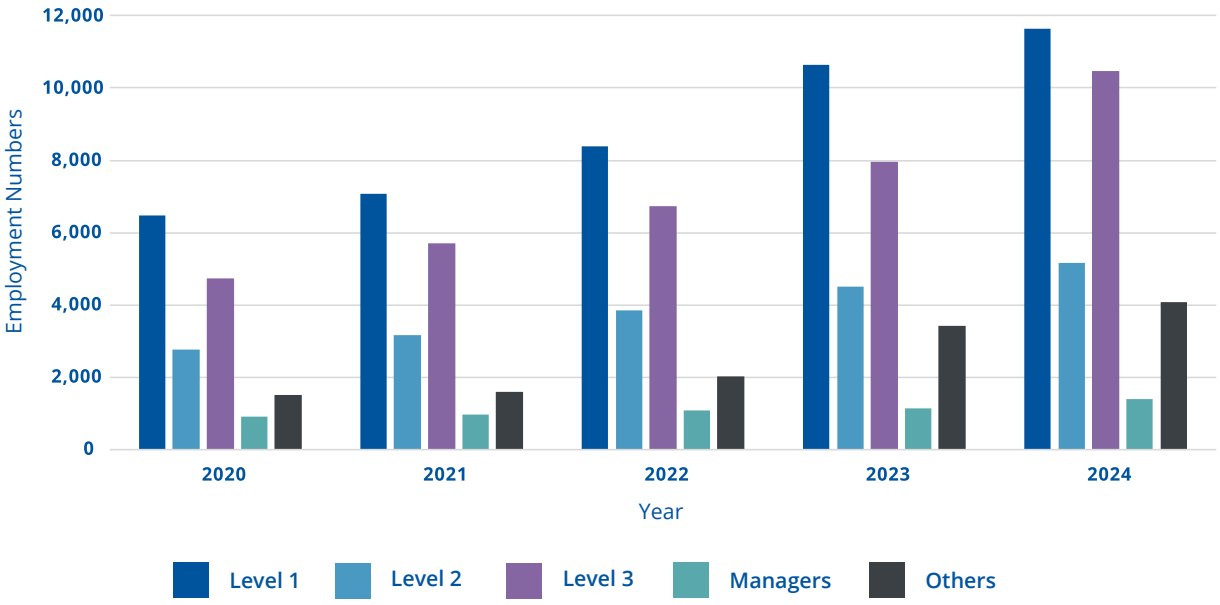
[1] Reporting members include operators and training members, but exclude associate members.

2.2 EMPLOYMENT

Distribution of employment between grades for individuals undertaking rope access activities is shown in **Figure 2**. Total employment in 2024 averaged 32,715 [27,669], which is an increase of 18.1% over the last 12 months. Notable is the 31.3% increase in employment for Level 3 technicians in 2024, 10,458 [7,964].

31%
increase in Level 3 employment **since 2023**

Figure 2: Distribution of rope access employment between grades



73.5%
increase of reported hours worked in the **last 4 years**

2.3 REPORTED HOURS WORKED

The distribution of reported work hours by grade is shown in **Figure 3**. The total hours worked in 2024 is 33,665,594 [32,795,726], this is an increase of 2.7% from 2023, and 73.5% increase in the last 4 years.

Notable is the reduction in reported work hours for 'Managers' and 'Others' when compared with 2023, while conversely all grades have shown an increase in work hours, with the Level 2's being the greatest at 14.9%.

Figure 3: 2024 distribution of reported work hours by grade

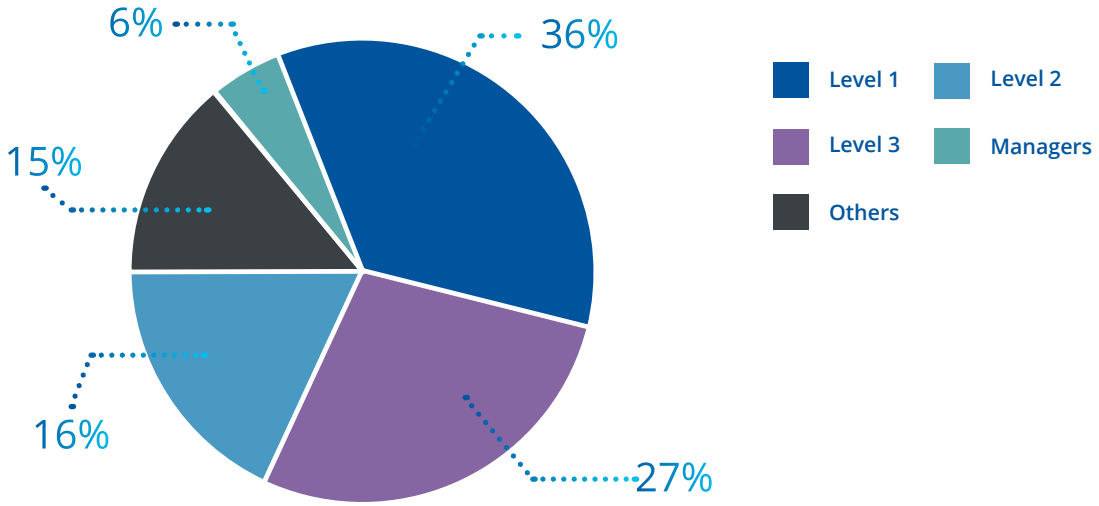


Figure 3a: Distribution of reported work hours by grade

Year	Level 1	Level 2	Level 3	Managers	Others
2020	7,053,087	3,103,833	5,243,305	1,118,342	2,893,652
2021	6,990,924	3,522,853	6,389,974	1,139,582	3,173,943
2022	8,375,176	4,618,926	7,419,162	1,394,655	3,693,721
2023	10,720,925	5,368,807	8,851,467	1,713,932	6,140,595
2024	11,644,784	6,169,266	9,496,743	1,657,069	4,697,732

2.4 LOCATION OF HOURS WORKED

Distribution of work hours data is shown in **Figure 4**, classifying work as, 'Onshore', 'Offshore', or 'Training'. Excluding 'Training', 65% [64%] of time working is spent 'Onshore' and 35% [36%] of time working 'Offshore' in 2024, a 1% shift from 2023.

Figure 4: Location of hours worked.

Year	Onshore - On Rope	Onshore - Other	Offshore - On Rope	Offshore - Other	Training	Overall
2020	6,758,002	5,522,746	3,087,325	3,475,025	569,122	**19,412,219**
2021	7,590,785	5,504,590	3,651,158	3,819,428	651,313	**21,217,274**
2022	8,855,725	6,637,526	4,295,185	4,650,655	1,062,549	**25,501,640**
2023	10,618,891	9,560,906	5,049,804	6,259,930	1,306,195	**32,795,726**
2024	11,687,953	9,283,648	5,191,143	6,291,053	1,211,797	**33,665,594**

65%
of time spent working
On-Shore

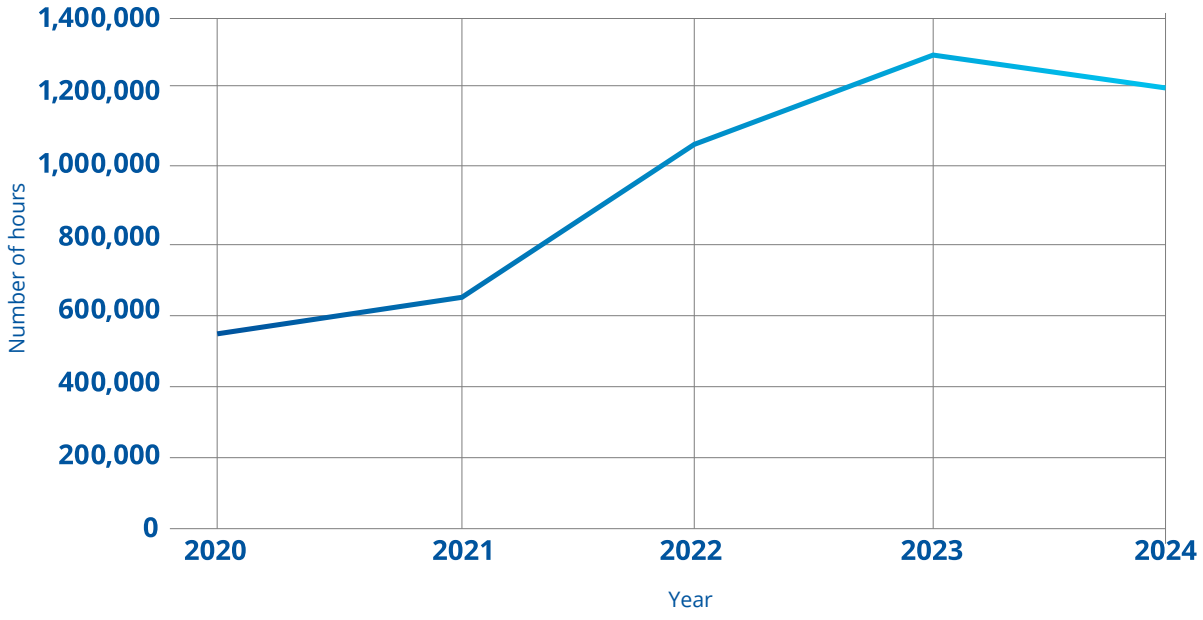
35%
of time spent working
Off-Shore

2.5 TRAINING

Training hours increased by 113% over the past four years (See **Figure 5**). However, 2024 marked the first annual decline, with total hours dropping by 94,398 hours (a 7.2% decrease).

New guidance was provided to members, clarifying that hours spend delivering training should be recorded as operational rather than training.

Figure 5: Training hours by year



7.2%
decrease in training hours from **2023-2024**

3. INCIDENT STATISTICS

3.1 INTRODUCTION

A total of 279 [356] reports were received, equating to an average of 0.4 incidents reported per member, a reduction from 0.5 in 2023. In 2023 there were a total of 356 of reported incidents, 5 were classified as not relevant and 84 training errors with no injury, the WASA 2023 data analysed the remaining 267 incidents. In January 2024, new guidance on incident reporting was implemented, clarifying what needed to be reported and discrepancies around training.

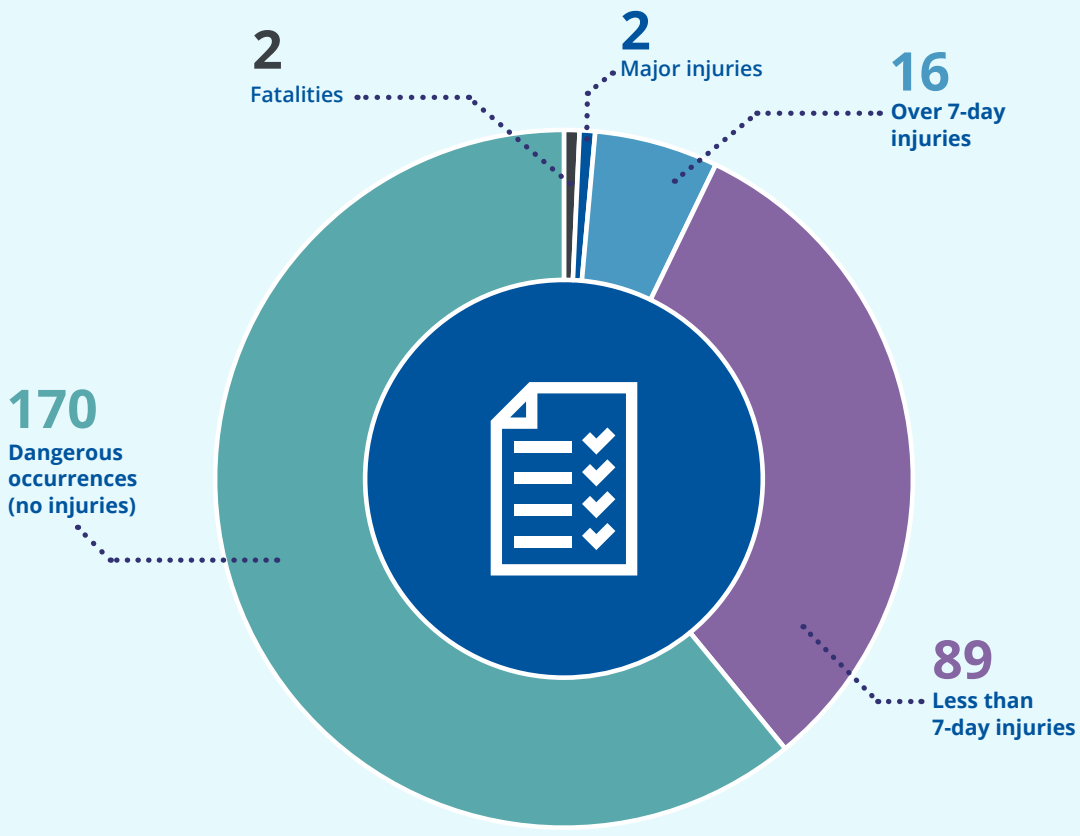
0.4
incidents reported per member at Q4

61%
of reported incidents resulted in no injury

3.2 DISTRIBUTION OF INCIDENT REPORTS

The distribution of incident reports is shown in **Figure 6**. 61% (170) of all reported incidents resulted in no injury (Dangerous Occurrence). 32% (89) were less than 7-day, 6% (16) were over 7-day, 0.5% (2) Major injury and 0.5% (2) as fatal (Fatality). In 2024 fatalities reported an underlying cause of 'Ill health or Medical condition'. (See Appendix I for definitions of terms used).

Figure 6: Distribution of incident reports



See Appendix 1 for an explanation of the terms used by IRATA for 'Fatality', 'Major Injury', 'Over 7-day injury', 'less than 7-day injury', and 'Dangerous Occurrence' (No injury).

3.3 INCIDENT DATA OVER TIME

The incident data over time for 'Fatal', 'Major' and 'Over 7-day' injuries are shown in **Figure 7**.

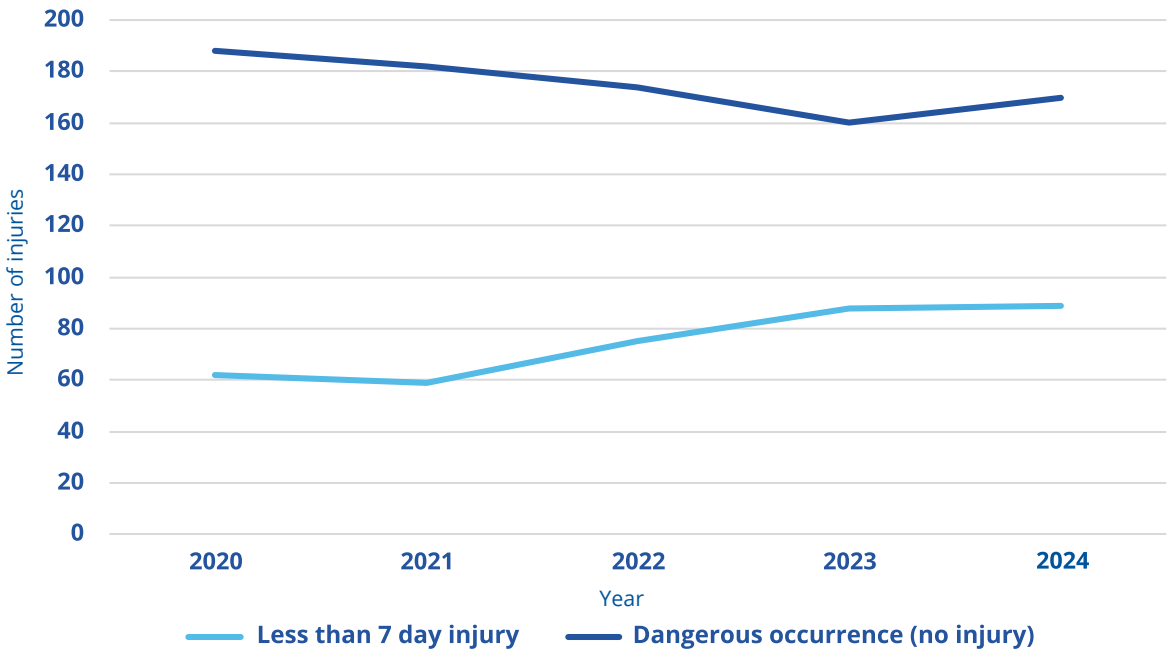
Figure 7: 'Fatality', 'Major' and 'Over 7-day'

Year	Fatality	Major	Over 7-day
2020	0	3	7
2021	3	4	8
2022	0	3	8
2023	1	4	14
2024	2	2	16

The number of reports covering 'Fatal', 'Major' and 'Over 7-day' injury was 20 in 2024 [19].

The incident data over time for 'Less than 7-day' and 'Near misses' is shown in **Figure 8.**

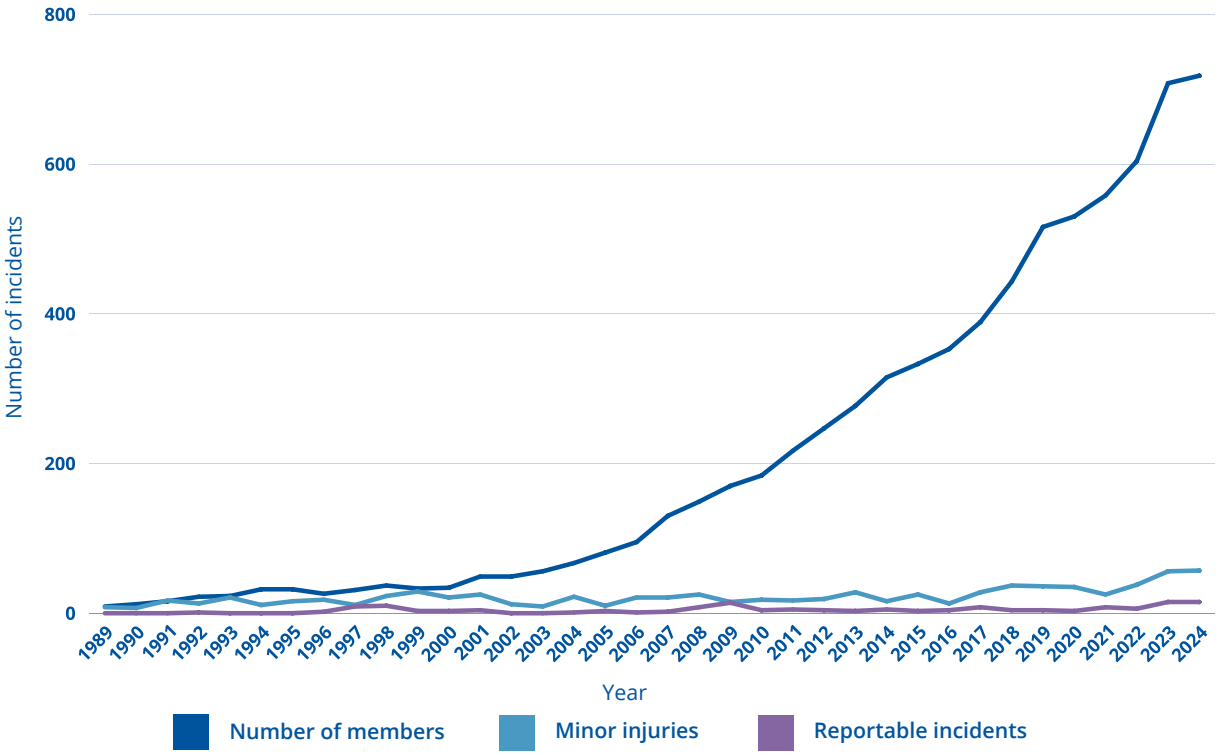
Figure 8: 'Less than 7-day', and 'Dangerous Occurrence'



The data shows an increase in total reported incidents from 267 in 2023 to 279 in 2024.

Figure 9 Shows the total numbers of members since 1989 alongside incidents.
On Rope hours increased from 267,504 in 1989 to 33,665,594 in 2024.

Figure 9: Membership growth compared to On Rope 'Minor injuries' and 'Reportable Incidents'[2]



[2] Terminology uses the term 'Reportable Incidents,' this denotes incidences needed to be reported to HSE under RIDDOR regulations, not incidents reported to IRATA. 'Minor Injuries' equates IRATA's classification of 'Less than 7-day' and 'Reportable Incidents' combine Fatality, Major Injury and Over 7-Day injury. All these injuries were reported as occurring "On Rope".

3.4 SUMMARY OF REPORTED INCIDENTS IN 2024

In summary, the reported incidents data by activity in 2024 is shown in **Figure 10**.

65% of incidents reported occured **'On Rope'**

18% of incidents reported occured whilst **Training**

17% of incidents reported as **'Other'**

Figure 10: Reported incident data by activity

Activity	On Rope	Other	Training	Total
Fatality[3]	1	1	0	**2**
Major injury	2	0	0	**2**
Over 7-day injury	12	2	2	**16**
Less than 7-day injury	56	8	25	**89**
Dangerous occurrence	111	35	24	**170**
Total	**182**	**46**	**51**	**279**

Alternatively, by location, see **Figure 11.**

Figure 11: Reported incident data by location

Location	On-shore	Off-shore	Training	Total
Fatality	2	0	0	**2**
Major injury	1	1	0	**2**
Over 7-day injury	10	4	2	**16**
Less than 7-day injury	50	14	25	**89**
Dangerous occurrence	124	22	24	**170**
Total	**187**	**41**	**51**	**279**

67% of incidents reported **On-Shore**

15% of incidents reported **Off-Shore**

18% of incidents reported during **Training**

Alternatively, by grade, see **Figure 12.**

[3] Fatalities reported underlying causes as 'Ill Health or Medical Condition'

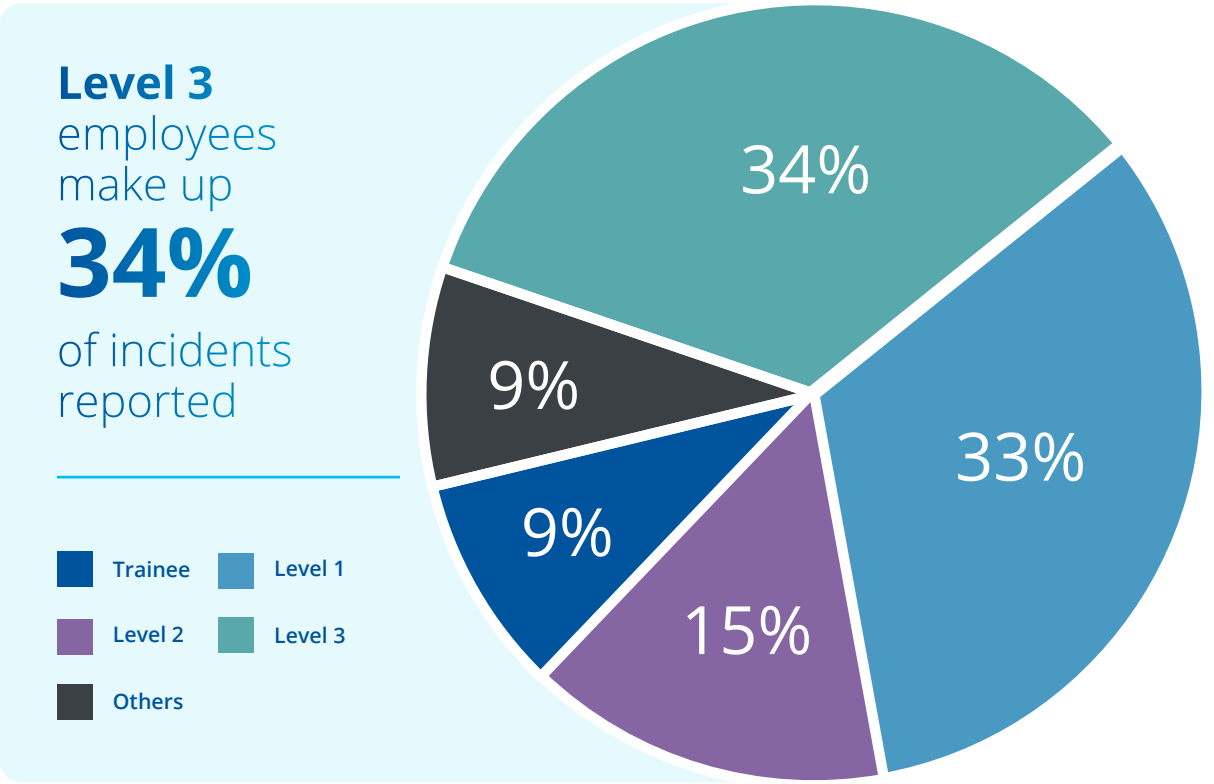


Figure 12: Reported incident data by grade

Grade	Fatality	Major injury	Over 7-day injury	Less than 7-day injury	Dangerous Occurrence – no injury	Total
Trainee	0	0	2	12	12	**26**
Level 1	0	0	4	34	54	**92**
Level 2	2	2	2	13	21	**40**
Level 3	0	0	8	27	60	**95**
Other	0	0	0	3	23	**26**
Total	**2**	**2**	**16**	**89**	**170**	**279**

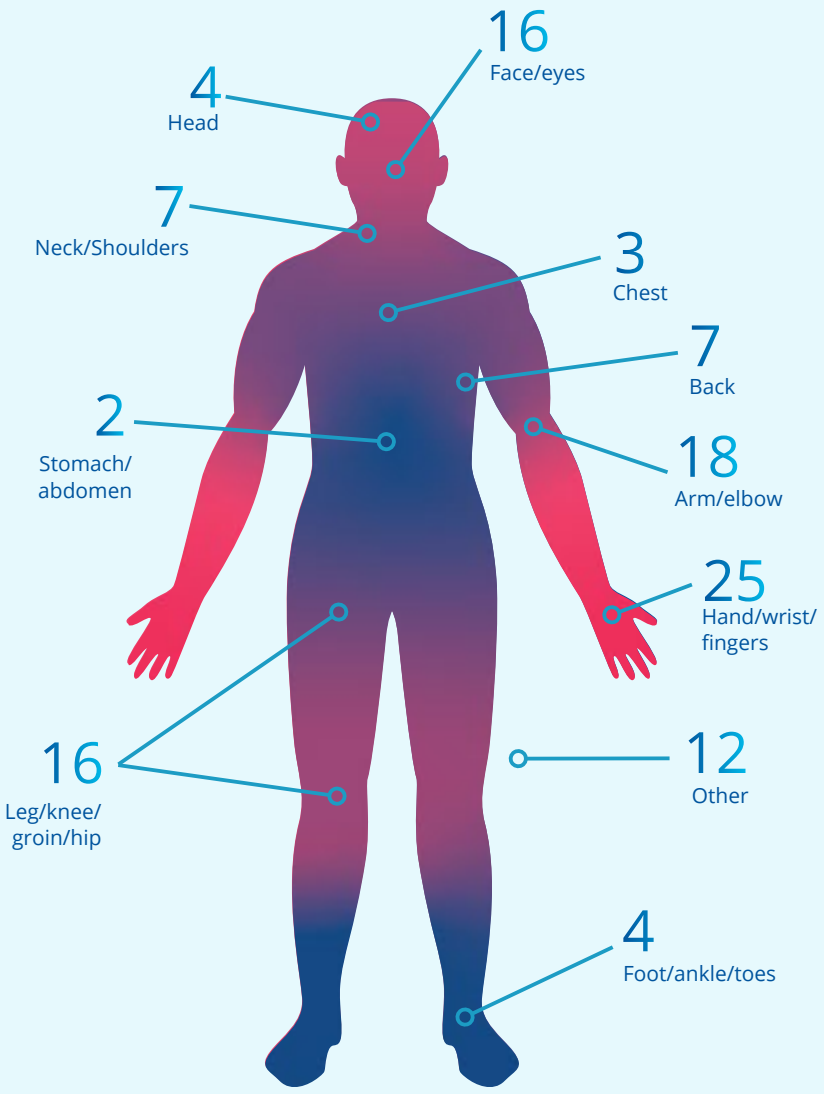
Transparent reporting turns insights into learning, and learning into prevention

3.5 BODY PARTS INJURED

The total number of reported injuries to body parts in 2024 is 114 [119]. The total number of injuries is not equal to the total number of reports, as there may be multiple injury sites. **Figure 13** shows the injury count per body part.

Injury	No. of injuries 2023	No. of injuries 2024
Head	6	4
Face / eyes	22	16
Neck / shoulders	10	7
Chest	1	3
Stomach / torso	1	2
Back	11	7
Arm	16	18
Hand / fingers	23	25
Leg	23	16
Foot / ankle / toes	4	4
Other	2	12
Total	**119**	**114**

Figure 13: Reported incident data by body part



3.6 IMMEDIATE CAUSE OF INCIDENT

This report is based on 279 [267] incident reports. Some reports were associated with more than one 'cause'. The full list of immediate reported causes (See Appendix I) is listed in **Figure 14**.

Figure 14: Reported immediate cause of incident

Immediate causes	Fatality	Major injury	Over 7-day injury	Less than 7-day injury	Dangerous occurrence (no injury)	Total
Falling or dropped object	0	0	0	9	50	59
Operator error or omission	0	1	5	11	32	49
Contact with tool(s) material or equipment	0	1	4	25	10	40
Strains / sprain	0	0	4	21	0	25
Rope damage	0	0	1	0	20	21
Manual handling	0	0	2	11	3	16
Ill health or medical condition	1	0	2	5	7	15
Slip / trip	0	1	1	8	2	12
Failure of a permit to work system	0	0	0	1	11	12
Failure of plant and work equipment	0	0	0	2	7	9
Rope access equipment failure	0	0	0	0	9	9
Rope access equipment malfunction	0	0	0	1	6	7
Discarded material or equipment	0	0	0	0	7	7
Fall from a height	0	0	0	0	4	4
Collapse	1	0	0	2	1	4
Electric shock	0	0	0	0	3	3
Failure of electrical, mechanical or other isolation	0	0	0	0	0	0
Overturn	0	0	0	0	0	0
Explosion	0	0	0	0	0	0
Other	1	1	3	17	29	51
Total	**3**	**4**	**22**	**113**	**201**	**343**

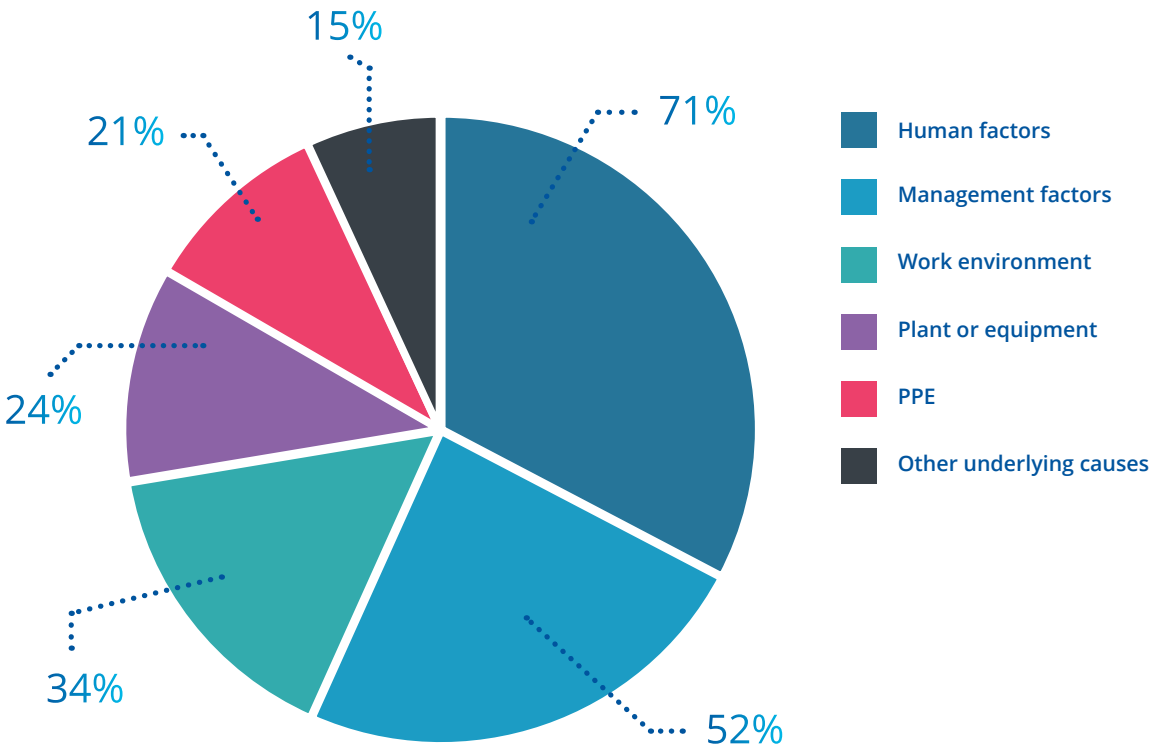
3.7 SUMMARY OF UNDERLYING CAUSES OF AN INCIDENT

The total number of incidents 279 [267] split by underlying cause is broken down in **Figure 15.**

Figure 15: Reported underlying cause of incident

Underlying causes	Fatality	Major injury	Over 7-day injury	Less than 7-day injury	Dangerous occurrence (no injury)	Total	% Incidents impacted by underlying cause
Human factors	1	1	12	68	116	**198**	71%
Management factors	0	2	8	34	102	**146**	52%
Work environment	0	1	6	28	59	**94**	34%
Plant or equipment	0	0	5	13	49	**67**	24%
PPE	0	0	2	24	33	**59**	21%
Other underlying causes	0	0	1	11	31	**43**	15%

Figure 15a: % Incidents by impacted underlying cause

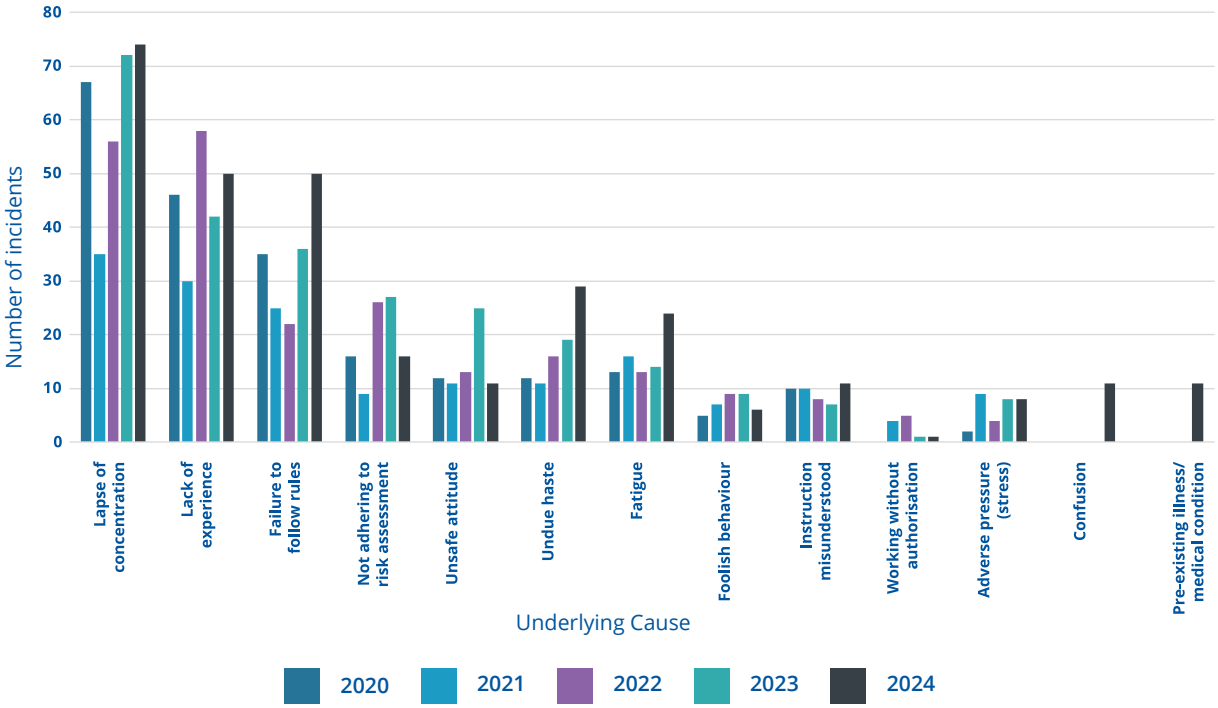


3.8 HUMAN FACTORS

71% of Incidents 198 [242] report Human Factors as the leading underlying cause, accounting for proportionally the most severe outcomes. **Figure 16** shows the reported causes broken down, with new categories 'Confusion' and 'Pre-existing illness/ medical condition' added to this year. Note some reports identify more than one reason. Lapse of concentration has increased again this year 74 [72]. Failure to follow rules 50 [36] is a notable increase.

37%
of incidents reporting human factors as a cause cite **'Lapse of concentration'.**

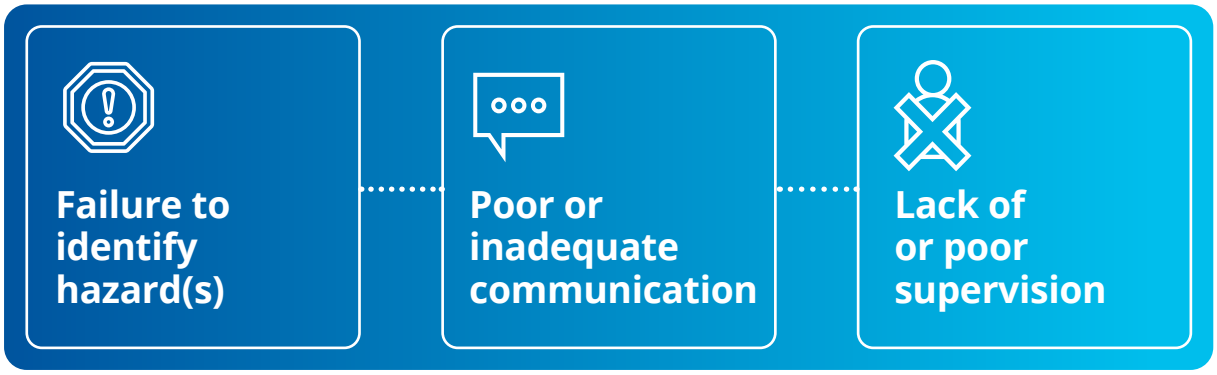
Figure 16: Human Factors



3.9 MANAGEMENT FACTORS

From the 279 incidents, 146 [130] reported as having 'Management factors 'as an underlying cause, identifying 170 [169] reasons (some had multiple reasons). See **Figure 17**.

The top three themes include:



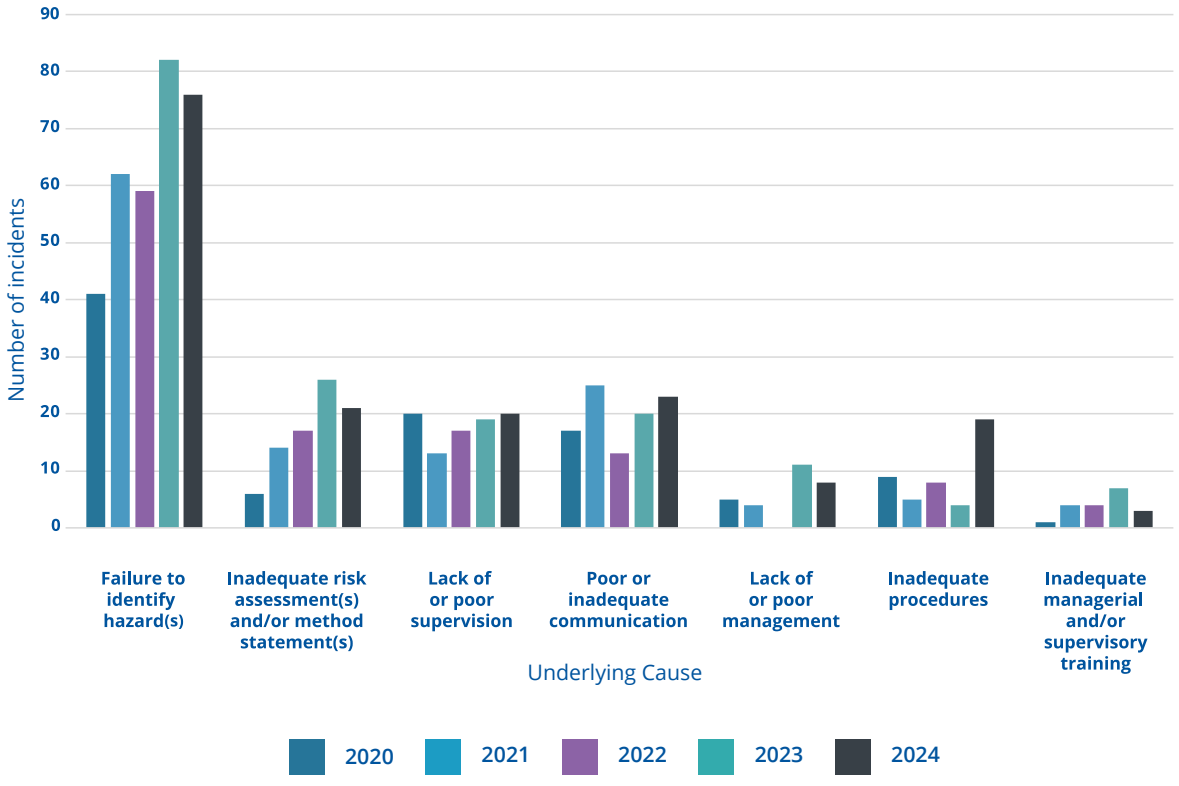
‘Failure to identify hazards’ accounts for

52%

of incidents where management factors are identified as an underlying cause

Image courtesy of Dynamic Access © 2024.

Figure 17: Management Factors



3.10 WORKING ENVIRONMENT

There are 94 [99] reported incidents citing having 'work environment' as an underlying cause, identifying 90 [106] reasons (some reports had 'Other' and multiple reasons). **Figure 18** shows the trend of reported incidents over the last 4 years with the overall trend being broadly level.

Figure 18: Work Environment

Underlying Cause	2020	2021	2022	2023	2024
Worksite access / egress problem	24	18	16	27	17
Adverse weather	9	6	12	9	15
Lack of room/confined space	14	12	14	20	12
Poor housekeeping	10	9	11	13	13
Poor design/layout	6	8	11	9	10
Lack of maintenance	14	5	11	14	12
Poor lighting / visibility	9	2	4	5	5
Failure to recognise ambient deterioration, e.g. weather	7	2	3	4	3
Noise and / or disturbance	3	3	3	5	3

3.11 PLANT AND/OR WORK EQUIPMENT

There are 67 [62] reported incidents citing having 'Plant and/or work equipment' as an underlying cause, identifying 93 [80] reasons (some reports had multiple reasons). See **Figure 19**. This year saw a spike in 'Safety device inoperative or faulty' arising as a reason.

Figure 19: Plant and/or work equipment

Underlying Cause	2021	2022	2023	2024
Incorrect operation/use	9	21	20	22
Lack of maintenance	14	17	13	15
Poor construction/design	11	16	19	11
Incorrect installation	11	15	15	8
Safety device inoperative or faulty	11	11	3	27
Mechanical failure	17	8	10	10

3.12 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The number of incidents reported as having PPE as an underlying cause is 59 [57], see **Figure 20**, with 'Incorrectly used' accounting for 19 incidents (32%).

'Poorly maintained' was not reported this year as a cause, however 'Defective' 10 [3] has shown an increase.

Figure 20: Personal Protective Equipment (PPE)

Underlying Cause	2021	2022	2023	2024
Incorrectly used	26	31	16	19
Defective	19	27	3	10
Wrong type/suitable	13	12	18	14
Not used	8	10	13	11
Poorly maintained	7	8	6	0
Not provided/not available	1	2	0	1

3.13 NON-INJURIOUS TRAINING ERRORS

This category of data is no longer reported other than in assessment under TACS.

A near miss reported today, is an accident prevented tomorrow.

3.14 ENVIRONMENTAL CONDITIONS

All 279 incidents reported the environmental conditions; these are shown in **Figure 21**. Note: 'Other' are incidents not affected by external environment factors, frequently cited as 'indoors'.

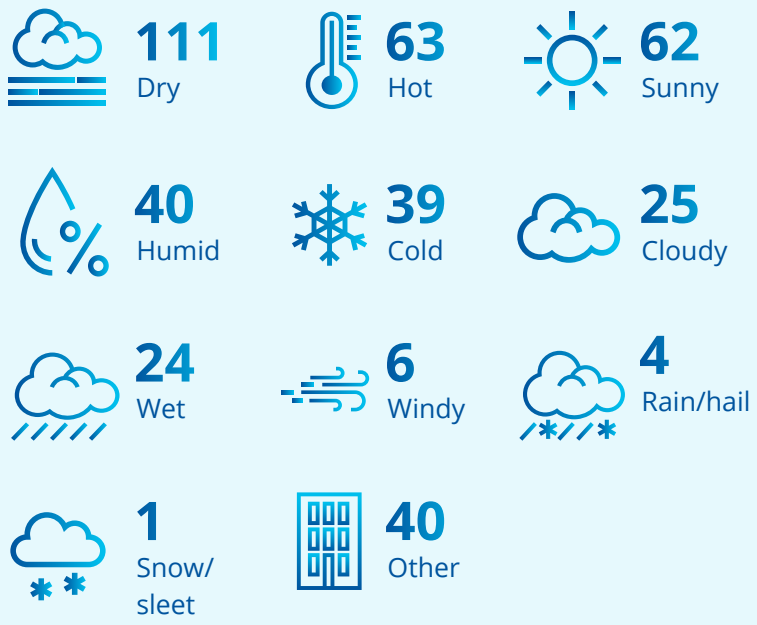


Figure 21: Environmental Conditions

3.15 TIME OF DAY

All of the 279 reported incidents note the time of day the incident occurred. See **Figure 22**.

Figure 22: Incidents by the time of day

3.16 INCIDENT NUMBERS FOR ON ROPE

Figure 23. Shows the incidence numbers for 'On Rope'.

Figure 23: Incident numbers for 'On Rope'

Status	All incidents	On Rope	% On Rope
Dangerous occurrence (no Injury)	170	111	65%
Less than 7-day injury	89	56	63%
Over 7-day injury	16	12	75%
Major injury	2	2	100%
Fatality	2	1	50%
Total	**279**	**182**	**65%**

4. DISSCUSSION & RECOMMENDATIONS

The following discussions and recommendations are from David Thomas, MSc, BSc(Eng), AKC, CEng, FICE, MInstRE, FIOSH (Retired).

4.1 KEY TRENDS

The data includes the following key trends (2023 to 2024):

a. Membership and employment

Membership: 718 [708, in 2023] members (+1.4%) - increased slightly.

Employment: 32,716 [27,699] (+18.1%) - rose sharply.

Level 1 employment: 11,628 [10,629] (+9.4%).
The growth in numbers has slowed.

Level 3 employment: 10,458 [7,964] (+31.3%).
This suggests an opportunity to increased supervisory/technical leadership capacity.

b. Hours worked

Total hours increased by only 2.7%, meaning the workforce grew faster than hours worked.

Suggests a possible shift towards shorter-term projects or improved reporting accuracy.

Level 1 and 2 hours grew (+8.6% and +14.9%), while Managers/Others decreased (-19.1%).

c. Training hours

First annual decline in four years: -7.2%.

Driven by revised guidance: training delivery now counted under operational hours. This trend needs careful interpretation.

d. Incidents

Total reports made: 279 [267, in 2023].

Fatalities: 2 [1].

Reportable incidents ('Fatality', 'Major' and 'Over 7-day'): 20 [19].

Minor incidents ('Less than 7-day'): 89 [88].

Dangerous Occurrences (no injury): 170 [160].

Overall, the picture is broadly stable.

279
total reports made in 2024 a **4.5% increase** from 2023

170
dangerous occurrences with no injury a **6.5% increase**

e. Incident distribution

Distribution: 65% occurred 'On Rope', 18% 'Training' and 16% 'Other'.

Onshore incidents: 67% (and 62.3% of the hours).

Training incidents: 18.3% (and 3.6% of the hours)

Suggests that 'Training' should continue to be an area of focus.

f. Immediate causes

Leading causes: Falling or dropped objects (59), Operator error or omission (49), Contact with tools, material or equipment (40), and Strains/sprain (25).

Rope damage (21) remains significant despite guidance.

g. Underlying causes

(i) Human Factors: 71% (198 incidents). Dominates. Within this:

- Lapse of concentration: 74 [72] – still rising.
- Failure to follow rules: 50 [36] – notable increase.
- Lack of experience: 50 [42] – increase.
- New categories: Confusion (11) and Pre-existing medical condition (11).

(ii) Management Factors: 52% (146 incidents). Within this:

- Failure to identify hazard(s): 76 [82] – slight reduction.
- Inadequate risk assessment(s) and/or method statement(s): 21 [26] – slight reduction.
- Poor or inadequate communication: 23 [20] – slight increase.
- Lack of or poor supervision: 20 [19]

(iii) Work Environment: 34% (94 incidents). Reduction on prior year. Within this:

- Worksite access/egress problem: 17 [27] – reduction.
- Lack of room/confined space: 12 [20] – increase.

(iv) Plant and/or work equipment issues. Increased. Within this:

- Incorrect operation / use: 22 [20]
- Lack of maintenance: 15 [13]
- Poor construction / design: 11 [19] – reduction.
- Safety device faulty: 27 [3] – spiked.

(v) PPE issues (55) [56]. Steady. Within this:

- Incorrectly used: 19 [16]
- Defective: 10 [3] – increase.
- Wrong type / unsuitable: 14 [18]

4.2 RECURRENT THEMES

There are some recurring themes from WASA 2024 and earlier:

a. **Falling or dropped objects remain one of the top causes.**

b. **Rope damage continues to feature despite available guidance.**

c. **Lapse of concentration, lack of experience, and failure to follow rules persist as the largest 'human factors' categories.**

d. **Failure to identify hazard(s), lack of or poor supervision, poor or inadequate communication, and inadequate risk assessment(s) and/or method statement(s) are consistently cited under management factors.**

e. **Training incidents remain disproportionately represented.**

f. **Year-on-year, lapse of concentration remains the single most common human factor.**

4.3 NEW AND EMERGING THEMES

There are some new and emerging themes in WASA 2025:

- **Shift in training data (with a decline due to reclassification).**
  There may be a risk of misinterpreting this as reduced training activity. Ensure clear communication.
- **There was a rise in the failure to follow rules.**
  This suggests cultural/behavioural issues, not just skill/experience gaps.
- **Plant and/or work equipment safety devices.**
  This emerges as a leading technical cause and merits attention (and whether focused guidance is required).
- **Medical/health-related factors (e.g. ill-health, pre-existing conditions) appear more often.**
  This may reflect both reporting changes and/or an ageing workforce and is worthy of investigation.
- **Environmental conditions.**
  There are more reports citing hot/humidity, suggesting extreme weather effects could have an effect on safety performance.

4.4 CONCLUSIONS

The main conclusions for WASA 2025 are:

a. **Stability but concern in serious outcomes**
Whilst the overall incident frequency is broadly stable, there were two fatalities and serious injuries remain elevated. The plateauing safety performance is contrary to the increasing membership growth. Note: Incident and/or accident frequency rates are not included within the statistical summaries.

b. **Persistent recurring themes**
Falling and/or dropped objects, rope damage, operator error, and hazard identification failures have remained unresolved for many years despite guidance. This suggests a gap between published guidance and frontline adoption.

c. **Human and management factors dominate**
Over 70% of incidents involve an element of 'human factors' performance. More than half link to management shortcomings. This reinforces the need for stronger safety culture, supervision, and behavioural competence interventions.

d. **Training risks and reporting challenges**
Training incidents remain significant. Reclassification of training hours makes trend analysis harder. So, continued focus is required as well as the need for consistency in reporting.

e. **Emerging technical risks**
Faulty safety devices and issues associated with personal protective equipment maintain prominence and are suggested as an area needing proactive attention.

4.5 REVIEW OF THE WASA 2024 RECOMMENDATIONS

WASA 2024 made seven principal recommendations, below. Some remain relevant in 2025, alongside new emerging themes.

We can't fix what we don't know.
Report hazards

WASA 2024 Recommendation 1:

Strengthen accident and incident reporting
Address barriers; improve near miss reporting

Partially Addressed:
New guidance clarified reporting (especially training incidents).

Overall reporting rates stable (279 reports).

Comment:
Near miss/dangerous occurrence reporting remains low relative to exposure hours. Variation persists across members. Cultural barriers to reporting are likely.

IRATA update: Launch of Incident reporting video and educational poster.

Create a members incident dashboard for trend analysis.

WASA 2024 Recommendation 2:

Common themes
revisit, e.g. dropped objects, rope damage, hazard identification, supervision, ill-health, musculoskeletal injury, wind/weather, training risks

Ongoing:
Dropped objects (59) and rope damage (21) remain leading causes.

Musculoskeletal and environmental factors also prominent.

Comment:
These risks continue year-on-year despite several Topic Sheets. Indicates a gap between published guidance and adoption at site level.

IRATA update: The discrepancy for dropped objects in IRATA assessment is now being amended to be issued for 'any dropped object', not only those defined in '9.7.5 Minor Discrepancies', 'critical personal fall protection equipment dropped'.

WASA 2024 Recommendation 3:

Register of recommendations
establish in order to track actions/outcomes

Not actioned:
Not visible in WASA 2025

Comment:
No systematic register of prior recommendations or progress tracking weakens year-on-year learning. This is a board governance issue.

IRATA update: This will be implemented at the start of the new HSC Term October 2025.

WASA 2024 Recommendation 4:

Behavioural competence and safety culture
discuss; share good practice

Not Addressed:
Human factors dominate (71% of incidents reported). Rule-breaking behaviors ('failure to follow rules' up to 50) and 'lapse of concentration' remain leading causes.

Comment:
Reinforces the need to consider behavioral competence and supervision. Also, to discuss safety culture – and what it is, what it 'looks like' and what it 'feels like' within member companies.

IRATA update: Human factors are addressed further in the new Rope Access Safety Supervisor Scheme; this will also be an ongoing topic with the HSC.

WASA 2024 Recommendation 5:

Leading and lagging indicators
discuss, e.g. safety observations, near miss trends, toolbox talks, etc.; establish benchmarking

Not Addressed:
Data collected is still 'lagging'. WASA 2025 remains heavily statistical.

Comment:
Opportunity remains for IRATA – in particular, the RACs - to identify and promote 'leading' indicators across members (e.g. safety conversations, hazard observations, etc.).

IRATA update: To be researched further, currently there are no projects or proposals in place for this subject.

WASA 2024 Recommendation 6:

Human failure and human factors
guidance and/or training in investigations

Partially Addressed:
Expanded categories ('confusion' and 'pre-existing medical condition') introduced.

Comment:
Still scope for IRATA to provide advice on structured training in root cause analysis and human factors investigation.

IRATA update: IRATA to publish the IRATA members guide to incident investigation.

WASA 2024 Recommendation 7:

Data collected
review categories; ensure consistency; benchmark with other sectors

Partially Addressed:
Categories clarified (especially training). Historical comparability becoming harder due to reclassification of training.

Comment:
Benchmarking against external datasets still missing. Reporting consistency remains a challenge.

IRATA update:
New categories and clarification of existing ones were added at the start of January 2024, moving forward this should provide clearer and more useable incident data.

4.6 IRATA HEALTH AND SAFETY COMMITTEE (HSC): UPDATE

The HSC is to be commended on its work to prepare guidance for members. It is essential that members utilise these resources as part of continuous improvement. They should expect to be asked about this at audit.

a. Completed Projects (2024 to 2025):

Safety Bulletins, Serious Incident Briefings, Publications & Topic Sheets:

- Topic Sheet No. 29 – Direct supervision and pre-use checks[4]([HS-438], 21/03/2024)
- Topic Sheet No. 30 – Scaffold use for rigging and anchoring[5] ([HS-441], 26/07/2024)
- Topic Sheet No. 31 – Tool tethering and lanyards[6] ([HS-384], 1006/2025)
- Serious Incident Briefing No. 24 – Fall from training platform[7] ([HS-446], 27/06/2024)
- Safety Bulletin No. 50 – Confined space: The hazards[8] ([HS-437], 02/10/2024)
- Safety Bulletin No. 51 – Dropped and falling objects[9] ([HS-385], 08/04/2025)

Incidents:

- Update: Incident report[10] ([FM-021] 05/01/2024)
- Update: Guidance to IRATA incident reporting[11] ([GU-265], 05/01/2024)
- 'Report a Problem. Prevent a Fatality' Poster[12] ([FM-436], V002, 05/04/2024)

b. Current Projects (2025):

Safety Bulletins, Serious Incident Briefings, Publications & Topic Sheets:

- Topic Sheet – Tensioned lines (under review for publication)
- Member's guide to incident investigation – Guidance for members to investigate their own incidents (not IRATA) (under review for publication)
- Safety Bulletin – Technician health
- Safety Bulletin – Geotechnical

WASA 2025

Safety awareness video – An addition to the series[13] aimed at highlighting the importance of incident reporting. Filming took place in April 2025, and the new video is to be shown at ITEC 2025.

References

[4] **https://irata.org/downloads/24741**

[5] **https://irata.org/downloads/25146**

[6] **https://irata.org/downloads/28861**

[7] **https://irata.org/downloads/24509**

[8] **https://irata.org/downloads/25778**

[9] **https://irata.org/downloads/27952**

[10] **https://irata.org/xpages/incident-reporting**

[11] **https://irata.org/downloads/22650**

[12] **https://irata.org/downloads/23361**

[13] **https://irata.org/page/health-and-safety-videos**

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4.7 INDEPENDENT RECOMMENDATIONS

The following recommendations are made to IRATA although they apply equally to members as much as they do to the collective:

1. **Strengthen the discussion on 'human factors' and 'behavioural competence'**
   Members should evaluate their provision of training on 'behavioural competence' (e.g. responsibility, following rules, safe attitudes). They should renew any focus on concentration, fatigue management, and rule adherence.

2. **Reinforce hazard identification and supervision**
   IRATA should require evidence of hazard identification training and supervisory competence in both the initial and three-yearly recertification audits. Members should review their procedure(s) and consider near miss reporting campaigns targeted at hazard recognition.

3. **Address dropped objects and rope damage**
   Despite several topic sheets, and an IRATA-produced poster and video, these remain stubborn risks. Mandatory toolbox talks and/or refreshers on rope protection and tool management are recommended for all grades, with evidence viewed at audit.

4. **Plant and equipment reliability**
   The IRATA HSC should investigate the apparent 'spike' in faulty safety devices. There may be the need for more stringent inspection standards; manufacturer feedback loops; and/or industry alerts where (and if) systemic issues are detected.

5. **Training safety oversight**
   The IRATA HSC should review how training incidents are tracked now that the reporting rules have changed. Trainer Members should be encouraged to monitor and share trends in musculoskeletal strain, falls in controlled environments, and ill-health cases. The RACs have a role to play here.

6. **Wellbeing and medical fitness**
   Rising reports of ill-health/pre-existing conditions might suggest that IRATA needs clearer fitness-to-work standards. Recommend exploring guidance on medical screening and management of chronic conditions.

7. **Climate and environmental risks**
   More incidents linked to heat/humidity could indicate the need to review the IRATA guidance on working in extreme weather (hydration, rest, scheduling). Members should also consider what action they take and how they manage these risks.

8. **Learning from serious cases**
   Fatalities and major injuries should trigger collective learning reviews across IRATA, not just isolated safety bulletins. It is recommended that there be a systematic review of all fatalities in the last 5 years.

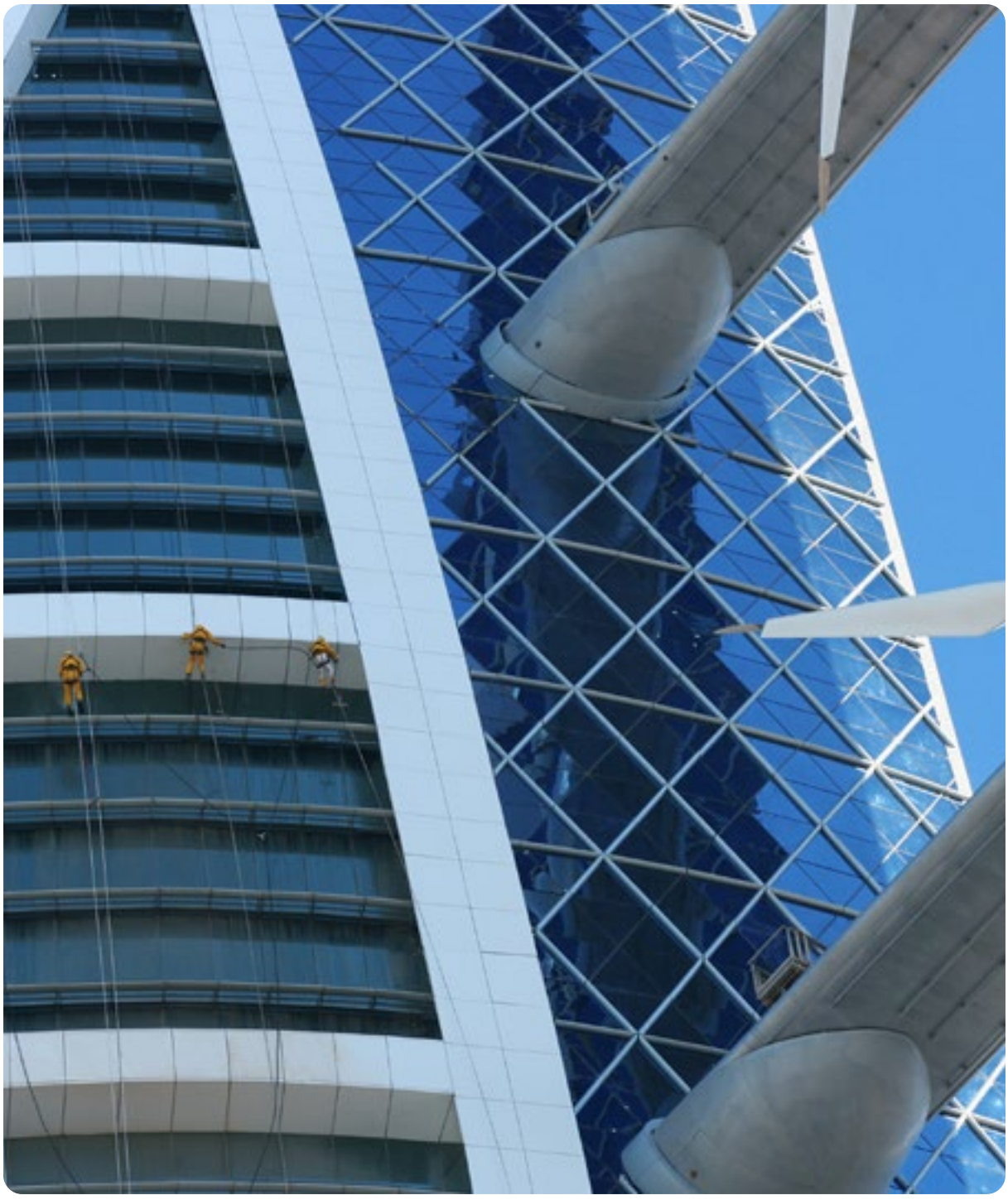
4.7.1 Response from IRATA

Based on David Thomas's introduction of "Discussion and recommendations" in the 2024 WASA report, the information provided in this section, will be proposed to the incoming IRATA Health and Safety Committee to review and make suggestions for improvements based on these points.

ACKNOWLEDGEMENTS

The assistance of IRATA Head Office staff in compiling, arranging, and presenting data is gratefully acknowledged. The considerable efforts of member company staff who produce and submit the required data are also gratefully acknowledged.

Special thanks go to the Health and Safety Committee for their collective efforts in developing a comprehensive range of resources. This WASA report represents a collective commitment to sharing learnings and driving continuous improvement across the industry, with the aim of creating safer working environments for all.



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APPENDIX I
GLOSSARY OF TERMS USED

The following definitions apply to all data collection, analysis, and reporting throughout this document. These terms are used consistently in IRATA incident reporting and are essential for accurate interpretation of the statistics and trends presented in the main report.

In dealing with incidents and in line with 'Guidance to IRATA Incident reporting', [GU-265], this report uses the following terms unless noted otherwise:

Image courtesy of Mira Rope Access © 2024.

WORK LOCATION

'On-Rope'

Arranging, using and direct involvement in rope access activity. Includes access and egress activities to rope access work sites and setting up equipment, rigging and de-rigging. It may, for example, include setting up rescue equipment and work equipment at the work site in readiness for immediate deployment on rope.

Includes:

- All work in direct association with rope access operations.
- Setting up access and egress arrangements.
- Setting up rescue equipment.
- All work on trials where realistic or representative conditions are used and involve rope access methods (this need not be on site but must involve actual rope work).
- Standby for rescue/recovery (in harness).

Excludes:

- Routine equipment checking and maintenance carried out off-site.
- Travel to and from site (including helicopter and/or vessel).
- General office work, such as preparing general documentation.
- Standby for emergency aid or support but not in harness.
- Toolbox talks and meetings.
- Trial work not involving rope access.
- Access/egress, e.g. to wind farms, etc., via helicopter and/or marine vessels.
- Resting and breaks in otherwise continuous work.
- Temporary delays due to environmental conditions on site (off-rope).

'Training'

All activities undertaken at IRATA-approved training venues by trainees , including assessment. This **excludes** all trainers and training staff for rope access training who will be reported under either ***"On-rope"*** or ***"Other"*** as appropriate. All other unrelated training, induction courses, trial work, and specialist courses (e.g. use of breathing apparatus, first aid) are excluded and should be reported under ***"Other"***.

Includes:

- IRATA training-related physical injuries.
- Muscle strain, musculoskeletal injury, or anything that has caused a change in the physical condition of the candidate.
- Any physical act/incident that has caused failure or partial failure in one system.
- Uncontrolled descent, dynamically loading backup device, falling on cow's tail or failure in any system (cut rope, anchor failure).
- Equipment damage in physical use or found during inspection (other than when carrying out inspection training).

Excludes:

- Training-related discrepancies.
- All other unrelated training, induction courses, trial work, and specialist courses (e.g. use of breathing apparatus, first aid).

'Other'

Typically includes all other work, both on and off-site, in offices, etc., that is in support of rope access and related activities. For example, equipment inspection prior to removal to the work site, logistics, storage, administration and standby duties (e.g. fire watching, surveillance and site security). "Other" also includes all incidents not accounted for by the above categories, including rope access trainers (unless actively on rope) and all non-rope access training.

Includes:

- Acting as onsite support, including communications (only if in immediate proximity) and not in a harness as part of the team, e.g. sentry or communication to standby vessel or central control room, etc.
- Maintaining surveillance of rope access working on site, e.g. site supervisor.
- Standby for emergency aid or support (includes fire watchers).
- Site visits such as hazard identification or sampling.
- Toolbox talks and meetings specifically associated with the on-rope work.
- Any preparatory work directly associated with specific rope access work such as equipment checks, inspections, risk assessments, permit to work and isolation checks.
- Temporary waiting due to weather on-site.
- Resting and breaks in otherwise continuous work.
- All work carried out off-site, such as in offices and training establishments (except rope access training).
- Logistics support.
- General inspection and maintenance of equipment.
- Trials and testing of equipment.
- All training that is not rope access related.
- All instructor, trainer and support staff hours (but not trainees – see 'Training').

Excludes:

- All on-rope work activities.
- Rope access training and assessment of individuals (trainees).
- Work not associated with any specific rope access job and not involving the use of ropes.
- Temporary delays due to environmental conditions away from the work site.

"Other" also excludes workers who are not involved in rope access activities.

INCIDENT CAUSES

'Immediate Cause'

The event(s) that led to the incident occurring. For an injury report the initial stimuli that led to the incident outcome are to be reported.

'Underlying Cause'

Potential 'Root Causes' aim to identify underlying factors that may have contributed to the occurrence to the incident.

INCIDENT CONSEQUENCES

'Fatality'

A death within one year as a result of an accident or illness from work.

An "Accident" is an unintended event where actual personal harm, injury or fatality occurred at work. This includes sprains, strains, illnesses or ill health brought on by, or made worse by, work.

'Major injury'

Typically, "major" injuries include, for example, broken major bones, any amputation, major dislocation, loss of eyesight and need for resuscitation.

There is no "days lost" element in defining a "Major injury". Thus, even if an injured person returns to work the next day, the nature of the injury might still make it a "major". Includes:

- Any fracture other than to the fingers, thumbs or toes.
- Any amputation.
- Dislocation of the shoulder, hip, knee or spine.
- Loss of sight (whether temporary or permanent).
- A chemical or hot metal burn to the eye or any penetrating injury to the eye.
- Any injury resulting from an electrical shock or electrical burn (including any electrical burn caused by arcing or arcing products) leading to unconsciousness or requiring resuscitation or admittance to hospital for more than 24 hours.
- Any other injury leading to hypothermia, heat-induced illness or unconsciousness requiring resuscitation or admittance to hospital for more than 24 hours.
- Loss of consciousness caused by asphyxia or exposure to a harmful substance or biological agent.
- Acute illness requiring medical treatment or loss of consciousness because of the absorption of any substance by inhalation, ingestion or through the skin.
- Acute illness which requires medical treatment where there is reason to believe this resulted from exposure to a biological agent or its toxins or infected material.

Excludes:

- Any event that did not result in illness or injury.

'Over 7-day injury'

Includes:

- All injuries resulting in over 7 days of absence from normal duties, including training-related physical injuries.

Excludes:

- All "Major injuries" as categorised above.

'Less than 7-day injury'

Includes:

- All injuries resulting in less than 7 days of absence from normal duties, including training-related physical injuries.

Excludes:

- All "Major injuries" as categorised above.

'Dangerous occurrence (no injury)'

Includes:

- Urgent escape or rescue, irrespective of cause, e.g. sudden bad weather (failure to monitor weather conditions), deluge release, gas/fume emissions and envelopment, fatigue, incapacitation (not due to illness or injury);

- Unsafe rope access activity, including loss of control, e.g. during descent, rigging faults, failure to protect ropes and rigging (edge protection), and potentially unsafe rigging of ropes.
- Failure of essential communications system.
- Dropping an item of equipment or tooling during operations.
- Any event that could have led to the risk of serious injury or death but, by good fortune, did not.
- Any damage to rope, harnesses, or associated equipment, however caused.
- Incidents occurring during rope access work or work that is in support of rope access and related activities that did not result in illness or injury.

Excludes:

- Not to include “discrepancies” at training and assessment.
- Any event that resulted in illness or injury.

ADDITIONAL TERMS

RAC — Regional Advisory Committee

The scope of the RACs is “to promote and maintain high standards, safety, work quality and working practices for the industrial rope access industry”. Full details can be found in ‘Regional Advisory Committee Terms of Reference’ [QP-109].

APPENDIX II

Appendix II – Table 1 – Summary of Incidents Reported by RAC

RAC	Number of accidents and incidents reported	Total hours reported	No. of members based on Q4 2024 returns*
Australasia	85	3,314,297	59
Benelux	6	775,985	32
Brazil	16	1,107,523	38
D-A-CH	1	53,994	6
Eastern Europe	2	1,272,277	47
Far East Asia	0	229,689	21
Mediterranean	2	453,324	37
Middle East, Central Asia & South Asia	17	9,921,142	101
North America	106	3,206,914	51
North Sea Operators	14	5,209,616	55
Scandinavia	6	424,547	11
South East Asia	1	1,725,500	63
Southern Africa	4	1,211,547	31
Sub-Sahara	0	801,175	37
United Kingdom	18	3,858,681	121
Other	1	99,383	8
Total	**279**	**33,665,594**	**718**

Appendix II – Table 2 – Summary of RAC Employment by Grade

	2024					
RAC	**Level 1**	**Level 2**	**Level 3**	**Managers**	**Others**	**Total**
Australasia	1,279	595	1,112	120	98	**3,203**
Benelux	300	128	292	62	172	**953**
Brazil	1,231	379	1,467	167	253	**3,497**
D-A-CH	8	6	22	11	9	**55**
Eastern European	244	118	289	58	292	**1,000**
Far East Asia	78	40	110	21	3	**250**
Mediterranean	235	89	190	47	89	**649**
Middle East, Central Asia & South Asia	2,493	1,487	1,192	229	776	**6,175**
North America	1,392	479	1,729	170	444	**4,213**
North Sea Operators	1,797	546	1,411	105	504	**4,363**
Scandinavia	154	76	339	14	16	**600**
South East Asia	673	333	518	71	108	**1,708**
Southern Africa	296	168	352	67	104	**986**
Sub-Sahara	218	191	208	53	83	**752**
United Kingdom	1,196	515	1,213	208	1,108	**4,239**
Other	37	8	17	6	11	**79**
Overall	**11,628**	**5,156**	**10,458**	**1,406**	**4,068**	**32,715**

Appendix II – Table 3 – Summary of Work Hours by Grade

RAC	Level 1	Level 2	Level 3	Managers	Others	Total
Australasia	1,202,055	607,336	1,215,141	144,234	145,531	**3,314,297**
Benelux	194,585	95,197	230,844	67,539	187,820	**775,985**
Brazil	353,211	169,675	296,461	63,613	224,563	**1,107,523**
D-A-CH	8,180	7,274	18,889	9,033	10,618	**53,994**
Eastern European	223,388	136,131	277,671	44,495	590,592	**1,272,277**
Far East Asia	67,200	44,593	96,159	17,441	4,296	**229,689**
Mediterranean	122,758	68,536	157,735	54,377	49,918	**453,324**
Middle East, Central Asia & South Asia	3,875,859	2,526,397	1,853,697	394,382	1,270,807	**9,921,142**
North America	1,389,464	376,958	926,754	242,480	271,258	**3,206,914**
North Sea Operators	1,814,188	581,874	1,630,469	115,740	1,067,345	**5,209,616**
Scandinavia	97,502	87,901	217,926	17,106	4,112	**424,547**
South East Asia	637,627	355,534	522,209	87,247	122,883	**1,725,500**
Southern Africa	344,565	254,440	461,894	55,169	95,479	**1,211,547**
Sub-Sahara	219,805	173,798	228,840	67,191	111,541	**801,175**
United Kingdom	1,043,114	672,330	1,352,334	273,967	516,936	**3,858,681**
Other	51,283	11,292	9,720	3,055	24,033	**99,383**
Overall	**11,644,784**	**6,169,266**	**9,496,743**	**1,657,069**	**4,697,732**	**33,665,594**

Appendix II – Table 4 – Summary of Work Hours by Location

RAC	Onshore - On Rope	Onshore - Other	Offshore - On Rope	Offshore - Other	Training	Totals
Australasia	1,734,070	908,201	293,683	338,472	39,871	**3,314,297**
Benelux	315,014	312,481	80,557	57,736	10,197	**775,985**
Brazil	175,671	241,203	272,259	133,041	285,349	**1,107,523**
D-A-CH	16,362	37,207	12	12	401	**53,994**
Eastern European	152,262	473,721	157,651	432,500	56,143	**1,272,277**
Far East Asia	83,208	87,935	32,786	6,835	18,925	**229,689**
Mediterranean	204,292	184,851	8,014	7,571	48,596	**453,324**
Middle East, Central Asia & South Asia	4,405,711	3,016,668	1,045,083	1,221,595	232,085	**9,921,142**
North America	2,111,467	779,322	71,660	149,808	94,657	**3,206,914**
North Sea Operators	606,819	949,891	1,503,140	2,122,925	26,841	**5,209,616**
Scandinavia	55,895	104,701	87,888	170,966	5,097	**424,547**
South East Asia	332,736	328,130	359,713	621,136	83,785	**1,725,500**
Southern Africa	54,420	137,872	452,117	533,032	34,106	**1,211,547**
Sub-Sahara	69,442	156,993	251,164	226,603	96,973	**801,175**
United Kingdom	1,345,365	1,502,735	571,185	267,042	172,354	**3,858,681**
Other	25,219	61,737	4,231	1,779	6,417	**99,383**
Overall	**11,687,953**	**9,283,648**	**5,191,143**	**6,291,053**	**1,211,797**	**33,665,594**

Appendix II – Table 5 – Summary of Training Hours by RAC

RAC	2019	2020	2021	2022	2023	2024
Australasia	40,095	46,133	30,627	42,054	58,013	39,871
Benelux	7,800	8,530	6,822	9,460	11,078	10,197
Brazil	119,711	103,169	145,496	214,658	221,388	285,349
D-A-CH	5,423	2,266	2,161	2,719	549	401
Eastern European	58,536	40,065	48,100	54,867	56,933	56,143
Far East Asia	Previously included in other RACs			34,637	21,365	18,925
Mediterranean	19,984	25,598	30,193	36,671	115,239	48,596
Middle East, Central Asia & South Asia	88,570	41,104	112,015	157,146	226,997	232,085
North America	78,107	48,156	62,730	75,636	85,385	94,657
North Sea Operators	10,456	9,437	7,626	65,682	28,170	26,841
Scandinavia	4,315	3,976	3,316	4,448	15,437	5,097
South East Asia	94,404	77,706	49,726	81,315	77,103	83,785
Southern Africa	12,671	16,732	24,816	28,892	21,364	34,106
Sub-Sahara	Previously included in other RACs			87,861	103,829	96,973
United Kingdom	152,537	75,927	97,058	162,820	261,890	172,354
Other	42,807	70,323	30,627	3,683	1,455	6,417
Overall	**735,416**	**569,122**	**651,313**	**1,062,549**	**1,306,195**	**1,211,797**

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