



MARINE
Safety Forum

MSF Statistics Report 2022

Non-Contributor report.

Contents

Introduction.....	3
Membership Statistical Results	4
Lagging Indicators.....	4
Lost Time Injuries	4
Total Recordable Injuries	4
First Aid Cases	5
Collisions or Groundings.....	5
Dropped Objects/Potential Dropped Objects	6
Near Miss.....	6
High Potential Reports	7
Spillages	7
Leading Indicators	8
Safety Observations.....	8
Senior Leader Visits.....	8
Lagging vs Leading Indicators	9
Incident Causes	10
Lost Time Injury Immediate Causes	10
High Potential Report Root Causes	11
MSF Safety Alerts	12
History	12
Categories	12
Observations and Conclusions	14
Appendix	14
Abbreviations and Definitions.....	15
Causes.....	16
Submission Form	17

Introduction.

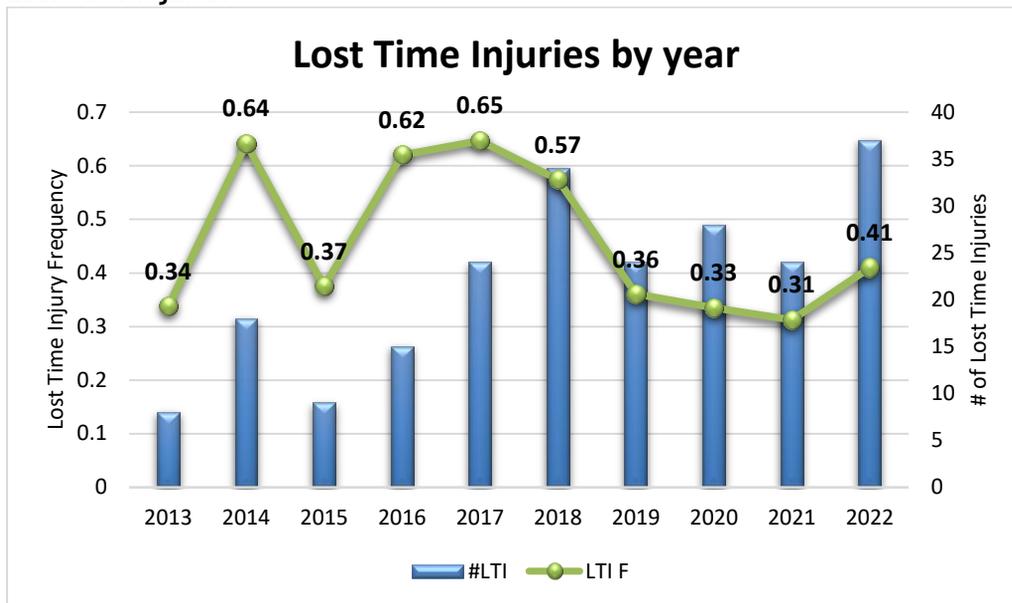
- Following on from the success of previous reports, the MSF has again produced this annual membership statistics report up to the end of 2022.
- This report utilises data from 24 different member companies in total.
- Data ranges from 5 years to just 1 year depending on what data the companies were able to provide.

Year	# of Company data
2018	14
2019	16
2020	19
2021	17
2022	20

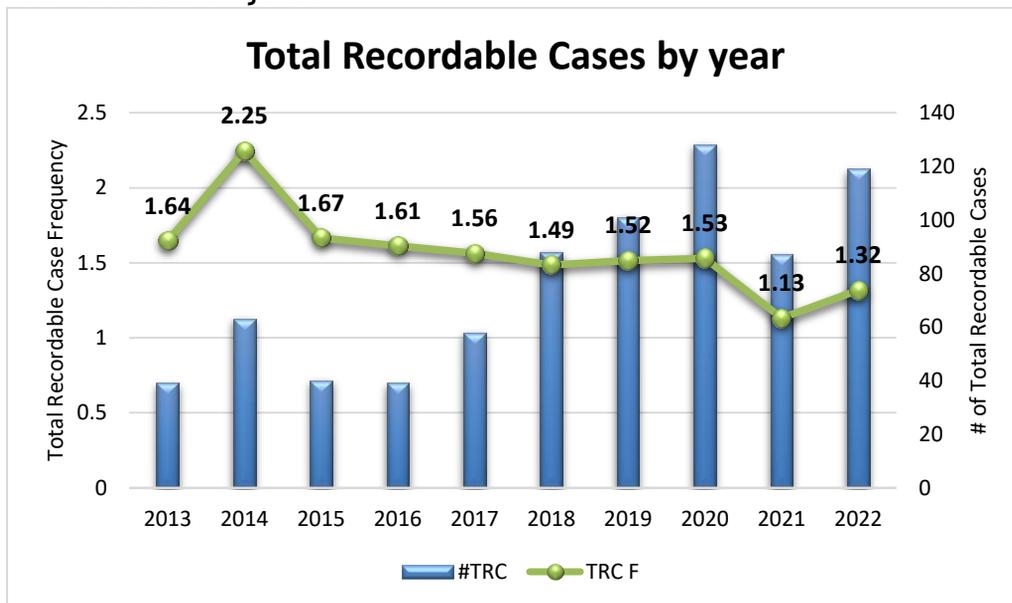
- All member data provided to the MSF is treated in the strictest confidence.
- The aim of the MSF Safety Statistics and this report is to:
 - Identify industry problem areas.
 - Focus MSF communication (Safety Alerts, guidance documents) on areas that need it most.
 - Quantify industry safety standards so that they can be measured for years to come to assess and encourage improvement.
- This report contains sections called '*Membership Statistical Results*' where the data from all companies is combined to enable to comparison of the statistics for each of the last 5 years to show overall MSF membership rolling performance.
- The report contains topics of analysis which have been divided into lagging and leading indicators.
- The report also calculates and compares an overall lagging and leading frequency for each company and the membership in total (The formulas for which can be seen in the 'Abbreviations and Definitions' section.)
- This report (and previous reports) and the data submission template can be found at the MSF website <https://www.marinesafetyforum.org/stats/>
- This report only shows that data for the entire membership. A separate more detailed report is available but only for those companies that have contributed data to allow for anonymous benchmarking with other companies and the industry.

Membership Statistical Results Lagging Indicators

Lost Time Injuries



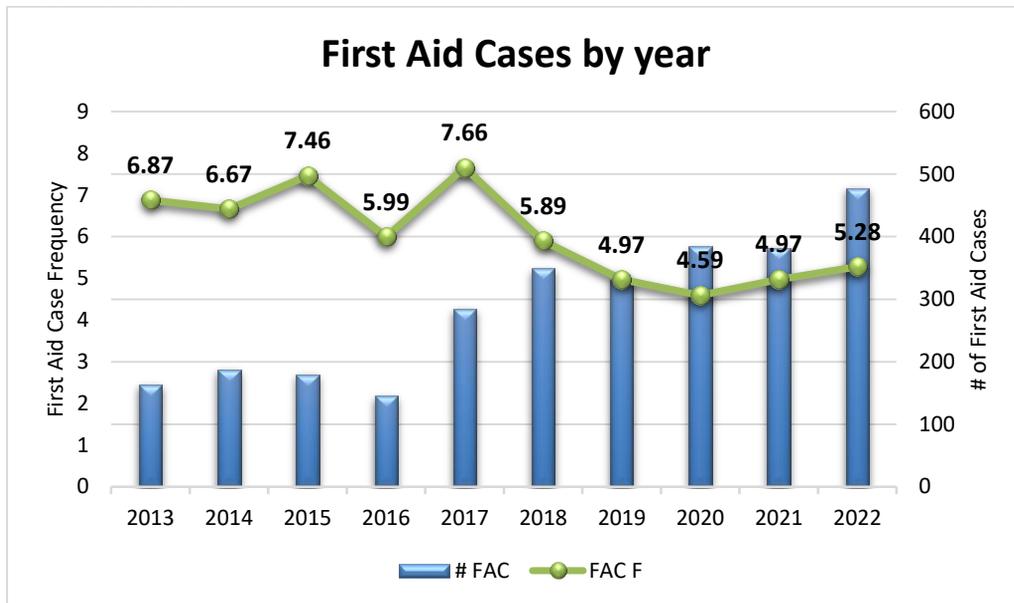
Total Recordable Injuries



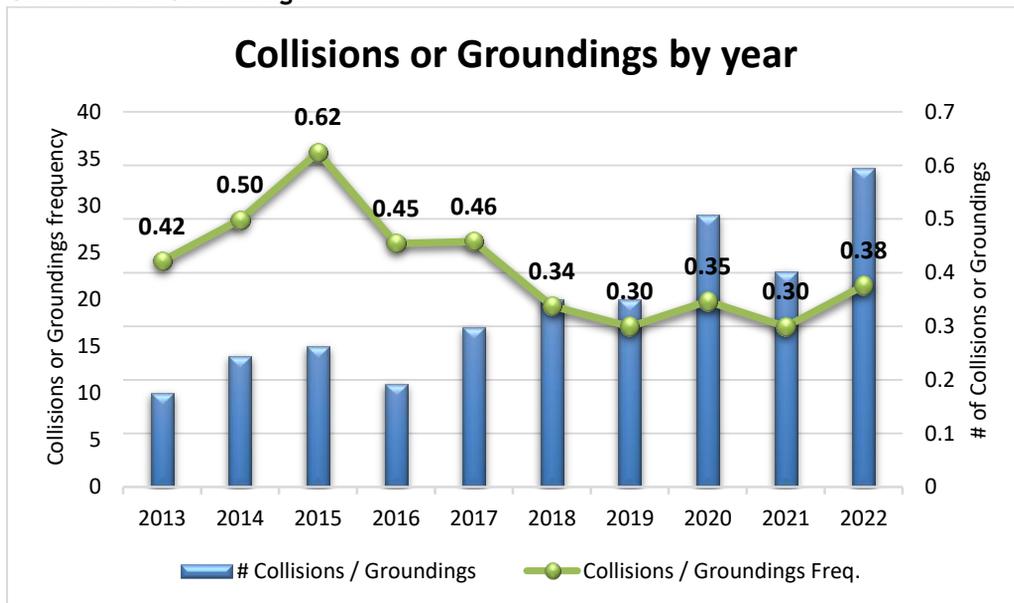
Notes:

- #LTI & #TRC are not directly comparable due to some companies not submitting 5 years of data.

First Aid Cases



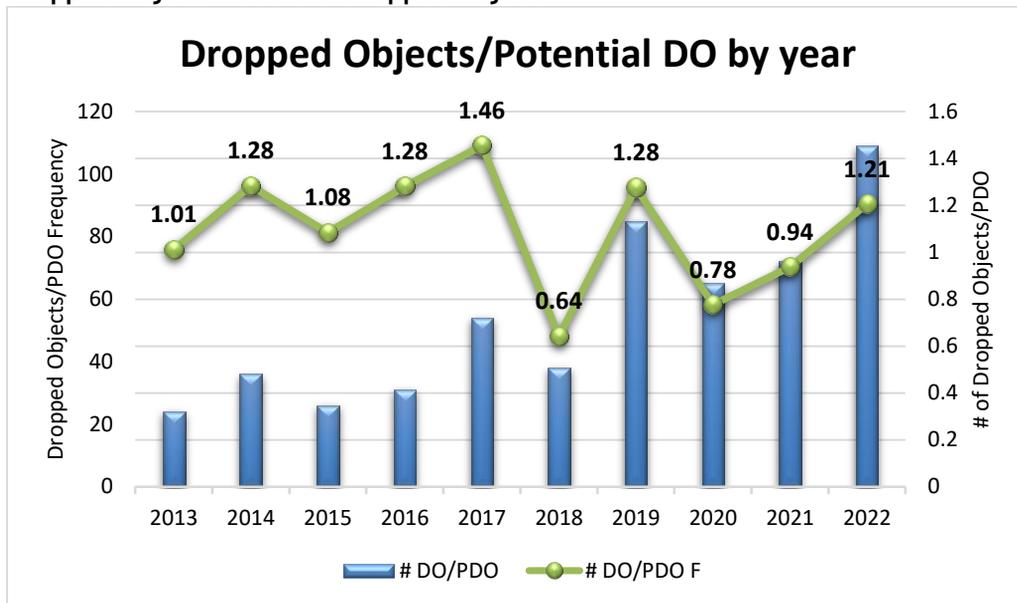
Collisions or Groundings



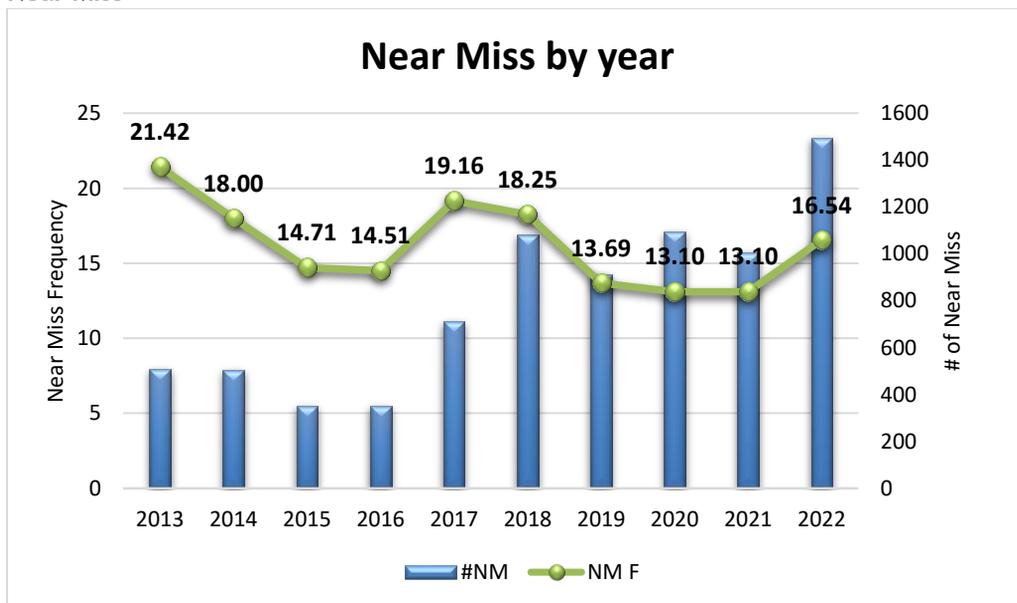
Notes:

- *#NM & #Collisions/Groundings are not directly comparable due to some companies not submitting 5 years of data.*

Dropped Objects/Potential Dropped Objects



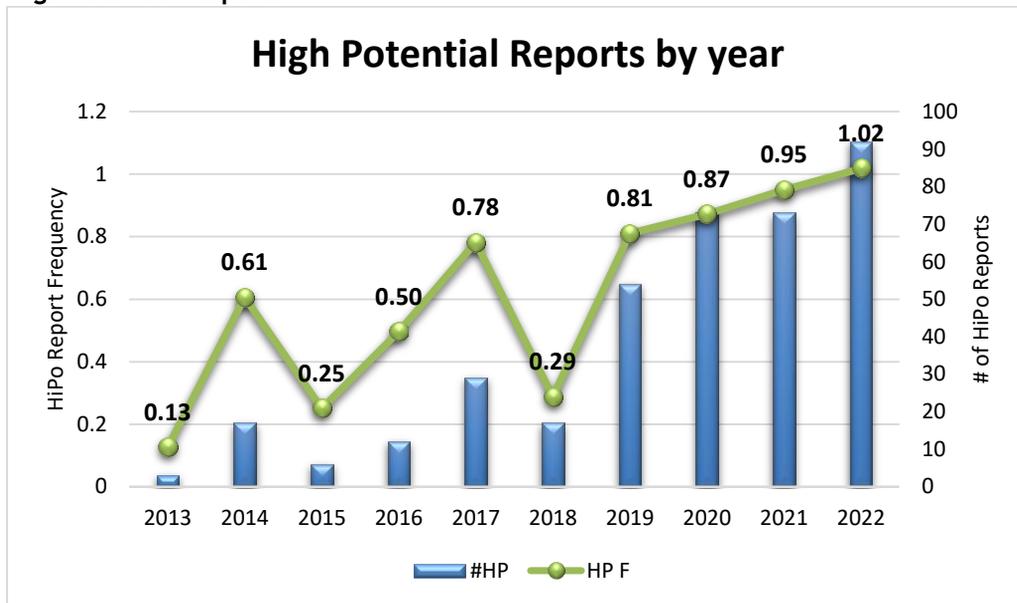
Near Miss



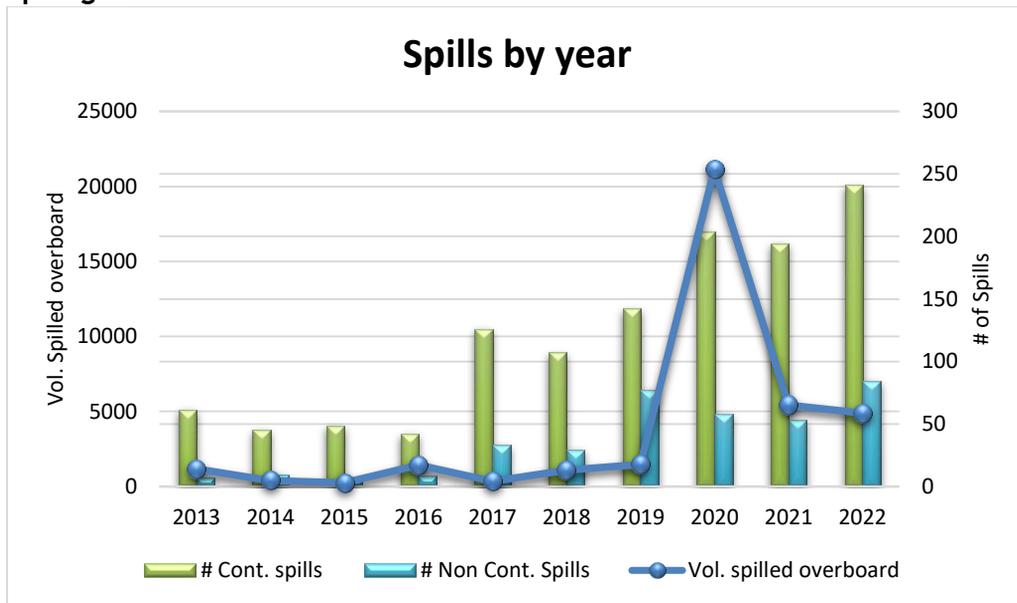
Notes:

- #DO/DPO & #NM are not directly comparable due to some companies not submitting 5 years of data.

High Potential Reports



Spillages



Notes:

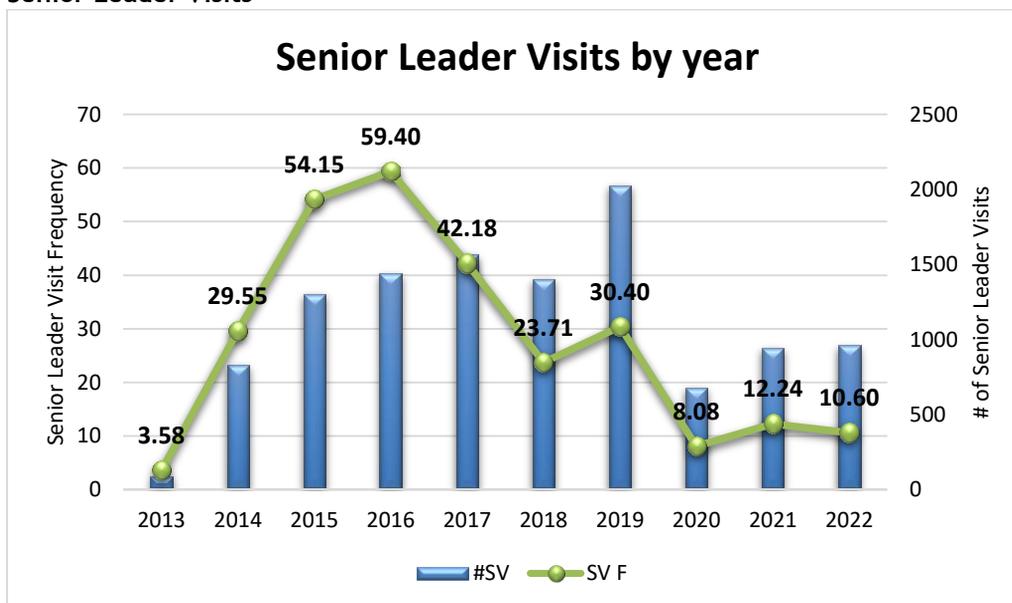
- #HP and #Spills are not directly comparable due to some companies not submitting 5 years of data.

Leading Indicators

Safety Observations



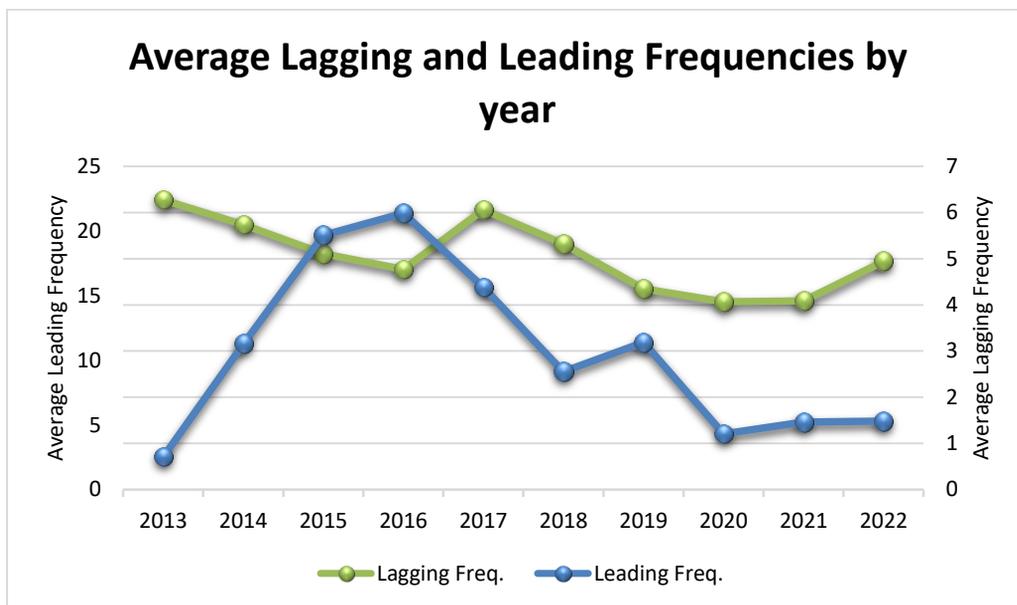
Senior Leader Visits



Notes:

- #SV are not directly comparable due to some companies not submitting 5 years of data.

Lagging vs Leading Indicators

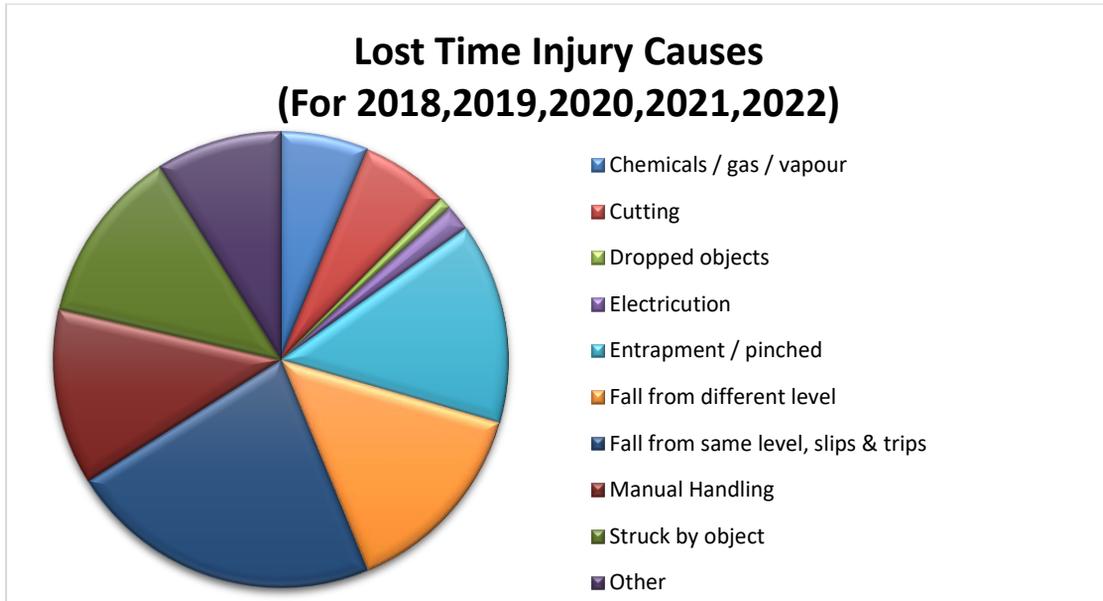


Notes:

- *For definitions of lagging and leading indicators please see section 'Abbreviations and Definitions'*

Incident Causes Lost Time Injury Immediate Causes

Five Year Results:



2022 Results:

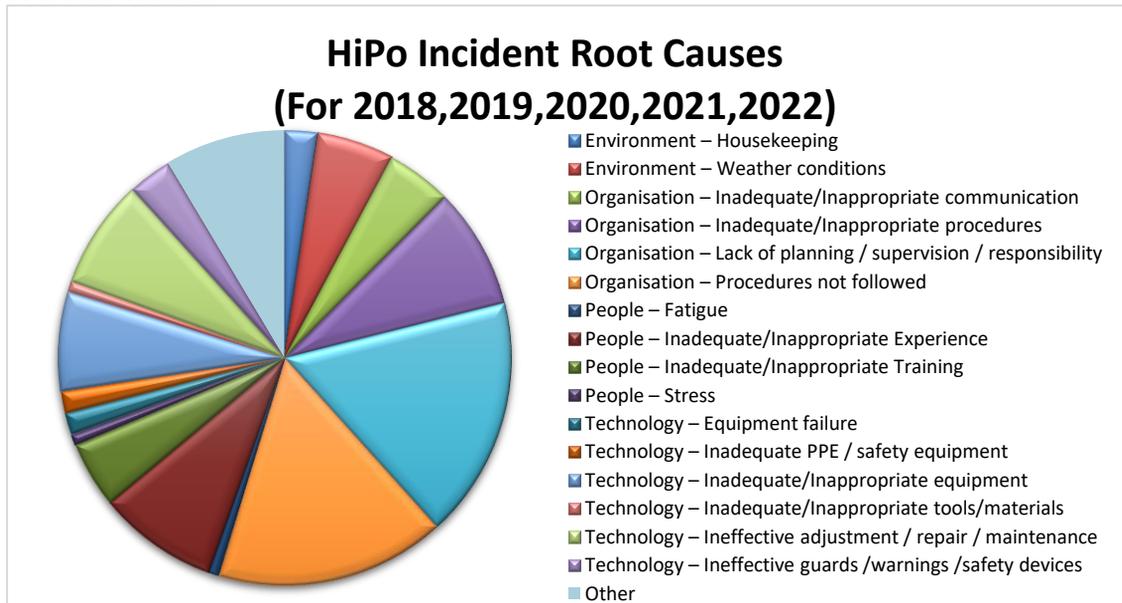


Notes:

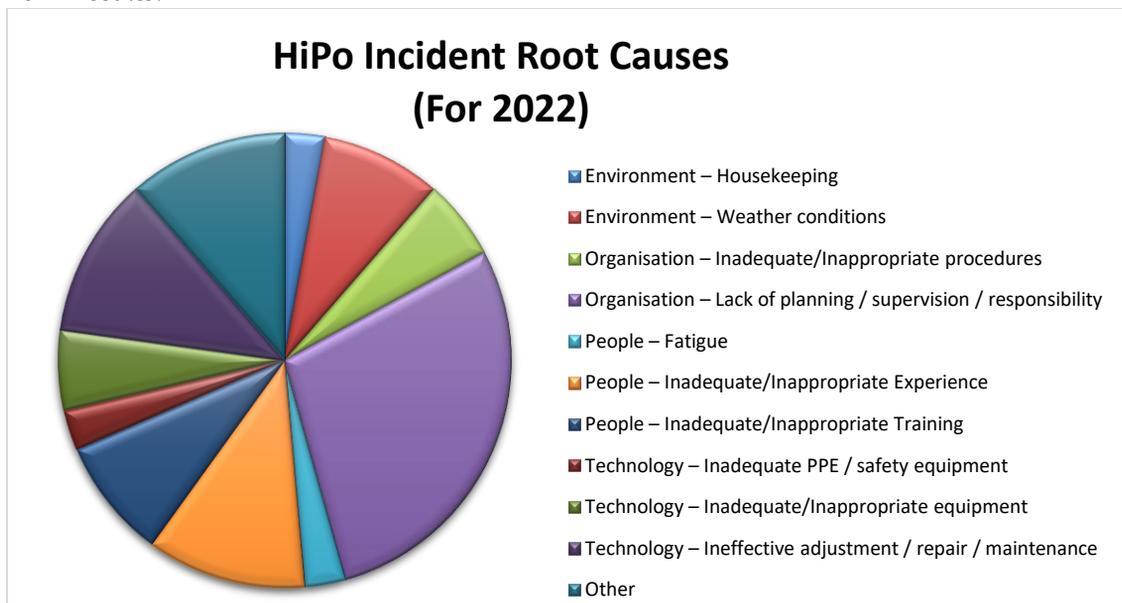
- Causes that were not attributed to an incident are not shown in the charts above. See appendix.

High Potential Report Root Causes

Five Year Results:



2022 Results:



Notes:

- Causes that were not attributed to an incident are not shown in the charts above. See appendix.

MSF Safety Alerts

History

The following chart shows the number of safety alerts published historically by the MSF.



Categories

The following chart shows the number of safety alerts historically published for each category.



The following chart shows the number of safety alerts published in 2022.



Observations and Conclusions

Membership Statistical Results

- After four consecutive years of falling LTIF, 2022 saw an unfortunate increase for the member companies that have contributed data. TRCF has also seen an unfortunate increase in 2022 compared to 2021.
- Unfortunately FACH also increased in 2021 for the second year in a row which would suggest that the overall injury rate has significantly worsened.
- Near Miss frequency has worryingly also seen its biggest increase in 2022 since 2017.
- Dropped Object (and PDO) had been volatile year on year but has now increased for a second year in a row and High Potential reports has also unfortunately increased for the fourth year in a row.
- 2022 saw an increase in both contained and uncontained spill however thankfully the quantity that was spilled overboard actually reduced from previous years.
- The Safety Observation frequency saw a welcome increase in 2022, following an out of trend drop in 2021 and is now back in line with previous years.
- Senior Leader vessel visits saw a somewhat surprising reduction in 2022, and worryingly has not returned to anywhere near the pre COVID rate.
- The *Average Leading Frequency* remained almost identical in 2022, *Average Lagging Indicator Frequency* saw a sizable increase due to the increase of many of the lagging inputs.

Incident Causes

- '*Slips trips and falls*' remains the most common cause in the historic LTI data and was one of the highest again in 2022. The industry is still struggling to identify ways in which to reduce this cause.
- '*Dropped objects*' (caused by gravity) and '*Struck by object*' (caused by a force other than gravity) combined have historically been a common cause of LTI. 2022 no LTIs caused by a dropped object, which would suggest that the member data is more influenced by potential dropped objects than actual or that the industry has turned a corner with this common concern. However in 2022 '*Struck by object*' was the joint most common cause of LTI which is a set back on 2021.
- Once again 2021 LTI causes are heavily influenced by close quarters factors such as '*Chemicals*', '*Cutting*', '*Electrocution*' and '*Manual Handling*' which reminds us of the importance on maintaining high personal safety standards at all times.
- Around a third of all High Potential reports since 2017 were assigned the root cause of '*Lack of planning / supervision / responsibility*' and '*Procedures not followed*' which would suggest that the industry still needs much improvement on an organisational level. This is again backed up by the fact that the most common category of safety alerts since 2003 remains '*Control of work activity*'.

Appendix

Abbreviations and Definitions

The following abbreviations were used in this report:

- LTI - Lost Time Injury
 - TRC - Total Recordable Cases (LTI+RWC+MTC)
 - RWC - Restricted Work Cases
 - MTC - Medical Treatment Case
 - FAC - First Aid Case
 - INC - Collisions or Grounding Incidents
 - DO / PDO - Dropped Object / Potential Dropped Object
 - NM - Near Miss
 - HP - High Potential
 - HiPo - High Potential
 - SO - Safety Observation
 - SV - Senior Leader (Management) Visit
 - SA - Safety Alerts (submitted to MSF)
- All of the above followed by the suffix 'F' means the respective frequency:

$$\text{Frequency} = \frac{\text{Number of reports} \times 1,000,000}{\text{Manhours}}$$

(With the exception of Safety Observation Frequency which is X 200,000)

- Average Lagging Frequency = $\frac{\text{TRCF} + \text{FACF} + \text{NMF} + \text{INCF} + \text{DOF}}{5}$
- Average Leading Frequency = $\frac{(\text{SOF} \div 100) + \text{SVF} + \text{SAF}}{3}$
- For the purposes of this report, Safety Observations are to be considered a POSITIVE intervention to avoid an incident in future.
- 'Senior Leader (Management) for the purposes of this report is to be considered as executive and/or senior management level.

Causes

The following causes were given as options for the LTI immediate cause:

- Chemicals / gas / vapour
- Cutting
- Dropped objects (caused by gravity)
- Electrocuting
- Entrapment / pinched
- Fall from different level
- Fall from same level, slips & trips
- Manual Handling
- Struck by object (caused by a force other than gravity)
- Other

The following causes were given as options for the HiPo Report root cause:
Technology - Equipment failure

- Technology - Inadequate/Inappropriate equipment
- Technology - Inadequate/Inappropriate tools/materials
- Technology - Ineffective guards /warnings /safety devices
- Technology - Inadequate PPE / safety equipment
- Technology - Ineffective adjustment / repair / maintenance
- Organisation - Inadequate/Inappropriate procedures
- Organisation - Procedures not followed
- Organisation - Lack of planning / supervision / responsibility
- Organisation - Inadequate/Inappropriate communication
- Organisation - Lack of resources
- Environment - Housekeeping
- Environment - Weather conditions
- Environment - Temperature extremes
- Environment - Noise
- Environment - Lighting
- Environment - Ventilation
- People - Inadequate/Inappropriate Experience
- People - Inadequate/Inappropriate Training
- People - Insufficient Physical ability
- People - Fatigue
- People - Stress
- Other

Submission Form

The following form was used for the submission of data used in this report:



MARINE
Safety Forum

Vessel Operator Safety Statistics

Information shared with the MSF will be treated in the strictest confidence

Company name			
Areas of Operation	Africa		
	Asia/Pacific		
	Europe		
	Middle East		
	North America		
	South America		
	Other		

Exposure Hours	
Exposure Hours recorded	
Recording method	

Indicators	
Number Of Fatalities	
Number of Lost Time Incidents	
Number of Restricted Work Cases	
Number of Medical Treatment Cases	
Total Number of Recordable injuries	
Number of First Aid Cases	
Number of collisions / Groundings	
Number of Dropped or potential dropped objects	
Number of Near Miss reports	
Number of Hi-Po reports	
Number of Safety Observations	
Number of Senior Leader visits	
Number of Safety Alerts sent to MSF	

Environmental	
Number of Contained Spills	
Number of Non Contained Spills	
Approx. volume (litres) of total Non Contained Spills	

Frequency Rates	
Lost Time Frequency Rate, Based on 1M Hours	
Total recordable Frequency Rate, Based on 1M Hours	
Safety Observation Frequency Rate, Based on 200K Hours	

Year	2022	
Number of Vessels		
Type of Vessel Fleet	Anchor Handling Tug Supply	
	Emergency Response & Rescue Vessel	
	PSV	
	Seismic	
	Subsea Support Vessel	
	Windfarm	
	Other	

Fatality / LTI Causes	
LTI 1	
LTI 2	
LTI 3	
LTI 4	
LTI 5	
LTI 6	
LTI 7	
LTI 8	
LTI 9	
LTI 10	

Hi-Po Causes	
Hi-Po 1	
Hi-Po 2	
Hi-Po 3	
Hi-Po 4	
Hi-Po 5	
Hi-Po 6	
Hi-Po 7	
Hi-Po 8	
Hi-Po 9	
Hi-Po 10	

Safety Observation Trends	
1st	
2nd	
3rd	

Further Comments: