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MARINE SAFETY INVESTIGATION REPORT - 2025

**DIRECTORATE GENERAL OF MARITIME ADMINISTRATION
MINISTRY OF PORT, SHIPPING & WATERWAYS
GOVERNMENT OF INDIA**



Published By:



Directorate General of Maritime Administration

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SHRI SHYAM JAGANNATHAN, IAS

DIRECTOR GENERAL OF MARITIME ADMINISTRATION, GOVERNMENT OF INDIA

India's maritime industry continues to evolve as a key contributor to national growth and international trade. As the sector expands, strengthening maritime safety through collaboration, preparedness, and continuous improvement remains our foremost priority.



The findings presented in this report demonstrate that while maritime operations continue to grow, many incidents remain linked to routine shipboard activities, human factors, occupational hazards, and challenges associated with increasingly demanding operating environments. The report also draws attention to the growing significance of crew welfare and health-related incidents, reaffirming that the safety of seafarers extends well beyond the vessel's technical condition. Building a resilient maritime sector therefore requires equal emphasis on operational discipline, competence, preparedness, and the well-being of those who serve at sea.

Every reported incident presents an opportunity to strengthen procedures, improve awareness, enhance training, and reinforce a culture where safety becomes an integral part of everyday operations rather than a response to isolated events. The insights presented in this report are intended to support evidence-based decision-making and encourage proactive risk management across the maritime community.

I commend the dedicated efforts of the Casualty Branch, surveyors, reporting authorities, and all stakeholders whose professionalism and commitment have contributed to the preparation of this report. Their collective work strengthens our ability to transform operational experience into meaningful knowledge that benefits the entire maritime sector.

I encourage shipowners, operators, masters, seafarers, training institutions, classification societies, and all maritime stakeholders to utilise the observations presented in this report to further strengthen safety practices, promote continuous improvement, and enhance operational resilience. Together, through collaboration, professionalism, innovation, and an unwavering commitment to safety, we can continue to build a stronger maritime ecosystem while safeguarding lives, protecting the marine environment, and supporting India's vision of becoming a leading maritime nation.

CAPT. ABUL KALAM AZAD

NAUTICAL ADVISOR (I/C) GOVERNMENT OF INDIA

Seafaring has always demanded sound judgement, discipline, and the ability to respond effectively under changing conditions. Despite continuous advancements in ship design, navigation systems, and communication technologies, the safety of a voyage ultimately depends on the competence, preparedness, and professionalism of those serving onboard.



As mariners, we understand that every incident has a story behind it. Rarely does an accident result from a single cause; it is often the outcome of a series of decisions, operational challenges, environmental conditions, and human factors. Learning from these experiences is one of the most effective ways to prevent similar occurrences and strengthen safety standards across the industry.

This report presents a detailed assessment of the marine casualties and non-operational incidents reported during 2025. The analysis highlights recurring operational risks, changing incident patterns, and the growing importance of occupational safety, crew welfare, and medical preparedness. These findings should encourage all stakeholders to continuously review onboard practices, improve risk awareness, and reinforce a culture where safety remains an integral part of every operation.

I encourage Masters, officers, engineers, ratings, ship managers, and training institutions to use the observations presented in this report as an opportunity for reflection and continuous improvement. Safe operations are achieved not only through compliance with regulations but through leadership, teamwork, effective communication, and a willingness to learn from every experience.

Maritime safety is a shared responsibility that extends beyond the bridge or engine room. It relies on effective collaboration between shipowners, managers, surveyors, port authorities, training institutions, and every seafarer who contributes to the safe operation of a vessel. Strengthening this collective commitment through timely reporting, open sharing of lessons learnt, and continuous professional development will enhance our ability to prevent incidents and build a more resilient maritime sector.

I extend my appreciation to the Casualty Branch, Nautical Surveyors, and all reporting authorities whose commitment and professionalism have contributed to the preparation of this report. I am confident that the knowledge and lessons presented herein will support informed decision-making and further strengthen maritime safety across the Indian shipping industry.

CAPT. HARINDER SINGH

NAUTICAL SURVEYOR-CUM-DEPUTY DIRECTOR GENERAL (TECH.)

The Marine Safety Investigation Report – 2025 is a compilation of marine casualties and non-operational incidents reported during the year, supported by a detailed analysis of operational trends and contributing factors. The report has been prepared to facilitate learning, strengthen preventive measures, and promote informed decision-making across the maritime sector.



This edition examines incidents across vessel types, operational environments, geographical locations, and categories of occurrence. It also presents an assessment of occupational incidents, health-related emergencies, medical evacuations, search and rescue assistance, and other non-operational events that influence the safety and wellbeing of seafarers. Together, these analyses provide a broader understanding of the operational challenges encountered during the reporting period.

The preparation of this report involved the systematic collection, verification, classification, and analysis of information received from Nautical Surveyors, Port Authorities, shipping companies, investigation teams, and other reporting agencies. Every effort has been made to ensure that the information presented is accurate, consistent, and reflective of the circumstances reported. While individual incidents vary in nature and complexity, their collective analysis provides valuable insight into recurring patterns and opportunities for strengthening preventive measures.

The objective of this publication extends beyond documenting incidents. By identifying trends, highlighting areas of concern, and encouraging evidence-based discussions, the report seeks to support regulators, shipowners, managers, Masters, seafarers, training institutions, and other maritime stakeholders in strengthening safety practices and fostering a culture of continuous learning and operational excellence.

I sincerely acknowledge the valuable contributions of all Nautical Surveyors, reporting authorities, maritime administrations, and organisations whose timely reporting and cooperation made the preparation of this report possible. It is hoped that the observations and lessons presented in this publication will serve as a useful reference for the maritime community and contribute to the continued enhancement of maritime safety and the protection of life at sea.





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Introduction



IMAGE COURTESY - SCI

INTRODUCTION

The “Global shipping Industry” continues to operate under conditions where uncertainty is inherent and risk is constantly evolving. Despite advancements in safety systems, regulatory frameworks, and operational practices, maritime operations remain exposed to a wide range of hazards influenced by environmental conditions, human factors, and technical complexities. Over recent reporting periods, this risk landscape has shown a noticeable shift, reflecting not only an increase in the frequency of incidents but also a change in their overall nature and impact.

The incidents reported and observed during the current reporting period indicates a clear escalation in marine casualties, both in terms of occurrence and severity. A significant proportion of these incidents originates from routine operational activities such as movement across access areas, equipment handling, and maintenance work—areas that are familiar yet consistently exposed to risk. At the same time, less frequent but high-impact incidents, including fire, explosion, and man overboard cases, continue to result in severe consequences. In parallel, non-operational factors such as medical emergencies and mental health challenges further underline that maritime safety extends beyond operational control and regulatory safeguards and is deeply influenced by human conditions and onboard realities.



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

OUR INTENT

This report has therefore been prepared with the intent to move beyond conventional reporting and present a more grounded understanding of these realities—connecting data with context, and highlighting patterns that can support more practical, proactive, and human-centered approaches to maritime safety.

SCOPE OF REPORT

Overview:

This report presents a structured analysis of marine casualties observed and reported during the year 2025, with the objective of understanding how risks are distributed across operational activities, human factors, and varying maritime conditions. The scope has been designed to move beyond isolated incident reporting and provide a consolidated view of patterns, contributing factors, and emerging safety concerns. It reflects both the operational realities onboard vessels and the broader human and environmental influences that shape maritime safety outcomes.

Marine Casualty Analysis

- Occupational incidents arising from routine shipboard activities, including injuries of varying severity and man overboard (MOB) events
- Navigational and structural incidents affecting structural integrity of the vessel including collision, grounding, flooding, and sinking
- High-impact incidents such as fire and explosion, and man overboard (MOB)

Non Operational Incident Analysis:

(Other than Marine Casualty Analysis:)

- Health-related cases including sickness onboard and deaths occurring onboard or after evacuation ashore
- Mental health-related incidents, including suicide and psychological distress cases
- Desertion incidents and associated risks during transit and port stays
- Security and behavioral events including stowaway cases, piracy/hijacking, and willful default

Analytical Framework:

- Multi-dimensional analysis covering incident type, severity, and temporal trends across the reporting period
- Assessment of patterns based on vessel type, flag state participation, and operational context

Scope Limitations:

- Analysis is based on reported incidents within the defined dataset; unreported cases are outside the scope
- The report does not include detailed technical investigations or assign legal responsibility

TYPES OF SEVERITY COVERED

Casualty cases divided into four categories based on the severity of the incident:

Very Serious Marine Casualty:

A marine casualty involving loss of life, total loss of a vessel, or significant environmental damage. It represents the most severe level of casualty with major consequences to people, vessels, or the marine environment.

Serious Marine Casualty:

A marine casualty resulting in significant damage to a vessel, serious injury, or substantial operational impact. It may require major repairs, extended downtime, or involve serious consequences to personnel or the environment.

Marine Incident:

An event that affects, or could affect, the safety of a vessel, its operations, crew, or the marine environment.

It may not result in serious damage or casualties but has the potential to cause a marine accident.

Less Serious Marine Casualty:

A minor event with limited impact on vessel safety, personnel, or operations. It generally results in little or no damage or injury but is recorded for safety monitoring and preventive action.

TYPES OF INCIDENTS COVERED

MARINE CASUALTIES AND VERY SERIOUS MARINE CASUALTIES

The report identifies and analyses the following types of incidents, which fall within the scope of marine and very serious marine casualties:

COLLISION

An impact involving two or more ships. Collisions are often attributable to navigational errors, visibility issues, or mechanical failure and can result in hull breaches, crew injuries, or fatalities.

FIRE AND EXPLOSION

Uncontrolled ignition onboard, typically involving cargo, engine rooms, fuel systems, or galley areas. Explosions may result from pressurized systems or volatile cargo. Such incidents pose extreme danger to crew safety and vessel integrity.

MAN OVERBOARD

Incidents where a crew member or passenger unintentionally falls into the sea. These cases demand immediate search and rescue operations coordinated by MRCC's and are often linked to lapses in safety measures or harsh sea conditions.

GROUNDING (STRANDING)

Inadvertent contact between a vessel's hull and the seabed, reef, or submerged objects. Groundings may cause hull damage, oil spills, and navigation channel obstruction, and require immediate technical assessment.

SINKING (FOUNDING)

Loss of vessel buoyancy due to flooding, structural failure, or extreme weather, resulting in submersion. Often qualifies as a very serious marine casualty, especially when it involves total vessel loss or loss of life.

OCCUPATIONAL INCIDENT

Covers injuries, fatalities, or safety breaches not caused by external marine factors such as falls, equipment failure, confined space accidents, or electrical shock. These are frequently linked to non-compliance with shipboard safety protocols.

FLOODING

Ingress of water into the vessel's compartments due to hull breach, pipe failure, or open hatches, potentially leading to capsizing or machinery damage. Often categorized as serious or very serious depending on extent and consequences.

LOSS OF ANCHOR AND PROPULSION

Mechanical failure or loss of critical equipment such as anchor or propeller affecting vessel control or station-keeping ability. While not always causing immediate casualties, such incidents are operationally significant and may lead to further marine casualties.

GEOGRAPHIC AND JURISDICTIONAL COVERAGE THE REPORT COVERS:

- Incidents involving Indian-flagged vessels in international and Indian waters,
- Foreign flagged vessels in Indian waters,
- Indian seafarers serving aboard foreign-flagged ships,
- Casualties within Indian Search and Rescue Regions (SRRs),

By structuring casualty data in accordance with international standards and national reporting responsibilities, this report supports both operational response and policy-level interventions aimed at enhancing India's maritime safety architecture.

TYPES OF INCIDENTS COVERED

NON-OPERATIONAL INCIDENTS

These incidents are often reported via the DGComm Centre or notified by employers, MRCCs, Indian missions abroad, port authorities, or families. While not classified as “marine casualties” under IMO definitions, they are crucial for understanding crew vulnerabilities, medical needs, legal issues, and systemic risks.

The report identifies and analyses the following types of incidents, which fall within the scope of Non-Operational / Other Casualties:

DEATH ASHORE

A death of a seafarer occurring while off-duty in a foreign or home port, not directly related to shipboard operations. These may arise from natural causes, accidents, or medical complications.

DESERTION

When a seafarer unlawfully abandons the ship without permission or fails to return before sailing. Considered a breach of contract, desertion has legal and administrative implications for the shipowner and crew management.

INJURY

Non-fatal physical harm sustained onboard during contractual service. Severity may vary from minor to debilitating, requiring repatriation or hospitalization.

MISSING / MOB

Cases where a seafarer is unaccounted for—either lost overboard (Man Overboard) or disappeared while onboard, without trace. These cases require urgent investigation and often involve search and rescue operations and coordination with port authorities or embassies.

SICKNESS ONBOARD

Non-fatal medical conditions developed during voyage requiring monitoring, onboard treatment, or shore medical intervention. Includes infections, chronic conditions, fatigue or illness.

SICKNESS & DEATH ONBOARD

Illness leading to death while the seafarer is onboard. Typically, due to undiagnosed conditions, inadequate access to medical care, or pre-existing health issues. Considered a critical welfare and insurance matter.

SICKNESS ONBOARD & DEATH ASHORE

Refers to cases where a seafarer falls ill onboard and later dies ashore after being disembarked or hospitalized. These incidents may raise questions of inadequate medical examinations, delayed care, or underlying health concerns.

SICKNESS ONBOARD (MEDEVAC)

Serious illness onboard requiring MEDEVAC, where the seafarer is evacuated for emergency medical attention. These operations are resource-intensive and coordinated through MRCCs, medical evacuation and health authorities.

SUICIDE

Confirmed or suspected self-inflicted death onboard during the course of duty. Requires sensitive handling, psychological review, and possibly criminal or judicial inquiry. Suicide also reflects deeper issues of mental health and underlying support onboard.

STOWAWAY

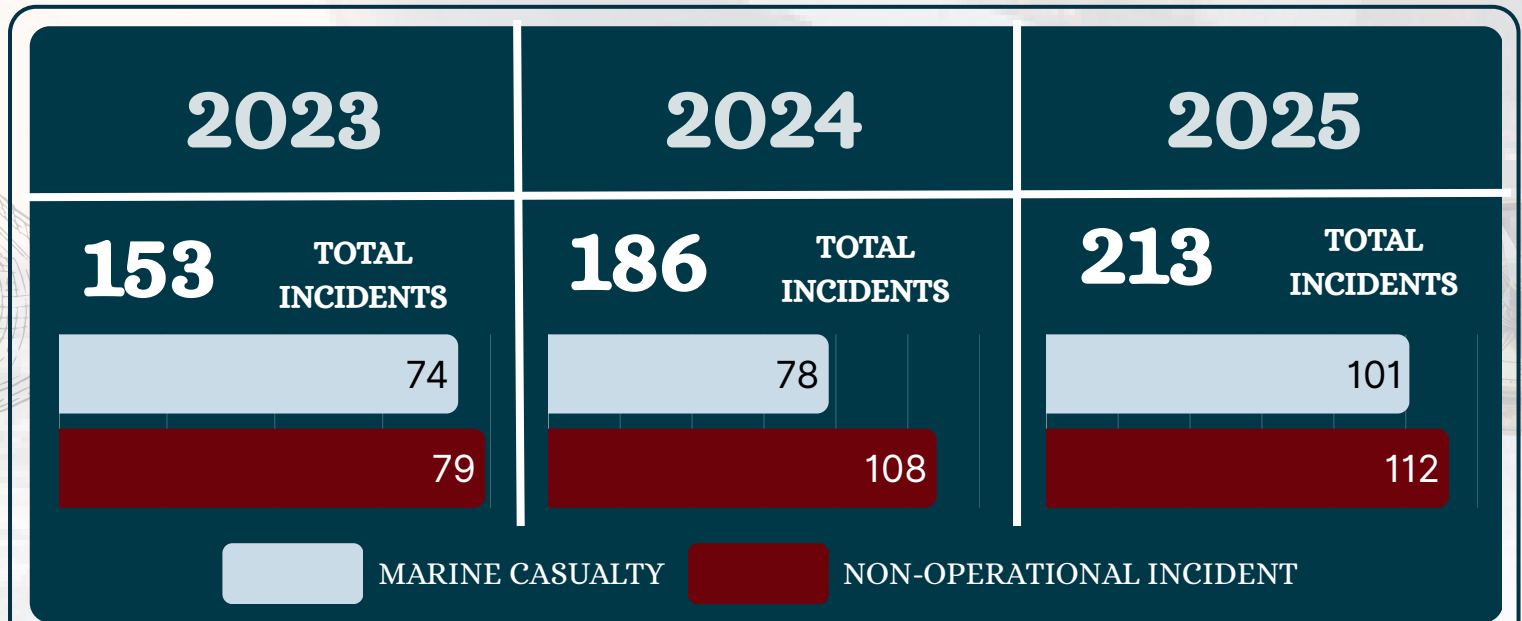
A stowaway is a person who boards a ship, or is concealed within its cargo, without the consent of the shipowner or Master, and is discovered after departure or upon arrival.

WILFUL DEFAULT

Acts of deliberate misconduct or negligence by seafarers, such as violation of instructions, unauthorized leave, or wilful damage. These are administrative violations impacting crew discipline and liability.

EXECUTIVE SUMMARY

OVERVIEW



TOTAL VERY SERIOUS INCIDENTS (2025)

128

Very Serious Marine Incidents encompass all events resulting in fatalities, significant vessel damage, injuries necessitating the sign-off of a crewmember or any occurrence that materially affects the vessel's operational status or continuity of operations.

MARINE CASUALTY

54

NON - OPERATIONAL INCIDENTS

74

- A total of **128** Very Serious Incidents were recorded in 2025 across both Marine Casualties & Non-Operational Incidents (Other than Marine Casualty).
- Very Serious Marine Casualties accounted for **53.46%** (54 out of 101 incidents) of all Marine Casualty incidents.
- Very Serious Non-Operational Incidents comprised of **66.07%** (74 out of 112 incidents) of all Non-Operational Incidents.

Ship type - Risk Profile

- **Bulk Carrier** : Bulk Carriers recorded the highest number of incidents, with 42 cases in total, comprising 18 marine casualty incidents, and 24 non-operational incidents involving human health and medical emergencies.
- **Container Vessels** : Container Vessels reported 30 marine casualty incidents, with occupational injuries on deck forming the predominant category. In addition, 19 non-operational incidents were associated with health and well-being concerns.

Fatal Threat Index

- [29 Deaths] **Sickness & Death Onboard**: The single largest threat to crew life across all the incidents, taking 29 lives in crew cabins before medical assistance could reach them.
- [16 Deaths] **Sickness Onboard & Death Ashore**: Accounts for 16 fatalities where crew members were evacuated or reached a port hospital but ultimately succumbed to severe medical conditions.
- [17 Deaths] **Man Overboard / Missing**: A combined total of 17 fatalities (5 from operational incidents and 12 missing due to non-operational events).
- [10 Deaths] **Fire & Explosion Disasters**: 3 incidents are responsible for 10 fatalities, making it statistically the most lethal requiring rigorous onboard fire control practices.

EXECUTIVE SUMMARY

MARINE CASUALTY - OVERVIEW

101

TOTAL INCIDENTS (2025)

INJURY

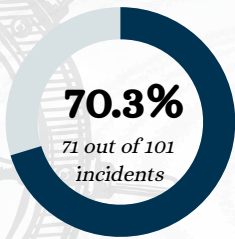
82

28

FATALITY

INCIDENT SEVERITY DISTRIBUTION		
	2025	2024
VERY SERIOUS INCIDENTS	54	51
SERIOUS INCIDENTS	35	10
MARINE INCIDENTS	10	11
LESS SERIOUS INCIDENTS	02	06

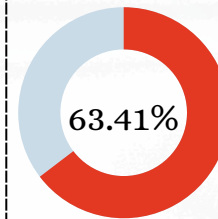
Key Insights



are Occupational incidents & Medevac cases

Daily On-Job Risk: Of the 101 recorded incidents, 71 were associated with routine slips, trips, and onboard operational hazards. The 71 occupational incidents including medical evacuations, are classified into: **44** Very Serious, **24** Serious, **2** Less Serious & **1** Marine Incident.

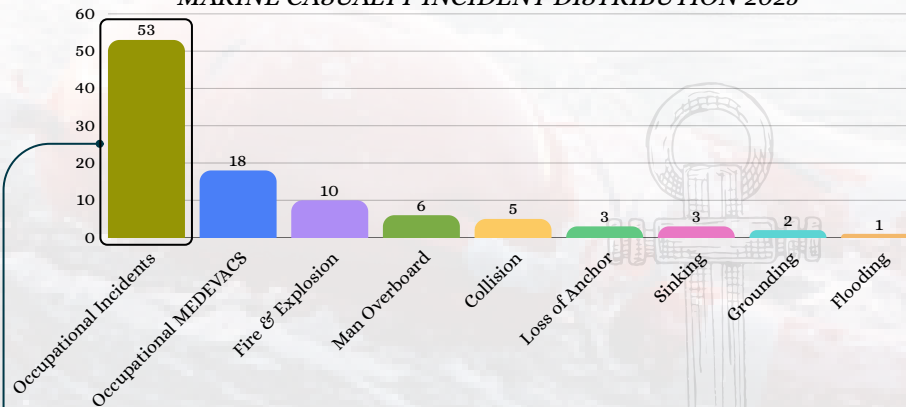
INJURY



A total of **52** out of **82** marine casualty injuries were categorized as very serious. Most of the incidents were associated with occupational incidents, medical evacuations (due to occupational incidents), fire and explosion incidents and vessel sinking.

Incident Distribution

MARINE CASUALTY INCIDENT DISTRIBUTION 2025



26

VERY SERIOUS
OCCUPATIONAL INCIDENTS

24

SERIOUS
OCCUPATIONAL INCIDENTS

01

MARINE
INCIDENT

02

LESS
SERIOUS

Occupational Incidents: Occupational Incidents accounted for only **06** fatalities out of a total 31 fatalities in Marine Casualties in 2025.

Ocean Distribution

[59.41%] High-Seas

Impact:

60 out of 101 casualties occurred more than 200 nautical miles from the nearest shore, severely complicating emergency medical evacuations and immediate response times.



EXECUTIVE SUMMARY

NON - OPERATIONAL OVERVIEW

(Other than Marine Casualty)

3.704%

RISE IN INCIDENTS
FROM 2024, 108 TO 112

18.03%

RISE IN FATALITIES
FROM 2024, 61 TO 72

40.00%

DECREASE IN INJURIES
FROM 2024, 15 TO 9

112

TOTAL
INCIDENTS
(2025)

INJURY



09

72



FATALITY

**includes Suicide & Missing / MOB cases*

Key Insights

CRITICAL SEVERITY GAP

78.6% Of all incidents were
(88 out of 112 Incidents) **missing, suicide** and
health related cases

Nearly four-fifths of all reported incidents are linked to serious crew-related issues, including **sickness, missing persons / MOB and suicide**. This highlights that health concerns and psychological well-being are the biggest risks faced by the maritime workforce.

SICKNESS THE PRIMARY FLEET THREAT

59.8% Of all the incidents
(67 out of 112 Incidents) are **Sickness** related

Acute illnesses such as **Sickness and Death Onboard** (29 cases), **Sickness Onboard & Death Ashore** (16 cases), & **Medical Evacuations** (14 cases) represent the vast majority of non-operational logs (67 out of 112). This shows a vital need to overhaul pre-boarding health screenings & enhance telemedicine support for isolated vessels.

THE INVISIBLE MENTAL HEALTH & SECURITY RISK

27.7% Of all the incidents
(31 out of 112 Incidents) are driven by **missing**
& **suicide** cases.

Behavioral and mental health crises form a significant secondary threat cluster, with 12 Missing / MOB cases & 9 confirmed Suicide events. When combined with 10 crew desertions, nearly a third of all non-operational cases trace back to psychological distress, isolation, or severe morale failure onboard.

Incident VS Vessel Type

54.5%

61 out of 112
incidents

The global cargo vessels like Bulk Carriers (24 cases), Container Vessels (19 cases) & Oil Product Tankers (18 cases) combine for more than half of all non operational incidents (61 out of 112 (54.5%)).

These high-endurance commercial fleets experience long ocean transits with minimal port breaks, making them the most vulnerable environments for unmanaged chronic medical conditions or sudden crew illnesses.

Crewmember's Rank Distribution

- [**34.66%**] **Deck Department:** Able Seamen (AB) and Chief Officers constituted a significant proportion of the cases reported within the Deck Department, reflecting the distribution of cases across different levels of deck operations.
- [**36.63%**] **Engine Room Crew:** Within the Engine Room Department, reported cases were distributed across various ranks, with Motormen, Oilers and Junior Engineers accounting for a notable share.
- [**28.71%**] **Salon/ Catering / Other Personnel:** Service-based roles are also exposed to significant onboard health risks beyond deck and engine operations.

(Based on as available data)





02

Indian Flag

Analysis

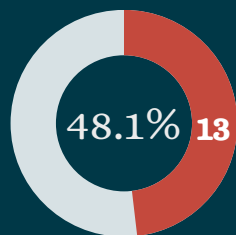


IMAGE COURTESY - SCI

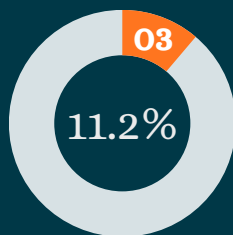
INDIAN FLAG SHIPS

OVERVIEW & ANALYSIS

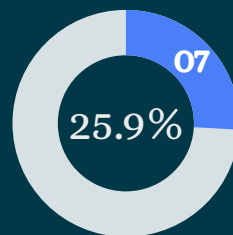
27
TOTAL
INCIDENTS



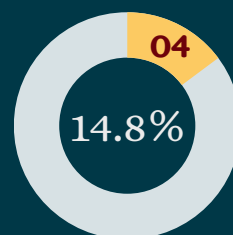
VERY SERIOUS
INCIDENTS



SERIOUS
INCIDENTS

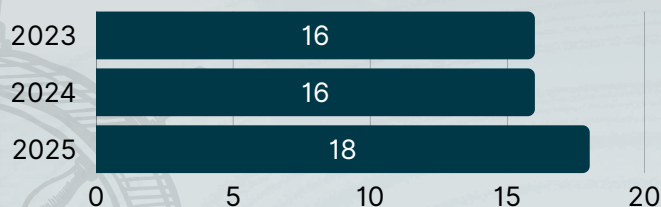


MARINE
INCIDENTS



LESS SERIOUS
INCIDENTS

18 MARINE CASUALTY



2023 vs 2024 vs 2025 YEAR WISE MARINE CASUALTY ANALYSIS

02 FATALITIES



06 INJURIES



KEY METRICS

61.1%

11 of the 18 marine casualty incidents were due to Occupational Incidents & Collision

27.8%

Bulk Carriers were the most involved with 5, followed by MSV / OSV with 4 incidents.

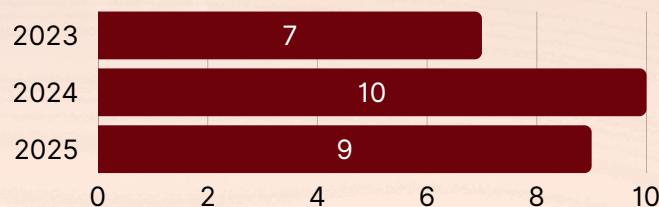
7.32%

Indian Flagged vessels accounted for only 7.32% (6 out of 82) of all Marine injuries.

09

NON-OPERATIONAL
INCIDENT

(OTHER THAN MARINE CASUALTY)



2023 vs 2024 vs 2025 YEAR WISE NON-OPERATIONAL ANALYSIS

07 FATALITIES



00 INJURIES



*includes Suicide & Missing / MOB cases

KEY METRICS

66.7%

6 of the 9 Non-Operational incidents occurred Outside Indian Waters.

55.6%

5 of the 9 non-operational incidents were sickness related, resulting in fatality.

33.4%

3 Out of 9 total incidents involved Container Vessels.

INDIAN FLAG SHIPS

NON-OPERATIONAL (Other than Marine Casualty)

09

TOTAL
INCIDENTS



VERY SERIOUS
INCIDENTS

07



LESS SERIOUS
INCIDENTS

02

07

FATALITIES



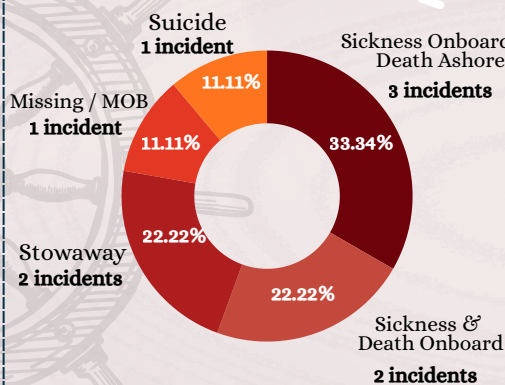
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INJURIES

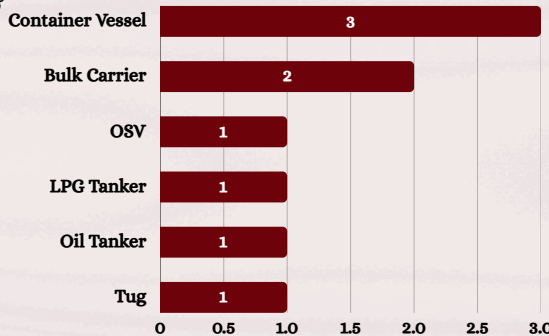


In 2025, seven non-operational fatalities were recorded on Indian-flagged vessels, primarily due to sudden medical emergencies. Out of 07 fatalities, 05 crew members died from natural causes. The remaining two cases were suicide and a person missing at sea during heavy weather, despite search and rescue efforts. Incidents without fatalities or injuries were stowaway cases (2).

THE WHY, WHERE & WHO



WHY: INCIDENT CLASSIFICATION



WHERE: VESSEL CLASSIFICATION

RATING



Oiler, OS, Handler, Motorman, Bosun: 6 individuals

OFFICERS / ENGINEERS



Chief Engineer: 1 Individual

WHO: RANK CLASSIFICATION

Strategic Suggestions



ADVANCED TELE-MEDICINE & VITAL MONITORING

Implement real-time remote medical assistance and wearable health-monitoring devices for crew members.

Since 56% incidents (05 out of 09 incidents) were medical emergencies, early detection of deteriorating vitals can bridge the gap during the critical hours before a vessel reaches port.



GLOBAL SAR & MEDEVAC OPTIMIZATION

Formalize and streamline communication protocols with international Maritime Rescue Coordination Centres (MRCCs).

With 67.5% incidents (06 out of 09 incidents) occurring outside Indian waters, having pre-established MEDEVAC routes and coastal agency contacts reduces response time in foreign jurisdictions.



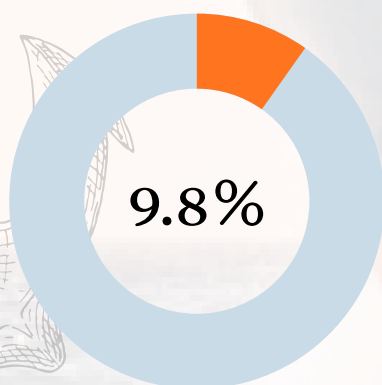
HOLISTIC CREW / WELLNESS SCREENING

Enhance Pre-Employment Medical Examinations (PEME) to include more rigorous cardiovascular screening and psychological wellness assessments.

Addressing "Sickness" and "Suicide" at the root starts with ensuring crew members are both physically and mentally resilient before they board.

TERRITORY ANALYSIS

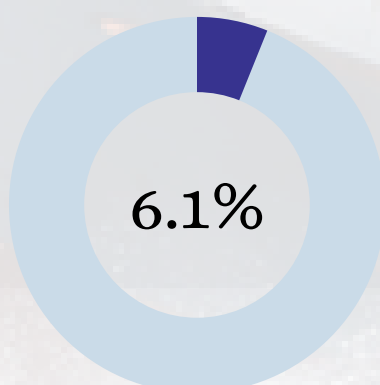
OVERVIEW



21

INCIDENTS

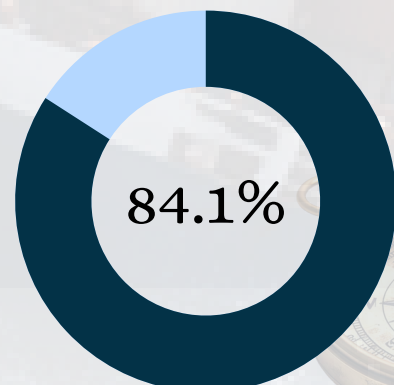
INDIAN TERRITORIAL WATERS
(UPTO 12nm FROM BASELINE)



13

INCIDENTS

INDIAN EXCLUSIVE ECONOMIC ZONE
(Between 12nm & 200nm FROM
BASELINE)



179

INCIDENTS

OUTSIDE INDIAN TERRITORIAL
WATERS
(BEYOND 200nm FROM BASELINE)

*The analysis of maritime incidents between 2024 and 2025 shows a persistent concentration of operational risk beyond India's immediate maritime boundaries. A review of incidents recorded in 2025 reveals that **179** incidents, accounting for **84.04%** of the total, occurred outside Indian waters, compared with 82% in 2024. This represents an increase of 2.04 percentage points, indicating a continued and notable concentration of maritime casualties in distant and international maritime environments. Structured analysis zones, monitored indicators and normalized trends collectively confirm the sustained exposure of Indian maritime operations to risks across remote maritime regions.*

*In contrast, incidents occurring within India's maritime jurisdiction represented a smaller proportion of the overall incident profile. Indian Territorial Waters accounted for **21** incidents (**9.86%**) in 2025, while the Indian Exclusive Economic Zone (EEZ) accounted for **13** incidents (**6.1%**). Taken together, incidents within Indian Territorial Waters and the Indian EEZ constituted 15.96% of all recorded incidents in 2025.*

Collectively, these metrics reinforce the evolving nature of the maritime safety landscape, with the majority of incidents occurring in international and remote maritime environments. This trend highlights the critical requirement for a strategic focus on enhanced onboard self-sufficiency, robust long-range response and support frameworks, improved situational awareness, and deeper international coordination to effectively mitigate the operational complexities and safety challenges associated with maritime activity across distant global corridors.

INDIAN WATERS

ANALYSIS

34 TOTAL INCIDENTS

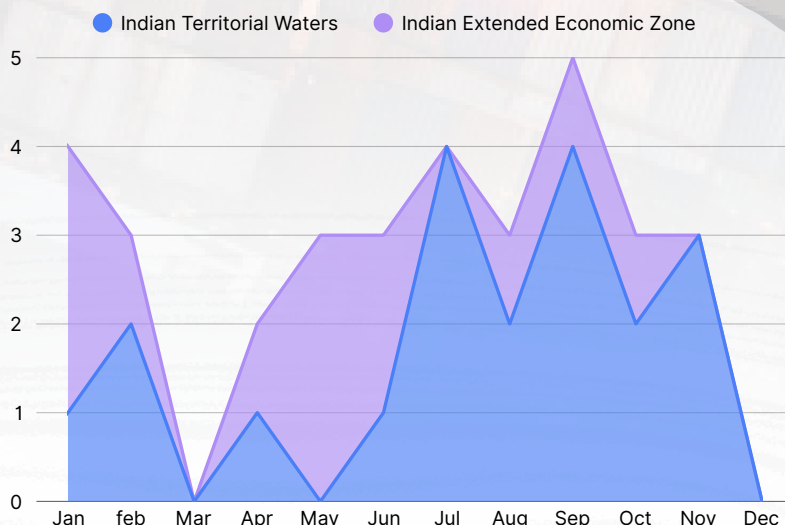
21 INDIAN TERRITORIAL WATERS

UPTO 12NM FROM BASELINE

13 INDIAN EXTENDED ECONOMIC ZONE

BETWEEN 12NM & 200NM FROM BASELINE

An analysis of **34** maritime incidents reported in Indian waters recorded **16 fatalities** and **14 injuries**. The incidents covered a range of operational and safety-related occurrences, including medical emergencies involving passenger vessels, mechanical failures, collisions and sinkings reported within the Territorial Waters and the Exclusive Economic Zone (EEZ). The findings indicate the need for continued surveillance, assessment, zero-gap monitoring, integrated safety measures and normalization across different areas of maritime operations.



Casualty Type Distribution

MARINE CASUALTY

23 TOTAL INCIDENTS

10 VERY SERIOUS INCIDENTS
07 SERIOUS INCIDENTS
06 MARINE INCIDENTS

11 FATALITIES
14 INJURIES

The **23** recorded marine casualties highlight the significant risks in shipping, where technical failures and workplace hazards directly threaten lives and assets. Resulting in 11 fatalities and 14 injuries, these

incidents mostly occurred on bulk carriers and container vessels, reflecting the fact that these types of ships employ the largest number of seafarers.

87.5%

7 of the 8 fatalities were due to Occupational Incidents and Fire & Explosion incidents.

28.6%

2 Out of 7 Occupational Incidents which caused injuries, were successfully evacuated, indicating a swift response.

NON-OPERATIONAL INCIDENTS

(Other than Marine Casualty)

11 TOTAL INCIDENTS

10 VERY SERIOUS INCIDENTS
01 LESS SERIOUS INCIDENTS

08 FATALITIES
00 INJURIES

With 8 fatalities and 0 reported injuries, these cases are characterized primarily involving acute medical emergencies such as cardiopulmonary arrests and sudden sicknesses.

37.5%
(3 of 8)

3 out Of the 8 fatalities recorded were passengers.



03

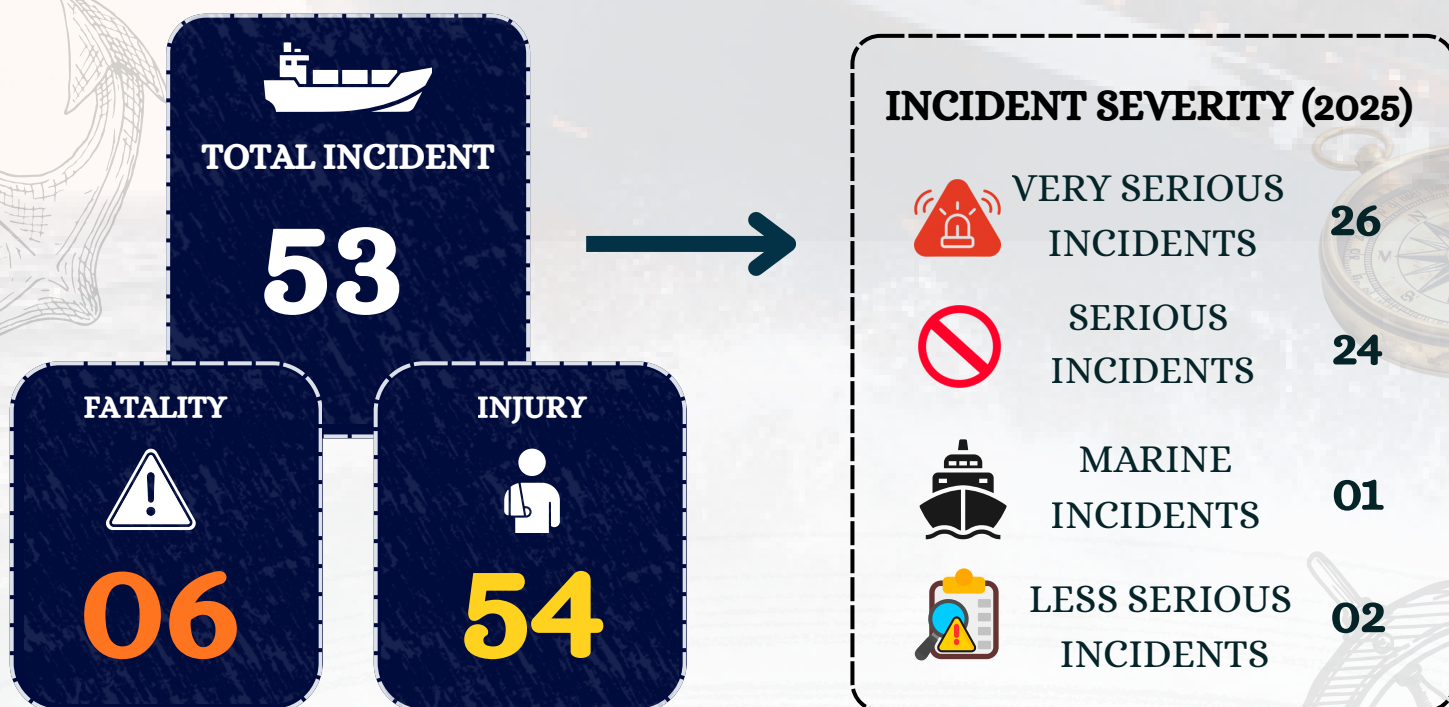
Marine Casualty



IMAGE COURTESY - SCI

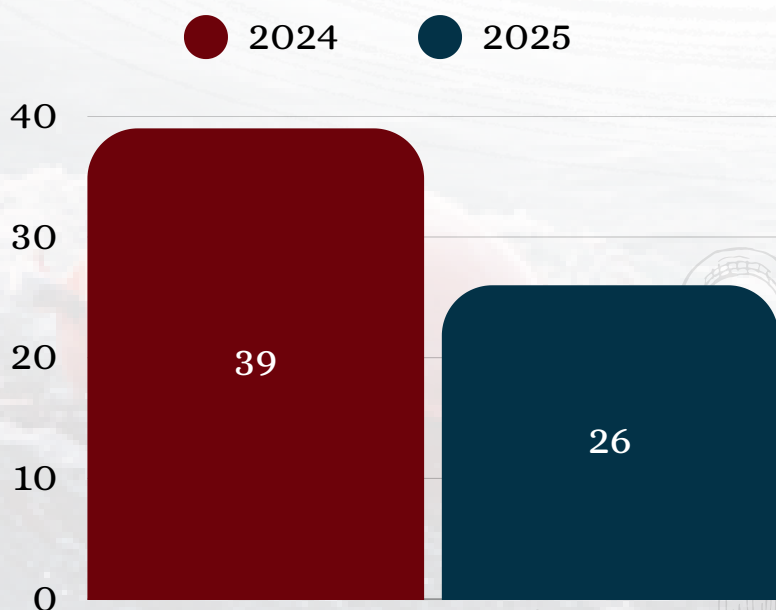
INCIDENT ANALYSIS

MARINE CASUALTY OCCUPATIONAL INCIDENTS



Occupational hazards represent the most persistent threat to Indian seafarers onboard, accounting for **53** total incidents in the year 2025 alone. This segment of the report shows the operational risks of maritime safety.

Very Serious Incidents



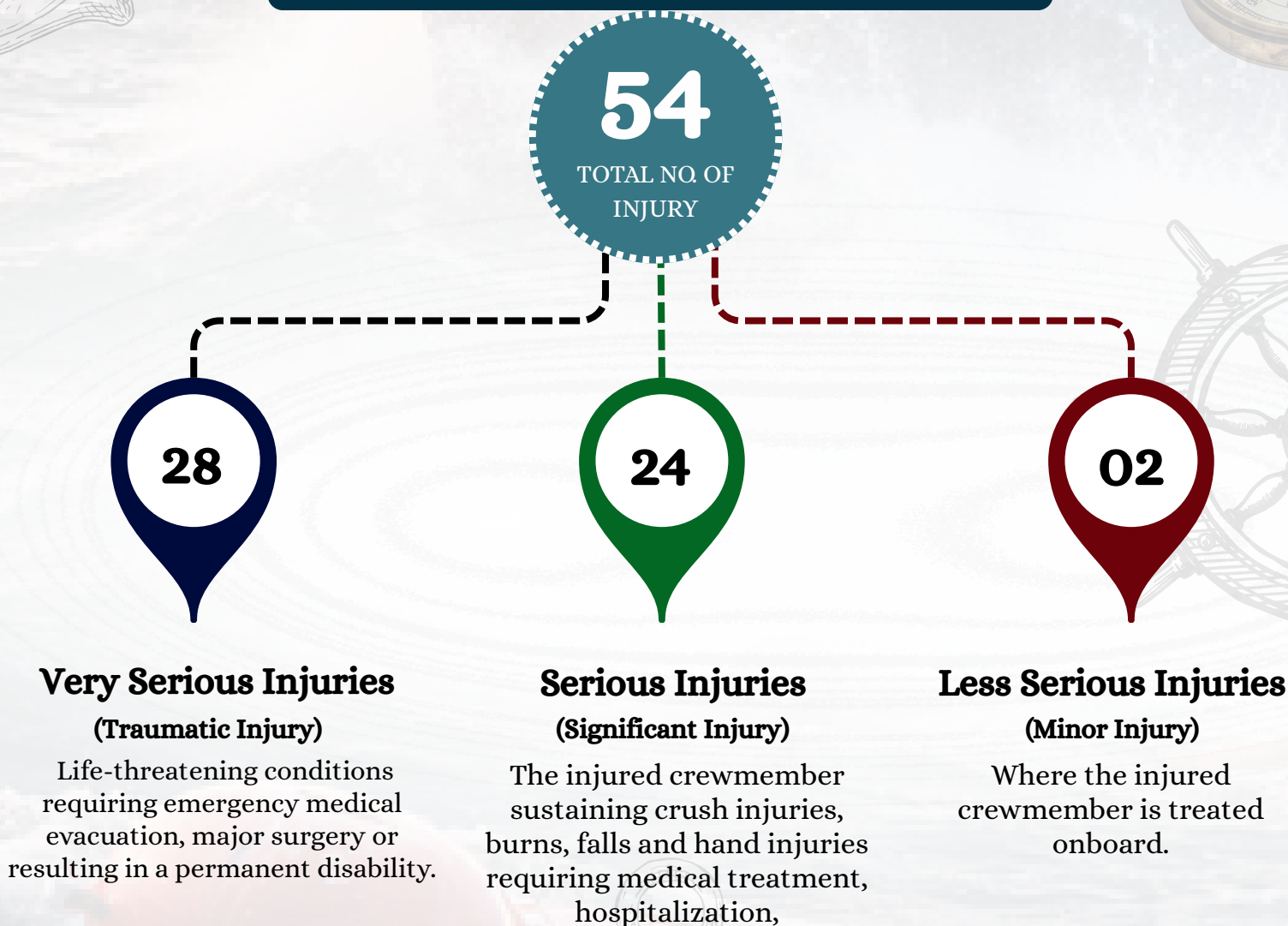
In 2025, the number of very serious incidents declined significantly from 39 in 2024 to 26, showing a reduction of 33%.

MARINE CASUALTY

OCCUPATIONAL INCIDENTS

INJURY ANALYSIS

INJURY IMPACT OF OCCUPATIONAL INCIDENTS

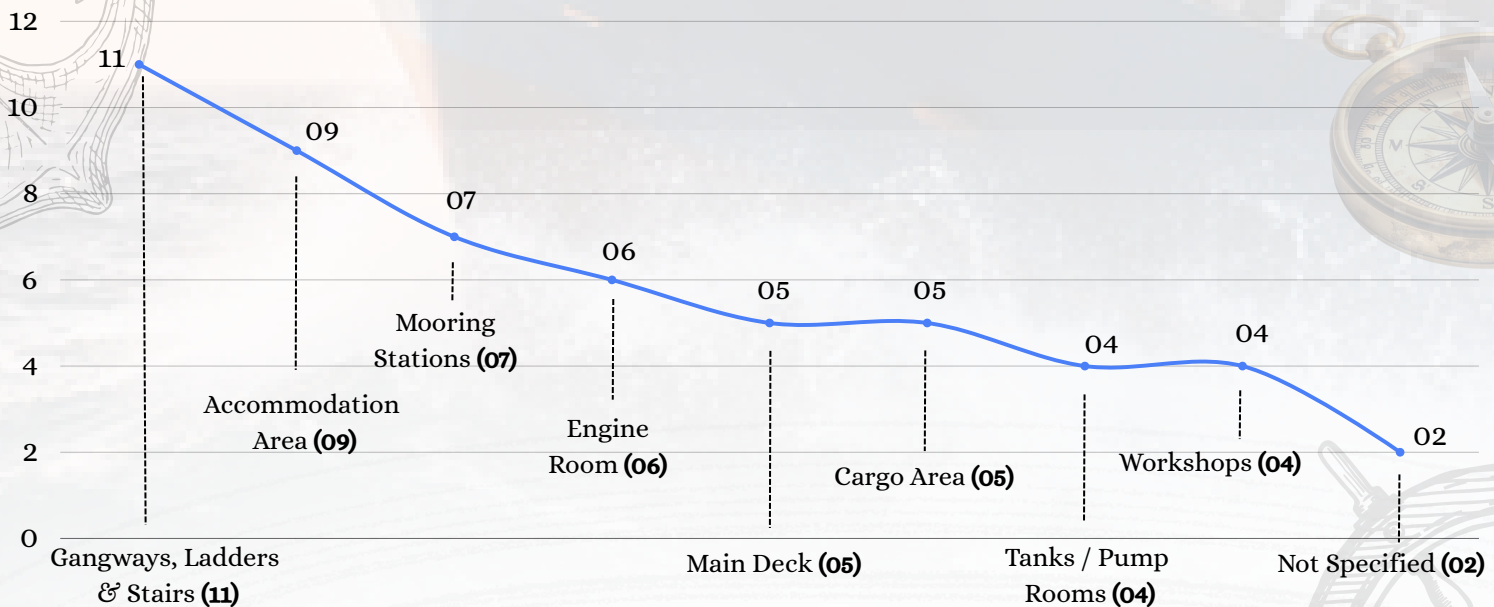


***THIS INJURY IMPACT DISTRIBUTION REINFORCES THE NEED FOR
EFFECTIVE SAFEGUARDS TO MITIGATE RISK AND PREVENT
OCCUPATIONAL INJURIES.***

MARINE CASUALTY

OCCUPATIONAL INCIDENTS

OCCUPATIONAL INCIDENTS BY SHIP AREA OCCURANCE



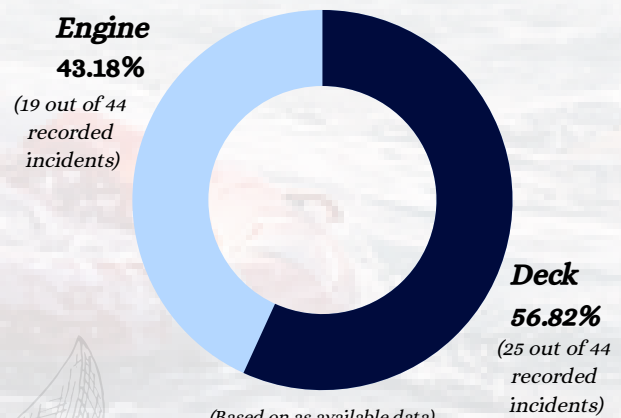
Incidents were primarily concentrated in high-traffic transit areas, including gangways, ladders, stairs and accommodation areas, which collectively recorded **20** cases. The distribution indicates that routine movement and access-related activities remain significant areas of exposure to slips, falls and other domestic hazards.

Strengthening safety protocols and hazard awareness in these frequently accessed areas remains important, alongside continued focus is required in engine rooms, as it is a critical zone.

CREWMEMBER CLASSIFICATION

BY RANK

Based on the reported incidents in the year 2025, it is revealed near equal distribution of risk across the vessel's primary departments. **25** incidents involved deck-side crew members; primarily during mooring operations, cargo handling, and general deck maintenance, while the remaining **19** incidents occurred among engine-side personnel, often during machinery overhauls or in high-temperature environments.



CREW MEMBERS SHOWED A SLIGHT UNEVEN DISTRIBUTION TOWARDS OCCUPATIONAL INCIDENTS.

MARINE CASUALTY

OCCUPATIONAL MEDEVAC



TOTAL INCIDENT

18

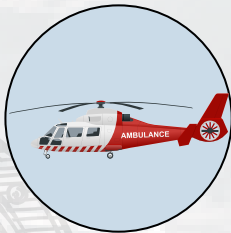


INJURY

18

All Occupational MEDEVAC are very serious incidents.

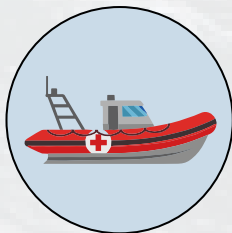
EVACUATION ANALYSIS



Helicopter /
Air

04

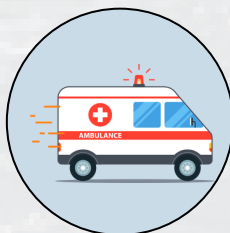
INCIDENTS



Boat /
Watercraft

05

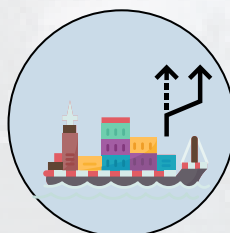
INCIDENTS



Ambulance /
Shore Vehicle

01

INCIDENTS



Vessel
Diversion

03

INCIDENTS



Method not
explicitly stated

05

INCIDENTS

16.67%

3 of the 18 Involved crew members
suffered a severe injury.

25.35%

18 of the 71 Occupational Incidents
were medical evacuations, accounting
to 25.35%

16.67%

3 of the 18 medical evacuations suffered
injury due to bad weather, battery
explosion & pump cap.

0

FATALITIES AMONG CREW-MEMBERS WHO
WERE EVACUATED, ENSURING A 100% SURVIVAL
RATE.



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

MARINE CASUALTY

MAN OVERBOARD



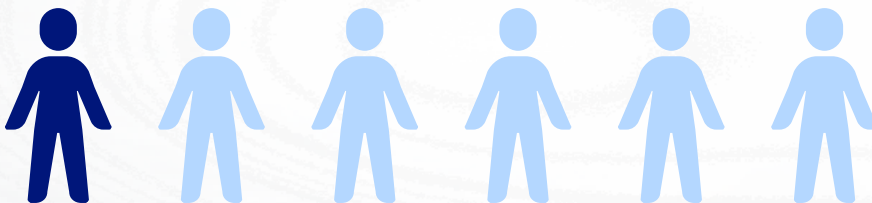
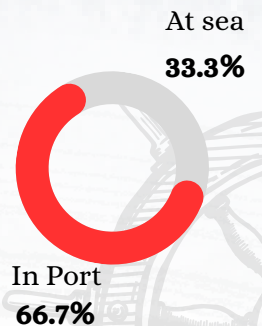
Man Overboard (MOB). This segment accounts for 6 separate incidents, which resulted in a 83% fatality rate for the individuals involved.

The tragic events to identify whether they stemmed from heavy weather exposure, lack of fall-protection equipment, emphasising that once a crew member enters the water, the window for a successful rescue closes rapidly.

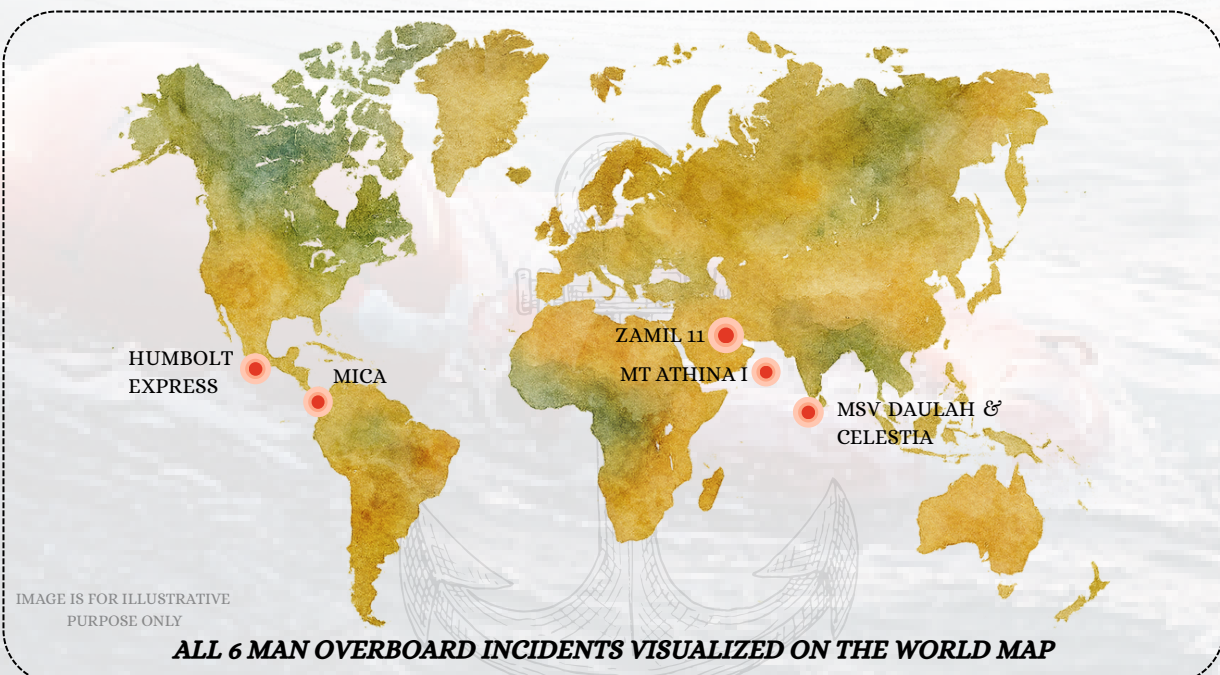


Analysis by Incident Location

Four of the six MOB incidents took place in port, whereas the remaining two occurred at sea.



Among the incidents, **5 were very serious** and resulted in fatalities, whereas **1 is a serious incident** ended with the successful rescue of a crewmember.



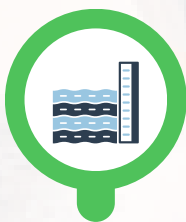
MARINE CASUALTY

MAN OVERBOARD

FACTORS AFFECTING SURVIVAL AFTER MOB



Water
temperature



Wave
height



Visibility



Clothing
worn



Physical
fitness



Time to rescue

MOB cases reveal the harsh reality of survival at sea; despite immediate SAR (Search and Rescue) activations, deployment of lifebuoys and "Williamson Turn" maneuvers, the combination of environmental factors such as high sea states, low visibility and cold-water shock often renders recovery efforts unsuccessful.

WHAT WE CAN DO:



Safe Deck
Practices



Life Jackets &
Safety Harnesses



Adequate Safety
Barriers



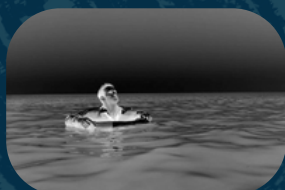
Vigilant Watchkeeping &
Efficient Communication

STRATEGIC LESSONS



- **Preventative Barriers:** Focus must shift from "recovery" to "prevention" through improved deck railing, mandatory harnesses in heavy weather, and anti-slip surfaces.
- **Mental Health Awareness:** A review of these specific incidents suggest that some MOB incidents may be linked to "intentional acts," highlighting the need for enhanced seafarer psychological support.

CREW TRACKING SYSTEMS



Infra-red thermal
tracking systems



Wearable MOB-Alert systems



Personnel Tracking
via CCTV Cameras



AI Video
Analytics

MARINE CASUALTY

FIRE & EXPLOSION

The year 2025 **10** Fire & Explosion incidents were reported. While these incidents are fewer in number compared to general occupational hazards, they accounted for a disproportionate and tragic loss of life. The incidents resulted in **10** fatalities and **7** injuries

“Early detection, effective fire prevention measures and well-rehearsed emergency response procedures remain the strongest safeguards against shipboard fires and explosions.”



TOTAL INCIDENT 2024		TOTAL INCIDENT 2025	
INJURY	FATALITY	INJURY	FATALITY
02	07	07	10

VERY SERIOUS INCIDENTS 2024 AND 2025

2024			2025		
VERY SERIOUS INCIDENT	MARINE INCIDENT	LESS SERIOUS INCIDENT	VERY SERIOUS INCIDENT	SERIOUS INCIDENT	
02	03	01	03	01	
06 DEATHS & 01 INJURY		01 INJURY	10 DEATHS & 06 INJURIES	01 INJURY	

VERY SERIOUS INCIDENTS ON VESSELS - 2025

FALCON		MV HEILAN STAR		WAN HAI 503	
FATALITIES	02	FATALITIES	04	FATALITIES	04
INJURIES	00	INJURIES	00	INJURIES	06

MARINE CASUALTY

FIRE & EXPLOSION



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

CARGO SUGGESTIONS

Cargo handling and evolving cargo types further amplified the severity of these events. Post-discharge procedures involving the draining of pipeline cargo into holds, combined with leaving hatch covers open for natural ventilation, led to catastrophic consecutive explosions that compromised buoyancy and caused rapid, severe vessel listing. Furthermore, modern transport risks were brought to the forefront by container explosions and specialized vehicle carrier blazes originating on decks transporting electric vehicles. These rapid, uncontrollable fires repeatedly forced crews to completely abandon ship into lifeboats and life rafts, reinforcing the importance of systematic assessment, zonal monitoring, integrated navigation in managing emerging cargo-related risks.

Finally, traditional wooden vessel construction proved highly vulnerable; fires breaking out within loaded cargo areas could not be contained due to the combustible nature of the hull material, resulting in total losses despite emergency towing and extensive firefighting assistance from port and municipal authorities.

KEY RECOMMENDATIONS

- Although fire and explosion incidents represented only a small proportion of the total marine incidents reported during the year, they continued to pose one of the most serious threats to life, property and the marine environment. Such incidents have the potential to escalate rapidly, particularly when they involve machinery spaces, cargo areas or dangerous goods, leaving limited time for effective intervention.
- The reported cases demonstrate that fires may occur during cargo operations, while underway, at anchor or alongside, highlighting that the risk exists throughout a vessel's operational cycle. Prompt detection, immediate activation of emergency procedures and effective coordination among the ship's crew and shore-based responders remain critical in preventing escalation and minimising consequences.
- The incidents also reinforce the importance of maintaining fire detection and fixed firefighting systems in a state of operational readiness, together with ensuring that crews remain familiar with emergency procedures through regular training and realistic drills. Continued emphasis on dedicated emergency vigilance, integrated knowledge and adaptability will further reduce the likelihood and severity of fire and explosion incidents.

MARINE CASUALTY

COLLISION

The year 2025 collision incident analysis reveals a total of **5** vessel contact incidents, which collectively resulted in **01 personnel injury**.

These events predominantly occurred within the high-risk environments of harbor lock gates and inner anchorages, primarily triggered by mechanical propulsion failures or anchor-dragging during environmental shifts.

While none of these specific cases caused any fatalities compared to last year, the incidents highlight a hazardous trend of contact with tugs and stationary barges, underscoring the volatility of close-quarters maneuvering. Risk alignment, integrated learning, yielding improved response during close-quarters maneuvering.

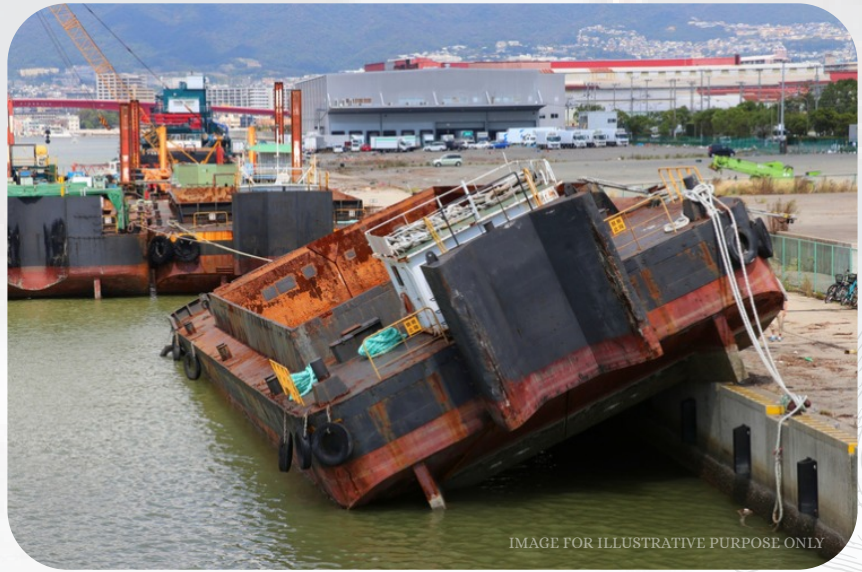


IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

2024			OVERVIEW			2025		
TOTAL INCIDENT	FATALITY	INJURY	TOTAL INCIDENT	FATALITY	INJURY	TOTAL INCIDENT	FATALITY	INJURY
10	03	00	05	00	01	05	00	01
						(All 5 incidents are Marine Incidents)		



OBSERVATIONS

01

Tugboat Contacts

Occurred during lock-gate transit in Mumbai. Primary cause - STBD engine actuator failure, leading to unintended "ahead" momentum despite neutral commands.

02

Barge Collisions

Resulted from vessels dragging anchor at inner anchorages. High swells & swift currents caused "soft touch" impacts with sand barges while maintaining anchor watch.

03

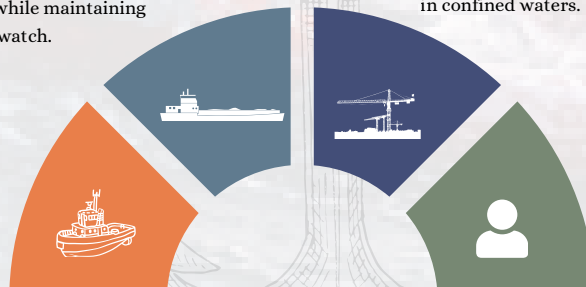
Quay & Jetty

Incidents involving contact with the lock jetty or fenders. These highlight the slim margin for error when mechanical redundancy fails in confined waters.

04

Human Element

A critical injury occurred when a mooring line parted due to collision tension. It serves as a reminder that mechanical failure quickly translates into physical danger.



MARINE CASUALTY

SINKING



Sinking incidents represent one of the most severe forms of marine casualties due to their potential to result in vessel loss, fatalities, environmental pollution and significant operational disruption.

Although relatively infrequent, these incidents carry disproportionately high consequences, underscoring the importance of robust vessel maintenance, stability management, effective emergency preparedness, and timely search and rescue (SAR) coordination to enhance maritime safety and minimize loss of life.

These incidents necessitate an uncompromising review of vessel structural integrity, stability protocols, cargo handling and the safety mandates governing ship-to-shore transfers. This report serves as a catalyst for enhanced regulatory vigilance and the implementation of rigorous preventative stratagems to ensure the inviolable protection of life and the environment at sea.

KEY LESSONS FROM SINKING INCIDENTS

1

Early Detection

Prompt identification of stability, flooding, or machinery abnormalities is critical to preventing loss of the vessel.

2

Effective Emergency Response

Timely distress communication, crew preparedness, and coordinated SAR operations significantly improve survival outcomes.

3

Recovery & Investigation

Comprehensive recovery efforts and systematic casualty investigations provide essential evidence for determining causal factors.

4

Safety Improvements

Lessons learned should be translated into enhanced maintenance practices, emergency preparedness, crew training and operational risk management.

OVERVIEW

	2024	2025
TOTAL INCIDENTS	03	03
INJURY	00	01
FATALITY	04	07

INCIDENT SEVERITY - 2025

- All the sinking incidents were Very Serious incidents.**
- MSC Elsa 3's sinking had no fatalities but extensive environmental pollution, tug boat CARA (Sea Quest) had 6 fatalities of involved crew members and the sinking of Amrut XVI had 1 fatality.

MARINE CASUALTY

LOSS OF ANCHOR AND PROPELLER

03 TOTAL INCIDENTS

The year 2025 reported 3 Loss of Anchor incidents, compared to 2 incidents in 2024. While the number of incidents increased, there were no serious consequences or casualties, as prompt action helped keep the situations under control.

The increase in cases may point to gaps in preventive maintenance, anchor equipment checks, or anchoring practices. Continued attention to routine inspections and proper anchoring procedures can help reduce similar incidents in the future.



GROUNDING

02 TOTAL INCIDENTS



The year 2025 reported 2 Grounding incidents, compared to 2024 which recorded 3 incidents. The reduction shows an improvement in navigational control and risk management. The reported cases were managed without significant harm to personnel or the environment.

The incidents emphasise the need for continued focus on safe navigation, situational awareness and proper passage planning. Maintaining these practices can help prevent grounding incidents and reduce the risk of further consequences.

01 TOTAL INCIDENTS

The year 2025 reported 2 Flooding incidents, compared with 3 incidents in 2024. The reduction in cases was accompanied by a zero-casualty outcome, with no fatalities or injuries reported.

Although the reported cases were contained with limited impact, flooding can lead to serious damage to the vessel, cargo and marine environment if not controlled quickly. The incidents highlight the need for regular inspections, early detection and effective response measures to prevent further escalation.

FLOODING

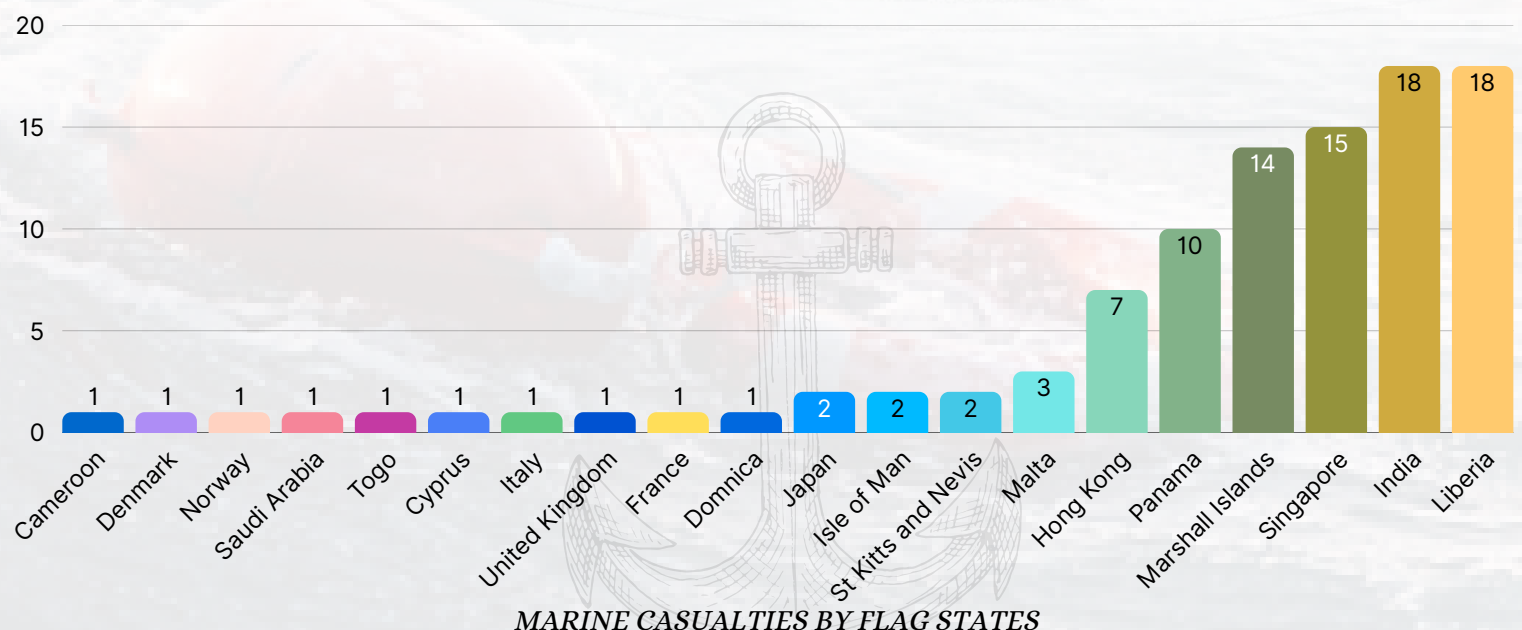


MARINE CASUALTY

FLAG STATE ANALYSIS

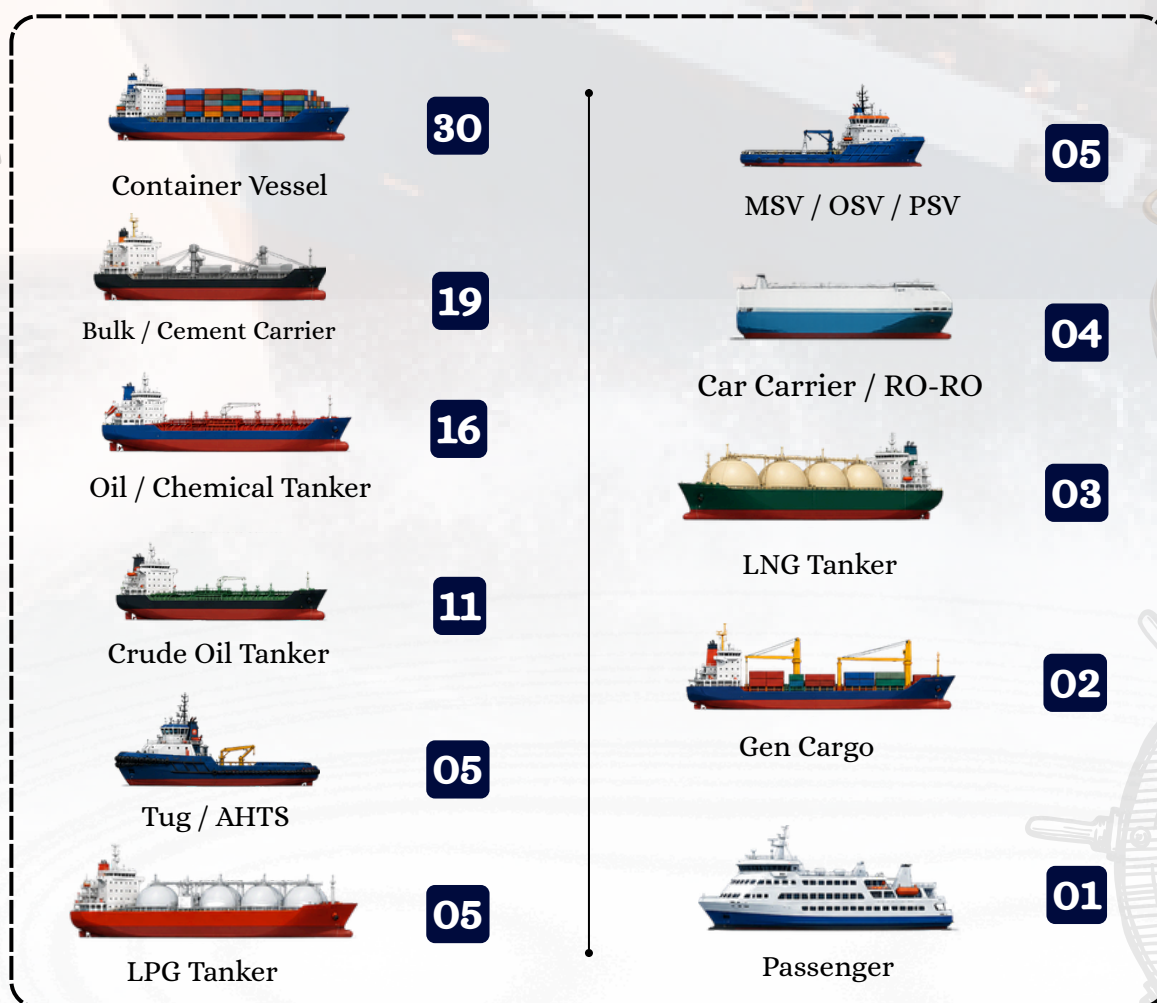


The 2025 data reflects a strong and transparent reporting culture across the global maritime industry, drawing from 20 distinct flag administrations. The distribution highlights a steady flow of information from established registries like India (18) to major global hubs such as Liberia (18) and Singapore (15). Rather than just representing incidents, these figures showcase a shared industry-wide commitment to maritime safety, where detailed reporting helps build a more secure global supply chain. This consistent tracking is especially critical given that the majority of Indian seafarers are employed on foreign-flagged vessels with Liberia, Singapore, the Marshall Islands, and Panama accounting for the largest share. Keeping tabs on these diverse flag states ensures a unified approach to safety, which is essential for safeguarding Indian crew members worldwide.



MARINE CASUALTY

VESSEL ANALYSIS



MARINE CASUALTIES BY VESSEL TYPE

The reported marine casualty incidents mostly involve vessel types with the highest levels of activity. **Container ships** saw the highest numbers with 30 incidents, followed by **Bulk** and **Cement carriers** at 19 and **Oil product & Chemical tankers** at 16. **Crude oil tankers** also showed a notable presence with 11 incidents.

While offshore and support vessels such as **MSV/OSV/PSV (5)** and **Tug/AHTS (5)** contribute moderately.

Other vessel types report relatively fewer cases. Fewer incidents on certain types of vessels like tankers, LPG, and LNG may also be indicative of higher safety standards on these vessels, which are brought through stringent international regulations, rigorous classification society oversight, and demanding commercial vetting processes like SIRE (Ship Inspection Report Programme).

Overall, the distribution highlights a clear link between operational intensity and incident occurrence, emphasizing the need for continued focus on safety in high-demand sectors.

OPERATIONAL SUGGESTIONS

- **High-Volume Sector Focus:** Use the extensive incident data from the Container and Dry Bulk sectors to continuously refine deck-safety and cargo-handling standards, focusing oversight where the majority of Indian seafarers are employed.
- **Energy Sector Benchmarking:** Adopt the strict risk-management frameworks and commercial vetting standards (such as SIRE regimes) observed in the low-incident Tanker, LPG, and LNG fleets as industry best practices for other vessel types.
- **Global Flag Cooperation:** Strengthen regulatory communication and data sharing with major international registries like Liberia, Singapore, the Marshall Islands, and Panama to enhance the safety and protection of the high volume of Indian crew serving on foreign-flagged vessels.

04

Non Operational Incidents



IMAGE COURTESY - SCI

OVERVIEW & INCIDENT ANALYSIS

Non - Operational Incident
(Other than Marine Casualty)

2023

79

INCIDENTS

02 INJURIES

55 FATALITIES

2024

108

INCIDENTS

15 INJURIES

61 FATALITIES

2025

112

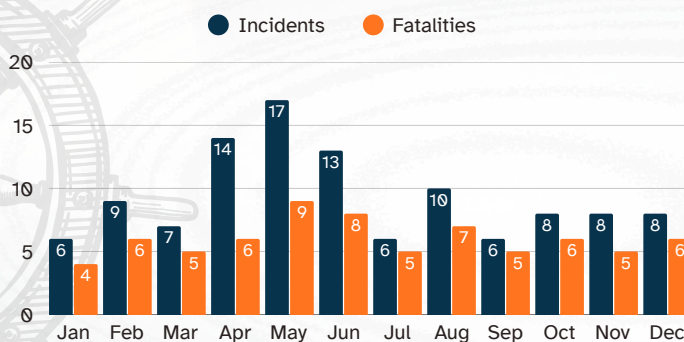
INCIDENTS

09 INJURIES

72 FATALITIES

Over the past three years, non-operational incidents have continued to rise, increasing from 79 in 2023 to 112 in 2025. More concerning is the steady increase in fatalities, from 55 to 72, showcasing a 31% rise. Behind these numbers are lives lost, highlighting the urgent need for stronger measures to protect personnel at sea.

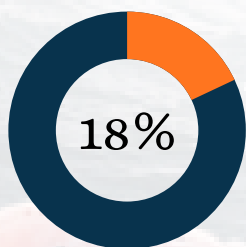
MONTH WISE INCIDENT VS FATALITY



Non-operational incidents peaked sharply in May, with 17 cases and 9 fatalities, indicating heightened personnel-related risk. Subsequent months recorded comparatively lower and more stable incident levels.

The disproportionate concentration of incidents in May show a distinct period of heightened personnel vulnerability, whereas the subsequent months reflect a comparatively moderated incidence pattern and reduced overall reporting frequency.

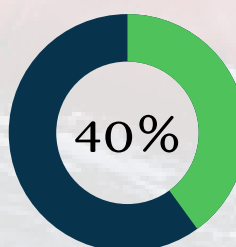
Consequences Insights



Fatalities went from **61** to **72** from 2024 to 2025, an **18%** increase in fatalities from the previous year.



Reduction in Man Overboard cases from **20** in 2024 to **12** in 2025



Injuries reduced from **15** in 2024 to **9** in 2025, a substantial **40%** reduction.



Reduction in Desertion cases from **23** in 2024 to **10** in 2025

NON-OPERATIONAL SICKNESS ANALYSIS

67
TOTAL
INCIDENTS

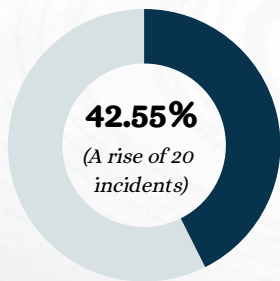
45
TOTAL
FATALITIES

A total of 67 recorded sickness incidents, which resulted in a total of 45 deaths. A critical trend of cardiovascular and gastric emergencies among maritime personnel was observed. The incidents primarily involved crew members with an average age of approximately 52. *(based on limited data)*

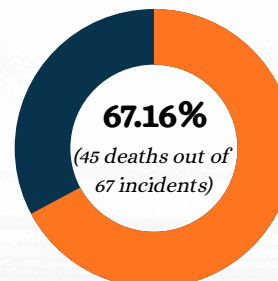
Systematic assessment zones, measured indicators, integrated networks, responsive actions, layered insights, yielding stronger visibility into cardiovascular risk patterns.

Sickness Breakdown

TYPE	INCIDENT COUNT
SICKNESS ONBOARD DEATH ONBOARD	29
SICKNESS ONBOARD DEATH ASHORE	16
SICKNESS ONBOARD MEDEVAC	14
SICKNESS ONBOARD	08

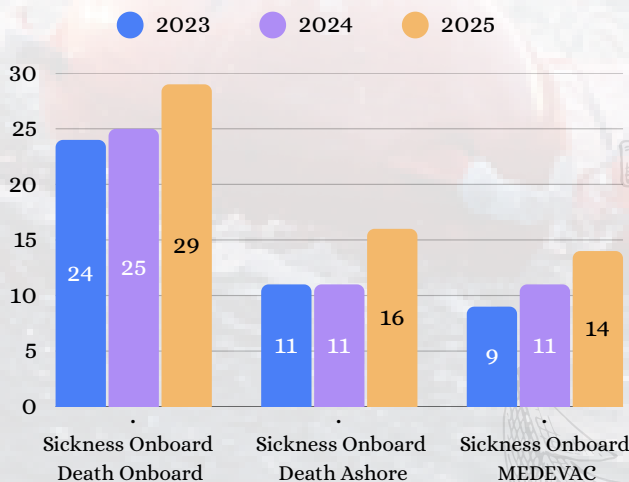


67 Sickness related incidents recorded in 2025; a 42.55% increase compared to last year's (2024) 47.

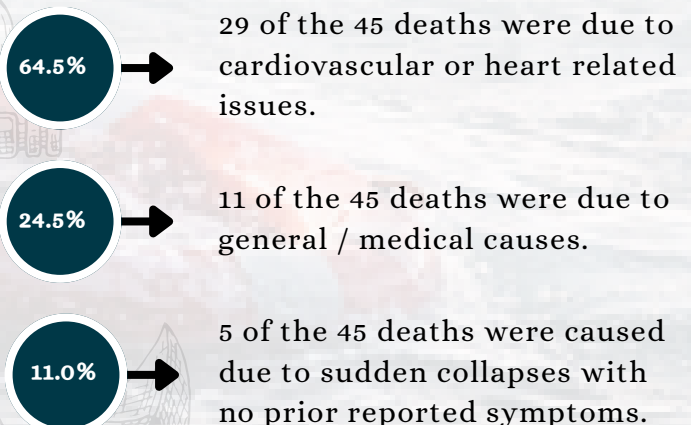


With a fatality percentage of 67.16%, sickness incidents are the most deadly among all Non-Operational Incidents.

3 YEAR COMPARISON



RISK-WISE DISTRIBUTION



NON-OPERATIONAL SICKNESS & DEATH ONBOARD



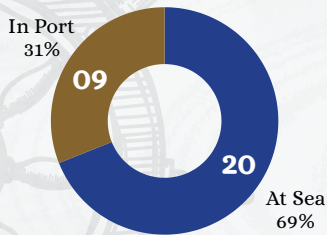
IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

29
TOTAL
INCIDENTS

Crew members involved in the 29 incidents in the year 2025, reported symptoms such as fever, respiratory problems and fatigue that were routinely managed onboard using medical advice.

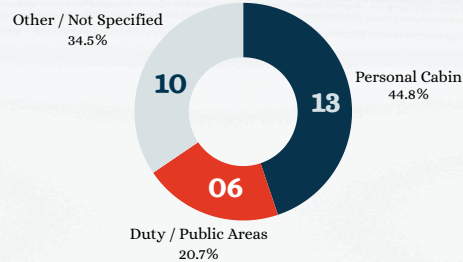
However, some cases deteriorated rapidly due to underlying conditions, leading to cardiac or respiratory failure and death. These events emphasize how rapidly illnesses can develop at sea and the importance of dedicated early vigilance, informed clinical assessment, knowledge-based intervention and adaptability to enable timely diagnosis and rapid evacuation.

ISOLATION FACTOR



This metric emphasizes the isolation factor. Most deaths occur "At Sea," where advanced medical facilities are hours or days away.

OCCURENCE LOCATION



This metric is vital for discussing monitoring & "well-being checks." It shows that a significant number of fatalities happen in private spaces, hence delaying an early evacuation procedure.

SICKNESS ONBOARD & DEATH ASHORE

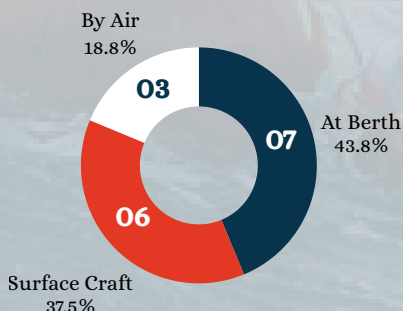
16
TOTAL
INCIDENTS

In these 16 incidents, sickness started on board, developing through such signs as fever, chest pain or fatigue. The initial response to their sickness involved treatment at sea and the patients then went ashore for more thorough treatment.

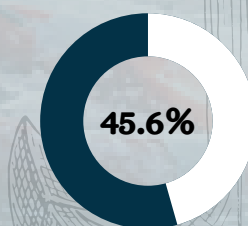
Even though the patients received proper treatment after being taken to a facility, some of them failed to recover.

This trend shows that the process of evacuation had been done effectively; however, the medical condition had worsened to a point where recovery was impossible.

DISEMBARKATION METHOD



2024 VS 2025



Sickness Onboard & Death Ashore cases increased from 11 in 2024 to 16 in 2025, indicating a 45.56% increase.

POINT OF FATALITY

15

Of the total 16 cases, the involved crewmember was declared deceased after hospitalisation, indicating a successful evacuation.

NON-OPERATIONAL SICKNESS ONBOARD

08 TOTAL
INCIDENTS

During these 8 “Sickness Onboard” events, seafarers experienced symptoms including fever, infections and general discomfort while on board.

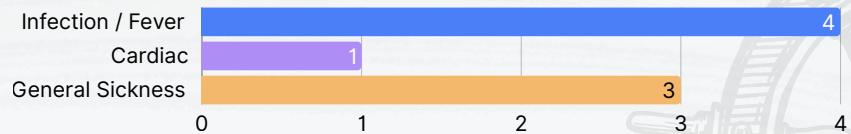
In these cases, dedicated early vigilance, informed medical assessment, knowledge-based intervention and adaptability played an important role in maintaining the health and stability of affected crew members. Unlike cases involving more severe or rapidly deteriorating conditions, none of these incidents required medical evacuation, as the seafarers responded adequately to onboard treatment and their health stabilised under medical supervision.

These cases demonstrate the importance of effective onboard medical preparedness and timely intervention in managing routine illnesses at sea. Early reporting of symptoms, proper medical evaluation, regular monitoring and access to appropriate treatment can prevent relatively minor conditions from developing into serious medical emergencies.



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

NATURE OF ILLNESS



IMMEDIATE MITIGATION ACTION

62.5%
37.5%

- **Direct Hospitalization Ashore (Critical Care):** 5 incidents (62.5%) — Cases requiring urgent clinical operations, such as stent placement for blockages or ICU stays.
- **Medical Sign-Off / Repatriation (Stabilized):** 3 incidents (37.5%) — Seafarers signed off the vessel due to prolonged illness to recover at shore or home.

SICKNESS ONBOARD - MEDEVAC

14 TOTAL
INCIDENTS

In these 14 “Sickness Onboard (medevac)” incidents, crew members developed symptoms ranging from acute pain and infections to breathing difficulties, prompting immediate medical attention onboard. As conditions showed signs of severity or uncertainty, evacuation was arranged to ensure access to advanced care.

Critical Condition Categories

Cardiac Emergencies

3 incidents (21.4%): Acute heart distress requiring advanced shore-side monitoring.

01



Neurological Conditions

4 incidents (28.6%): Includes brain infections, disorientation, and acute loss of consciousness.

02



03 Abdominal / Internal Pain

3 incidents (21.4%): Suspected organ failures or acute gastric issues.



04 Other Critical Illness

4 incidents (28.6%): Including unreported incidents and various other critical sicknesses.



NON-OPERATIONAL

MISSING / MOB



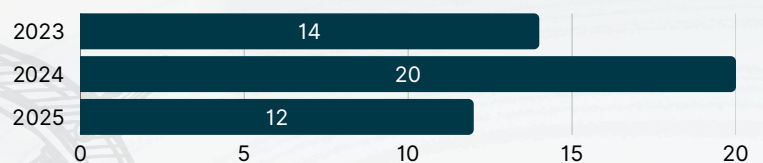
IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

The report outlines twelve non-operational incidents, mainly “Missing / MOB” cases across vessels like LPG tankers, container ships and VLCCs.

Typically, crew members are discovered missing only after failing to report for duty, prompting immediate responses such as ship-wide searches, and coordination with rescue centers.

Despite extensive SAR efforts, many cases remain unresolved, highlighting key lessons on mental health, strict safety protocols and vigilance during challenging conditions.

YEAR WISE COMPARISON



40%

Reduction in Missing / MOB incidents from 20 in 2024 to 12 in 2025.

12

TOTAL INCIDENTS

10

MISSING

12

FATALITIES

02

MAN OVERBOARD

Missing Analysis

100%

In all the 12 incidents where a crew member was reported to be missing, the ship was sailing (moving).

90%

A staggering 90% of missing person cases ended in tragedy, with 9 out of 10 crew members lost at sea.

THE SAFETY GAP

This metric calculates the time between when the crew member was Last Seen and when the Muster / Search was initiated. In maritime safety, this "gap" is critical because it determines how far the vessel has traveled from the potential Man Overboard (MOB) location.

Shortest Gap

Average Gap

Longest Gap

1.25 hours

4.2 hours

13 hours

FACTORS AFFECTING MISSING / MOB INCIDENTS

01

HUMAN FACTORS

- Fatigue, reduced situational awareness.
- Complacency during routine work.
- Inadequate supervision & psychological stress.

02

OPERATIONAL & ENVIRONMENTAL FACTORS

- Slippery deck surface, poor deck lighting.
- Unsafe guard rails or barriers.
- Adverse weather & ship motion
- Transfers & disembarkation, lack of immediate safety gear (life- jacket etc.).

NON-OPERATIONAL

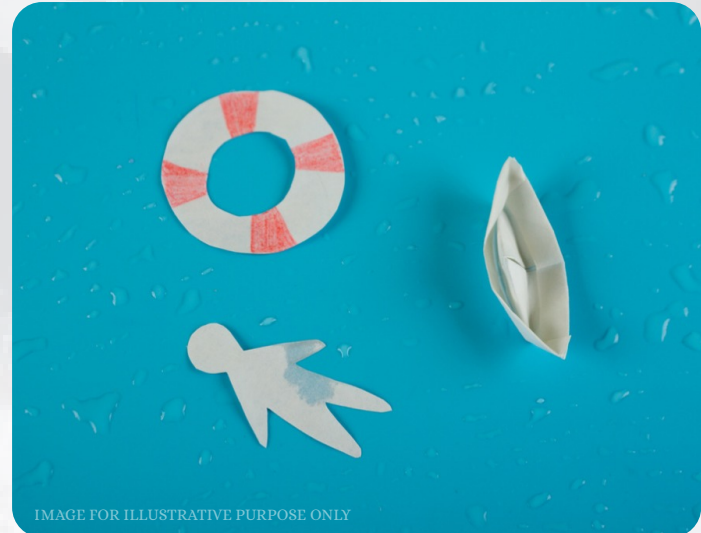
MISSING / MOB

HOW TO MINIMIZE MISSING / MOB CASES

SAFETY CULTURE AND COMPANY RESPONSIBILITY

Safety culture and company accountability are essential for maintaining safe maritime operations. Shipping companies have a key role in preventing incidents by encouraging robust safety practices and making safety a central organizational focus.

“Strong safety culture encourages proactive identification of risks”



Missing overboard incidents can be significantly reduced through a mix of disciplined procedures, smart technology and constant awareness:

- Crew members should always wear appropriate personal **protective equipment** like life jackets, working vests and **safety harnesses** when working on deck, especially in rough weather or at night.
- Regular **safety drills** ensure everyone knows exactly what to do in an emergency, shaving off critical response time.
- Ships can also install CCTV **motion sensors** and **man-overboard alarm** systems that instantly alert the bridge if someone falls into the water.

Conclusion

Man Overboard incidents remain a significant challenge in maritime safety

The most effective strategy is prevention through:



Strong safety culture



Strict operational discipline



Enhanced situational awareness



Appropriate use of technology

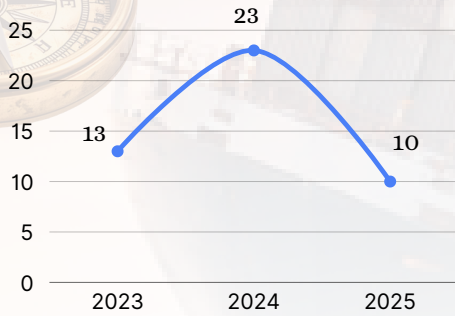
VIDEO QR CODE

Scan the QR Code to watch
“Safety Video Series - DGMA”.



NON-OPERATIONAL DESERTION

10 TOTAL INCIDENTS



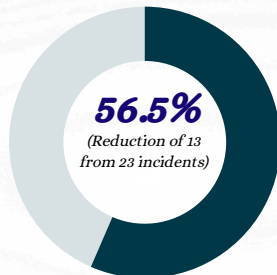
2023 vs 2024 vs 2025 DESERTION CASES

Insights



90% of the cases (9 out of 10) occurred within the United States, where crew members frequently absconded during transit at major airports like Miami, Houston, New York, Boston & 01 (10%) in desertion in Dubai.

Trends



Decline in desertion cases from 2024, from **23** in 2024 to **10** in 2025.

Transit vs Port Ratio

60% Transit

40% Port

- **Transit (6 Cases):** These incidents occurred away from the vessel. This includes seafarers absconding at airports during layovers (Miami, Dallas, Boston, Dubai, New York) or from hotels while waiting for the vessel to berth. These are often the hardest to control as the crew is not yet under the Master's direct supervision.
- **Port (4 Cases):** These incidents occurred while the vessel was alongside. They primarily involved crew members failing to return from authorized shore leave, often using simple errands like shopping or using a recreation as a cover to disappear.

Key Suggestions

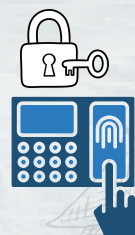
TRANSIT WINDOW SECURITY PROTOCOL



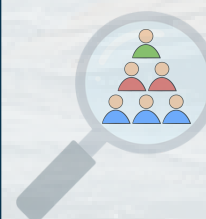
Implement "Terminal-to-Terminal" chaperoned transit. Ensure crew members are never left unmonitored during long layovers or hotel stays before boarding.

BIOMETRIC / SID VERIFICATION FRAMEWORKS

Promote the strict tracking of Seafarer Identity Documents (SID) at immigration checkpoints. Ensure all crew details are synced with international border databases to flag unauthorized detours during transit windows.



RISK BASED RECRUITMENT VETTING



Enhance pre-employment screening to identify "High-Pull" factors. Scrutinize candidates who have strong family ties, financial interests, or previous visa applications in the vessel's frequent trading regions.

NON-OPERATIONAL SUICIDE



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

09 TOTAL
INCIDENTS

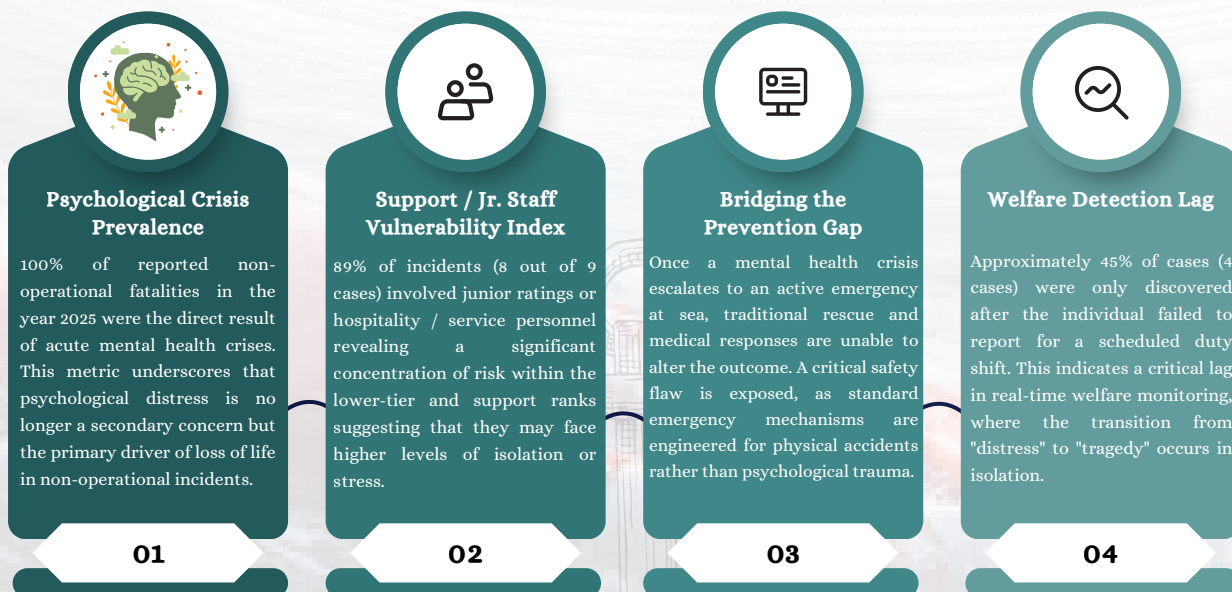
09 FATALITY
03 INJURIES

Suicide incident analysis reveals a harrowing intersection between the inherent isolation of life at sea and an escalating mental health crisis that often remains hidden beneath the surface of operational routine. In 2025, 9 suicide incidents were reported as compared to 5 in each of 2023 & 2024. Signals around zones, mood indicators, nuanced shifts point to distress that often goes unnoticed until it is too late.

The recurring pattern of crew members failing to report for duty, only to be found in the final

stages of a terminal psychological crisis, highlights a critical systemic vulnerability: the inability to detect silent despair before it manifests in tragedy. Whether in a private cabin or on a public deck, these losses prove that "safety" must evolve beyond mechanical checklists into proactive psychological stewardship.

OPERATIONAL INSIGHTS



Behind the maritime industry's operational success lies a growing mental health crisis, characterized by a 100% fatality rate in reported psychological emergencies. The data shows that 89% of these tragedies involve junior and support ranks, highlighting a critical vulnerability in those most prone to isolation, with recurring alienation, isolation, loneliness and yearning reflecting the emotional strain experienced by vulnerable crew members. While emergency responses are swift, they are often too late; this "prevention gap" proves that safety at sea must evolve from reactive logistics to proactive psychological stewardship. To save lives, the industry must transition from managing casualties to fostering a culture of radical empathy and early intervention.

NON-OPERATIONAL

(Other than Marine Casualty)

DEATH ASHORE

04
TOTAL
INCIDENTS

05
FATALITIES

Death Ashore incidents experienced a critical spike with **04** reported cases resulting in **05** fatalities, primarily driven by acute medical emergencies and transit accidents occurring within foreign port jurisdictions and dockside shipyard facilities. This geographical and situational clustering represents a significant escalation in shore-based risk exposure.

Consequently, the sharp rise reinforces the urgent need for multilevel unified frameworks for integrated normalization to better manage off-vessel exposure. While 2023 & 2024 recorded 1 incident each, 2025 year had a total of 4 reported such incidents.



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

INJURY ONBOARD

01
TOTAL
INCIDENTS

01
INJURIES



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

Injury Onboard incident, contributing to the overall trend observed in 2025. When viewed against 2024, which reported 3 such cases, it indicates that onboard safety risks remain a persistent challenge rather than an isolated occurrence, with structured analysis zonally monitoring integrated notifications emphasizing the need for continuous tracking of these risks.

Analysis of the incident showed that a Chief Officer sustained a serious hip injury after falling on a staircase onboard and was subsequently declared unfit for duty, requiring sign-off for further treatment.

NON-OPERATIONAL

(Other than Marine Casualty)

STOWAWAY ONBOARD



02
TOTAL
INCIDENTS

Two Stowaway Onboard incidents were recorded, highlighting a continued exposure to unauthorized access risks despite existing security measures.

The recurrence of such cases suggests gaps in surveillance, access control, or perimeter monitoring during port operations. This highlights the need for stricter vigilance and more robust implementation of ship and port security protocols, supported by systematic assessments, zero-gap monitoring, integrated networks and stronger coordination between shipboard and port-side security personnel. Strengthening these controls will help identify vulnerabilities earlier, improve response readiness and reinforce compliance with established security requirements.

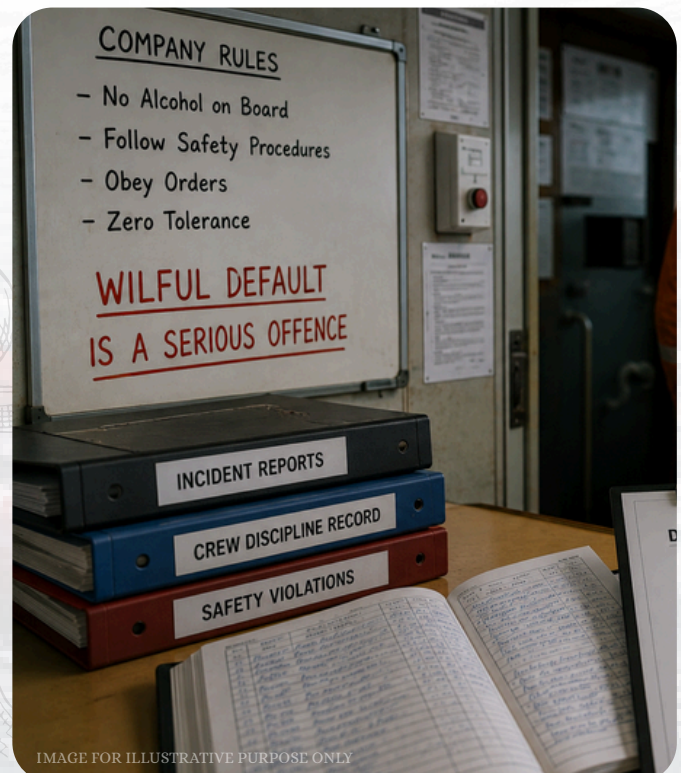
WILLFUL DEFAULT

07
TOTAL
INCIDENTS

01 **05**
FATALITIES INJURIES

The Willful Default category reflects a notable concentration of incidents, with 7 cases recorded, indicating a clear rise in non-compliant or negligent behaviors impacting operational safety. These incidents collectively resulted in one fatality & 5 injuries, underscoring the tangible human cost associated with such actions. In comparison, 2023 reported no incidents in this category, while 2024 recorded four incidents leading to five injuries.

The incidents point to a growing concern that extends beyond procedural lapses, requiring disciplined evaluation, vigilant intervention, knowledge-based accountability across safety-critical operations.



FLAG STATE ANALYSIS



The distribution of non-operational incidents across flag states reflects the global participation and operational diversity of the maritime sector. Leading registries such as **Marshall Islands (21)**, **Liberia (19)**, and **Panama (17)** account for the highest share, consistent with their large fleet sizes, extensive international presence & engagement of Indian seafarers.

NON-OPERATIONAL

(Other than Marine Casualty)

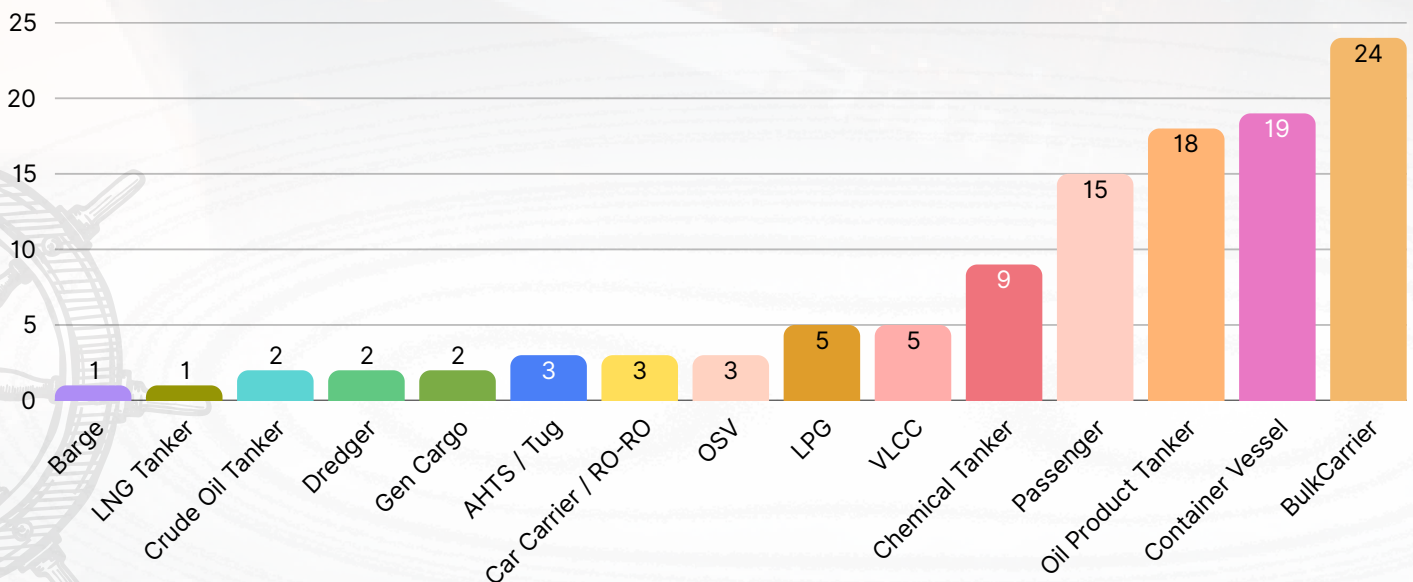
VESSEL ANALYSIS

The distribution of non-operational incidents across vessel types indicates a pronounced concentration within high-traffic and commercially intensive segments.

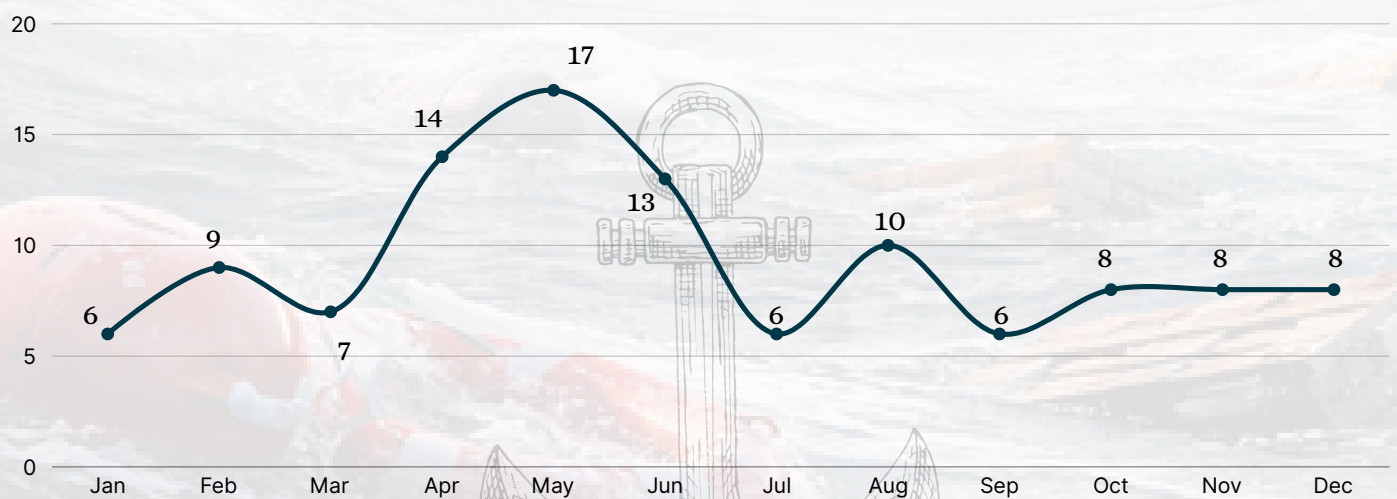
Bulk Carriers (24), Container Vessels (19), and Oil Product Tankers (18) account for most of the cases, reflecting their scale of operations and frequency of port interactions. Passenger vessels (15) and Chemical Tankers (9) also show notable representation, while categories such as LPG (5) and VLCCs (5) contribute moderately.

The remaining vessel types including AHTS, Barges, Car Carriers, LNG Tankers, Dredgers, Offshore units, and Tugs report comparatively lower incident counts, largely in isolated instances.

Overall, the pattern suggests that exposure to non-operational risks correlates strongly with operational intensity and human interface, underscoring the need for consistent safety and oversight measures across all vessel classes, irrespective of their scale or specialization.



VESSEL ANALYSIS - NON-OPERATIONAL INCIDENT



MONTH WISE VESSEL ANALYSIS - NON-OPERATIONAL INCIDENT



05

Fishing Vessel Incidents On Indian Coast



FISHING INCIDENTS

ANALYSIS

The analysis recorded 11 incidents involving fishing vessels during 2025, resulting in 2 confirmed fatalities and 2 persons reported missing, with 6 injuries recorded. These incidents highlight the continuing vulnerability of smaller fishing vessels when operating alongside cargo vessels.

The cases highlight the importance of enhanced navigational vigilance, effective lookout practices and timely reporting. While every collision is a matter of concern, these incidents carry an added dimension of urgency, as the consequences often extend beyond vessel damage to the loss or uncertain fate of lives at sea.



Three-year Comparison

2023

08

02 FATALITIES



02 INJURIES



2024

08

02 FATALITIES



02 INJURIES



2025

11

04 FATALITIES



06 INJURIES



MMD Jurisdiction

Kandla

04

Chennai

04

Mumbai

02

Cochin

01

To reduce incidents involving Indian Fishing Vessels (IFVs), the Directorate has adopted a phased strategy focused on prevention and coordination. Key measures include the installation of AIS transponders on IFVs, targeted awareness campaigns in high-risk zones in critical areas. A centralized reporting mechanism, including mobile app-based platforms, is being considered alongside the implementation of dynamic geofencing.

The Directorate is also planning along with Indian Coast Guard active engagement with State Fisheries Departments, Maritime Boards, and fishing communities to formulate practical, and conducting **Coastal state workshops**, and region-specific safety plans. Collisions at sea are preventable with technology, training, and regulation serving as the foundation. A unified, multi-agency effort is essential to ensure safer Indian waters.

06

Medevac Analysis - Indian Waters



IMAGE COURTESY - SCI

MEDEVAC INCIDENTS

ANALYSIS

24 TOTAL INCIDENTS

The period from January 2025 to December 2025 saw a series of swift and well-coordinated medical evacuation (MEDEVAC) operations across India's maritime zones.

A total of 24 successful evacuations were recorded during this period of 2025, highlighting the readiness and operational efficiency of maritime emergency response systems in both the West and East regions. Robust alignment, integrated leadership, layered insights, yielding consistently effective coordination across maritime emergency responses. Strategic alignment zonally managed integrated navigation. Each operation demonstrated exemplary coordination between maritime rescue coordination centers and various surface assets, which were deployed to intercept both local fishing boats and international vessels.

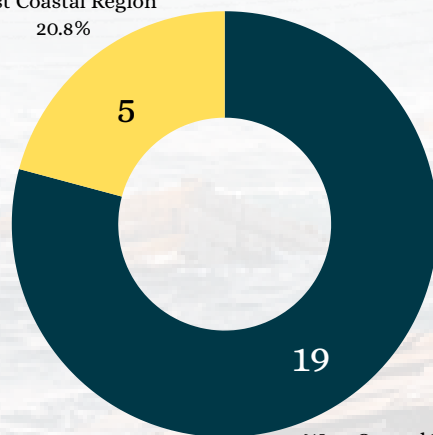
These interventions involved the rescue of individuals of various nationalities including Indian, Iranian, Ukrainian, Syrian and Filipino personnel who were subsequently transferred to shore-based medical facilities and government hospitals for further treatment. Such missions not only reflect the critical importance of maritime medical readiness but also highlight the value of dedicated emergency vigilance, integrated knowledge and adaptability in safeguarding lives at sea.



IMAGE FOR ILLUSTRATIVE PURPOSE ONLY

Regional Analysis

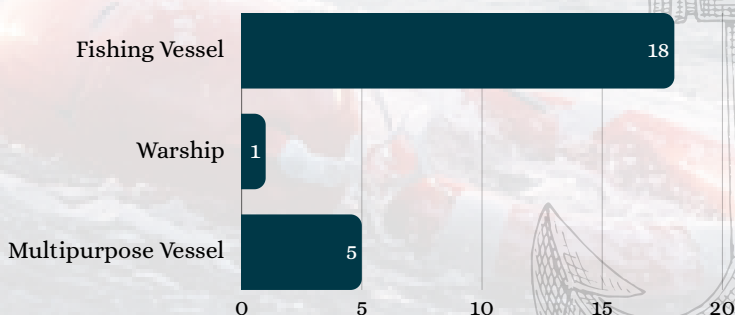
East Coastal Region
20.8%



West Coastal Region
79.2%

OF THE 24 EVACUATIONS, 19 WERE IN THE WEST REGION AND THE REMAINING 5 ON THE EAST REGION

VESSEL TYPE ANALYSIS



07

ETV Deployment

Analysis



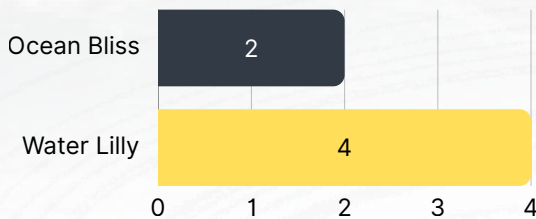
ETV DEPLOYMENT ANALYSIS

In 2025, Emergency Towing Vessel (ETV) deployment was critical to safeguarding navigation and preparedness along India's coastlines. On the western coast, the designated vessel remained heavily involved in active risk surveillance and incident mitigation missions, supporting assets zonally managing integrated navigation during critical operations. Concurrently, the eastern coast asset maintained a continuous standby posture to counter seasonal weather hazards like approaching cyclones and provide rapid assistance during vessel emergencies. Per safety protocols, government ETV deployment continues at an incident site to protect the marine environment until the shipowner engages in a suitable commercial salvage tug.



Key Insights

NO OF INCIDENTS COVERED BY BOTH ETVS



DAYS SPENT BY ETV AT RESCUE POINTS

78

WATER LILLY

05

OCEAN BLISS

ETV Water Lilly spent a total of 78 days at rescue points whereas Ocean Bliss' 5 days. While Water Lilly was involved in assisting with 4 incidents & 4 ships, Ocean Bliss was the only one to be involved with a Cyclone.

DEPLOYMENT DETAILS

WATER LILLY



- Tug Kabira** 2 Days 5th - 6th May
- Exercise Prasthan** 2 Days 28th - 29th April
- MSC Elsa 3** 14 Days 26th May - 9th June
- WAN HAI 503** 60 Days 9th June - 7th August

OCEAN BLISS



- Cyclone: Montha** 3 Days 26th - 29th October
- MV Rishabh** 2 Days 27th - 28th November

Notable Deployments

WAN HAI 503

01

In its most extensive engagement of the year, the Water Lily spent 60 days supporting the WAN HAI 503 from **09 June to 07 August 2025**.

The vessel provided essential firefighting support and maintained a constant patrol presence near the ship to monitor the situation and prevent further hazards.

02

MSC ELSA 3

The ETV Water Lily was mobilized for a 14-day operation from **26 May to 09 June 2025** to manage the aftermath of the MSC ELSA-3 incident.

During this period, the vessel was tasked with conducting critical underwater scanning of the wreck alongside continuous patrolling duties in the surrounding area to ensure maritime safety.



08

Notable Incidents



IMAGE COURTESY -SCI

NOTABLE INCIDENTS

SEAQUEST

(IMO NO. - 9629940, FLAG - MARSHALL ISLANDS)

INCIDENT OVERVIEW - SINKING



IMAGE OF LAUNCH BOAT CARA - SOURCE MOZAMBIQUE MARITIME ADMINISTRATION REPORT

On October 16, 2025, at approximately 0330 hrs local time, a catastrophic marine accident occurred at the Beira Outer Anchorage, Mozambique, involving the service launch boat Cara while transferring a 12-member Indian joining crew to the anchored vessel, Sea Quest. While alongside and securely made fast to the starboard side of the Sea Quest, the launch boat suddenly capsized and sank in heavy sea conditions, plunging all occupants into the water.

A rapid search and rescue operation successfully recovered seven crew members; however, two ordinary seamen were declared deceased after resuscitation efforts failed and five crew members remain missing.

Comprehensive data confirms that there were a total of 21 personnel on board the launch boat at the time of the capsizing. This complement included the 12 Indian crew members transiting to execute a scheduled crew change aboard the MT SEA QUEST,



IMAGE OF VESSEL MT SEAQUEST - SOURCE GOOGLE

alongside 2 specialized technicians enroute to provide surveying services. A definitive casualty inquiry of the 12 Indian mariners reveals that 6 survived with 5 remaining in stable physical condition and 1 repatriated for advanced medical assistance in India while 6 tragically lost their lives. Of the 2 Indian surveying technicians on board, 1 survived and is in stable condition, while 1 was declared deceased.



NOT TO SCALE

In accordance with the obligations set out in the International Code for the Investigation of Marine Accidents and Incidents (Resolution MSC.255(84)), formal notifications were dispatched to the maritime authorities of Mozambique, in their capacity as the Coastal State, and the Marshall Islands, as the Flag State of the MT SEA QUEST. Additionally, India was formally notified as a substantially interested State due to the severe toll on its seafarers (12), with seven of the deceased crew members being Indian nationals & a deceased surveying technician.

NOTABLE INCIDENTS

SEAQUEST

SEQUENCE OF EVENTS

Boarding & Mooring at Night



01

The port service launch boat Cara, carrying 12 incoming Indian crew members, arrived at the open-sea Beira Outer Anchorage under hours of darkness. The small craft pulled directly alongside and **was made fast** to the starboard side to initiate the crew transfer.

Adverse Swells & Catastrophic Capsize



02

While tightly tied to the ship's steel hull, the launch boat was subjected to violent open-sea swells & a severe rebounding hull-washing effect. The intense hydrodynamic forces caused immediate water ingress, resulting in an instantaneous loss of buoyancy submerging the craft.

Immediate SAR



03

The crew of the MT Sea Quest immediately triggered a Man Overboard (MOB) alarm, using spotlights in the total darkness to successfully rescue seven crew members from the water. Two unresponsive mariners were recovered, however, the medical team's resuscitation attempts failed.

Emergency Mobilization



04

MRCC Maputo & local Mozambican port authorities were formally notified to launch wider surface search operations for the remaining five missing crew members. Following the tragedy, local authorities mandated that all future anchorage transfers be restricted strictly to daylight hours.

Crew welfare & Action Taken

- **Immediate Shipboard Distress & Alert Mobilization:** The Master of the MT Sea Quest immediately activated Man Overboard (MOB) procedures following the launch craft's capsizing, deploying searchlights and transmitting a VHF DSC distress alert to the local port control tower and nearby anchored vessels.
- **Search & Rescue Execution:** Following delays in shore-side emergency response, the Master coordinated with nearby commercial vessels including MV Ubena, MV Burgan, MV Brighten Trader, and MV Fos Mercury to support search efforts. This collaboration enabled MV Ubena's rescue boat to recover the launch engineer approximately five hours after the incident.
- **Onboard First Aid & CPR Protocols:** Survivors were recovered aboard the MT Sea Quest, where the ship's medical team immediately administered CPR to two unresponsive Indian ordinary seamen. Despite exhaustive resuscitation efforts, neither could be revived.
- **Addressing Crew Fatigue & Psychological Welfare:** Post-casualty hearings identified severe fatigue and motion sickness among the arriving Indian crew, who had travelled directly from India before a nine-hour small-boat transfer. The compounded physical strain contributed to the removal of life jackets before the capsizing due to discomfort.

LESSONS LEARNT & RECOMMENDATIONS

- **Crew Change & Operational Limitations:** Mandate absolute daylight windows for all anchorage crew changes and provisioning, enforcing strict separation between personnel transfers and heavy cargo voyages.
- **Standardized Competency & Training:** Require basic English maritime communication proficiency for boat skippers, alongside mandatory sea survival and safety training for ship handling field staff and local maritime authority personnel.
- **Oversight, Equipment & Emergency Frameworks:** Enforce rigid safety equipment compliance, strengthen regulatory surveillance during port clearance for auxiliary service vessels & establish a National SAR Plan aligned with IMO & ICAO standards.

CONCLUSION

This incident underscores the imperative for stricter regulatory oversight regarding human compliance, technical safety thresholds, and meteorological risk assessments. It serves as a stark reminder that operational negligence and the failure to observe basic maritime safety protocols exponentially increase the risk of a catastrophic shipwreck.

Moving forward, maritime administrations must prioritize synchronized emergency response frameworks, mandating the absolute enforcement of minimum safety rules and standardized operational competency to eliminate cascading maritime hazards.

NOTABLE INCIDENTS

WAN HAI 503

(IMO NO. - 9294862, FLAG - SINGAPORE)

INCIDENT OVERVIEW - FIRE & EXPLOSION

On the morning of June 9, 2025, at approximately 0950 hrs IST, the Singapore-flagged container vessel MV Wan Hai 503 suffered a major underdeck cargo hold container explosion and a subsequent severe onboard fire while transiting the Arabian Sea, approximately 44 nautical miles southwest of Azhikkal, Kerala. The vessel was enroute to Nhava Sheva carrying 157 IMDG dangerous goods containers, including 32.2 tons of highly volatile Nitrocellulose with Alcohol.



The blast triggered an aggressive fire in forward Bay Nos. 2 and 3 that rapidly began spreading aft toward the accommodation area. All 18 crew members were successfully rescued via a Indian Navy vessel, with five sustaining injuries. The vessel remains afloat but unmanned and actively drifting, posing critical environmental, pollution and navigational hazards to the Indian coastline. Joint monitoring operations, actively facilitated by the DGS alongside the Indian Coast Guard and local disaster management authorities, remain underway as specialized salvage teams are mobilized to execute complex boundary cooling and prevent a catastrophic secondary breach.

SEQUENCE OF EVENTS



UNDERDECK
EXPLOSION

01

On 9 June 2025 at 09:50 hrs IST, an underdeck container explosion triggered a severe chemical fire in the forward cargo bays of MV Wan Hai 503 off the Kerala coast, breaching deck structures and threatening adjacent fuel oil tanks.



EMERGENCY CREW
EVACUATION

02

As the fire spread toward the accommodation block, an Indian Navy vessel rescued all 18 crew members, with five injured mariners evacuated to New Mangalore Port for medical treatment.



SALVAGE
OPERATIONS

04

Emergency tugs and specialist salvors were deployed to contain the fire and secure the drifting vessel. The investigation highlighted the need for stricter IMDG cargo stowage validation and improved separation between hazardous cargo and fuel tanks.



ESCALATING
ENVIRONMENTAL
HAZARDS

03

The Directorate General of Maritime Administration (DGMA) initiated a coordinated response with the Indian Coast Guard and the Information Fusion Centre, deploying pollution control vessels and Dornier aircraft to monitor the drifting vessel and support boundary cooling operations

NOTABLE INCIDENTS

WAN HAI 503



IMAGE COURTESY : COAST GUARD

Action Taken & Emergency Response

Immediate action and tactical intervention were undertaken by the Directorate General of Maritime Administration, in coordination with the Indian Navy, the Indian Coast Guard, state authorities, shipowners, the vessel's P&I provider, and specialized private salvors engaged by the shipowners. The Indian Navy and the Indian Coast Guard successfully rescued the crew onboard and deployed aerial surveillance. The Directorate continuously coordinated and monitored the measures taken for the safety of the evacuated crew members and the containment efforts being undertaken. The Indian Coast Guard and salvors undertook efforts to connect a tow to the vessel to prevent it from drifting and commenced boundary cooling and emergency dewatering operations. These operations were executed around the clock to suppress the volatile cargo fires and preserve the vessel's residual buoyancy and intact stability. Following a rigorous 45-day monitoring regime and the total stabilization of the cargo holds, the Directorate safely managed the salvors to arrange a offshore towing arrangement, guiding the vessel out of the Indian EEZ and seamlessly handing over the distressed vessel to Maritime and Port Authority (MPA) of Singapore, for them to further arrange for a final place of refuge.

Salvage Operation & Containment

- **Operational Window & Response Footprint:** Maintained a 45-day continuous response, keeping the unstable hull anchored or under controlled tow approximately 90 nautical miles outside the Indian EEZ to protect coastal shipping lanes.
- **Task Force & Inter-Agency Asset Allocation:** Deployed a multi-agency response comprising 3 Indian Coast Guard vessels, 2 Dornier aircraft, and private salvage tugs to conduct boundary cooling, drift control, and environmental monitoring.
- **Thermal Suppression Efficiency:** A 20-member salvage team, including hazardous material specialists, carried out boundary cooling, reducing temperatures in the affected forward holds to a stable 40–41°C.
- **Cargo Loss & Boundary Accounting:** Confirmed 31 containers lost overboard in waters exceeding 700 metres depth. Drift modelling verified no shoreline stranding of general cargo, with only one empty tank container recovered ashore.
- **Intact Stability Control:** Continuous bilge pumping and dewatering operations mitigated firefighting water accumulation, preventing instability from free-surface effects.
- **Jurisdictional Handover Baseline:** Following 35 consecutive Situation Reports (Sitreps), the stabilized vessel was formally handed over to the Maritime and Port Authority of Singapore for onward management.

LESSONS LEARNT & CONCLUSION

This incident highlights the imperative for stricter regulatory oversight regarding the declaration, stowage, and containment of hazardous chemical classes within global container fleets. It serves as a stark reminder that prolonged operational delays in deploying specialized salvage or marine firefighting personnel can exponentially increase the risk of a catastrophic incident.

Moving forward, maritime administrations must prioritize synchronized emergency response frameworks that blend international salvage expertise with real-time coastal hazard forecasting to mitigate environmental risks.

NOTABLE INCIDENTS

MT FULDA

(IMO NO. - 9185865, FLAG - HONG KONG)

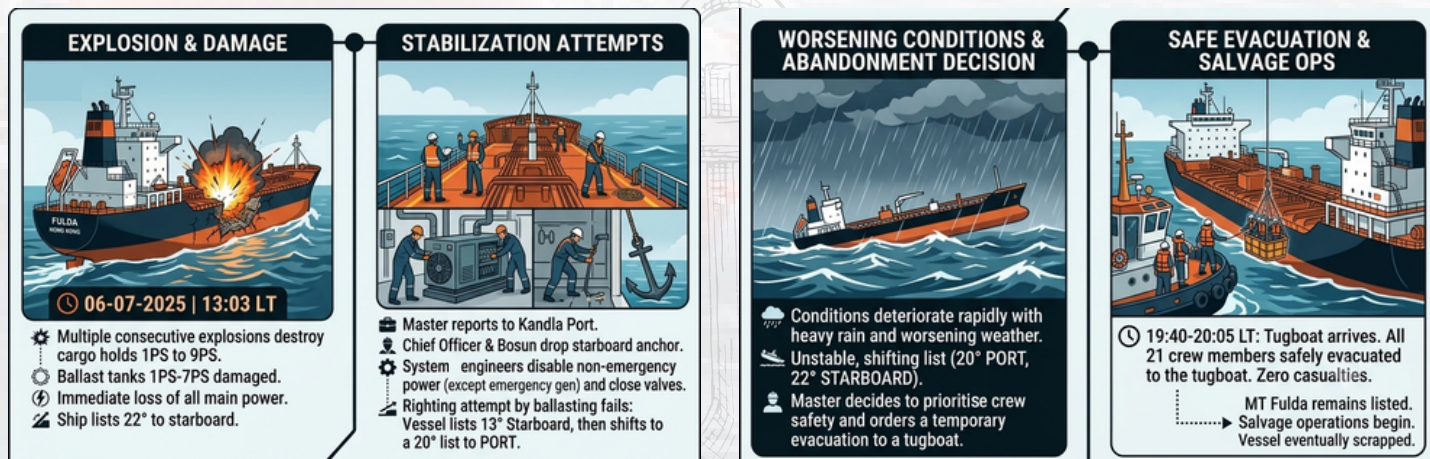
INCIDENT OVERVIEW - FIRE & EXPLOSION

On the afternoon of July 6, 2025, at approximately 1305 IST, the 26-year-old Hong Kong-flagged tanker MT Fulda suffered a major onboard explosion and subsequent fire in the Gulf of Kutch, shortly after departing Kandla, India. The vessel was enroute to Port Sohar, Oman, following a complete discharge of its methanol cargo.



The blast caused severe structural damage to the forward top deck and led to a heavy 22-degree list. All 21 crew members were successfully evacuated with zero casualties, while the Directorate General of Maritime Administration (DGMA), Indian Coast Guard, and local port authorities swiftly coordinated emergency operations to mitigate pollution risks and tow the vessel to safety.

SEQUENCE OF EVENTS



NOTABLE INCIDENTS

MT FULDA

Action Taken

- **Crew Rescue & Emergency Response:** All 21 crew members were safely evacuated by the port tug Orchid Star, achieving zero casualties. The Directorate General of Shipping (DGS), Indian Coast Guard, and Deendayal Port Authority coordinated a rapid response, deploying interceptor craft, pollution-control assets, and harbor tugs to secure the area.
- **Vessel Stabilization & Technical Oversight:** Salvage teams stabilized the vessel's 22-degree starboard list, preventing further water ingress, while DGS-led technical surveys investigated the explosion's root causes, including methanol vapor accumulation and ignition risks.
- **Environmental Protection & Damage Assessment:** Continuous pollution monitoring protected 384 MT of bunker fuel from spillage, while the vessel was secured at a designated Kandla anchorage for structural assessment and salvage planning.



IMAGE OF MT FULDA

Co-ordination & Enforcement

- **Surveillance Fleet:** deployed specialized assets, which maintain continuous on-site surveillance to mitigate environmental threats & assist in future salvage actions.
- **Boarding Complications:** Rough weather and intense swells prevented the salvage master from successfully assessing the deck firsthand.
- **Regulatory Intervention:** Convened an emergency meeting to address a critical bottleneck: the persistent delay by the shipowners & the P&I Club in formally appointing a professional salvor.
- **Government Mandate:** A firm ultimatum stating that any further delays in formulating and executing an oil removal plan will result in the immediate revocation of the P&I Club's operating approval within India.

LESSONS LEARNT & CONCLUSION

This incident underscores the need for stricter regulatory oversight of the declaration, stowage, and containment of hazardous volatile chemicals, particularly through robust validation of tank-venting systems and explosion-proof electrical bonding. It highlights how inadequate static discharge mitigation can significantly increase the risk of underdeck gas accumulation, catastrophic explosions and rapid stability loss.

Moving forward, maritime administrations should strengthen coordinated emergency response frameworks that integrate international salvage expertise with real-time coastal hazard forecasting. Vessel operators must also implement comprehensive, type-approved atmospheric monitoring across cargo spaces to ensure hazardous vapor levels are identified and controlled well before reaching critical ignition thresholds.



IMAGE OF MT FULDA



NOTABLE INCIDENTS

MSC ELSA - 3

(IMO NO - 9123221, FLAG - LIBERIA)

INCIDENT OVERVIEW - SINKING

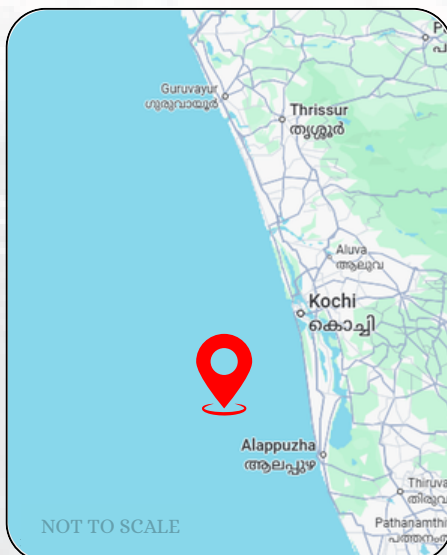


On the afternoon of May 24, 2025, at approximately 1300 hrs IST, the Liberia-flagged container vessel MSC Elsa 3 suffered a severe integrated ballast and heeling system failure, developing a critical starboard list while transiting the Arabian Sea, approximately 30 nautical miles southwest of Kochi Port. The vessel was enroute from Vizhinjam to Cochin carrying 643 containers, which included 13 International Maritime Dangerous Goods (IMDG) containers holding highly reactive Class 4.3

Calcium Carbide is a hazardous substance that releases flammable gases upon water contact alongside 65 to 70 containers loaded with industrial plastic nurdles. Despite emergency interventions, the progressive flooding could not be contained, causing the 27-year-old vessel to capsize and completely sink at approximately 0750 hrs on May 25, 2025, coming to rest on its starboard side at a depth of 60 metres, roughly 13 nautical miles off the Kerala coast.



The rapid structural failure triggered a high-priority emergency rescue operation, with the Indian Coast Guard and Indian Navy successfully evacuating all 24 crew members with zero casualties. The submerged wreck, holding approximately 367 tonnes of Heavy Fuel Oil (HFO) and 64 tonnes of Diesel Oil



poses severe long-term environmental, socio-economic and navigational hazards to the local fishing communities and regional shipping lanes, with 66 containers already drifting overboard and beaching along a 120 km stretch of coastline from Ernakulam to Kollam. Joint response operations, strictly supervised by the Ministry of Ports, Shipping and Waterways (MoPSW) and the Directorate General of Maritime Administration (DGMA) alongside state disaster management authorities (KSDMA), are actively underway as specialised salvage teams from T&T Salvage and SMIT Salvage deploy advanced assets including the diving support vessel DSV Southern Nova to execute subsea sealing, manage massive coastal cleanups of over 595 tonnes of plastic nurdles and initiate deep-water fuel extraction.

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MSC ELSA - 3

SEQUENCE OF EVENTS

01 System Failure

At approximately 1300 hrs IST, MSC Elsa 3 suffered a failure of its ballast and heeling systems while transiting southwest of Kochi. The vessel developed a severe starboard list while carrying 643 containers, including hazardous Class 4.3 Calcium Carbide & plastic nurdles.

02 Crew Evacuation

As flooding worsened, the Indian Coast Guard and Indian Navy safely evacuated all 24 crew members with no casualties. The vessel subsequently capsized and sank about 13 nautical miles off the Kerala coast, coming to rest at a depth of 60 metres.

03 Emergency Response

The sinking released containers and plastic nurdles, affecting nearly 120 km of Kerala's coastline. The DGS coordinated the emergency response, directing salvage operations, oil spill prevention measures, and continuous aerial monitoring.

04 Environmental Recovery

Salvage teams completed fuel removal from the wreck, while recovery operations retrieved washed-ashore containers and plastic nurdles. The incident concluded with extensive environmental cleanup and legal action seeking compensation for the damage caused.

Environmental Hazards

- **Heavy Volatile Fuel Burden:** At the time of sinking, the vessel's fuel tanks contained an estimated volume of ~367 tonnes of Heavy Fuel Oil (HFO) alongside ~64 tonnes of Diesel Oil, posing a constant threat of coastal slick contamination prior to extraction.
- **Water-Reactive Hazardous Cargo:** The vessel went down with approximately 340 tonnes of Calcium Carbide, which included 5 IMDG Class 4.3 dangerous goods containers stowed as deck cargo. This specific chemical compound poses extreme stability risks due to its highly volatile gas-producing reaction when exposed directly to seawater.

SALVAGE & RECOVERY OPERATIONS

- **Coordinated Salvage Response:** The Directorate General of Shipping (DGS) coordinated a multi-agency response, appointing professional salvors and directing wreck removal, oil extraction and cargo recovery, supported by the Indian Coast Guard.
- **Pollution Prevention:** Salvage teams secured the wreck and carried out fuel removal operations, while continuous monitoring ensured effective environmental protection and minimized the risk of oil pollution.
- **Cargo & Coastal Cleanup:** Recovery operations focused on retrieving lost cargo and cleaning the affected coastline, reflecting coordinated efforts to mitigate environmental impacts and restore the coastal area.

LESSONS LEARNT & RECOMMENDATIONS

- **Strengthen Structural Safety of Aging Vessels:** The sinking of MSC Elsa 3 highlights the need for enhanced structural integrity assessments and predictive maintenance of aging vessels, particularly ballast, heeling and watertight systems, to prevent progressive flooding and stability failures.
- **Enhance Hazardous Cargo Management:** Stricter IMDG cargo segregation, especially for water-reactive substances, together with improved stowage practices and real-time vessel stability monitoring, are essential to reduce the risk of catastrophic cargo-related incidents and environmental pollution.
- **Improve Environmental Preparedness & Response:** Maritime authorities should establish dedicated regional response capabilities for pollution control, including microplastic and bunker fuel recovery, while strengthening coordinated emergency response frameworks to minimise environmental, economic, and legal consequences.

CONCLUSION

The catastrophic sinking of MSC Elsa 3 underscores the need for stricter oversight of aging vessels, structural integrity, and technical safety standards. It highlights how mechanical failures, combined with hazardous IMDG cargo and plastic nurdles, can escalate into major environmental disasters, while the 120 km coastal contamination & caused ecological, economic and legal consequences.

Moving forward, maritime administrations should strengthen age-targeted Port State Control inspections, hazardous cargo segregation, and real-time stability monitoring. Regional emergency response capabilities, including rapid microplastic recovery and bunker fuel containment, must also be enhanced to prevent localized failures from escalating into prolonged environmental crises.



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