

Rising Tide of Maritime Safety

The maritime industry, which supports nearly 90% of global trade, is facing escalating safety challenges. In 2024, a 5% rise in serious shipping accidents revealed growing risks, highlighting the urgent need for more effective preventive measures. Port and terminal operations remain highly vulnerable, with over 2,400 incidents reported in 2022 half occurring within port areas. While major accidents are now less common, complacency and weak safety controls continue to lead to violations and risky shortcuts.

Although 2023 saw a record low of 26 major accidents, representing a 70% decline over the last decade, the industry's stability is at risk due to unpredictable geopolitical conflicts, climate change, and the trend toward larger vessels. To sustain safety gains, ports must enhance risk assessments and emergency preparedness or risk compromising both operational safety and worker well-being. Shipping and port terminal accidents can result in significant cargo damage, seriously affecting global supply chains, business operations, and pricing. Incidents like fires or collisions can lead to vast cargo losses; in 2024, insurers recorded \$1.6 billion in claims, largely related to damaged cargo. Such losses disrupt schedules, causing bottlenecks and forcing companies to find alternative routes or replacements for damaged goods.

These disruptions ripple through entire industries, as damaged or delayed shipments force factories, retailers, and consumers to wait longer for vital products, leading to slowdowns in production. Just in time inventory businesses are particularly vulnerable to these delays, which can result in halted production, missed deadlines, and lost revenue. Global port disruptions are equally damaging; in 2024, accidents cost port operators an estimated \$750 million, compounding the challenges for supply chains.

Longer turnaround times also contribute to inefficiencies. Damaged vessels often require extensive repairs, and ports affected by accidents may need weeks or months for full restoration. This prolongs downtime for ships and creates congestion at ports, further delaying goods and reducing productivity. Accidents also drive up operational costs. Insurance premiums rise for companies frequently involved in accidents, while compliance with safety regulations and the cost of replacing damaged cargo add financial strain. These costs are often passed along the supply chain, raising prices for consumers particularly in sectors like electronics, automobiles, and raw materials, which heavily depend on maritime trade and exports.

In response, the industry has made accident prevention a top priority in 2024, with an emphasis on technology upgrades, improved training, and enhanced communication. Ports are becoming more proactive by adopting automated cargo systems, predictive crane maintenance, and real-time operational monitoring, which have already reduced infrastructure-related accidents by 7% and improved hazard response. Seafarers are prioritizing safety through rigorous training, with 95% of shipping companies investing in regular safety and emergency courses. This has improved preparedness for high-pressure situations and reduced human error.

Operators are increasingly using advanced technologies such as AI-assisted navigation and real-time weather monitoring to prevent collisions, especially in congested or adverse weather conditions. These measures have led to a 12% reduction in accidents. Predictive analytics are also helping operators identify equipment issues before they become problematic, minimizing disruptions.

Improved communication among ship operators, port authorities, and terminal staff is also critical for smooth and safe operations. Shared safety platforms have facilitated better coordination and increased the reporting of near-miss incidents by 15%, allowing for preventive actions before accidents occur. Regulatory compliance remains crucial, with 98% of ships adhering to international safety standards thanks to increased inspections and audits. Continuous investment in technology, training, and safety management is helping the maritime industry not only reduce accidents but also ensure long-term global trade stability. The collaborative efforts of ports, seafarers, and operators are essential to protecting lives, reducing financial losses, and safeguarding the environment.



Image Courtesy : Reuters

Baltimore Bridge Incident (March 2024): The MV Dali suffered a blackout, causing it to collide with the Francis Scott Key Bridge. The impact led to a partial bridge collapse and the tragic death of six people.



Photo Courtesy: Kevin Odit NMG

In December 2023, an explosion during repairs on the MT Eastwind at Liwatoni, Mombasa, caused severe damage to the ship and impacted nearby buildings. Only one person was injured.



Photo credit Maritime Executive

CMA CGM Belem Incident (August 2024): The container ship lost 99 containers off South Africa's coast during severe weather, marking the second such incident within a month and raising concerns about ship stability in rough seas.