

# Vessel Stability Stats and Facts



## FACTS

1. A lack of stability can cause a vessel to capsize, which is the complete overturning of the vessel. Capsizing can occur due to various factors such as excessive rolling, improper loading, or the vessel encountering large waves or severe weather conditions.
2. Inadequate stability can result in a vessel losing its stability and becoming unstable. This can occur if the vessel's center of gravity is too high, the weight distribution is improper, or the vessel is subject to external forces that exceed its stability limits.
3. Insufficient stability can result in excessive rolling motions of the vessel, particularly in rough seas or during adverse weather conditions.
4. Vessels with poor stability may have difficulty maintaining their course and maneuverability, increasing the risk of collisions with other vessels, fixed structures, or navigational hazards.
5. Proper stability provides a safety margin for vessels to handle unexpected events, such as sudden changes in weather or encountering large waves.
6. Unstable vessels pose a threat to the environment, particularly if they capsize or sink.

## STATS

- According to the International Maritime Organization (IMO), there were more than 2,000 reported marine accidents. This represents an increase of more than 10% from the previous year.
- There are various causes for marine accidents, however, approximately 80 to 90% of all accidents are caused by a mistake made by a person, namely human error.
- In 2021, there were 43 accidents aboard ship, unchanged from 43 in 2020 and down from the 2011–2020 average of 50.
- In 2021, 82% of the 200 vessels involved in shipping accidents reported to the TSB were Canadian-flag vessels. Of these Canadian-flag vessels, 53% were commercial non-fishing vessels and 32% were fishing vessels; the remaining 15% were non-commercial vessels, pleasure craft or service vessels.
- From 2020 to 2021, the total number of accidents decreased 16% (5,265 to 4,439), and the number of non-fatal injured victims decreased 17% (3,191 to 2,641).
- The U.S. Coast Guard revealed that there were 658 boating fatalities nationwide in 2021, a 14% decrease from the 767 deaths in 2020.
- There were 49 large ships totally lost in 2020, basically unchanged from 48 in 2019.