Maritime accident fatalities in the EU

Statistics Explained

Data extracted in November 2023. Planned article update: November 2024.

|alt= a line chart with two lines showing the maritime accident fatalities in the EU from the year 2018 to the year 2022, the lines show EU registered ships and ships registered outside the EU. This article presents the latest statistical data on maritime accident fatalities involving ships registered in the European Union (EU), by region where the accident occurred, by ship type and by role of person killed. In addition, data on the number of persons killed in accidents involving ships registered in countries outside the EU but occurring in EU territorial waters are provided. The data are based on maritime accidents and incidents reported by the accident investigation bodies of the EU Member States, Iceland and Norway to the European Maritime Safety Agency (EMSA).

The number of persons killed in accidents with EU-registered ships slightly increased in 2022

Worldwide, 24 persons were killed in maritime accidents involving EU-registered ships in 2022 (see Figure 1). During the period 2018-2022, the number of persons who lost their lives in maritime accidents involving EU-registered ships fluctuated year-on-year. It increased by 25 % from 2018 to 2019, from 32 to 40 fatalities, where it reached a peak. A sharp fall, number of fatalities divided by two, followed in 2020. This may be explained by the COVID-19 pandemic and the slowdown of maritime activities. In 2021, the number of fatalities slightly increased to 21, followed by another slight increase to 24, in 2022. On average over the period 2018-2022, there were 27.4 fatalities per year in such accidents.

Figure 1 also provides the number of persons who lost their lives in EU territorial seas in accidents involving ships registered outside the EU. From 2018 to 2019, the number of such deaths fell from seven in 2018 to five in 2019. However, the number increased in 2020, to

14 persons killed. In 2021, the number of fatalities registered dropped to three, and remained stable at three in 2022.

[&]quot; Worldwide, 24 persons lost their lives in maritime accidents involving ships registered in EU Member States in 2022, up from 21 in 2021. "

[&]quot; Eleven passengers lost their lives in maritime accident fatalities in the EU in 2022. "

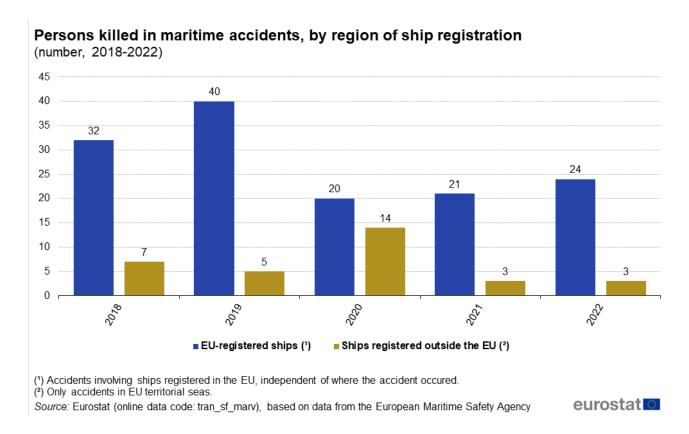


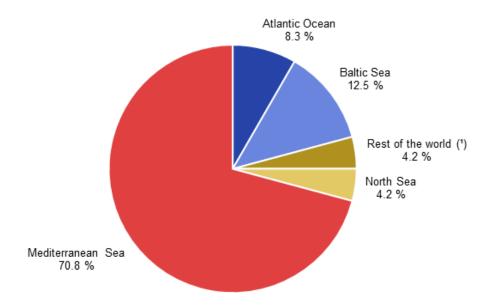
Figure 1: Persons killed in maritime accidents, by region of ship registration, 2018-2022 (number) Source: Eurostat (tran sf marv), based on data from the European Maritime Safety Agency

In 2022, 23 of the 24 fatalities in accidents involving EU-registered vessels were recorded in seas inside the EU

The data in Figure 2 on people killed in maritime accidents cover accidents involving EU-registered ships in all parts of the world, both those occurring in the territorial seas of the EU Member States and those outside EU seas.

In 2022, 17 persons were killed in the Mediterranean Sea accounting for 70.8 % of the total death toll from such accidents. Three people were killed in the Baltic Sea and two in the Atlantic Ocean, representing 12.5 % and 8.3 %, respectively. One fatality was registered in the North Sea representing 4.2 %. No fatality was recorded in the Black Sea and in the English Channel. The remaining fatality was caused by accidents involving EU-registered ships in other regions of the world, corresponding to a share of 4.2 %.

Persons killed in maritime accidents involving EU-registered ships, by region (%, 2022)



Note: no accident in the Black Sea.

(¹) 'Rest of the world' does not include the Baltic Sea, North Sea, English Channel, Atlantic Ocean, Black Sea and Mediterranean Sea regions categorised as EU seas. Source: Eurostat (online data code: tran sf marv), based on data from the European

Maritime Safety Agency.

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Figure 2: Persons killed in maritime accidents involving EU-registered ships, by region, 2022 (% of persons killed) Source: Eurostat (tran sf marv), based on data from the European Maritime Safety Agency

In 2022, 12 persons were killed in accidents involving EU-registered passenger ships

The number of accidents leading to loss of lives is relatively small among EU-registered ships. As a result, small changes in the number of persons killed in accidents with different types of vessels can lead to substantial changes in the shares of fatalities by ship type. In 2022, five persons lost their lives in accidents involving EU-registered cargo ships, corresponding to one-fifth (20.87 %) of the total (Figure 3). This was way lower than between 2018 and 2021 where 15 or 16 fatalities were registered. By contrast, 12 fatalities were registered in accidents involving passenger ships in 2022, while no fatality were registered in this category in 2021 and 2020.

The number of persons killed in accidents involving fishing vessels fell from 13 in 2018 to three in 2022. In 2018, accidents involving fishing vessels accounted for almost half of the persons killed, with 13 deaths registered. In 2022, three persons were killed in an accident involving a service ship, stable compared with 2021 where two persons lost their lives. In the remaining two ship categories, one person was killed in an accident involving a recreational craft for the first time over the last 5 years while no fatality was registered in an accident involving an inland waterway vessel, after recording the first fatality in 2021.

Persons killed in maritime accidents involving EU-registered ships, by type of ship (number, 2018-2019)

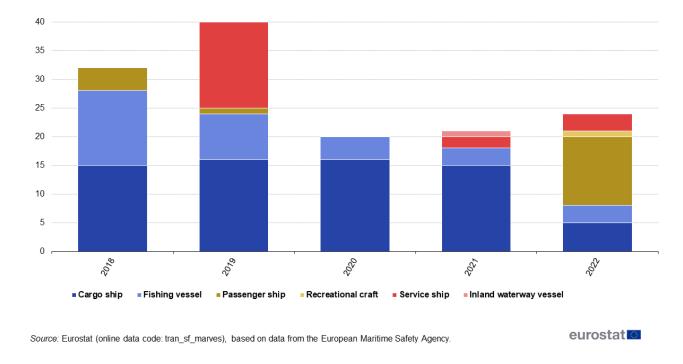


Figure 3: Persons killed in maritime accidents involving EU-registered ships, by type of ship, 2018-2022 (number) Source: Eurostat (tran_sf_marves), based on data from the European Maritime Safety Agency

In 2022, 12 crew members were killed in accidents with EU-registered ships

In the period 2018-2022, 14 passengers lost their lives in maritime accidents involving EU-registered ships: three in 2018, 11 in 2022, accounting for almost half of the fatalities registered in 2022 (45.8 %) (Figure 4).

The number of crew members killed in accidents increased from 29 in 2018, to 37 in 2019. This represented shares in the total death toll in the range 90.6 % to 92.5 %. In 2020, the number of crew members losing their lives in maritime accidents dropped to 20, accounting for 100 % of the persons killed that year, before decreasing to 19 in 2021 and 12 in 2022 (50 % of the total death).

In the category 'other persons', which covers service personnel, dock workers, pilots, inspectors, etc., six persons accidentally lost their lives over the period 2018-2022. Three persons in this category were killed in 2019, two persons died in 2021 and one in 2022, while no fatalities were registered in 2018 and 2020.

Persons killed in maritime accidents involving EU-registered ships, by category of victims (number, 2018-2022)

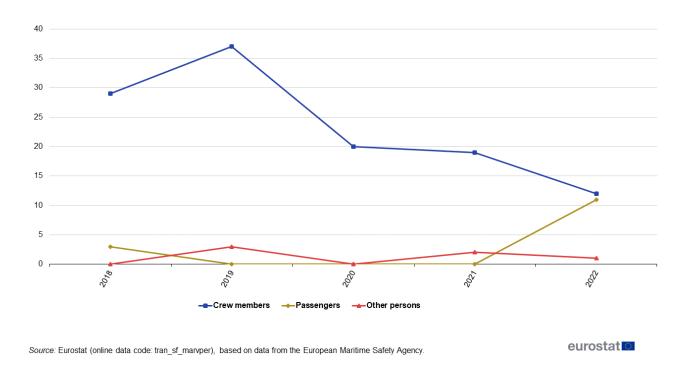


Figure 4: Persons killed in maritime accidents involving EU-registered ships, by category of victims, 2018-2022 (number) Source: Eurostat (tran_sf_marvper), based on data from the European Maritime Safety Agency

The Mediterranean Sea claimed 17 lives in accidents with EU-registered ships in 2022

Table 1 provides an overview on the persons killed in maritime accidents involving EU-registered ships in different seas. From 2018 to 2022, more than eight persons on average were killed each year in such accidents in the Atlantic Ocean, increasing from 12 deaths in 2018, to 20 deaths in 2019 before dropping to three deaths in 2020. In 2021, five persons lost their lives in the Atlantic Ocean, before dropping to two deaths in 2022, accounting for only 8.3 % of the total number of deaths. In the period 2018-2022, 40 persons died in accidents involving EU-registered ships in the Mediterranean Sea, dropping from six deaths in 2018 to five deaths in 2019 before increasing to eight deaths in 2020. The most significant increase was registered between 2021 and 2022 when four people lost their lives in the Mediterranean Sea in 2021 and 17 in 2022, accounting for 70.8 % of the total number of deaths. In 2022, the number of deaths in the Baltic Sea decreased to three after having increased from one fatality in 2018, 2019 and 2020 to four fatalities in 2021.

In the North Sea, five persons were killed in 2018 and 2019, respectively, while no death occurred in 2020. In 2021, three deaths were recorded before dropping to one death in 2022. In the Black Sea, there was one fatality during this period, in 2018. In the busy English Channel, there was only one person killed in such accidents during this period, in 2021.

Concerning accidents involving EU-registered ships in seas located in the rest of the world, outside European waters, only one person died in 2022, whereas an average of six persons dying each year was registered over the period 2018 to 2022. A peak was reached in 2019 with nine persons killed in such accidents.

Persons killed in maritime accidents involving EU-registered ships, by sea (number, 2018-2022)

	2018	2019	2020	2021	2022
Baltic Sea	1	1	1	4	3
North Sea	5	5	0	3	1
English Channel	0	0	0	1	0
Atlantic Ocean	12	20	3	5	2
Black Sea	1	0	0	0	0
Mediterranean Sea	6	5	8	4	17
Rest of the world	7	9	8	4	1

Source: Eurostat (online data codes: tran sf marv, based on data from the European Maritime Safety Agency)



Table 1: Persons killed in maritime accidents involving EU-registered ships, by sea, 2018-2022 (number) Source: Eurostat (tran sf marv), based on data from the European Maritime Safety Agency

Source data for tables and graphs

Download Excel file

Data sources

The data on maritime transport accidents are collected by the national independent investigative bodies in the EU Member States, Iceland and Norway. These data are reported to the European Maritime Safety Agency (EMSA) through the centralised database European Marine Casualty Information Platform (EMCIP). The same concepts and definitions are applied by all reporting countries. The accidents investigated cover marine incidents and casualties that:

- · involve ships registered in the country;
- · occur within country's territorial seas and internal waters;
- involve other substantial interests of the country.¹

The maritime accident data are provided to Eurostat by EMSA under an Administrative Agreement between the two bodies, signed on 29 March 2017, concerning their technical cooperation in the field of maritime transport accident statistics. EMSA is responsible for the entire process of data collection and management. It should be noted that the data may be adjusted when final reports on all marine casualties and incidents have been provided to EMSA by the national independent accident investigation bodies.

The data on maritime accidents disseminated by Eurostat are available from reference year 2011 onwards. The measurement unit is the number of persons that lost their lives in maritime accidents or have sustained serious or minor injuries. Data in Eurostat's free dissemination database are available on an annual basis.

The statistics are grouped according where the vessels are registered ('EU-registered' or 'Registered in other country'), type of vessel (cargo ship, passenger ship, fishing vessel, service ship or other vessel), the category of person affected (crew, passenger or other person) and the ocean region in which the accident occurred. Only data related to moving vessels are included. Regarding fishing vessels, only vessels over 15 meters long are included.

Geographical coverage

Data are provided to the European Maritime Safety Agency (EMSA) by the accident investigation bodies of the EU Member States, Norway and Iceland, as foreseen by Accident Investigation Directive (Directive 2009/18/EC) on the

¹For the definition of such substantial interests, please refer to Article 4.11 of the International Maritime Organisation's Resolution A.849(20) Code for the Investigation of Marine Casualties .

investigation of accidents in maritime transport (also known as the 'Accident Investigation Directive' or 'Al Directive'). All accidents are recorded by the responsible national authorities.

Detailed country data are confidential and, consequently, not disseminated. Information related to the country of registration of the ship or the coastal state is grouped under either: 'EU Member States', 'Non-EU countries', or 'Unknown' (if relevant).

Marine accidents are categorised according to the ocean region where they occurred, not to the country that reported the accident. The 'Rest of the world' category is used when the accident did not occur in the territorial seas of one of the EU Member States, but involved a vessel registered in an EU Member State.

EU aggregates

The European Union is composed of 27 Member States: Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland and Sweden.

Czechia, Luxembourg, Hungary, Austria and Slovakia are landlocked countries without ocean or sea coasts.

EU territorial seas

The EU territorial seas are made up of the territorial seas and internal waters of the EU Member States. The United Nations Convention on the Law of the Sea (UNCLOS) defines the 'territorial sea' of a country as the area within which the sovereignty of a coastal State extends, beyond its land territory and internal waters. It is a belt of coastal water extending at most 12 nautical miles (22.2 km) from the baseline (usually the mean low-water mark) of a coastal state.

The EMSA data on maritime accidents and fatalities group accidents that occur in EU territorial seas according to the ocean regions in which these territorial waters lie: Baltic Sea, North Sea, English Channel, Atlantic Ocean, Black Sea, Mediterranean Sea. In this context, accidents occurring in international waters or in the territorial waters of non-EU countries are not included in these regions of EU territorial waters, but are categorised as 'Rest of the world'.

Marine casualty

The datasets disseminated by Eurostat contain data on persons who lost their lives and persons that sustained injuries in maritime accidents.

A marine casualty is defined as an event (or sequence of events) in connection with the operations of a ship, resulting in any of the following:

- death or serious injury of a person;
- · loss of a person from a ship;
- loss, presumed loss or abandonment of a ship;
- · material damage to a ship;
- stranding or disabling of a ship, or involvement of a ship in a collision;
- material damage to marine infrastructure external to a ship that could seriously endanger the safety of the ship, another ship or an individual; or
- severe damage to the environment, or the potential for severe damage to the environment due to the damage of a ship.

However, a marine casualty does not include a deliberate act or omission with the intention of affecting the safety of a ship, an individual or the environment.

Ship types

- Cargo ship: a commercial ship designed for the carriage of various types of cargo, goods or products and up to a maximum of 12 passengers.
- Fishing vessel: a vessel equipped or used commercially for catching fish or other living resources at sea.

- Passenger ship: a ship designed to transport more than 12 passengers.
- Service ship: a ship designed for special services, like a tugboat or a dredger.
- Other ships: such vessels are only considered when involved in an accident or other incident that includes a ship covered by the Accident Investigation Directive (Directive 2009/18/EC) or when the incidence occurs in a maritime area such as a maritime port. Such ships may be:
 - Inland waterway vessel: a vessel intended solely or mainly for navigation on inland waterways.
 - Recreational craft: a boat of any type, regardless of the means of propulsion, intended for sports or leisure purposes.
 - Navy ship: a ship operating under the navy or other military organisation.
 - Unknown ship type: occurrence for which it was not possible to identify the vessel type.

Only data related to moving vessels (and over 15 meters for fishing vessels) are provided to Eurostat.

Accidents related to inland waterway vessels are excluded from the Eurostat tables when the accident took place on an inland waterway.

Context

Shipping is of strategic importance to the EU's economy: every year, 2 billion tonnes of cargo are loaded and unloaded at EU ports, while 1 billion tonnes of oil transits through EU ports and EU territorial seas. Each year, more than 400 million passengers embark and disembark at European ports. Overall, maritime industries are an important source of employment and income for the European economy. This is why the EU is constantly developing and intensifying its maritime safety policy.

The European Union and its Member States are at the forefront of improving maritime safety legislation and promoting high-quality standards. The aim is to eliminate substandard shipping, increase the protection of passengers and crews, reduce the risk of environmental pollution, and ensure that operators who follow good practices are not put at a commercial disadvantage compared with those prepared to take shortcuts with vessel safety.

The EU has put in place an extensive legislative framework for safety, environmental protection and quality shipping. The EU's action in the field of maritime safety and protection of the environment enhances international legal conventions such as the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL), which are both overseen by the International Maritime Organisation (IMO).

Amongst its other important tasks, EMSA collects safety data and shares it with the Commission, as arranged in the Administrative Arrangement between Eurostat and EMSA.

International law requires that countries affected by an accident at sea investigate the causes and propose ways of preventing recurrences in the future. The idea underpinning Directive 2009/18/EC governing the investigation of accidents in the maritime transport sector is to improve maritime safety by providing clear EU guidelines for the harmonisation of technical investigations and lessons learnt after accidents at sea, without determining or assigning any civil or criminal liability.

Other articles

- · Transport statistics introduced
- · Maritime freight and vessels statistics
- · Maritime passenger statistics

- · Maritime transport of goods quarterly data
- · Maritime transport statistics short sea shipping of goods
- · Air safety statistics in the EU
- · Rail accident fatalities in the EU
- · Road safety statistics in the EU

Publications

- Eurostat: Key figures on European transport 2022 edition
- Eurostat: Energy, transport and environment statistics 2020 edition
- European Maritime Safety Agency (EMSA): Annual Overview of Marine Casualties and Incidents 2022

Main tables

Transport

Database

Transport

Multimodal data (tran)

Transport safety (tran_sf)

Maritime transport safety (tran sf mar)

Maritime accident victims by region of occurrence and country of registry of vessels (tran_sf_marv)

Maritime accident victims by region of occurrence, country of registry of vessels and category of victims (tran_sf_marvper)

Maritime accident victims by region of occurrence, country of registry of vessels and type of vessels (tran_sf_marves)

Dedicated section

Transport statistics

Methodology

- Maritime transport safety (ESMS metadata file tran_sf_mar)
- Eurostat/United Nations Economic Commission for Europe (UNECE)/International Transport Forum (ITF): Glossary for transport statistics — 5thedition (2019)

Legislation

- Regulation (EC) No 1406/2002 of the European Parliament and of the Council of 27 June 2002 establishing a European Maritime Safety Agency.
- Summary of EU legislation Maritime safety: European Maritime Safety Agency
- Directive 2009/18/EC of the European Parliament and of the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector and amending Council Directive 1999/35/EC and Directive 2002/59/EC of the European Parliament and of the Council

External links

- European Maritime Safety Agency (EMSA)
 - Accident investigation
- European Commission DG Mobility and Transport (MOVE)
 - Maritime transport
 - The essentials of EU maritime transport (video)
 - EU actions on maritime safety and environment protection
 - European Union legislation on maritime safety
- European Commission DG Maritime Affairs and Fisheries (MARE)
 - Maritime affairs and fisheries
- International Maritime Organisation (IMO)
 - Maritime safety