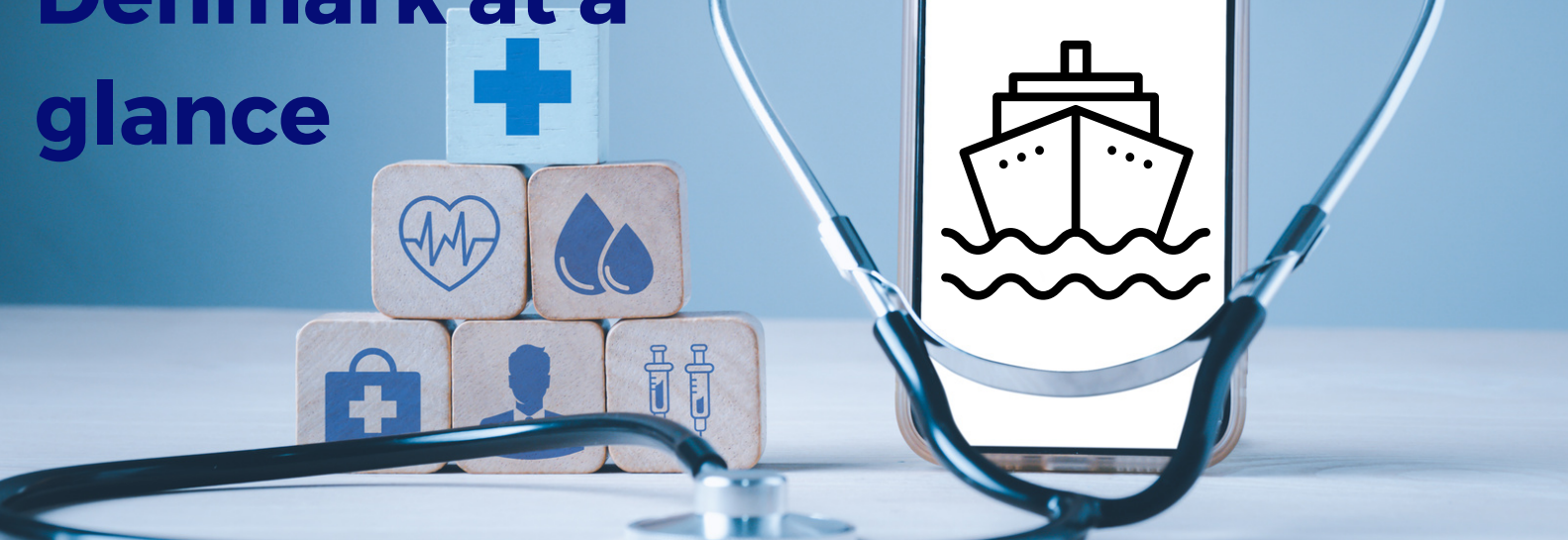


RADIO MEDICAL DENMARK



Annual Report 2022

Radio Medical Denmark at a glance



About us

Radio Medical Denmark is a telemedicine specialist unit with the task of offering medical service to the seafarers 24/7.

Radio Medical Denmark is affiliated with the University Hospital of Southern Denmark, Esbjerg Hospital.

Our clients:

- Danish Maritime Authority (Danish registered vessels, primarily in the merchant and fishing fleet)
- The Faroe Islands (Faroese registered vessels)

Clients added from 2023

- I-SOS, TOTAL - Offshore installations and connecting vessels in the North Sea
- Maersk - Vessels sailing under flags of Hong Kong and Singapore

CONTACT

website: www.radio-medical.dk

Line Emilie Laugesen
General Manager
e-mail: lilla@rsyd.dk

Our service

When illness and/or injuries occur and the crew need assistance in evaluating the incidences, they contact the doctors at Radio Medical Denmark either by e-mail or by phone. Less urgent cases are often handled by e-mail. In emergency cases phone contact is often used.

The doctors always provide advice and guidance during consultations. In some cases there may be a need of follow-up consultations. In acute cases it may be necessary for a vessel to disembark a patient, where the vessel will seek nearest port, and make a deviation of their original route. It may also be necessary to initiate evacuation of a patient in collaboration with the the Danish Defense – primarily by helicopter.

Teamwork

There are seafarers in charge of medical care on board of the vessels, and they help in cases of illness and/or injuries on board. They also have an important role when the Radio Medical doctor needs to assess the patient who are ill and/or injured, where they act as the doctor's hands, eyes and ears.

This teamwork between the vessel and the doctor is essential for the ill and/or injured patient on board. The doctors of Radio Medical therefore have a keen interest in participating and contributing to the education of medical staff on the vessels. In this way, we can keep developing and improving the conditions of the seafarers.

WHERE ARE WE NOW?

DEAR ALL

Once again, the annual report from Radio Medical Denmark is presented. The report provides an overview of the services provided by the telemedicine specialist unit at Esbjerg Hospital.

2022 was a special year, due to a new record in the number of cases. Nearly 3000 unique cases involving seafarers from all over the world on board of vessels sailing under the Danish flag. Radio Medical Denmark is known and respected throughout the world for fast and competent medical care and advice given to seafarers from merchant vessels, supply ships, fishing vessels, ferries etc.

We have a close and strong collaboration with the Danish Maritime Authority, including in particular the Center for Maritime Health Service on Fanø. The collaboration helps ensure a coherent maritime healthcare system for the benefit of all professional seafarers.

Our ambition is for Radio Medical Denmark to continue to belong to the world elite within telemedical maritime assistance services (TMAS).

Head of Radio Medical Denmark

Jan Vork

RADIO MEDICAL DENMARK 2023

2023 promises to be very interesting. We have just entered into an agreement with Maersk regarding telemedicine services for their foreign-flagged vessels. We hope this collaboration will benefit all our users. We participate in an international collaboration with our “sister-organizations” in Northern Europe and Italy in order to exchange experience and develop our services.

In September 2023, a conference will be held in the International Maritime Health Association, and the whole entire maritime “health family” will gather in Athens. Radio Medical Denmark will also be represented. We hope to be able to participate in more research projects together with the University of Southern Denmark.

In 2023 Radio Medical Denmark will also participate in a national medicine chest forum, to develop and update the contents of the medicine chests. It is essential that the medicine chests contain the necessary medicine to deal with illness and injuries at sea.



MEET OUR TEAM



Radio Medical Denmark



Line Emilie Laugesen

General Manager



Jan Vork

**Head of Radio Medical
Denmark**



Carina Betzer Eg

General secretary



Dorte Østergaard

Secretary



Ida Nielsen

IT consultant

MEET THE DOCTORS BEHIND THE SCREEN

As of March 31st 2023 the medical staff consists of 7 doctors



Maritime physician

Jan Vork

Emergency medicine specialist
General medicine specialist



Maritime physician

Marie Hamming

General medicine specialist
Emergency medicine field expert



Maritime physician

Søren Kristensen

Ear, nose, throat specialist
General medicine specialist



Maritime physician

Lise Mondrup

General medicine specialist
Palliative medicine field expert



Maritime physician

Carsten Hertz

Ear, nose, throat specialist



Maritime physician

Allan Thimsen Pedersen

Neurology specialist



Maritime physician

Ulf Grue Hørlyk

Emergency medicine specialist
General medicine specialist

Last years

NUMBERS & STATISTICS

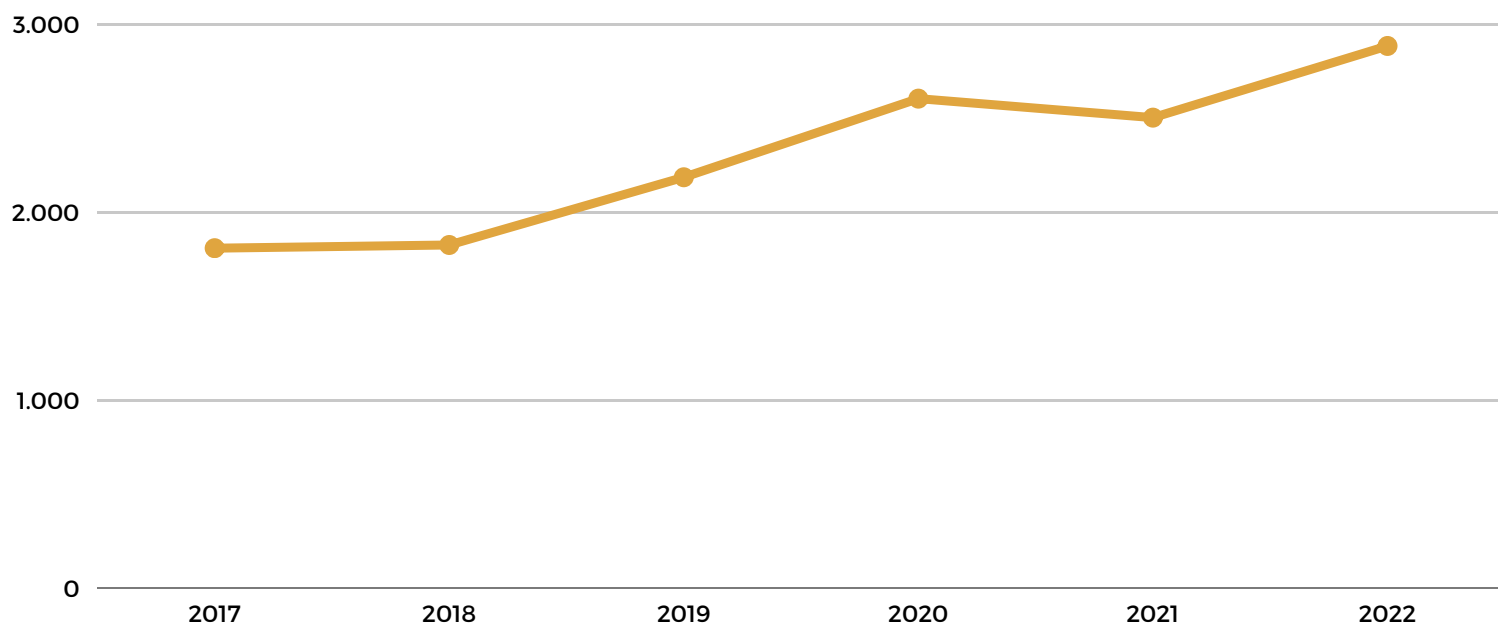
2022 resulted in a new **record year** with most cases ever.

2886

cases

15%

increase from 2021



Development in the number of cases for Radio Medical Denmark from 2017-2022

2022 became a new record year in the number of cases, with a 15% increase from 2021, and 10% more cases than the previous record year 2020.

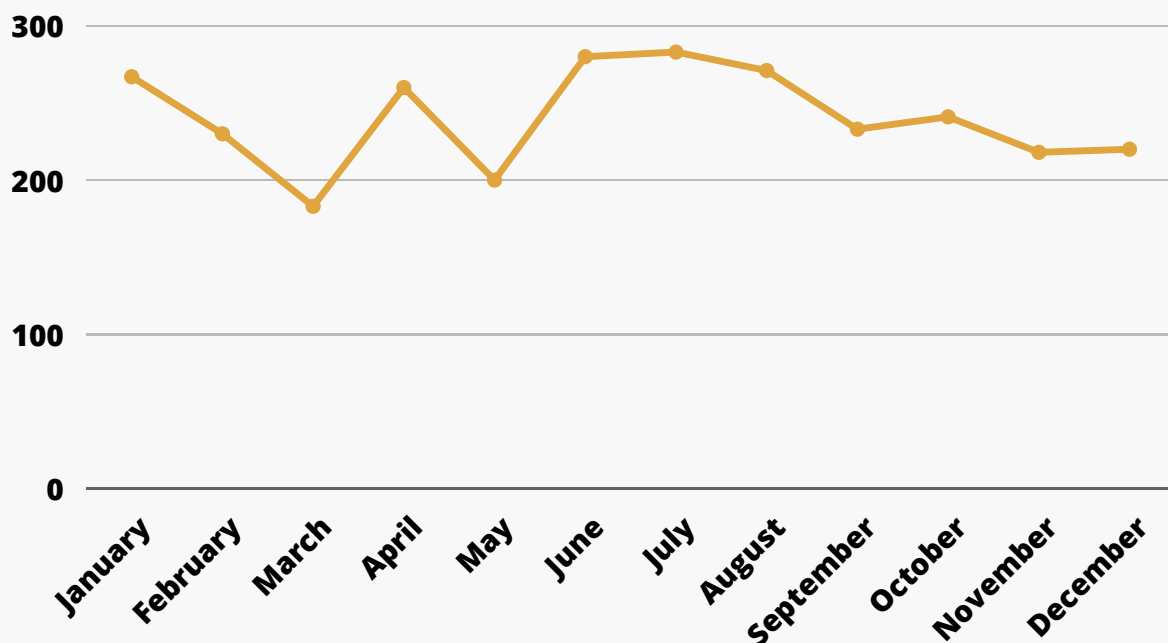
The increase in the number of cases over the past few years has continued in 2022, and therefore it seems that the high number of cases will gradually become the new permanent level, and not just a temporary level as previously presumed.

CASES PER MONTH



There has been an even distribution of the cases over the months in 2022, with an average of 240 cases per month. The month in which there have been the fewest number of cases is March with 183 cases, while there has been most activity in the month of July with 283 cases.

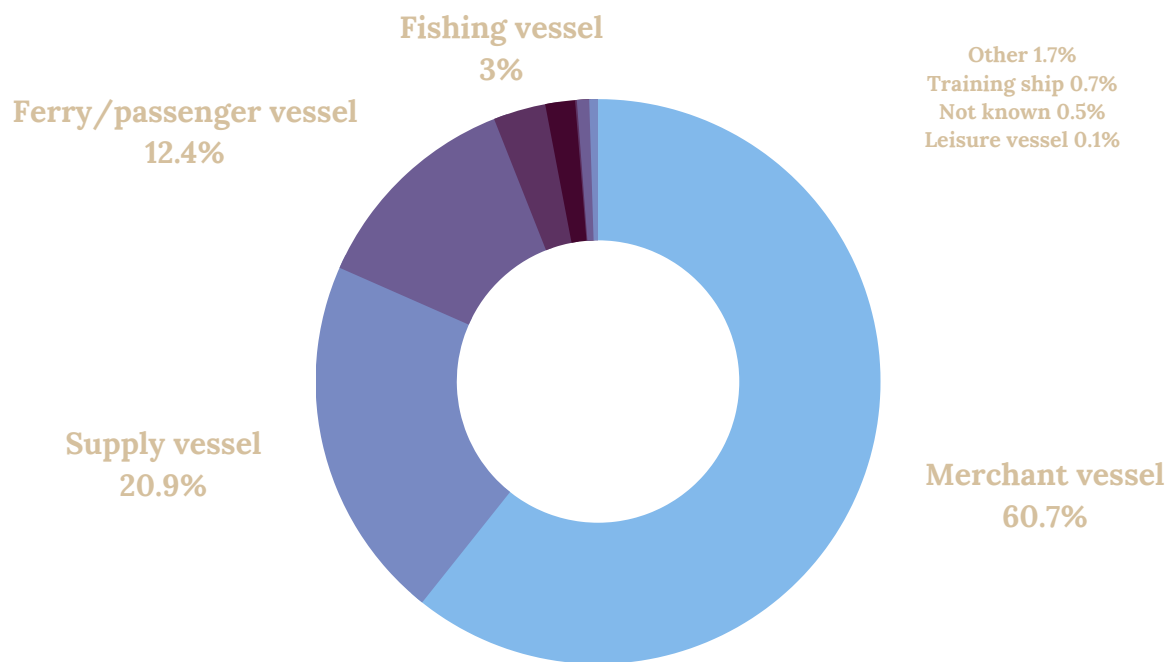
Based on the distribution, we also overall see a slightly more constant increased activity over the months of summer.



Number of cases in 2022 divided by months

CASES PER VESSEL TYPE

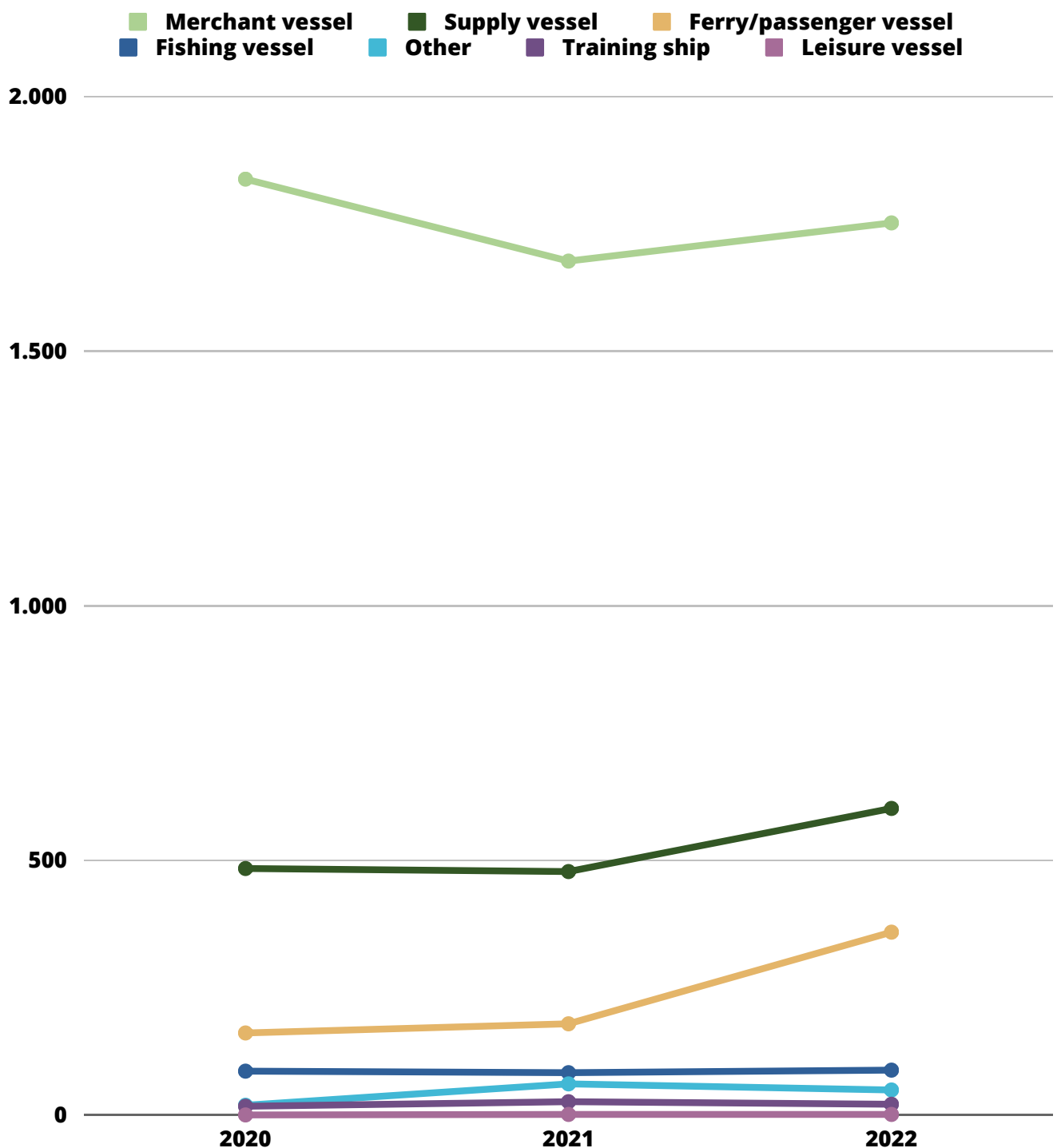
It is still the merchant fleet that has the most inquiries to Radio Medical Denmark. In 2022, there were **1752 cases** from the merchant vessels, which corresponds to **60.7%** of all cases in 2022.



Number of cases in 2022 by vessel type - presented in percentage %

The supply vessels had 602 cases corresponding to 20.9% of the total number of cases, while the ferry/passenger vessels had 359 cases corresponding to 12.4% of the total number of cases.

At the other end of the list of the number of cases, we find the fishing vessels with 88 cases, corresponding to 3% of all cases in 2022.



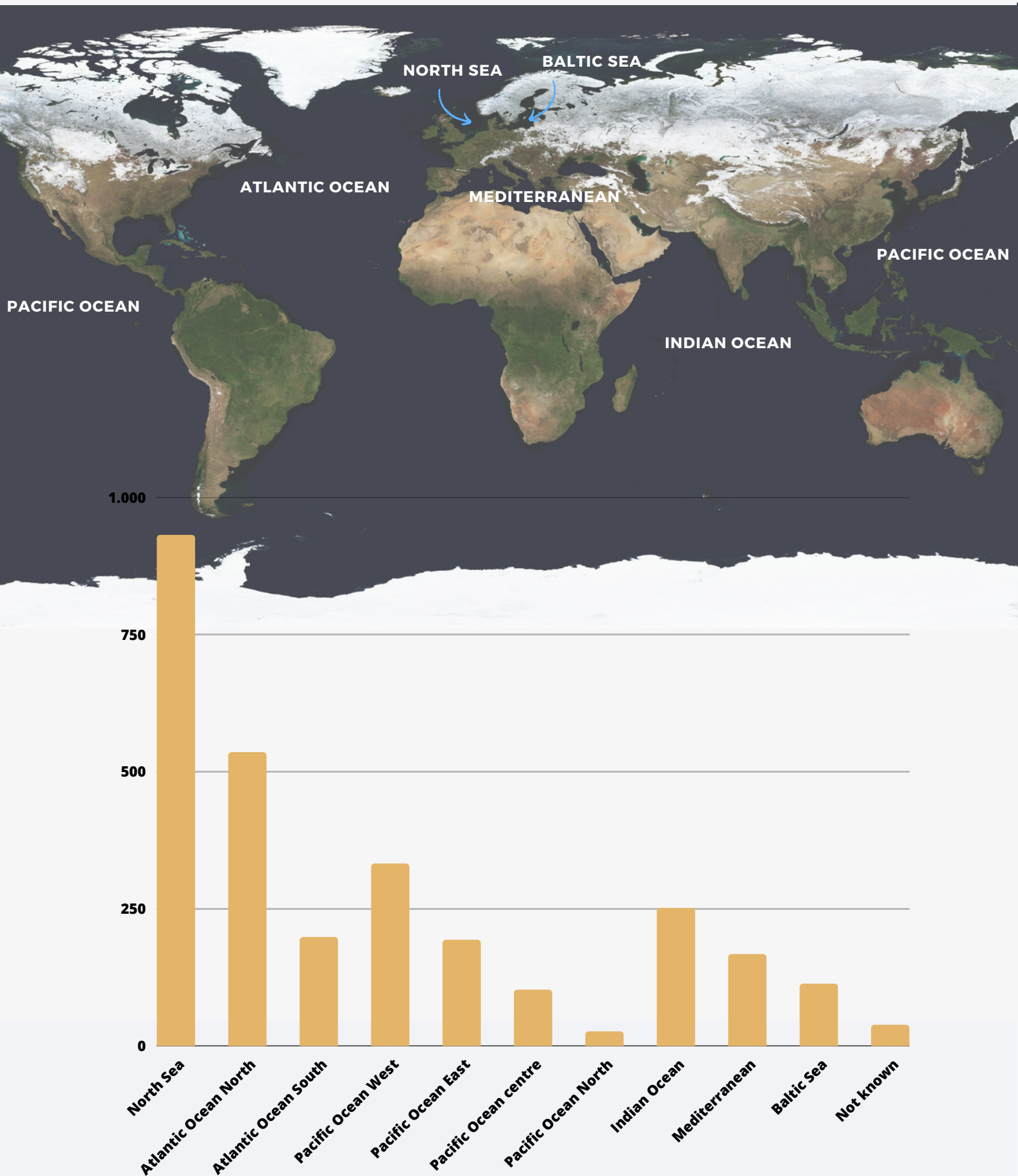
Trends in cases by vessel type from 2020-2022

If we compare the number of cases in 2022 divided by vessel type with the other years, we have, in 2022, experienced an increase in the number of cases from merchant vessels of **4.5%**, from supply vessels of **26%**, while there has been a **doubling** in the number of cases from ferries and passenger vessels. This could indicate that ferry activity has picked up again after the years with Covid-19.

The number of cases from the other vessel types in 2022 was at a similar level compared to the previous years.

Where are the patients at the time of the inquiries?

THE SEAS OF THE WORLD



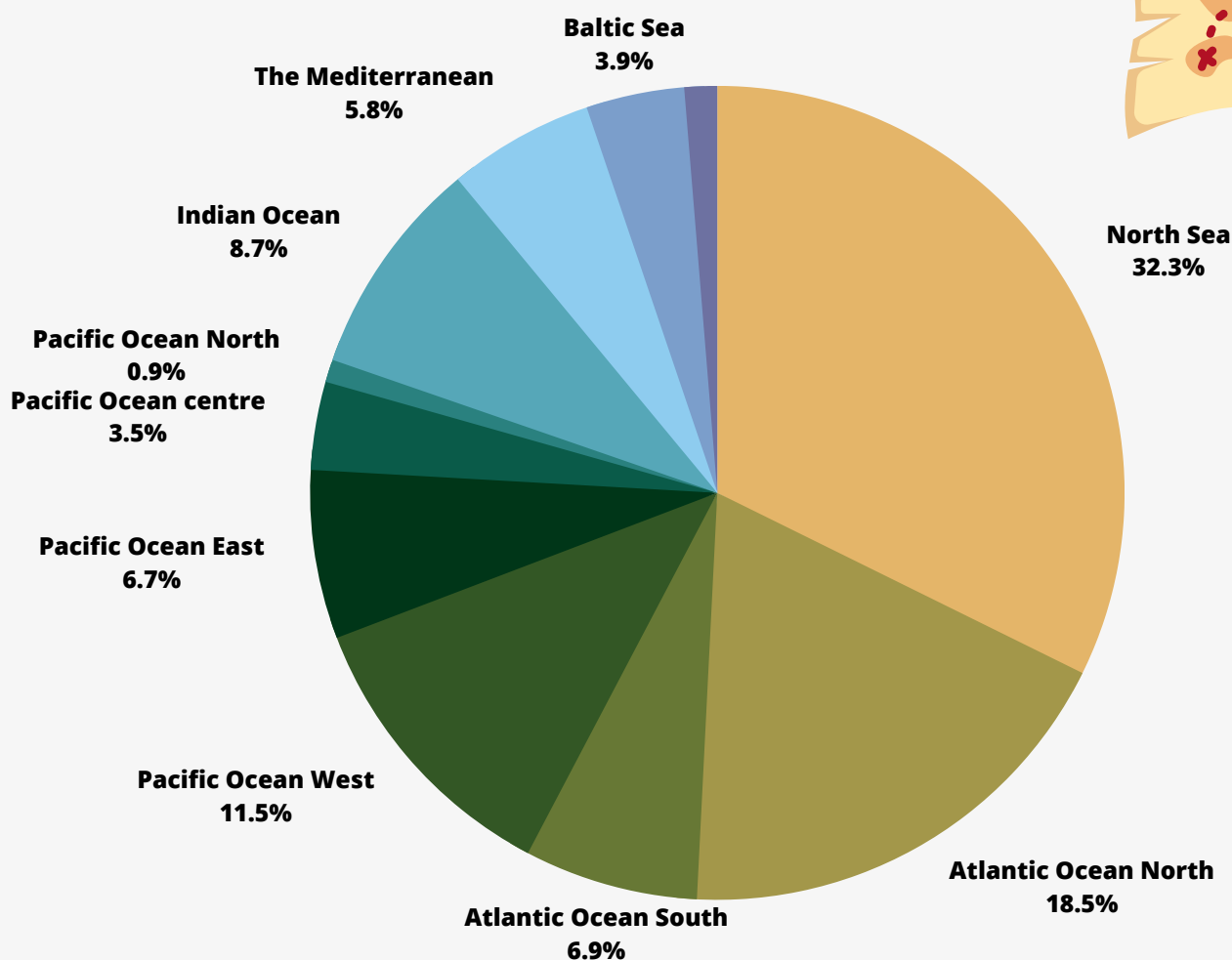
Distribution of the geographical location for inquiries to Radio Medical Denmark in 2022

The distribution of the place of origin for the inquiries to Radio Medical Denmark clearly shows that the vessels are scattered all over the globe when contacting our doctors.

Over 30% (904 inquiries) have been from seafarers who geographically have been very far away from the doctors situated in Denmark being in either the Pacific or Indian Ocean.

The highest number of inquiries are from the North Sea with 931 inquiries, corresponding to 32.3% of all cases. The second highest number of inquiries are from the Atlantic Ocean with 733 inquiries, 25.4% of all cases, while there have been 653 inquiries from the Pacific Ocean, 22.6% of all cases.

Percentage-wise distribution



Distribution of the geographical location for inquiries to Radio Medical Denmark in 2022
- shown in percentage %

81

Disembarkations

59

Evacuations



81

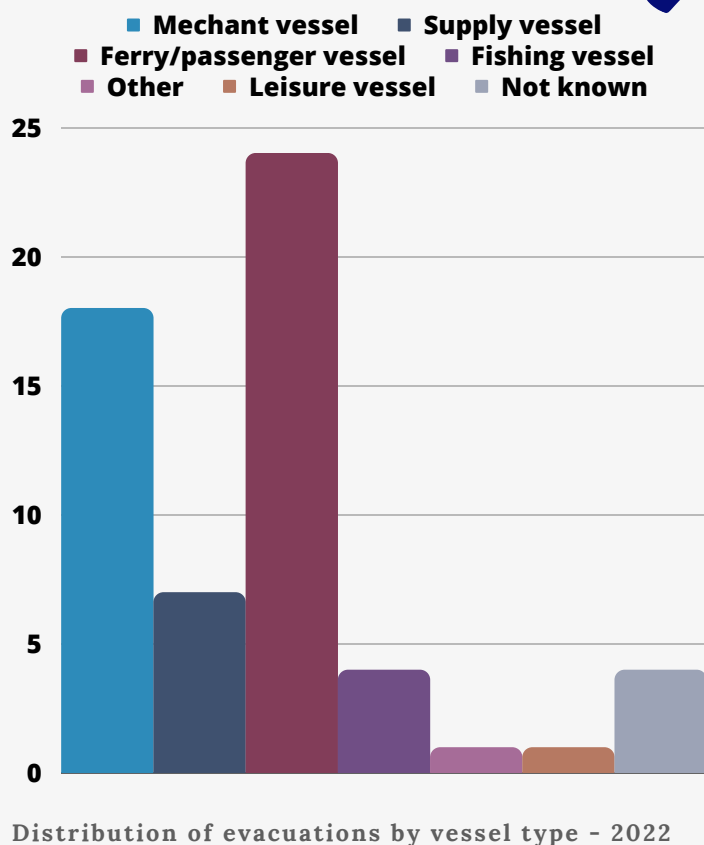
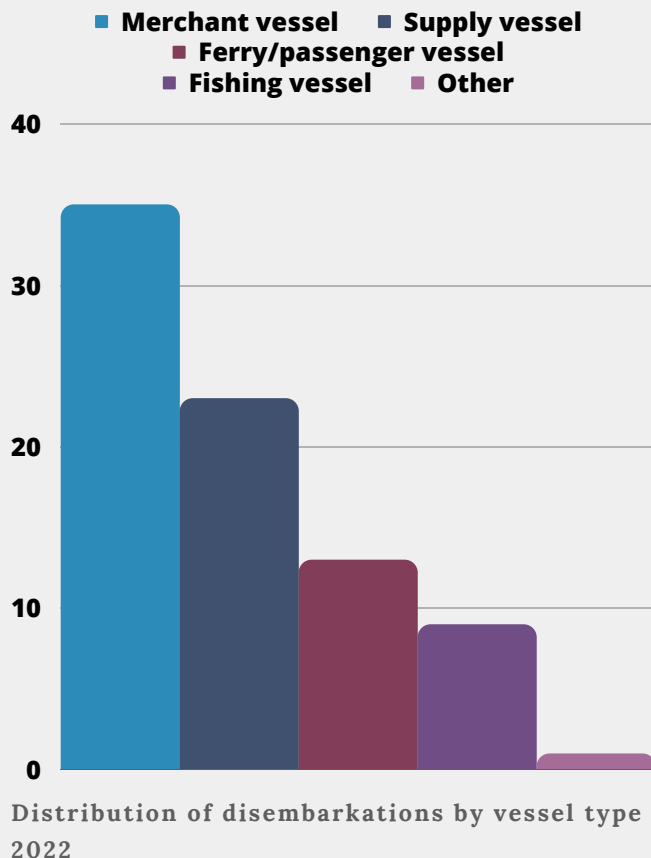
Disembarkations distributed

Definition of a disembarkation

Crew member who signs off due to illness/injury before planned discharge for further treatment at the next possible port call.

In 2022, there have been 81 disembarkations. The majority of the disembarkations are from the merchant vessels with 35 disembarkations, while the supply vessels have had 23 disembarkations.

If the disembarkations are compared with the number of cases per vessel type, 2% of all cases from the merchant vessels have resulted in a disembarkation, while this number for the other vessel types is: supply vessels (3.8%), ferry/passenger vessels (3.6%), while all 10.2% of the inquiries from the fishing vessels resulted in a disembarkation.



59

Evacuations distributed

Definition of an evacuation

Acute disembarkations from the vessels with the assistance of a helicopter or rescue vessel from the JRCC or via drilling rigs.

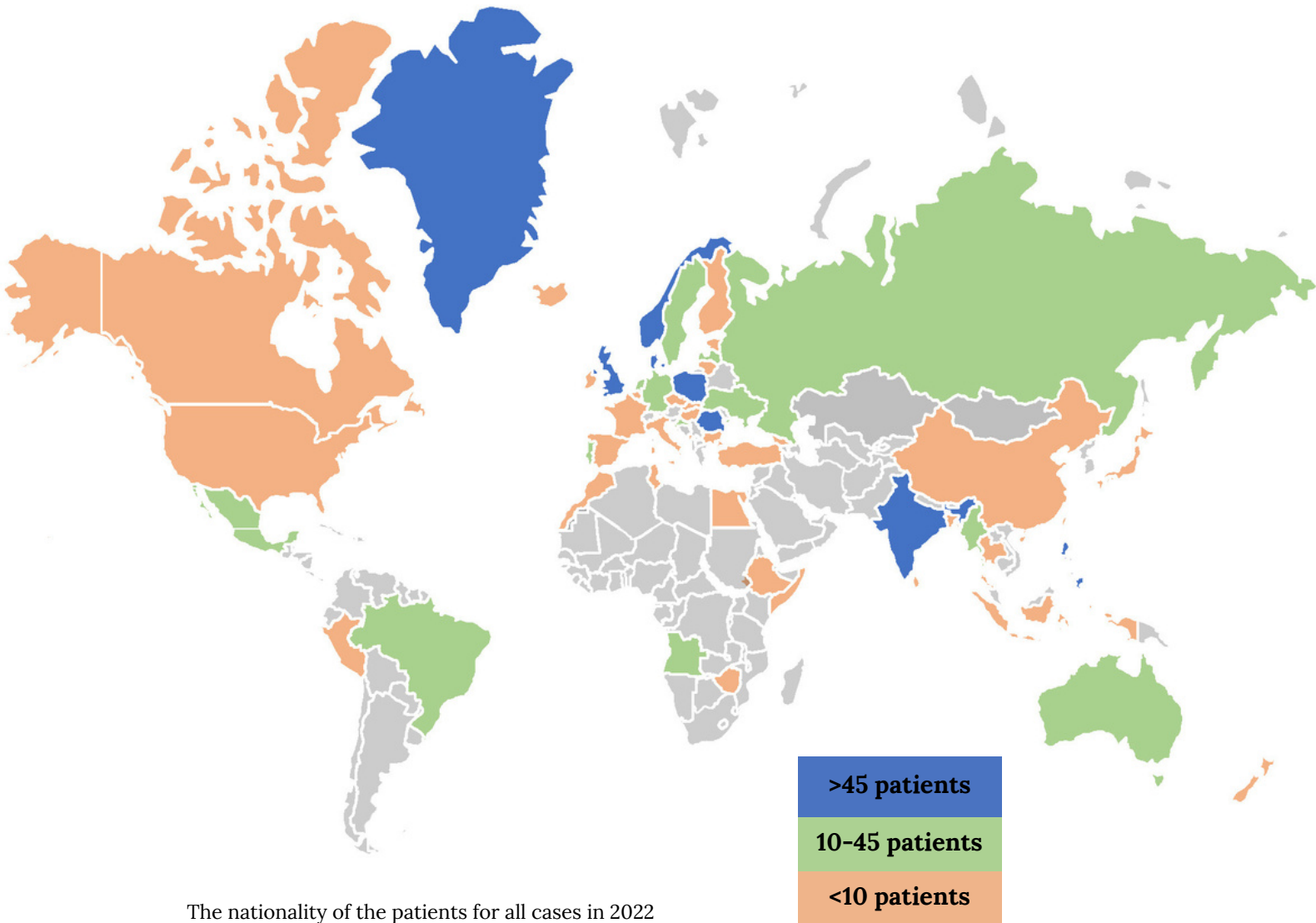
There have been 59 evacuations in 2022. The majority of evacuations are from the ferry/passenger vessels with 24 evacuations, while the merchant vessels have had 18 evacuations.

If the evacuations are compared with the number of cases per vessel type, 6.7% of cases from ferries/passenger vessels have resulted in an evacuation, while this number for the other vessel types is: merchant vessels (1%), supply vessels (1.2%), while 4.5% of the inquiries from the fishing vessels have resulted in an evacuation.



The nationality of the patients

WHERE ARE THEY FROM?



The nationality of the patients for all cases in 2022

Radio Medical Denmark provides telemedicine services to patients from all over the world. The map above shows the distribution of patient's nationality from the cases in 2022.

The blue countries represent nationalities from which there have been over 45 cases, while the green countries represent nationalities from which there have been between 10-45 cases, and finally the orange countries represent nationalities from which there have been less than 10 cases.

The 2886 cases in 2022 have involved patients from 58 different countries.

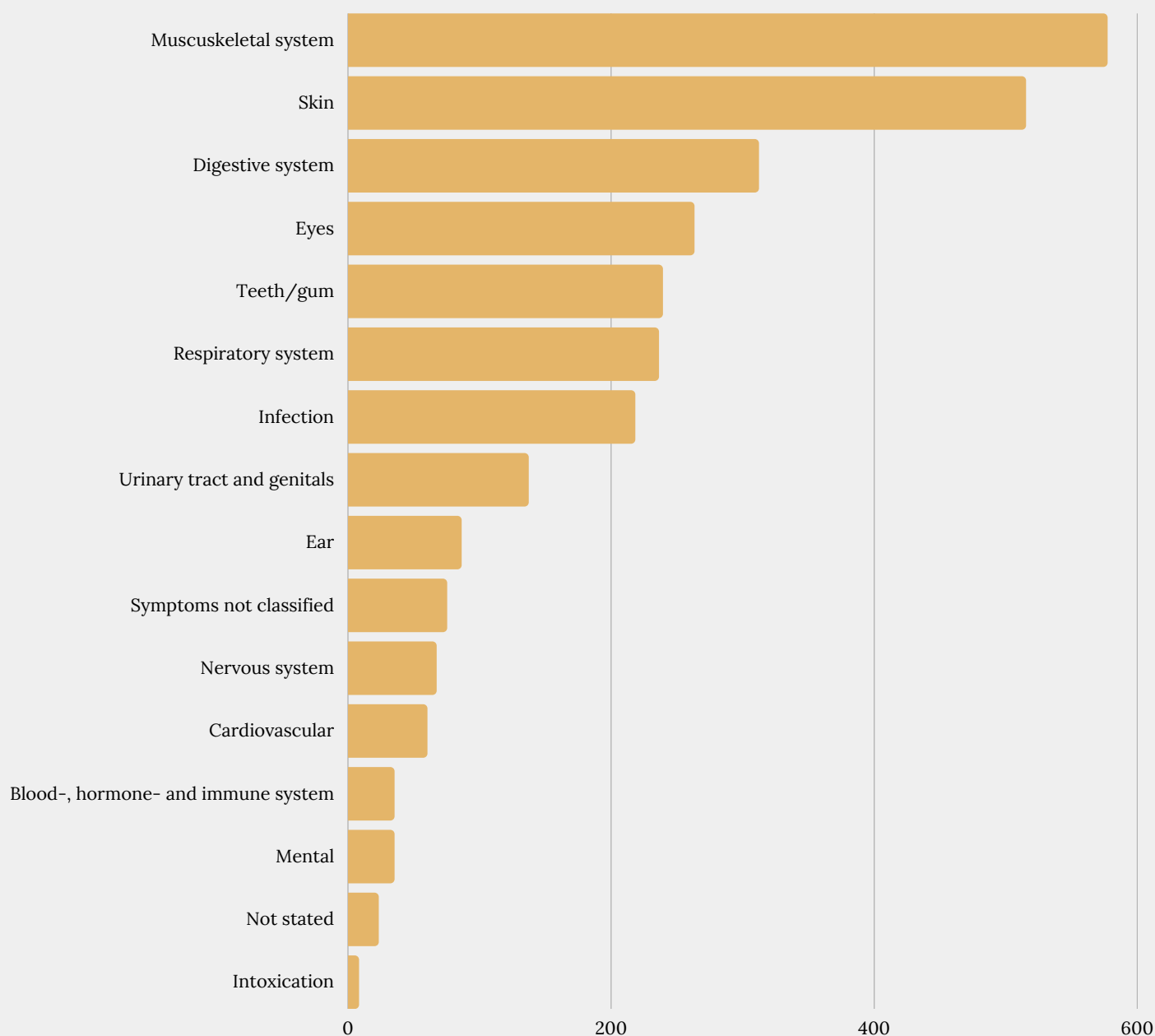
The majority of all inquiries are made up of patients from the countries of the Philippines (27%), Denmark (25%) and India (16%). This is also consistent with the fact that the majority of the seafarers who are covered by the service of Radio Medical Denmark, are from these countries.

The following countries in the distribution of cases are Poland (6%), Norway (3%), Great Britain (3%) and Romania (2%).

ILLNESSES & INJURIES ON BOARD

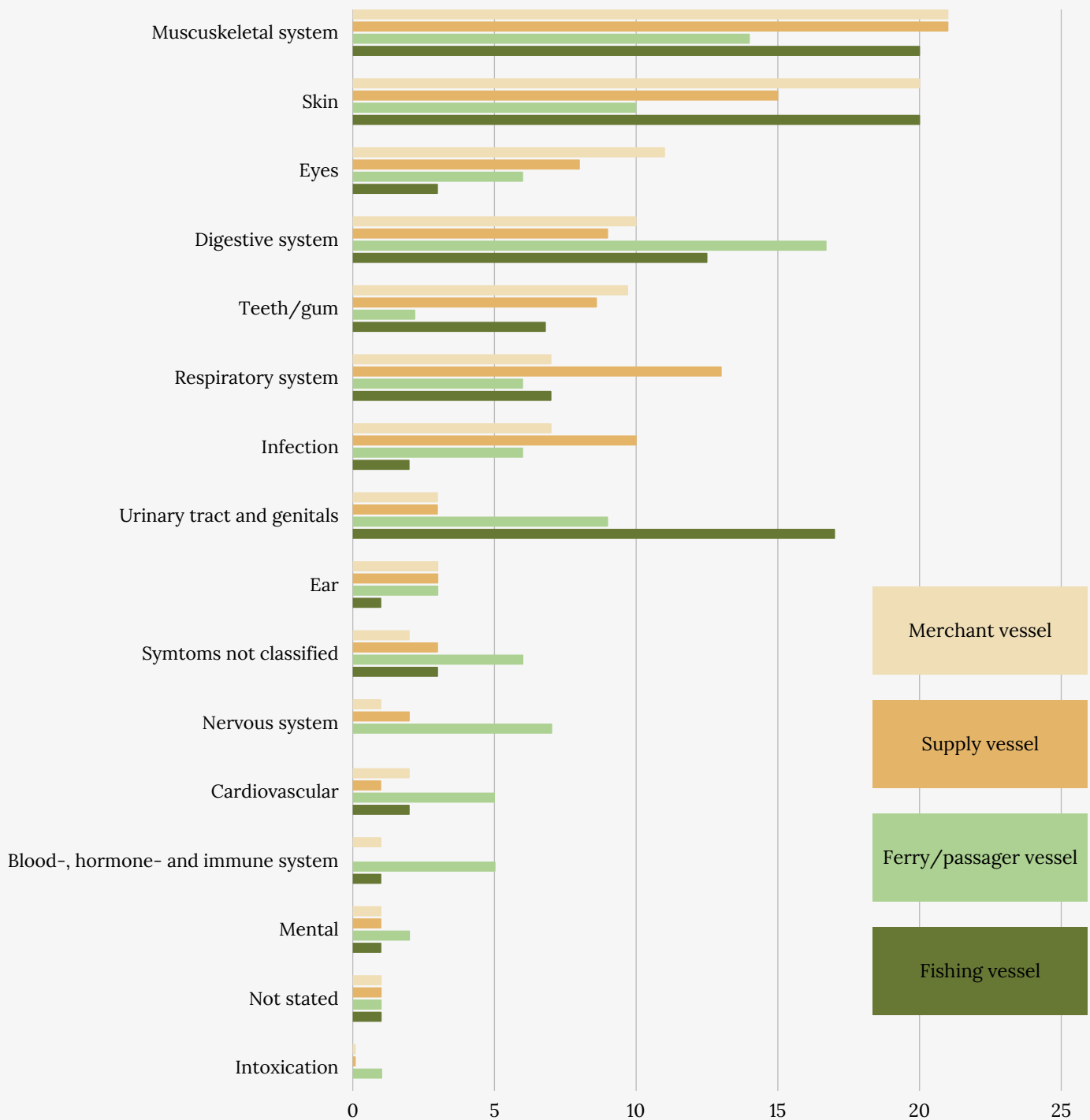
As in the previous years, it is again musculoskeletal disorders (20%) and skin disorders (17.8%) which have been the most frequent causes to inquiries in 2022.

The second most frequent causes to inquiries have been illness/injuries in the digestive system (10.8%), the visual system (9.1%), teeth/gums (8.3%) and the respiratory system (8.2%). This is equivalent to the distribution of the causes of inquiries in 2021.



Overview of the distribution of the causes of inquiries in 2022

Distribution of illnesses/injuries for 4 vessel types



Percentage-wise distribution of illnesses and injuries for selected vessel types in 2022

If you look at the four vessel types accounting for 97% of all inquiries in 2022: merchant vessels (60.7%), supply vessels (20.9%), ferry/passenger vessels (12.4%) and fishing vessels (3%), then the percentage-wise distribution of illnesses and injuries for each vessel type is as shown above.

The diagram shows that there is quite a difference in the causes of inquiries among the four vessel types. It is considered completely explainable, as the vessels who are out on sea for longer periods of time, will have different illness patterns than the vessels who are away from shore for shorter periods of time.

In general, there are very few major fluctuations, but there are categories of illnesses/injuries where we see a significant difference between the vessel types.

In the category of urinary tract and genitals, we notice that this category accounts for a significantly larger proportion of inquiries coming from the fishing vessels (17%), compared to the other vessel types, where the category represents respectively, ferry/passenger vessel (9%), merchant vessel (3%) and supply vessel (3%) of the inquiries.

PRESCRIBED MEDICINE

The table on the right shows the distribution of the number of prescribed medicaments.

In 2022, **3582 medicaments** were prescribed and divided between **78 different drugs**.



Groups of medicaments	Number	%
Oxygen	8	0.2
Local anaesthetic	23	0.6
Analgesic	1955	54.6
Medicines for allergy, shock and seasickness	133	3.7
Antidotes	3	0.1
Medicines for mental disorders and convulsions	39	1.1
Medicines for infections	536	15
Malaria - preventive	7	0.2
Heartmedication	50	1.4
Medicines for skin	201	5.6
Disinfectants	37	1
Medicines for alimentary tract	179	5
Ear and eye medicines	302	8.4
Gynaecological medicines	2	0.1
Medicines for cold and asthma	104	2.9
Infusion fluids and similar	3	0.1
TOTAL	3582	100

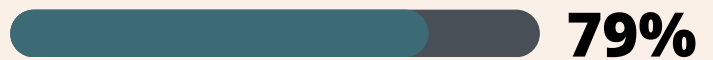
The distribution clearly shows that the group of medicaments which has been used the most during illness and/or injuries are analgesic/pain relievers. This group of medicaments represents just below of 55% of all prescribed drugs by Radio Medical Denmark in 2022.

In 105 cases (3.5% of all cases) the doctors have prescribed strong pain killers (morphine or similar).

The following groups of medicaments which has also been frequently prescribed are medicaments for infection (15%), eye and ear (8.4%) and skin (5.6%).

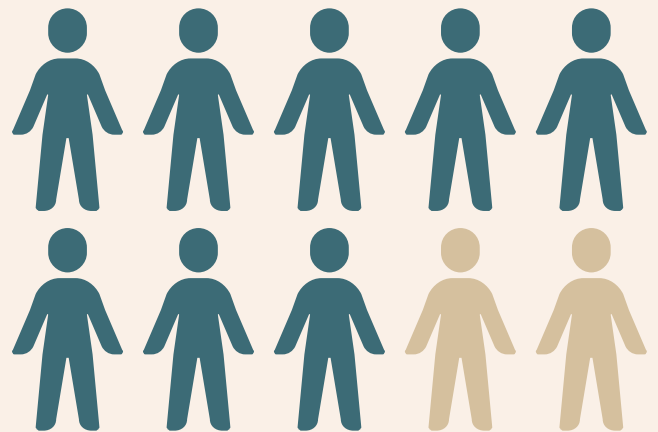
In 3 cases there were a need to initiate infusion with fluids. In such cases it is necessary to insert a drip in a vein of the patient. It is a skill that seafarers in charge of medical care on board are taught as a part of their education in medical care at the Centre for Maritime Health Service, Fanøe.

Inserting a drip can in some cases be lifesaving and this illustrates the importance of this being a part of the education in medical care.



79% of all cases in 2022 have had medicine prescribed

This corresponds to medicine prescription in 8 out of 10 cases



Reviewing all cases in 2022, the doctors of Radio Medical Denmark have prescribed one or more medications in 8 out of 10 cases. It has therefore been necessary to start medical treatment for the illnesses and/or injuries that the patients have presented with in the majority of the cases.

Conclusion

A busy record year 2022 with 2886 cases between seafarers from all over the world and the doctors of Radio Medical Denmark, in Esbjerg. Slightly more inquiries from passenger vessels, as an expression of more activity in the year of 2022 compared to previous years.

140 cases with disembarkation or evacuation. Lots of medicine prescribed, including the prescription of strong painkillers and in some cases also treatment with drip infusion. The activities reflect the importance of seafarers in charge of medical care on board being well trained and educated and able to act as the doctor's hands, eyes and ears.

This annual report was created by

Jan Vork

Head of Radio Medical Denmark

Line Emilie Laugesen

General Manager