

# Risks and preventive measures

## LONGLINE FISHING



National Health and Safety Awareness Plan for  
the Fishing Sector

safety  
saves  lives

**Title:** Risks and preventive measures: longline fishing

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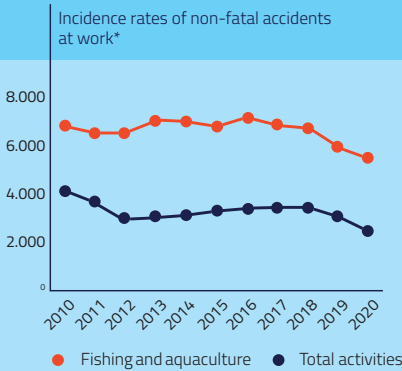
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# Fishing: a very dangerous sector

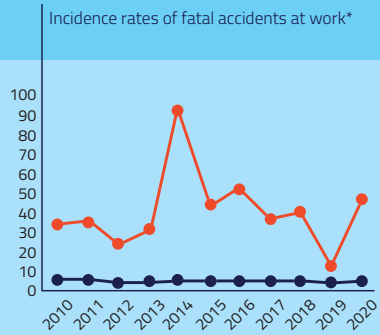
The accident rate in fishing is twice the average rate of all occupational activities.



Fishing has been and continues to be one of the economic activities with the highest occupational accident rates, doubling even those of other activities. Fatal accidents are 10 times more frequent in fishing than in other sectors.

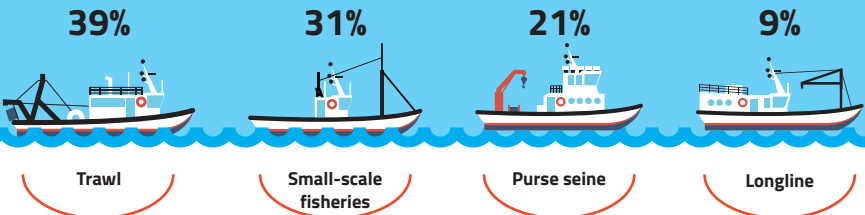


Source: Ministry of Labour and Social Economy (2020).



\*Accidents per 100,000 persons employed

## By fishing gear



- Trawl 37%
- Purse seine 33%
- Longline 26%
- Small-scale fisheries 4%



In the period 2011-2020, longline fishing had the **lowest number of serious and fatal accidents (9%)** investigated by the Labour and Social Security Inspectorate; but it has a relative **hazard rate of 26%**, if we consider the vessels registered.

Source : accidents under investigation by the ITSS (2011-2020).

## National Awareness Plan



This Plan aims to raise awareness among workers in the fishing sector of the importance of maritime safety and **health and safety at work**.

**The objective:** to contribute to improving safety at work and reducing the high accident rate in the sector.

# SEA ACCIDENTS

## Hazards of the vessel at sea

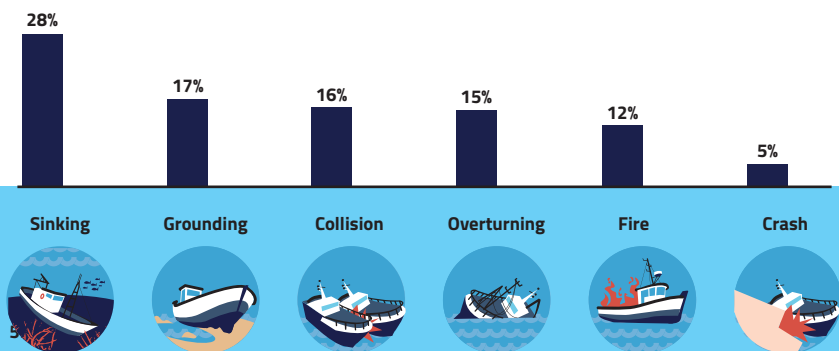
They affect the entire vessel as the workplace.  
They affect the entire crew.  
They sometimes take the lives of many workers.



**Sinking** is the most frequent sea accident due to waterways, loss of stability or flooding of spaces.

**Fires** usually start in the engine room, galley or cabins.

### Percentage of accidents



**Sinking and overturning accounted for 50% of maritime accident fatalities**

Source: CIAIM (2010-2020).

### Main causes



#### Personal factors:

not complying with the established safety rules, not using the self-inflating life jacket or not assessing the conditions of waves, wind... regarding the vessel's safety.



#### Work organisation:

lack of required training or qualifications, inadequate working methods or crew tiredness.



#### Emergency management:

lack of familiarity with emergency arrangements and procedures.

### Recommendations

Ensure the **ship's stability** (especially when hoisting), quantity of cargo and its stowage.

In the event of **adverse weather**: close doors, hatches and ports and remove water from bilges; secure the cargo and deck equipment.

Keep the **deck clear** and make sure that the drainage ports are not blocked.

**In the event of fire**, raise the alarm immediately. Use available fire-fighting equipment.

**Keep** risk areas (galley, storeroom...) and cabins (no smoking) **tidy and clean**. Keep a fire blanket next to the galley.

**Participate** in regular fire-fighting and emergency drills.

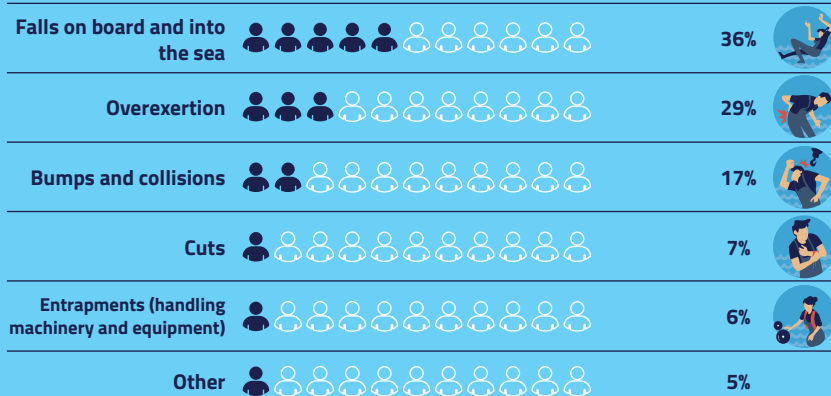
**Comply with the Convention on International Regulations** for Preventing Collisions (COLREGs).

# OCCUPATIONAL ACCIDENTS

## Hazards involved in fishing activities

They occur during the stay or the performance of a task while on board the vessel.

The most frequent accidents which occur in the fishing activity are:



Source: work accident reports (MITES 2010-2020).

## Falling is not funny!

### Falls on board and into the sea

On a vessel, falls are frequent both on deck and when embarking and disembarking.

The “man overboard” is a special form of fall, which occurs when falling into the sea.

Always wear a self-inflating life jacket on deck and, if necessary, PPE against falling from height.

- Keep the **deck and working areas as well as the passageways** clear of obstacles and debris. Remove deck irregularities or mark them with vivid paint.



- Use **ramps, gangways or ladders** to get on and off the ship, or to pass between boats tied alongside.
- Wear protective footwear with **non-slip soles**.
- Avoid working on deck in the event of **adverse weather conditions**.
- Exercise **extreme caution** in tasks where there is a risk of falling into the sea.
- Do not climb** or move around on the bulwark.

## Watch your head!

### Bumps or collisions

- Watch out for **obstacles** at head height.
- Protect edges and protrusions.** Secure doors, gates and hatches. Wear a protective cap to protect against bumps and knocks.
- Keep order** and stow catches to prevent them from moving.



## Watch your back!

### Overexertion

- You can damage your back by **handling weights, frequent repetitive movements** and by adopting inappropriate postures for long periods of time.
- Maintain a **stable posture**, hold the load as close to your body as possible, avoid twisting your back and use aids whenever possible.
- If possible, use **tables for sorting** and gutting fish and use knee rests if necessary.



## Watch your hands! *Cuts*

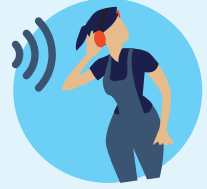
- > You can cut your hands when **using knives and with the bones and fins** of some species. Cold weather increases the risk of cuts.



- > Keep **knives sharp and clean**. Cut in an outward direction from the body. Always wear protective gloves.

## What are you saying! *Noise*

- > High noise levels **make communication difficult** and increase the risk of accidents and can lead to deafness.
- > Wear **hearing protection** when necessary.



## Hot, cold, UV radiation! *Environmental conditions*

- > When it is hot, **drink plenty of water** and take breaks in the shade.
- > **Wear suitable clothing** against wind, cold or water. Protect especially ears, hands and feet. Drink warm beverages but **avoid caffeine and alcohol**.
- > The sun damages the eyes and skin. **Cover your head and body** with work clothes and wear sunscreen and sunglasses.



## Don't burn yourself! *Contact with temperature*

- > Some equipment can reach very high temperatures. Wear **suitable protective equipment** during maintenance work.
- > Beware of **splashes of hot fluids** (e.g. cylinder purging).
- > Cold burns can also occur.



## You can't see it, but you can feel it! *Contact with electrical voltage*

- > **Do not use defective cables**, damaged plugs or sockets. Do not pull on cables when disconnecting electrical equipment.
- > Do not use electrical equipment with **wet hands**.



## Don't get sick! *Chemical and biological hazards*

- > **Chemicals** used for cleaning, maintenance of the vessel or preservation of catches can be dangerous.
- > **Follow label recommendations** and keep them covered and labelled in their original containers and do not mix them. Wear protective equipment (gloves, goggles, etc.).
- > Be careful with confined spaces such as the ship's hold. They can accumulate toxic or flammable contaminants or lack oxygen. Follow safety procedures.
- > You can also suffer skin injuries from infections, allergies, **bites and stings** from marine species.
- > Identify **hazardous species** and wear appropriate gloves during handling. Wash with soap and hot water at the end of each shift.



# SPECIFIC OPERATIONAL RISKS

## in longline fishing

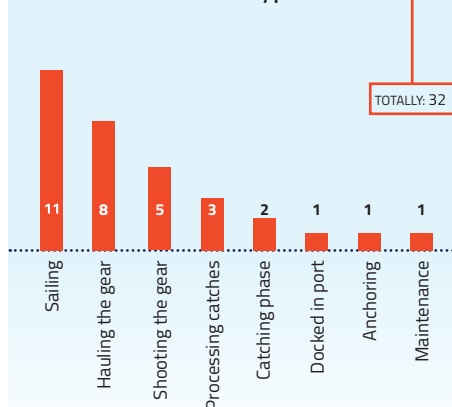


### When do serious accidents occur?

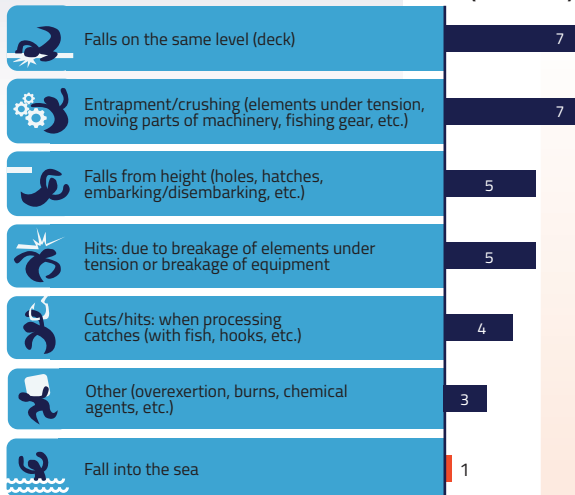
Almost half of these accidents occur during the fishing operations: **hauling, shooting and catching**.

The **navigation phase** is also critical, where 35% of serious and fatal accidents occur.

LONGLINE FISHING: Activity phase



LONGLINE FISHING: Forms of serious and fatal accidents (2011-2020)



TOTALY: 31/1

Source : accidents under investigation by the ITSS (2011-2020).

### How do they occur?

The main *serious* accidents in longline fishing are **falls** on the same level/ from height, impacts and **entrapment** by elements under tension, between moving parts of machinery or with the gear, followed by **cuts/strikes** when processing catches.

One *fatal* accident occurred due to a **fall into the sea**.





Falls on the same level, due to **slips, trips or loss of balance**, are a common form of serious accidents, due to the accumulation of materials on deck, instability of the vessel, poorly painted decks or decks with worn paint.



- » **Stow items properly** in defined areas on deck: ropes and cables coiled or on line hauler; gear, crates or drums out of passageways and securely lashed.

Many serious and fatal accidents occur during fishing operations and are related to:

**Elements under tension** (rope, line, etc.).

**Gear** (hooks).

**Machinery and work equipment** (winches, line hauler, hauler, etc.).

**Entrapments with moving parts of machinery and collisions or entanglements between objects** can occur especially during the storage (winding of the main line), the capture and hauling phase (when shooting the marker beacon, setting/attaching elements to the main line or when pulling the branch line).



- » To operate work equipment **one must have specific training** and follow the manufacturer's instructions.
- » There shall be constant ship-to-dock communication during winding. **The winding area shall be marked with buoys** to prevent access by anyone not involved in the operation.
- » **The reel shall be installed on a fixed axle**, well seated on the ground. The set shall have a deceleration system to control the braking speed.
- » At the shooting, **check that the gear ties are marked** and adjust the shuttle programming to the vessel's speed.
- » **When hauling, the person in charge** of the line hauler/net hauler must pay special attention if there is a clip or snap hook nearby, as they could be projected and break the main line. When approaching gear ties (buoy, branch line or light), he/she should slow down the drum and inform the crew. Finally stop, unhook from the main line and continue hauling.
- » **Moving parts of work equipment must be protected.** Never remove the protective guards. Even so, it is recommended to take precautions to avoid entrapment (tight clothing, etc.). If the equipment locks or malfunctions, immediately press the emergency stop.





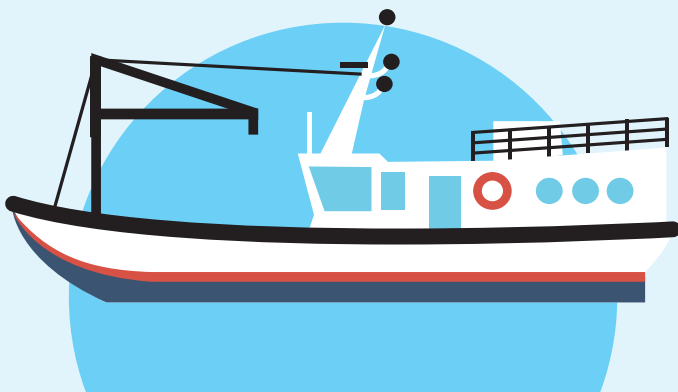
While setting the ship and during the catching phase, there is a risk of **entrapment by elements under tension** and of **collisions due to broken** elements, which can also cause accidents as a result of the **projection of fragments** or particles (hooks).

- » **Stay away** from the operations if you are not directly involved.
- » **Avoid entanglement with ropes, gears, etc.** (do not form sinuses in the ropes).  
Once the lower part of the branch line is released, attach the clip or snap hook to the main line.
- » **Do not go over or under** ropes, lines or gear which may accidentally come under tension. It is recommended to protect the line's radius of action, from the net hauler to the shuttle.
- » It is advisable to have a **knife or something similar at the bow and stern in case of entanglement/ entrapment**.
- » **If there are abnormal tensions** when setting the buoy, warn the skipper and stay away until they are eliminated. If the line becomes tangled, move out of range until the hauler comes to a complete stop..
- » **Wear a protective helmet** with a face shield if you are within range of the main line (in case of possible breakage) and use **eye protection** in tasks where there is a risk of projections.



**Impacts or punctures by objects or tools** are very frequent and can occur during the navigation to the fishing grounds, in the preparation of the gear-branch line and the baiting of hooks and during the catching phase.

- » **Stow the branch lines properly**, coiling them to avoid entanglement and to ensure that they come out without difficulty during the shooting process.
- » **Baskets, buckets or line haulers** shall be secured so that they cannot overturn in the event of bad weather.
- » **Use extreme caution when baiting** hooks so that hooks or fishbones do not get stuck in the body or clothing. Wear safety gloves.
- » **Be careful when handling the gaff** so as not to hit nearby sailors and do not pass behind it if it is used by another fellow fisherman.
- » **Store the gaff** protected and out of the way.





There is a risk of accidents with catches, both when catching and hauling them on board, and during processing, stowage and unloading. Take special care with **potentially dangerous species** such as sharks, swordfish, etc.

- › Use the safest method for lifting and killing catches according to **species, size and weight**.
- › It is recommended to **kill dangerous species** before bringing them on board and do not remove the hook until you are sure they are not alive. Have a hammer or similar available if necessary.
- › **Tire or exhaust the catches before hauling them** if they are very vital and it is advisable to use the lasso to lift the catches.
- › **Wear protective gloves and sleeves** which offer adequate puncture resistance against possible bites.
- › **Caution should also be exercised during processing** and stowage with dangerous or potentially biting species.
- › In processing, **be careful when handling deep-frozen parts of the shark catches** (fins can cut).



**Ergonomic hazards and overexertion** are important when lifting catches and in processing, stowage and unloading activities.

- › **When hooking and lifting the catch**, extend your arms as far as possible.
- › Do not handle loads of more than 25 kg on your own.
- › **Use mechanical aids** to lift/carry heavy loads or handle them among several people.



**Falls into the sea** during operations can be fatal. Setting of the marker buoy is a particularly dangerous task.

- › To set the signalling beacon, **approach the stern only as far as necessary**, never put your body on the outside.
- › **Always wear a self-inflating lifejacket** when working on deck and, if necessary, a restraint system against falling from height.



Another specific risk is **flooding when hauling**.

- › If the well has two access doors to the fish hold, **open the one providing the best shelter** in the event of bad weather.
- › During the hauling process, **it is recommended to close the doors** of hauling.

# Take a break!

## Watch out for fatigue

**Fatigue can increase navigation errors**, sea accidents and the risk of being injured due to operational accidents. Fatigue can be caused by long working hours, night shifts and high physical strain.

- » If possible, **get at least 6 hours of uninterrupted sleep** and **take breaks of about 20 minutes** during the day to ease tiredness.
- » **Follow a healthy diet** and drink enough water to stay well hydrated. Stay fit.
- » **Some medications, alcohol, tobacco** and other substances can affect alertness/performance as well as cause insomnia or drowsiness.



## Duties and responsibilities

### Shipowner

Ensure the effective protection of the crew.

**TAKE** measures to ensure that ships are operated without endangering the safety and health of the crew.

**PROVIDE** the necessary means to ensure safety on board.



### Skipper or captain

Ensure safety and health on board.

**FOLLOW** the orders or instructions of the shipowner.

**SUPERVISE** tasks, assigning them only to trained personnel.

**ENSURE** the correct condition and location of safety, emergency and protective equipment, as well as notices, instructions and ship's plans.

**ENSURE** that the crew receives training and information on occupational risk prevention and that emergency drills are carried out.



### Crew

For your safety and everyone else's.

**RESPECT** the safety measures adopted.

**FOLLOW** the safety instructions received.

**USE** the means and protective equipment provided correctly.

**REPORT** immediately any situation that, in your opinion, involves a risk to safety and health.




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