



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

iotc ctoi

Safety, health, accident and injury

IOTC ROS SFO TR3



CapMarine
Capricorn Marine Environmental

The sea fishing sector is recognised worldwide as the most hazardous industry to work in, accounting for significantly higher rates of fatal and/or serious accidents when compared to other sectors.

This module aims to alert Observers to the need to be constantly aware of the dangers around them while working onboard fishing vessels.

Health and safety can be viewed from various sides:

- personal health and safety and safety awareness onboard; and
- formal safety checks and reporting, which includes pre-boarding safety inspections and in-trip reporting (this follows in a subsequent presentation).



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

iotc ctoi



Health issues, personal first aid and safe working conditions

IOTC ROS SFO TR3.1 & TR3.2

Category: Safety, health, accident and injury

IOTC ROS SFO TR3



CapMarine
Capricorn Marine Environmental



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

HEALTH, ACCIDENT AND INJURY

- Fishing industry is most hazardous industry internationally
- Observers are exposed to the same risks as fishermen
- Observers need to receive compulsory STCW safety at-sea training
 1. Survival at sea
 2. Firefighting
 3. First Aid



STCW training focusses mainly on REACTIONARY training



Internationally the sea fishing sector is recognised worldwide as the most hazardous industry to work in, accounting for significantly higher rates of fatal and/or serious accidents when compared to other sectors such as agriculture or construction. As such Observers are also exposed to these risks onboard fishing vessels and need to be constantly aware of the dangers around them while working onboard. This will be covered in professional detail during your STCW survival course, completed before or after the current technical and scientific training. STCW training emphasise the reactionary procedures to be followed when there is an accident or imminent danger to the crew and vessel.



HEALTH, ACCIDENT AND INJURY

Develop a positive and responsible attitude to health and safety

Wear safety apparel on deck

- personal floatation device (PFD)
- safety shoes / boots
- sun-glasses
- hard hat
- gloves



Maintain high standards of health



- In-date medical certificate
- in-date inoculations 
- Take on board a personal first aid kit, and 
- Prophylactics

In this module we shall emphasise pre-emptive measures to prevent accidents, injury and sickness from occurring in the first place. This includes the need for Observers to develop a positive and responsible attitude to health and safety when it comes to wearing safety apparel such as a hard hat and personal floatation device (PFD) when working on the upper deck; maintaining a high standard of health at all times (e.g. in-date inoculations for tetanus, typhoid and, in some areas, yellow fever); being able to assist themselves if getting ill or when sustaining a minor injury while on-board (e.g. ,carry a personal first aid kit on-board as well as malaria prophylactics).



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

SURVIVAL EQUIPMENT

Check that both you and the vessel are fully equipped with all the compulsory survival equipment.



Personal Floatation Device (PFD):
wear at all times when working on deck



Immersion suit: only compulsory when working on temperate, sub-Antarctic and Antarctic areas)

Personal Localisation Beacon (PLB):

designed to communicate your physical location in an emergency



Signal mirror



Strobe light



Two-Way Communication Satellite Device: allows for independent emergency and text communications.



CapMarine
Capricorn Marine Environmental



Personal 1st aid kit

Pre-emptive measures also include the checking that both you and the vessel are fully equipped with all the compulsory survival equipment to maximize chances of survival in an emergency situation. In most instances compulsory survival equipment are part of a vessels licence and registration requirements and provided by the vessel operators. However, due to variable safety standards maintained in different countries, These may not always be adequate, therefore, it is always advisable to get your controlling authorities to issue you with personal working safety gear and survival equipment. Additional processes also have to be followed to ascertained that the vessel is fully equipped with all the compulsory survival equipment prior to the observer being allowed to embark.



Protective clothing

Observers should be issued with adequate protective clothing:

- Hard hat
- Safety boots
- Reflective jacket
- Protective eyewear
- Working gloves
- Safety harness and safety line



- Communicate with your coordinator if you do not have any of the mentioned items.
- It is just as important to ensure that you existing safety equipment is in working condition.
- Note: protective clothing and safety equipment cannot prevent an accident, it can only reduce the risk of injury.



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

HEALTH & SAFETY ONBOARD

Be aware of risks, safe working practices and preventive actions

Risks when working on open decks

- Falling overboard
- Injury from moving equipment, line haulers, overhead derricks, or winch cables
- Fish or sharks on the deck
- Other crew working with knives, gaffs or harpoons

Risks when sampling in a processing area

- Machinery and moving conveyor belts
- Crew manoeuvring heavy crates
- Open hatches



CapMarine
Capricorn Marine Environmental

To prevent accidents from happening in the first place, you should be aware of hazards and risks inherent to your work as an at-sea Observer. Awareness will allow you to implement preventive actions towards safe working practices.

The tasks and duties assigned to observers will require them to be either monitoring fishing activities or undertaking biometric sampling from various vantage points both on the upper deck and between decks. These are likely to expose them to a wide range of dangers. These risks are further accentuated from the continuous vessel movement, which can become severe in adverse weather conditions.



RISKS ASSESSMENT

Step 1: Identify the Hazards - anything with the potential to cause harm

- moving machinery
- work methods/practices
- overhead objects
- cables or ropes under tension
- exposure to harm such as live sharks or fish just landed
- slippery decks
- etc.



The first responsibility of the observer would be to do a risk assessment of the areas they will be standing or working. Initially this will be a conscious process, especially when moving to a new vessel, but with time will become almost a unconscious process. However, it is always important to then avoid the risk of complacency and not following a dedicated risk assessment process. A Risk Assessment is a careful examination of what, in the workplace, could cause harm to people so that preventive measures can be taken. The aim is to reduce the risk of injury and illness associated with work.

There are three steps to carrying out a Risk Assessment:

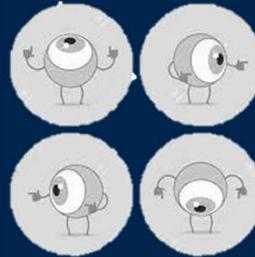
1. A hazard is anything with the potential to cause harm in terms of human injury or ill health, such as moving machinery, work methods/practices, overhead objects, cables or ropes under tension, or exposure to harm such as live sharks or fish just landed and slippery decks.



RISKS ASSESSMENT

Step 2: Assess the Risk – how or what is the likelihood on an injury

- Assess areas where you will be standing or working
- Never work in an area where your safety is in question
- Avoid the risk of complacency
- Look up, look down and look around



2. A risk is the likelihood that somebody will be harmed by the hazard and how serious the harm might be.

Assess what is the likelihood of an injury occurring, the possible severity, and how it may occur. Don't forget to always look up, down and all around.



RISKS ASSESSMENT

Step 3: Put Control Measures in Place – precautions taken to ensure a hazard will not injure someone

- setting up protective barriers against moving fish or equipment
- selecting a safer working area
- tidying work/sampling area
- avoid passing under suspended objects
- attach yourself with a cable to a rail if you are required to work on a open deck when the seas are rough



Do a risk assessment every time you enter a work area

3. Control measures or controls are the precautions taken to ensure a hazard will not injure someone

Taking into consideration the observers' tasks, they must consider measures to prevent or reduce a risk to prevent an accident. This process may entail setting up protective barriers against moving fish or machinery or selecting a safer working area. Note wearing safety clothing or a PFD does not necessarily reduce the risk, it may only reduce the danger of injury.



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

WORK AND PERSONAL HYGIENE

Maintain hygiene and respect vessel hygiene customs, at all times.



- Keep hair clean
- Care for your dental health



- Shower regularly

- Use deodorant daily

- Keep your hands clean



- Keep your hands neat



- Maintain restroom hygiene

- Avoid wearing too much perfume or cologne

- Change clothes when you finish sampling



- Change clothes when going for meals

- Don't wear overalls and boots in the bridge, in the mess or in the accommodation



- Clean your sampling material and working station at the end of each sampling period.



CapMarine
Capricorn Marine Environmental

Observers are expected to be aware of their own personal hygiene on-board vessels. Adequate washing and shower facilities are expected to be available on all vessels. In tropical conditions it may be necessary to change your clothes daily. Enquire as to the washing and drying facilities on-board and make use of these. Washing clothes and hanging them out to dry in your cabin is not hygienic. Washing and hanging them up in the showers or bathrooms may be offensive to others.

To ensure you always maintain your personal and work hygiene, there are several things you can do:

- Shower Regularly - Shower every day if possible. Shower will not only cleanse your skin but it will also help cleanse your body of odours. Simply smearing on perfume or aftershave does not help cover up body odour, and can exaggerate it.
- Use Deodorant Daily - Wear deodorant or antiperspirant daily, remember you work in warm climates.
- Keep your Hands Clean and Neat – Wash you hands regularly and thoroughly, after you finish sampling, after each restroom visit, and before meals. Trim your nails regularly.
- Change clothes when you finish sampling and before going for meals
- Don't wear overalls and boots in the bridge, in the mess or in the accommodation
- Clean your sampling material and working station at the end of each sampling period.



HEALTH AND INJURY

Monitor your own health and well-being while at sea:

1. Sea sickness



2. Colds and Flu



3. Diarrhea and food poisoning

4. Fatigue



5. Accidents



6. Sunburn

7. Hypothermia



8. Noise



Observers must report any accident, no matter how minor or sickness to their controlling authorities immediately. The progress of recovery or continuation of any symptoms must be reported to the captain and the observers' controlling authority with any deterioration of condition or at least every 24 hours.

Common illnesses and injuries are:

- sea sickness;
- diarrhoea and food poisoning;
- flues and colds; and
- cuts, bleeding and aberrations.

Other health risks that observers should be aware of are: prolonged exposure to sunlight (sunburn); hypothermia (working in refrigerated holds); and noise.



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

iotc ctoi

SEA SICKNESS



If symptoms involve vomiting, avoid dehydration by drinking enough water to replenish lost fluids.

To prevent or alleviate symptoms:

- ✓ avoid fatty and spicy foods, alcohol, citrus juices, milk and coffee
- ✓ eat dry crackers or cereals and drink plain bottled water
- ✓ avoid confined spaces and stay in the fresh air
- ✓ focus on the horizon
- ✓ stay busy
- ✓ take motion sickness medication

COLDS & FLUS



If symptoms persist for >1 week: report your condition to the Captain and your controlling authority, as there is a danger of developing pneumonia

To alleviate symptoms:

- ✓ take flu remedies, painkillers and vitamins
- ✓ stay hydrated and rest

If you are having difficulties breathing, you are to be evacuated to the nearest port, or onto a suitable vessel returning to port, where you will receive medical assistance on land.



CapMarine
Capricorn Marine Environmental

Sea Sickness occurs when the body, inner ear and eyes all send different signals to the brain. Agitated by this perceptual incongruity the brain responds by releasing stress-related hormones that can lead to a cold perspiration, headaches, dizziness, nausea and vomiting. Seasickness usually occurs in the first 12 to 24 hours after sailing and can also be weather dependant. Should symptoms persist for longer than 24 hours together with vomiting be aware of dehydration and drink sufficient water to replenish lost fluids. Observers with prior experience of working at sea will know if they are prone to motion sickness and need to take a supply of motion sickness medication with them.

Colds and flues often occur within a week or so after sailing. New crew joining the vessel after being flown in from other parts of the world and although not showing symptoms can carry infectious bacteria or viruses against which other persons on-board have no resistance. Although uncomfortable the symptoms of a cold or flu can be overcome within a few days without having to resort to antibiotics. Observers are encouraged to take extra flu remedies, pain pills and vitamin supplements. Should flu symptoms persist there is always the danger of developing pneumonia and observers are cautioned to report immediately if they are not showing any signs of recovering from flu symptoms and continue coughing.



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

iotc ctoi

ACCIDENTS



Small injuries:

- ✓ clean with an antiseptic solution (or with soap) and dress with clean plasters or bandages to prevent infection

Serious injury or if injuries fail to respond to early treatment:

- ✓ immediately report it to the Captain and your controlling authority

In extreme situations, prepare to be evacuated to the nearest port

DIARRHOEA



To treat diarrhoea: take medications such as “Imodium”; drink extra fluids with small amounts of salt and sugar added; try to eat normally when you feel better and your appetite returns

In case of any of the following signs:

- ✓ presence of blood, pus or yellow mucus in stools
- ✓ inability to drink or hold down water due to vomiting
- ✓ dehydration (small amounts of dark urine, dry mucus membranes, drowsiness.

Report it to the Captain and your controlling authority and prepare to be evacuated to the nearest port.



CapMarine
Capricorn Marine Environmental

Accidents

- Always get medical attention, no matter how small the injury. Observers should be able to assist themselves for small injuries using their own first aid kit however, be aware of the possibility of infection.
- All wounds should be thoroughly and regularly cleaned with an antiseptic solution (or with soap and water) and dressed with clean plasters or bandages to prevent infection.
- All accidents and or injuries must immediately be reported to the captain and the observer-controlling agency. In the event of a serious injury or when injuries fail to respond to early treatment it is important to communicate all the details to the captain and your controlling agency.
- In extreme situations of illness or injury it may be necessary to arrange for the evacuation of the observer to the nearest port or onto a suitable vessel returning to Port. In these situations, the necessary logistics will be taken over by the controlling agency ashore.

Diarrhoea is an abnormal increase in the frequency and liquidity of the stools and can be caused by a virus or bacteria or from food poisoning. Symptoms can be acute lasting for only one or two days or chronic lasting for a week or more.

These symptoms are not uncommon, but if they persist for more than 24 hours specific diagnosis and treatment may be required. In this event it is important to report your condition to both the captain of the vessel and your controlling agency.



FATIGUE

Do I work on automatic and without thinking?



Do I fall asleep for small amounts of time?

Do I feel that I just can't be bothered?

Do I feel tired and/or yawn all the time?



Am I more irritable than usual?

Am I easily frustrated by tasks?

Do I feel stressed?



Do I feel that I just don't want to cooperate with others?

Am I finding it increasingly difficult to perform more than one task at once?



Am I forgetting to do things more and more?



Am I having difficulty concentrating?



In the case of fatigue, sleep uninterrupted for between six (6) and twelve (12) hours.

Fatigue: Lack of sleep can be extremely dangerous and can cause serious problems. Fatigue can result in poor decisions and slow reactions that greatly increase the risk of accidents and/or injury. To prevent fatigue, plan your work schedules to be able to sleep uninterrupted for at least 6 out of every 24 hours. Correctly assess your level of fatigue. Remember though that people are poor judges of their own level of fatigue.



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

HEALTH AND INJURY

- All accidents, injuries and illnesses are to be reported to Observer managing authorities (Coordinator) and the Captain!
- Progress on recovery or deterioration of symptoms are to be reported to Captain and Observer managing authorities on a regular basis.



- In extreme situations of illness or injury it may be necessary to arrange for the evacuation of the observer to the nearest port or onto a suitable vessel returning to Port
- It is critically important to report any injury, illness or condition to the captain and your coordinator and to update regularly, progress to recovery or should the situation deteriorate.



Food and Agriculture
Organization of the
United Nations



Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

ANY QUESTIONS?



send us a message via Talents LMS



CapMarine
Capricorn Marine Environmental