

QUALITY, HEALTH, SAFETY, SECURITY & ENVIRONMENT BULLETIN (QHSSE)



Index

| | |
|---|-----------|
| Best Practices..... | 3 |
| Best Practices Award..... | 35 |
| Vetting Findings..... | 37 |
| Security..... | 40 |
| Health..... | 43 |
| Environmental..... | 54 |
| Safety..... | 57 |
| Christmas 2023 Panagia Thalassini..... | 64 |
| Christmas 2023 Santiago I..... | 65 |

BEST PRACTICES

Improving Safety Signs of Workplace

Author: Motorman John Agpangan

Vessel: Santiago I



Why is important the safety signs?

The most common accidents on board are slips, trips and falls. This cause injuries, fractures, and sometimes even fatalities.

One of the reasons is the inadequate post of the safety signal on the workplace area. In another cases the signals are not sufficient clear to be aware for the crewmembers.

These signals are important to communicate information about potential hazards or dangers ahead, preventing accidents.



Small change, big results! Every crewmember must be knowing the important role of keeping your workplace secure and delimited.

“Appropriate, big, clear and easy to be understood” are the basic properties of a good safety signals.

The safety signals help to promote a safe and responsible environment culture for crew.

BEST PRACTICES

We are part of the change!

The objective of this publication is improving our safety work condition and promote the crew's safety awareness.

This best practice will ensure the responsibility for safety work conditions is a priority before doing any job.



BEFORE



AFTER

BEST PRACTICES

MOB BOAT- FALL PREVENTER DEVICE BEST PRACTICE DURING EXERCISES AND DRILLS

Author: Master Salvador Salord

Vessel: Santiago I

Introduction

According to IMO MSC.1/Circ.1327, conventional lifeboats have to have a FPD (Fall Preventer Device) in order to prevent an undesired on-load release when lowering the lifeboats or when doing maintenance.

The problem

When lowering the MOB boat (with or without people on board), we have no other choice but to rely on the on/off load release hook mechanism. If somebody, by mistake, activates the on-load release by touching it or having it tangled to the harness/clothing while the boat is being lowered, the boat would be released. This case happened to Capt. Salord when he was a 3rd officer, when lowering a MOB boat, one crew member got the harness tangled with the on-load release wire. Luckily, the wire was not pulled, so no accident took place, but it triggered a red warning and made me creative on how we could do things in a safer way.



The solution

We believe that by putting a strap **only during exercises and drills** of adequate SWL and shackles by-passing the hook (like a conventional lifeboat FPD) we have a secondary mean of safety, and the boat would remain attached to the wire in case of accidental release or failure of the hook.

BEST PRACTICES

ADJUST CORRECT WORK CLEARANCE IN ANGLE GRINDER AND CHECK SAFETY DEVICES

Author: 2/A/E Gianfranco Anticono

Vessel: Panagia Thalassini

Angle Grinder is common use on board for engine and deck crew and is an equipment to many cases of accidents on board, it is best practice to adjust correct work clearance between the grinder stone to the platform is 2mm to 3mm and same clearance adjustment in the brush.

PROBLEM

Clearance between grinding wheel and grinding platform is not regulated to its proper allowable clearance measurement and broken protective glass guard. It will be dangerous for the crew operator when the machine is not in the proper condition. It can lead to serious injury or fatal accident if not corrected immediately.

SOLUTION

Adjusting the clearance between the grinding wheel and grinding platform to its recommended measurements. Replacing the broken protective guard glass with appropriate replacement.

1. Before than adjust we can see the clearance is more than 4mm.



BEST PRACTICES

2. After correct adjust clearance between 2mm and 3mm, the equipment is safer to use.



3. Protective glass is a potential safety device and must be install for avoid direct damage for the operator



BEST PRACTICES

4. Safety operation guidelines for properly use of the Angle Grinder.



5. Personal Protective Equipment should be in good condition.



6. Emergency stop push button must be tested before to grinder tools and release button for reset.



7. Earth ground wire must be installed for preventive electric shock when electrical of the machine fails.



BEST PRACTICES

Additional practices:

-Making sure that the protective equipment is available, and it is in best condition to maximize its purpose to protect the user in any kind of danger of this machinery.

-Testing the emergency stop push button before using the bench grinder, it is important to test

this safety device of this equipment to ensure we can execute rapid shutdown in any case of emergency to stop the grinder.

-Checking the earth ground wire connection if it is still in good contact in the ground, to avoid electrocution and huge damage to the motor in any electrical malfunction in the grinder.

Doing such as preventive actions can reduce potential liabilities for the company, risk of accident, prevent injuries, and save lives in the future for the crew.



BEST PRACTICES

LATHE MACHINE TESTING THE SAFETY DEVICES AND MAINTENANCE INSPECTION

Author: 2/A/E Gianfranco Anticono

Vessel: Panagia Thalassini

Lathe Machine contain several fast-rotating parts that can cause contact and entanglement hazards. Keep all body parts away from all rotating parts. Never wear loose-fitting clothing or jewellery while operating a Lathe Machine.

Tie back and contain all long hair. Use guards to protect from accidental contact with rotating parts.

There are several flying object hazards that can potentially come from a Lathe Machine. Make sure to secure both the workpiece and cutting tool. Be sure to remove the chuck key from the chuck. Make sure to keep the work area clean from all debris, chips and tools.

Inspection and Adjustment regularly inspection the machine for any signs of wear, damage, or misalignment. Check the alignment of the bed, tailstock, and tool rest. Make necessary adjustments to maintain precise alignment.

Follow Manufacturer Guidelines always refer to the manufacturer's manual and guidelines for specific maintenance procedures, recommended lubricants, inspection intervals, and other maintenance requirements.



BEST PRACTICES

1. Chuck Guard protects user from accidental contact with the rotating chuck, helping to eliminate hazards such as pinch point, crushing and entanglement. When the guard is open the sensor of Lathe Machine safety system block to start. After close Chuck Guard will be turn on green light and is ready to use.

- GUARD OPEN BLOCK OPERATION



- GUARD CLOSE SAFETY DEVICE IN OPERATION



BEST PRACTICES

2. Safety Foot Pedal to be applied frontally at the bottom of the lathe machine as an emergency stop. Easily accessible emergency stop, during operation only need to maintain press the pedal and immediately the lathe machine will be stop.



3. Emergency stop push button must be tested before to use Lathe Machine and release button for reset. Should be located at easy to access locations on the machine. The purpose of the button is so the operator can stop the machine quickly in case of failure or an emergency situation such as becoming entangled in the machine.



Before



After

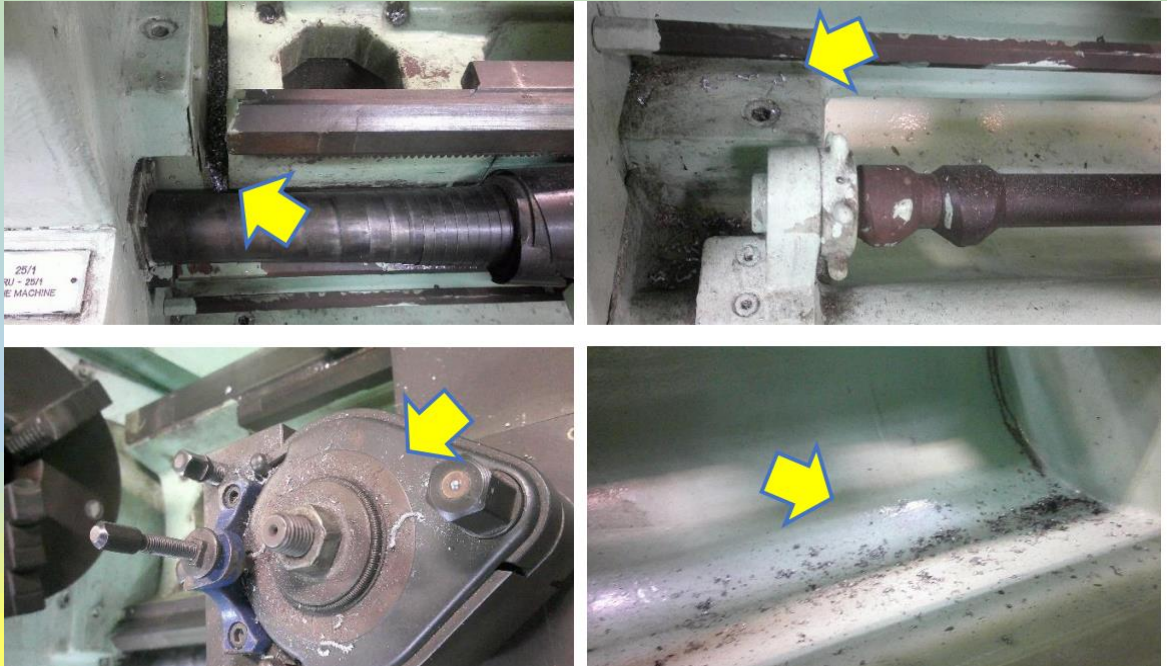


Release

BEST PRACTICES

4. Regular cleaning: Clean the lathe machine regularly to remove dust, debris, and coolant residues. Use compressed air, brushes, and appropriate cleaning agents to clean the machine thoroughly.

- Before remove material residues.

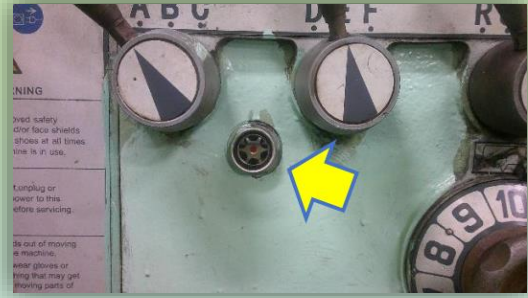
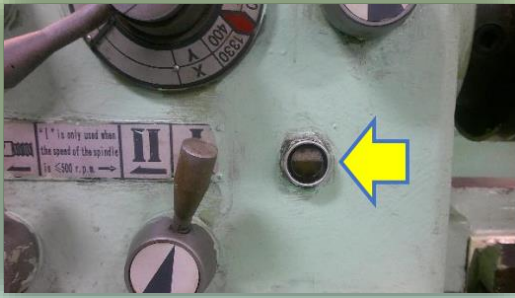


- After clean and blow by compressed air.

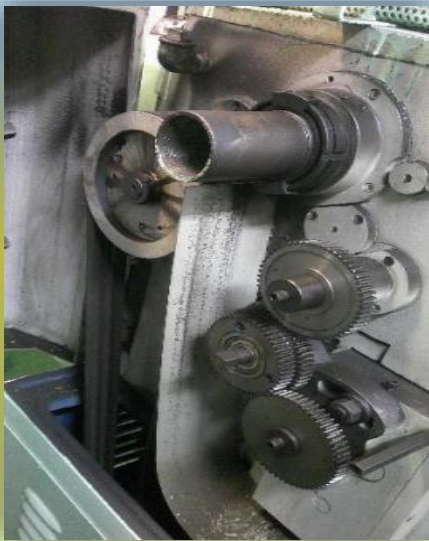


BEST PRACTICES

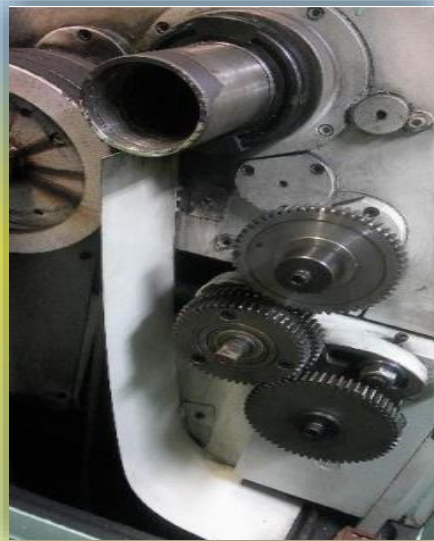
5. Must be check and refill if its necessary oil level for avoid damage the equipment, destroy gears and transmission in the motor side.



6. Lubricate the moving parts of the lathe machine as per the manufacture's recommendations. This includes the spindle, gears, slides, and other components. Proper lubrication reduces friction, minimizes wear and tear, and ensures smooth operation.



Before



After

7. Belt and Motor Inspection: Inspect the belts for signs of wear, cracking, or misalignment. Adjust or replace belts as necessary. Check the motor for proper functioning and address any motor-related issues promptly.



BEST PRACTICES

8. Operator Training ensure that the machine operators are properly trained on the correct operation and maintenance procedures. Promote a culture of safety and encourage operators to report any issues or abnormalities.

Tool Maintenance keep the cutting tools sharp and properly adjustment. Replace worn-out or damaged tools promptly. Ensure correct tool selection and use appropriate cutting speeds and feeds.



1. Tight chuck with material



2. Proximity cutting tool sharp



3. Adjust speed and rotation to work



4. Close chuck guard and operate with PPE

BEST PRACTICES

EPIRB MODEL FOR ABANDON SHIP DRILLS

Author: 2/O Edwin Gamarra / DC Paula Ramos

Vessel: Santiago I



Looking for the safety improvement on board, drills and trainings must be performed weekly and monthly as per ship's schedule involving all the crew members.

In this matter we analyzed the importance of Abandon drill, that it's necessary to be carried out minimum once per month or when 25% of the crew on board is changed. During this drill we must simulate an emergency abandon of the ship from master's order, sounding the general alarm and gathering all the crew on the muster station ready to embark in the Lifeboat, carrying all the GMDSS equipment's such as Logbook, SARTS, VHF portable & EPIRB's; so as per we know, EPIRB equipment its very sensitive to be activated by mistake due to the automatic operation by water spray, sending distress signals to the stations by satellite.



BEST PRACTICES

To prevent this risk of accidentally activation or damage, we made a small EPIRB model; becoming easily and safely to transport during abandon drills, in order to keep always in mind. Additionally of this, can be handle safely for all the crew for improving trainings of use and activation of GMDSS equipment during emergency.



BEST PRACTICES

DEPRESSURIZE OF THE ACETYLENE-OXYGEN LINE AFTER USE

Author: E/C Carlos Solana

Vessel: Panagia Thalassini

Gas welding is a very useful technique that allows to joint metals and also to cut them with a very clean cut. When we use acetylene-oxygen for gas welding, it is best practice to depressurise the line when we finish the job. We have to depressurise the line from the bottles in both acetylene and oxygen rooms until the gas welding station located in workshop. The best way to do it is following the next steps:

1- Close the valve on top of the bottle and in the regulator inside both acetylene and oxygen room.



Acetylene



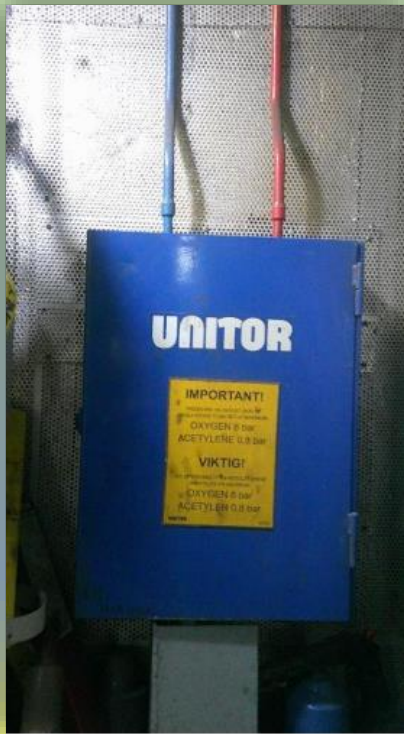
Oxygen

1.1- In case of arrival or staying in port, both connecting hose from acetylene-oxygen bottles to regulator must be disconnected.

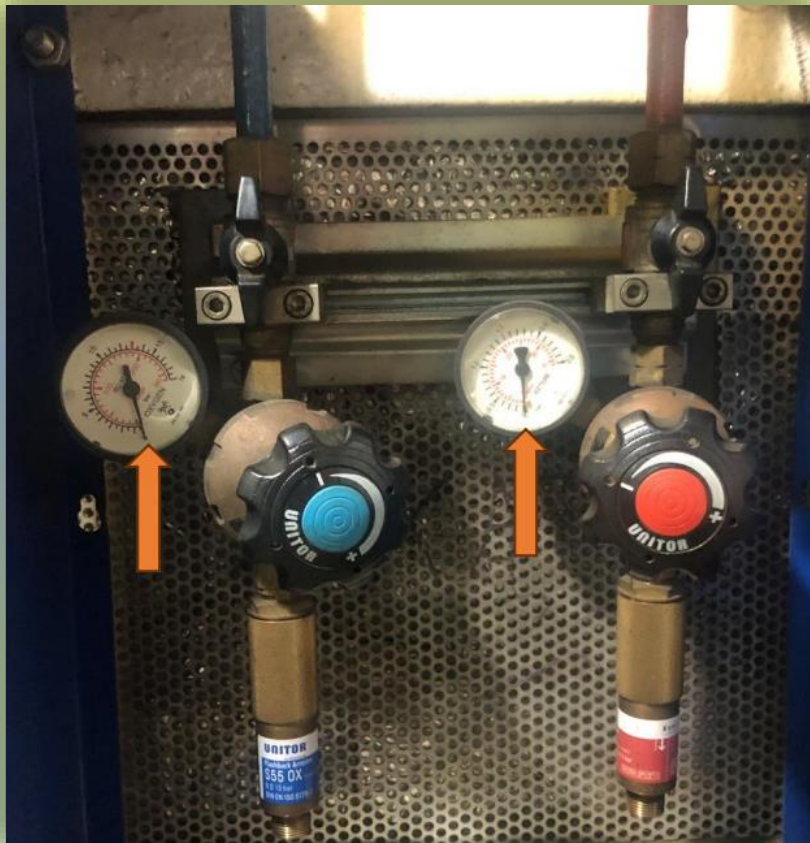


BEST PRACTICES

2- Open the butterfly valves of acetylene and oxygen in the gas welding station at workshop, now the line is depressurizing.



3- Look at the pressure gauges in the gas welding station, when the pressure is zero it means the line is depressurized.



BEST PRACTICES

4- Close the butterfly valves at gas welding station.



These simple steps can avoid some risky situations and help to keep safety in working areas at the ship.



BEST PRACTICES

IDENTIFYING OF OIL DRUMS WITH STENCIL NAME

Author: D/C Carlos Solana

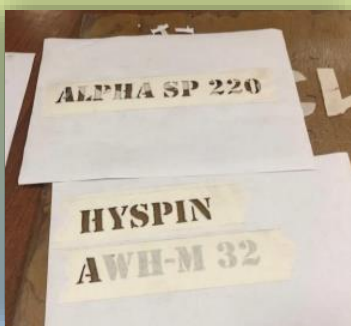
Vessel: Panagia Thalassini

In all merchant ships there is needed a strong supply of Lube Oil. All ships must to carry different types of Lube Oil for different types of specific machinery. It is very important to classify and identify the correct type of oil that is wanted to be used, considering that the use of the wrong oil into specific machinery could severely damage it and cause its break.

In the vessels the oil drums are generally named with paint-markers, but in sea conditions and ship work conditions these names usually don't last more than 1 month, causing that great quantity of oil are wasted and never used.

To avoid that, it is best practice to identify the drums with the stencil technique. This technique consist on printing the name of the specific oil with the WORD font "stencil". Then you cut the words in a paper, put the paper on the drum and fill the words with paint.

This technique allows that the name of the oil drums last so much longer, avoiding the unnecessary wasting of lube oil and making the company saving money.



In this photos we can see the process of the Stencil technique and the final result.

BEST PRACTICES

PROTECTING OUR SECURITY

Author: D/C Ana Pacheco

Vessel: Panagia Thalassini



Security is fundamental for vessels, vulnerable areas should have additional control measures for mitigating risks.

To reduce the likelihood of threat at first deck, which is one of the most accessible, I consider as a best practice to keep sealed these windows fastened with numbered security seals to make sure they stay closed at all times and unauthorized use prevented.



BEST PRACTICES

1. 'DO NOT OPEN' poster should be placed in every window to let the crew know that it cannot be opened without master consent and not following this order have consequences.

DO NOT OPEN

ONLY IN CASE OF EMERGENCY

UNDER MASTER ORDERS

1. Sealed windows must be included in security seal log with their seal numbers accordingly.



1. List of locations BP to be applied: Officer's messroom, Officer's dayroom, Crew's messroom and Galley.



BEST PRACTICES

HOW TO REFILL FIRE EXTINGUISHER

Author: 2/O Antoni Roig

Vessel: Panagia Thalassini

Since we have on board rechargeable powder fire extinguishers and all spare parts needed to do it, it would be a good practice to have a guide on how to refill an extinguisher. a clear procedure with few steps followed by pictures.

This procedure should be inside the locker where the spares are located and to be added in the company training manuals around the vessel, so entire crew could familiarize about the procedure.

Fire extinguishers need to be recharged after each use – even if they aren't empty – to ensure that there will be enough pressure and suppressant agent to properly extinguish another fire. they should also be recharged if they become damaged, or periodically throughout their lifespan.

Been more cost-effective to refill a rechargeable product than to buy a new, disposable one each time there is a fire emergency.

a best practice created in Panagia Thalassini but could be applied to other vessels of the company using chargeable extinguishers. being a very useful tool for all officers already on board and the new ones to come as could be cadets.

HOW TO REFILL FIRE EXTINGUISHER

1ST STEP



- Before unscrew the upper part of the extinguisher make sure to empty and depressurize your fire extinguisher completely until nothing comes out when you squeeze the handle.

BEST PRACTICES



- Unscrew the upper part and pull up the entire assembly which it comes with the co2 cartridge and pvc tube included, carefully due to is quite fragile



- Place the safety pin to prevent push the knob before install the new co2 cartridge



- Check for any signs of corrosion and damage as you do this

2ND STEP



- With original spares ready:
- O-ring kit
- Safety pin
- Co2 cartridge
- Pvc tube

BEST PRACTICES



- Replace o-ring if the old one is not in good condition.

3RD STEP



- Unscrew carefully the used co2 cartridge



- Install the new co2 cartridge

4TH STEP



- Refill the cylinder with a 6kg quchemical powder bag. recommended to do it in an open area and to leewind, to prevent the spread of the powder.

BEST PRACTICES

5TH STEP



- Place back the operating valve already assembled (which includes the hose port, discharge levers with pushing knob, co2 cartridge and pvc tube) from the top of the cylinder.



- Placed it right in the middle and with special care to not break the pvc tube
- Help your self with a teflon hammer to gently shake the powder

6TH STEP



- Tight up the fire extinguisher and put back the tag to safety pin

BEST PRACTICES

MIND YOUR HEAD

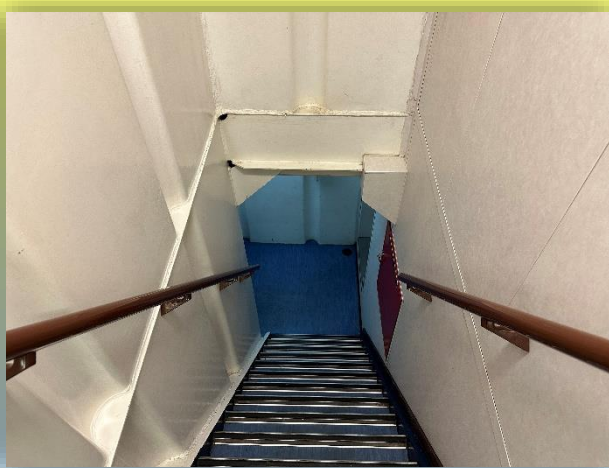
Author: D/C Ana Pacheco

Vessel: Panagia Thalassini

Many years ago, the London tube; the subway system, created a slogan reminding people to look down and step carefully between the platform and the train. It's become such a symbol of London that we see not only the mind the gap symbol on t-shirts but memes of all kinds to "mind the... something".

Here at Panagia Thalassini I found at the galley going stairs down to provision store room, a suitable place to put the slogan. Where? up, to not hit your head while you are going the stairs down.

As a best practice I decided to put the slogan 'mind your head' as is appreciable at the photo. Accompanied to the slogan I also placed an adhesive warning tape, with the purpose to make it more visible.



BEST PRACTICES

PRODUCTS NEAR TO EXPIRE BASKET

Author: D/C Bryan Pineda

Vessel: Panagia Thalassini

Food on board is one of the most important goods. However, many times some products are stored in a drawer or hidden due to new products arrival and unfortunately causing the expiration of these products.

The expiration of food is a great disadvantage for the ship because it represents a loss of products and not being able to be consume. It also represents an economic loss that must be reduced.

To avoid this, it should be considered products with a close expiration date to use them and give them a use before getting rid of them.



The idea to prevent this is simple but effective. It consists of using a recycled basket of previous products with a sign indicating where to deposit products that are near to their expiration date, so in this way have this products located to use them before they are wasted.



BEST PRACTICES

To conclude, the basket can be very useful tool in the provision store because in addition to being able to put products that are going to expire, you can also put old products that after receiving a supply, they can remain at the back of the shelf for use them as soon as possible. Resulting all this in significant savings.



BEST PRACTICES

PURPOSE OF COLOR-CODING FIRE HOSES ON BOARD

Author: 2/O Antoni Roig - D/C Bryan Pineda

Vessel: Panagia Thalassini

There is a purpose to choosing a colour for fire hoses. the colour of a fire hose can indicate its purpose, which can help firefighters quickly and easily identify the correct hose for a specific task. this purpose is commonly known at shore by firefighters. therefore, we thought to implement it on board at Panagia Thalassini. could be applicable to other company vessels since will be quite practical to differentiate our fire hoses.

As is indicated at SOLAS chapter ii-2, shall, together with any necessary fittings and tools, be kept ready for use in conspicuous positions near the water service hydrants or connections.

Fire hoses shall have a length of at least 10 m, but not more than:

1. 15 m in machinery spaces.
(example: engine room, pump room, bosun store, steering gear room)
2. 20 m in other spaces and open decks; and
3. (example: inside accommodation, open deck if your ships max breadth is less then 30m)
4. 25 m for open decks on ships with a maximum breadth in excess of 30 m.

Since we have on board almost the same fire hoses stations with the same fittings at both spaces (machinery and deck), all the hoses looks very similar and is easy to get wrong at the time of secure back the hose to its station.

Consequently, in case of a real fire could be a hose of 20 meters or more at the machinery spaces and would be very long for a reduced space. otherwise, having a hose of 15 meters or less on deck, could fall short to attack an open deck fire.

BEST PRACTICES

There upon, as a best practice, we decided to mark all fire hoses on board to easy differentiate machinery spaces from open deck fire hoses.

- At machinery spaces were marked with ' M/S ' in red color
- At open deck were marked with ' O/D ' in green color

TESTING AND MARKING MACHINERY HOSES:



BEST PRACTICES



BEST PRACTICES

FREE FALL BOAT TANK MAINTENANCE

Author: 3/O Johnatan Amaral D/C Clara Cobo

Vessel: Santiago I

Introduction

According to SOLAS– Charter III – Reg. 20.6.2 the free fall boat engine must be tested weekly and monthly as well. In engine maintenance, it must be tested according to current regulations for at least 3 minutes.

Additionally, every 3 months or if not every 6 months the free fall boat must be launched and engine tested in the water.

The Matter

All this periodic maintenance represents diesel consumption; therefore, the fuel tank must be full at all the time in case of emergency following live saving appliance. The problem that arises with the tank is that it does not show the remaining amount, it can only indicate that it is empty, and to know if it is full you have to open the tank cap and check it with the help of a flashlight.



The Solution

We have calculated the consumption of diesel per month following manufacture manual and applying the period that we need to start the engine as per our maintenance, the consumption is 0.6l/month. Since there has been no evidence that the fuel tank has been refilled for a long time, we propose creating a record in which the date that the maintenance was carried out appears and if the tank was refilled, this will provide greater security when doing so and to comply with SOLAS Chapter III Regulation 36, which requires a record for all inspections and maintenance.



THIRD QUARTER BEST PRACTICES AWARDS

Author: 2/O Antoni Roig

Best Practices:

- IBC personnel protection and safety equipment posters.
- Handover proposal for all officers

Vessel: Panagia Thalassini



Author: D/C Sara Soberon

Best Practice: Sprinkler action limit area.

Vessel: Panagia Thalassini



THIRD QUARTER BEST PRACTICES AWARDS

Author: D/C Pablo Rodriguez

Best Practice: Identification of pressure sensor's location

Vessel: Panagia Thalassini



Author: D/C Noel Carrasco

Best Practice: Appropriate marks for weather shelters

Vessel: Panagia Thalassini



VETTING FINDINGS DURING FOURTH QUARTER 2023

SIRE

| Chapter | Observation |
|---------|--|
| 2.1 | <p>#1) It was not stated on the cargo ship safety equipment certificate form E, stated under 2.1 & 2.2, what the backup system was for the vessel's ECDIS unit. It stated only "Provided".</p> <p>#2) The vessel was delivered on 14 March 2022 (keel laying date December 2015) and fitted with a ballast water treatment system. On the ballast water management certificate, issued 14 September 2022, it stated that the vessel is certified for D1 and D2, instead of only certifying for D2.</p> |
| 2.6 | <p>Master's SMS review was required to be carried out on monthly basis in parts so as to complete the full review of the system at least once every year, but the review carried out for the past 12 months had no evidence of positive/negative feedback and as observed it was simply a tick box exercise with no material substance.</p> |
| 5.5 | <p>There was no evidence that the insulation gloves in the switchboard room (ECR) and emergency generator room had been periodically tested for air leaks and a dielectric (insulation) test as recommended by IEC 60903 standards 6 monthly.</p> |
| 5.26 | <p>The oxygen and acetylene hoses in the workshop were fitted on both sides, for the connection to the torch and the regulators, with re usable worm drive clamps, the OCIMF recommended BCGA CP 7 Rev. 8 (2018) (British Compressed Gases Association Code of Practice 7 item # 7.3) is indicating that fittings must be retained with suitable clips or ferrules and that re-usable worm drive clamps should not be used.</p> |
| 5.26 | <p>There was no evidence that regulators for oxygen and acetylene cylinders were inspected annually and replaced or refurbished on a 5-year basis or as per manufacturer's instructions.</p> |
| 10.32 | <p>Alarm monitoring screen in ECR was displaying an active common alarm in the system for main engine general since 13-Jul-2023.</p> |

VETTING FINDINGS DURING FOURTH QUARTER 2023

CDI

Chapter **Observation**

- 1.1.43 (D)** Port State Authority - Transport Canada.
Place of Inspection - Port Moody.
Date of detention - 24 Mar 2023.
Twenty deficiencies related to below categories rectified were the grounds for detention.
Emergency Systems - Enclosed space entry and rescue drills.
ISM, related deficiencies.
MLC, 2006 Conditions of employment - Wages.
Pollution prevention - MARPOL Annex I - Oil filtering equipment.
Propulsion and auxiliary machinery - Operation of Machinery.
Safety of Navigation - Nautical Publications
- 1.2.15 (R)** Any other document as required in the vessel's SMS Plan: Marpol Annex VI & NTC 2008, 2023 Edition was not available on board.
- 1.4.9 (R)** MO issued on 24 Mar 2023 was related to Monorail Provision Crane to be re-instated and certified by Bureau Veritas following replacement of lower beam.
- 5.4.3 (S)** - Tank cleaning heater: Tank cleaning sea water heater control for steam automatic valve was not in order.
- Cargo heating pipelines: Main deck steam line flanges (several nuts & bolts) were corroded and wasted.
- 6.1.14 (D)** M/E Xhead Scavenge Drain sample report dated 19 Jan 2023 was showing Alert. Results were based on tests performed, indicate iron wear (Fe & MFA) is outside OEM normal limits for all units for VLASFO operation and 40BN cylinder oil. Sample is landed annually.
M/E hydraulic power pack 1 report dated 22 May 2023 was showing Alert.
Regarding particle count the oil does not meet OEM cleanness.

VETTING FINDINGS DURING FOURTH QUARTER 2023

CDI

Chapter **Observation**

7.1.30 (R) See observation raised under 1.4.9.

8.2.27 (S) Fixed gas detection system was erratic showing fault at times in CCR 8 Wheelhouse Panels.
Reportedly due to pipe choked of muddy water.
Risk assessment and other procedures followed were use of portable gas instruments for ballast tanks and void spaces.
Records established of Nov 2023 did not verify its manual or by fixed gas detection.

8.2.36 (R) Cargo manifold areas were not protected by an appropriate handrail of at least 1 m and including a midrail.

11.1.18 (S) The vessel maintained a Ballast Water Records Log of all Operations in an In-House format in compliance with all relevant regulations, this log is kept in consecutive numbered pages and the Inspector agreed that was properly filled and signed, the Inspector observation comes from the fact it was not in a notebook format with pages glued together, which is not a criterion established in any regulation but in the Inspector criteria.

This log has been in used for the last 4 years in all fleet vessels and has been review in each inspection the vessel had, including Port State Controls without any remark.

In our humble opinion this observation should have not been raised.

SECURITY

INTERIM INDUSTRY TRANSIT ADVICE, SOUTHERN RED SEA, AND GULF OF ADEN – 15 DECEMBER 2023

SITUATION

Houthi rebels in Yemen have continued to attack international shipping. After the Houthi forces hijacked a car carrier on 19 November 2023, further attacks by armed skiffs, drones or anti-ship missiles have occurred. Houthis have demanded vessels to head for the Houthi-controlled port of Hodeida where hijacking and hostage-taking might follow. Military sources indicate that Houthi have also been masquerading as Yemeni Coastguard officials.

It had appeared that Houthis are threatening vessels they believe as having direct affiliation / links with Israel, Israeli nationals or ships directly associated with the Saudi-led coalition involved in the Houthi conflict with the Yemeni government. However, information related to vessels involved in more recent attacks did not indicate any immediate affiliation with Israel, Israeli nationals, nor links to the conflict.

The Houthi's information source and accuracy is not known, ships should maintain a heightened awareness for potential collateral damage when transiting the region and disregard Houthi demands to divert course.

Ships with AIS switched on and off have been attacked. Switching off AIS makes it marginally more difficult to track a ship but may also hinder the ability of the military to provide support or direct contact. International Maritime Organization (IMO) Circular A1106(29) para 22 outlines the use of AIS. It states that, "If the master believes that the continual operation of AIS might compromise the safety and security of his/her ship or where security incidents are imminent, the AIS may be switched off." Limiting the information in AIS data fields or switching off AIS could make a ship harder to locate but it is unlikely to ultimately prevent an attack. Limiting AIS data to the mandatory fields and omitting the next port of call (NPOC) could be considered.



SECURITY

THREAT CONSIDERATIONS

In the past, Houthi forces have attacked merchant shipping using antiship missiles, waterborne improvised explosive devices (WBIED), and unmanned aerial vehicles (UAV).

Furthermore, they have laid mines to protect port entries for ports under their control, and on rare occasion such mines have become detached from their tether and have drifted into the traffic lanes.

The current maritime threat from the Houthi forces is greater in vicinity of the Yemeni Red Sea coastline where they are present.

While the airborne threat from helicopters cannot be ruled out during hours of dark-ness it is probably greater during daylight hours where targets are more easily identi-fied and attacked/boarded. The challenge of visually detecting and classifying small contacts at night, such as a water-borne improvised explosive devices (WBIED), remains.

Recent attacks using drones and anti-ship missiles have also been carried out during hours of darkness. Maintaining lookouts during the entire passage, regardless of tim-ing, is necessary.

Ship operators which have called, or plan to call, Israeli ports should limit information access. Published information could be used by the Houthis.

As per BMP 5, ships planning a passage through the Southern Red Sea and Gulf of Aden should conduct a thorough ship and voyage specific threat and risk assessment considering any additional advice from their flag State. These assessments should in-clude a specific update with input from official sources such as UKMTO for the period of operation, the latest update from relevant shipping associations, ownership details, and trading history of the ship in the last 3 years.



SECURITY

ROUTING CONSIDERATIONS

Ship owners, operators, managers, and staff should regularly evaluate the risks to their ships, including navigation and collision avoidance, and plan routes accordingly.

The Master retains ultimate responsibility for ensuring vessel safety and security.

Note that the Bab el-Mandeb Strait is narrow and when passing north bound, ships within the Traffic Separation Scheme will be no more than approximately 7 nautical miles from the Yemeni coastline.

The industry recommendation to use the Maritime Security Transit Corridor (MSTC) re-mains unchanged in light of the recent attack. The MSTC is the amalgamation of the Internationally Recommended Transit Corridor (IRTC), the Bab el-Mandeb Traffic Sepa-ration Scheme and the Traffic Separation Scheme West of Hanish Islands, and a two-way route directly connecting the IRTC and the Bab el-Mandeb Traffic separation Scheme.

VESSEL HARDENING CONSIDERATIONS

Hardening measures are described in BMP5 and advice on the website www.maritimeglobalsecurity.org can be applied in areas of the ship where insertion of armed men by helicopter may be likely. The use of citadels / safe areas has proven to be successful in preventing the hijackers taking over the control of the ships. This has also provided valuable time for the Naval vessels within the areas to arrive for assis-tance. Use of citadel requires thorough preparation and understanding of advantages and pitfalls – the guidelines in BMP5 applies.

CONSIDERATIONS REGARDING ARMED GUARDS

Complete a thorough risk assessment when considering the use of armed guards. Caution should be taken when managing their employment and rules of engagement should consider the risk of escalation.

REPORTING

In the event of any incident, suspicious activity, or concern:

- Report any suspicious activity or concerns to the UKMTO at watchkeepers@ukmto.org +44 2392 222060
- If under attack, please contact US Naval Forces in Bahrain directly on +973 1785 3879

HEALTH

DENGUE - GLOBAL SITUATION

Description of the Situation

Global Overview

Current situation

The global incidence of dengue has markedly increased over the past two decades, posing a substantial public health challenge. From 2000 to 2019, the World Health Organization (WHO) documented a ten-fold surge in reported cases worldwide increasing from 500 000 to 5.2 million. The year 2019 marked an unprecedented peak, with reported instances spreading across 129 countries.

After a slight decline of cases between the year 2020-2022 due to the COVID-19 pandemic and lower reporting rate, in 2023, an upsurge in dengue cases have been observed globally, characterized by a significant increase in the number, scale, and simultaneous occurrence of multiple outbreaks, spreading into regions previously unaffected by dengue.

Dengue transmission is cyclic and large outbreaks every 3-4 years can be expected. During the COVID-19 pandemic we saw moderate transmission of dengue in some regions and low transmission in others leading to an accumulation of people without immunity to certain dengue virus serotypes. However, the data on the circulating dengue serotypes is limited.

Since the beginning of 2023, ongoing transmission, combined with an unexpected spike in dengue cases have resulted in close to a historic high of over five million cases and more than 5000 dengue-related deaths reported in over 80 countries/territories and five WHO regions: Africa, Americas, South-East Asia, Western Pacific and Eastern Mediterranean Regions globally (Figure 1). Close to 80% of these cases, or 4.1 million, have been reported in the Region of the Americas. Dengue is the most widespread arbovirus and causes the highest number of arboviral disease cases in the Region of the Americas, with cyclic epidemics recurring every 3 to 5 years. In addition, clusters of autochthonous dengue have been reported in the WHO European Region. However, these numbers are likely an underestimate of the true burden as most of the primary infections are asymptomatic and dengue reporting is not mandatory in many countries.

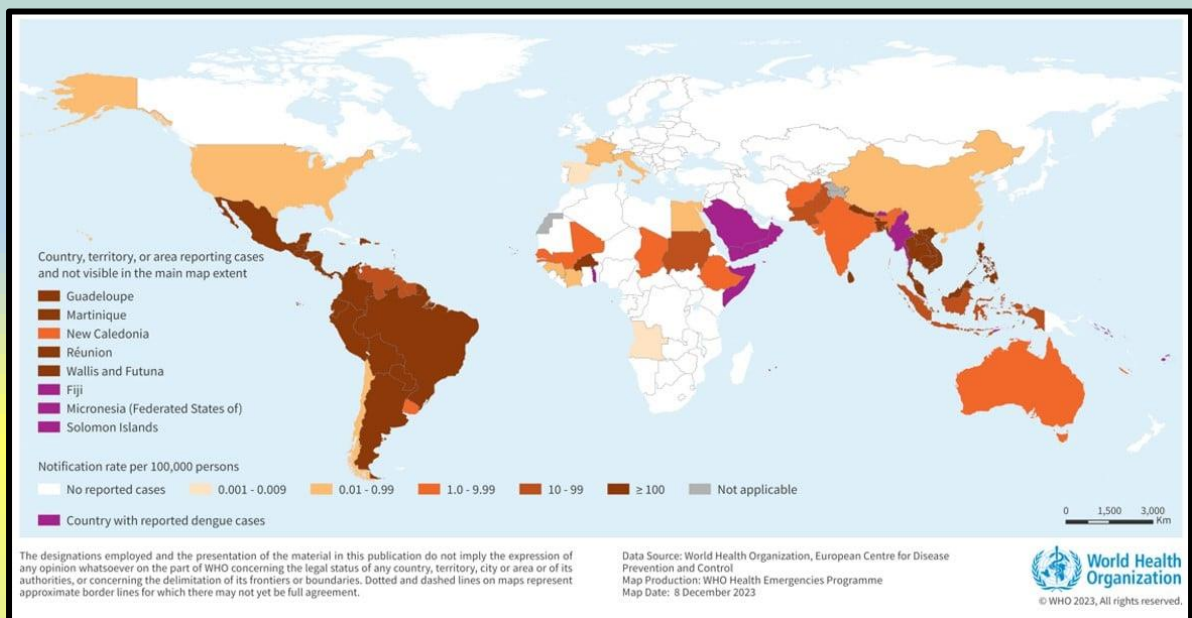
Several factors are associated with the increasing risk of spread of the dengue epidemic including, the changing distribution of the vectors (chiefly *Aedes aegypti* and *Aedes albopictus*), especially in previously dengue naïve countries; the consequences of El Nino phenomena in 2023 and climate change leading to increasing temperatures and high rainfall, humidity among others; fragile health systems in the midst of COVID-19 pandemic, political and

HEALTH

financial instabilities in countries facing complex humanitarian crises and high population movements. These factors also challenge the response to the epidemic and the risk of further spread to other countries. Weakness in the surveillance systems in many affected countries may have led to delayed reporting and response and missed identification of symptoms, contributing to increased severe dengue outcomes.

WHO has assessed the risk to be high globally considering the increasing risk of transmission and the upsurge of cases and deaths.

Figure 1: Countries/territories/areas reporting autochthonous dengue cases (November 2022- November 2023) *



* Based on most recent available data (the data should be interpreted considering the differences in reporting rates and case definitions between the regions).

Regional overview

WHO Region of Africa:

Africa is among the top four regions most affected by arboviral diseases, including yellow fever, dengue, chikungunya, O'nyong nyong, Rift Valley fever, and Zika. In 2023, 171 991 dengue cases have been reported in countries in the region and 753 deaths. Evidence of dengue circulation has been detected in local populations and/or among travelers returning from more than 30 African countries.

Outbreaks have been reported from 15 of the 47 countries including Benin, Burkina Faso, Cape Verde, Chad, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Mali, Mauritius, Niger, Nigeria, São Tomé and Príncipe, Senegal and Togo. The outbreaks in most of these countries began in 2023, except in São Tomé and Príncipe, where it was a continuation of an outbreak that started in April 2022. As of 19 December 2023, outbreaks are still ongoing in 11 countries and were declared over in Chad, Guinea, Mauritius, and São Tomé and Príncipe.

HEALTH

The most affected country in the region in 2023 is Burkina Faso, experiencing a significant increase in dengue cases compared with the same periods in 2021 and 2022. As of 18 December, the cumulative number of cases reported in the country for 2023 is 146 878 suspected cases, including 68 346 probable cases (positive rapid diagnostic test) and 688 deaths among suspected cases, representing a case fatality rate of 0.5%.

The burden of dengue in Africa is not well understood due to i) similarity of common, non-specific clinical symptoms of the disease with malaria and other tropical febrile illnesses; ii) limited laboratory capacity for timely detection and confirmation of dengue, which is crucial for detecting and reporting cases and preventing its spread; and iii) inadequate surveillance and limited case reporting, especially for dengue.

Efforts are ongoing to better understand the transmission dynamics of dengue and other arboviruses in the region. The WHO Regional Office for Africa has endorsed the Framework for the integrated control, elimination and eradication of tropical and vector-borne diseases in the African Region 2022-2030. Equally, the Regional Office has also drafted the Framework for implementation of the Global Arbovirus Initiative by targeted Member States in the WHO African Region.

WHO Region of the Americas:

Between 1 January 2023 and 11 December 2023, a total of 4.1 million suspected dengue cases (cumulative incidence of 419 cases per 100 000 population), including 6710 severe cases (0.16% of suspected cases) and 2049 deaths (CFR 0.05%) were reported from 42 countries and territories in the Region of the Americas, with 15 countries reporting active outbreak. Of the total number of dengue cases until 12 November 2023 (EW 48 of 2023), 1 895 122 (45%) were laboratory confirmed.

Currently, 46 countries and territories systematically report, through the Health Information Platform for the Americas (PLISA), on a weekly basis, the total number of cases, incidence, number of severe cases, number of deaths and lethality due to dengue, as well as entomological surveillance data. As of EW 48, Brazil has reported the highest number of suspected cases in the Region (n = 2 909 404; 1359 cases per 100 000 population), followed by Peru (n= 271 279; 813 cases per 100 000 population), and Mexico (n = 235 616; 179 cases per 100 000 population). In terms of severe dengue, Colombia reported the most cases (1504; 1.35% of cases), followed by Brazil (1474; 0.05% of cases), Mexico (1272; 0.54% of cases), Peru (1065; 0.39% of cases), and Bolivia (640; 0.44% of cases).

HEALTH

Although dengue is endemic in most countries of South America, Mexico and Central America, and the Caribbean countries, the second half of 2023 has witnessed an alarming increase in cases, with cumulative cases for the year surpassing all previous yearly totals and in some countries extending beyond historically affected areas of transmission. Dengue cases have increased in the Americas over the past four decades, from 1.5 million cases from 1980 to 1989 to 17.5 million in 2010-2019. Before 2023, the highest historical dengue caseload was in 2019, with over 3.18 million cases, 28 208 severe cases, and 1823 deaths (CFR 0.06).

DENV is the most widespread arbovirus and causes the highest number of arboviral disease cases in the Region of the Americas, with cyclic epidemics recurring every 3 to 5 years. Approximately 500 million people in the region are at risk of dengue infection today. *Ae. aegypti*, the vector mosquito for dengue, is widely distributed in the Americas, only Canada is free from dengue and its vector. In Uruguay, where *Ae. Aegypti* is present, limited autochthonous transmission was last reported in 2016, and only imported cases have been reported since then.

All four DENV serotypes (DENV-1, DENV-2, DENV-3 and DENV-4) are currently circulating in the Americas. DENV-3 and DENV-4 are being detected more frequently in 2023 after several years of predominant detection of DENV-1 and DENV-2. Nevertheless, nine countries are reporting the co-circulation of all four dengue serotypes. Simultaneous circulation of all these serotypes has been detected in Brazil, Colombia, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama, and Venezuela. The Arbovirus Diagnosis Laboratory Network of the Americas (RELDA as per its acronym in Spanish) has been strengthened to face the introduction of new dengue serotypes and the re-emergence of other arboviral diseases, such as chikungunya, Zika, and West Nile virus, all of which are currently circulating in the region alongside dengue. The main objective of the network is to ensure efficient laboratory surveillance and robust installed capacity to respond to outbreaks and epidemics.

WHO Eastern Mediterranean Region:

Dengue and severe dengue epidemics were first reported in the Region in 1998, and since then, their frequency and geographical spread have increased, with outbreaks occurring in all nine endemic countries: Afghanistan, Djibouti, Egypt, Oman, Pakistan, Saudi Arabia, Somalia, Sudan, and Yemen.

Among these are fragile, conflict affected and vulnerable countries such as Afghanistan, Pakistan, Sudan, Somalia and Yemen. The outbreaks are exacerbated due to disruption of health services (Sudan), fragile health systems (Afghanistan, Somalia, Sudan, Pakistan and Yemen), mass population movements, poor water and sanitation infrastructure, and

HEALTH

recurring natural disasters such as floods affecting Somalia, Sudan, Pakistan, and Yemen, along with earthquakes in Afghanistan. Outbreaks are also reported in middle- and high-income countries such as Egypt, Oman and Saudi Arabia due to climate change leading to unusual rainfalls. Pakistan (n= 20 072), Saudi Arabia and Oman have reported the highest number of confirmed cases thus far in 2023.

During these epidemics, all four serotypes of dengue virus were known to circulate in the Region. *Ae. aegypti* is the predominant and primary vector transmitting dengue in the EMR endemic countries. More recently, Bahrain, Iran, and Qatar have reported the presence of *Ae. aegypti*, although no local transmission of dengue has been documented. Additionally, presence of the secondary vector of dengue, *Ae. albopictus*, has also been reported from ten EMR countries (Afghanistan, Iran, Jordan, Lebanon, Morocco, Oman, Pakistan, Palestine, Syria and Tunisia).

The effectiveness of response measures is hindered by several factors including i) constrained laboratory capacities ii) challenges in accessing healthcare iii) shortages of human resources iv) limited and inconsistent vector surveillance v) insecticide resistance, vi) poor community engagement and health education vii) a fragmented surveillance system. vii) The ongoing armed hostilities in many Eastern Mediterranean Region countries further compound the complexities of response efforts.

WHO European Region:

Dengue is not endemic in the WHO European Region and cases are mainly travel-related; however, since 2010, there have been reports of autochthonous cases in a number of countries in the region, including Croatia, France, Israel, Italy, Portugal and Spain. In 2018, the year with the most comprehensive data available, a total of 2500 cases of dengue were reported to WHO through the regional annual surveillance data collection mechanism with Germany, France, and the United Kingdom contributing the majority of cases. The vast majority of these cases were imported. However, it should be noted that data completeness remains challenging.

Between 1 January and 5 December 2023, sporadic autochthonous cases and outbreaks have been reported in three countries: Italy (n = 82), France (n = 43) and Spain (n = 3). Routine testing for dengue in Member States of the WHO European Region is not common unless there is a travel history and clinical suspicion, hence the actual numbers of dengue cases in 2023 is likely to be underestimated. One death of an imported, travel-related case was reported in Italy; no additional deaths have been reported in European countries in 2023 to date.

HEALTH

The *Ae. albopictus* mosquito, which is the main vector of dengue virus in Europe, is established in several Southern European countries. *Ae. albopictus* mosquitoes have been detected further north and west in the past ten years and it has capacity to hibernate in winter. In 2023, this mosquito species has been identified in 13 countries of the region, a notable increase from eight countries in 2013.

While cold winters prevent year-round transmission of mosquito-borne diseases, the climatic suitability for transmission of DENV in Europe is increasing, leading to floods and stagnant water pools. These create more favorable conditions for the competent vector population. *Ae. aegypti* (principal dengue vector in most countries) does not survive over winter well but has been established in Cyprus and Madeira, Portugal since 2022.

These trends can potentially lead to an increase in the number of dengue cases and possible fatalities.

Robust public health systems in many countries, including access to early diagnosis, case referral, and management of severe cases, contribute to reduced severe health impact and further disease spread for both imported and autochthonous cases.

WHO South-East Asia Region:

In the WHO Southeast Asia region, 10 out of 11 Member States are known to be endemic for dengue virus. In 2023, several countries, including Bangladesh and Thailand, have reported a notable surge in dengue cases compared to previous years. In particular, India, Indonesia, Myanmar, Sri Lanka and Thailand rank among the world's 30 most highly endemic countries.

Compared to 2022, in 2023, Bangladesh and Thailand recorded a larger number of dengue cases. By November 2023, Bangladesh experienced a substantial rise in cases reaching 308 167 compared to 62 382 reported for the entirety of 2022. Thailand saw an increase of over 300%, with dengue cases rising from 46 678 in 2022 to 136 655 in 2023 (as of 22 November 2023). During the same period, the death toll in Bangladesh rose from 281 (CFR 0.45%) to 1598 (CFR 0.52%), while in Thailand, it increased from 34 (CFR 0.07%) to 147 (CFR 0.11%). In other countries, the CFR ranged from 0.04% in Nepal to 0.72% in Indonesia. It's important to interpret these values cautiously due to variations in the case definition used across countries, with some systems primarily focused on reporting hospitalized or severe dengue cases.

HEALTH

In addition, spatial and temporal shifts in dengue patterns were observed in 2022 and continued in 2023. Nepal and Bangladesh experienced spikes in case numbers earlier than usual. Cases in Nepal shifted from the Kathmandu Valley in 2022 to the southeast Terai region and hill districts in Gandaki province in 2023. India, in 2023, experienced an increase in cases in Kerala and northeastern States bordering Bangladesh compared to the previous year.

WHO Western Pacific Region:

The Western Pacific Region continues to face a high burden of mosquito-borne arboviral diseases, particularly dengue. These diseases cause significant morbidity and mortality, especially among those unreached by quality primary health care (PHC) services.

Between 1 January 2023 to 7 December 2023, over 500 000 dengue cases and 750 deaths were reported from eight countries/territories/areas in the WHO Western Pacific Region: Australia, Cambodia, China, Lao People's Democratic Republic, Malaysia, Philippines, Singapore, and Viet Nam. The most affected countries are the Philippines, reporting 167 355 cases and 575 deaths (CFR 0.34%), and Viet Nam with 149 557 cases and 36 deaths (CFR: 0.02%). Dengue is endemic in several countries such as Cambodia, Lao People's Democratic Republic, the Philippines, and Viet Nam.

In Pacific Island countries/territories (n = 21), in 2023, dengue-like illness¹ was reported from nine Pacific countries/territories, resulting in a total of 13 339 cases, a 28% increase reported as of 30 November compared to 2022. Among the most affected are Fiji, which reported 8418 cases in 2022 and 11 522 cases in 2023, reflecting a 37% increase.

Member States with endemic transmission continue to report longer seasonal dengue epidemics with increasing magnitude and geographic spread. However, disease incidence is less reliable due to the underreporting of cases, particularly in the Pacific Island Countries and territories based on their current syndromic surveillance of dengue as dengue-like illness (DLI) reporting system. Furthermore, the reported number of deaths due to severe dengue is variable. As such, country-level and sub-national case fatality rates (CFR) may appear inconsistent.

Due to the endemicity of dengue and public health burden in the Western Pacific Region, in 2008, the Regional Committee for WPR endorsed the Dengue Strategic Plan for the Asia Pacific Region 2008-2015 (resolution WPR/RC59.R6), serving as a road map. Subsequently, in 2016, considering the growing regional trends in dengue morbidity and mortality, the Western Pacific Regional Action Plan for Dengue Prevention and Control was developed. This plan recommended a switch in strategy from outbreak

HEALTH

containment to reducing the impact of dengue on communities. There is a window of opportunity for Pacific countries/territories to improve the adherence to the existing WHO “Framework for National Surveillance and control plans for Aedes vectors” in the Pacific for non-endemic countries in the Pacific Region. Given the impact of climate change on the spread and endemicities of Arboviral diseases, establishing a comprehensive Early Warning System (EWS) that integrates climate, disease, viral/ serological, and entomology surveillance is crucial. Such a system has the potential to predict future risks in vulnerable communities.

WHO Risk Assessment

Recent data from 2023 emphasize escalated dengue outbreaks in several countries, particularly Bangladesh, Brazil, Burkina Faso, Fiji, Pakistan, the Philippines, and Viet Nam. Additionally, non-endemic countries are increasingly facing dengue as a significant public health concern. The emergence and re-emergence of dengue and its unprecedented worldwide spread are linked to various factors: i) Changing distribution and adaptation of the *Aedes aegypti* vector; ii) increased unplanned urbanization and human activities fostering conducive environments for vector-host interaction; iii) Climate change-induced shifts in weather patterns; iv) Fragile healthcare systems amidst political and financial instabilities; v) Co-circulation of multiple dengue serotypes; vi) Challenges in clinical diagnosis due to non-specific symptoms; vii) Inadequate laboratory and testing capacity; viii) Prolonged ongoing concurrent outbreaks, including COVID-19; ix) Lack of specific treatment for dengue; x) Limited behavioral data available on community risk perceptions, awareness and health seeking behaviors; xi) Lack of community centered approach and RCCE resources to support engagement and mobilization of local communities in vector control activities; xi) Insufficient vector surveillance and control capacities and, xii) Lack of coordination among stakeholders, chronic underfunding, low donor interest and xii) large scale movement of people and goods.

The expansion of DENV beyond its endemic transmission areas presents additional challenges. A significant population that is immunologically naïve to the current virus circulating, increasing the risk of outbreaks. Moreover, people in these areas might lack awareness of dengue warning signs, leading to potential delays in seeking health care which is critical to reducing mortality from severe disease. Accessibility challenges to medical facilities, compounded by limited geographical access, heighten the difficulty in accessing basic healthcare services. These challenges are aggravated by stockouts of essential supplies for prevention and control, laboratory diagnostic reagents, and the need for ongoing training of healthcare workers.

HEALTH

These factors, along with others, including financial crises, mass migration of internally displaced persons (IDPs) and refugees, and longstanding developmental inadequacies, have deprived large populations across all continents of adequate healthcare, consequently increasing their vulnerability to dengue. However, it is important to note that the distribution of dengue risk varies significantly across regions, countries, and within countries.

Based on all the above WHO has assessed the risk at global level as high. Following the risk assessment and an internal grading process, WHO Regional Offices have agreed on priority interventions to implement in support of Member States.

Dengue prevention and outbreak response involves several agencies in the public health sector. Addressing these challenges requires a multidisciplinary and multisectoral integrated approach, especially at national level to achieve its goal of reducing the impact on public health. The strain on epidemic response capacity due to simultaneous concurrent outbreaks coupled with political crises highlights the need for robust emergency response mechanisms and strengthened collaboration among stakeholders. The global lack of resources, including shortages of good quality dengue diagnostic kits for early detection, lack of trained clinical and vector control personnel, and community awareness remain a critical obstacle to an effective response. While coordination efforts with global health organizations like WHO and other partners strive to set common priorities and analyses, the need for continuous support to affected countries and enhanced collaboration is imperative.

WHO Advice

Effective vector control measures:

Effective vector control is key to the prevention and control of the DENV. Vector control activities should target all areas where there is a risk of human-vector contact, such as residences, workplaces, schools, and hospitals. WHO promotes Integrated Vector Management (IVM) to control Aedes species. IVM should include removing potential breeding sites, reducing vector populations, and minimizing individual exposure. This should involve vector control strategies for larvae and adults (i.e., environmental management and source reduction), especially monitoring water storage practices, draining and cleaning household water storage containers weekly, larvicide in non-potable water using WHO-prequalified larvicides at correct dosages, distribution of insecticide-treated nets (ITNs) for fever/dengue inpatients to contain spread of the virus from health facilities. Indoor space spraying for rapidly containing dengue-infected mosquitoes may be challenging to deliver in densely populated areas.

HEALTH

The Global Arbovirus Initiative promotes coordination and collaboration among multisectoral partners, an integrated vector management approach and sustained control measures at all levels. Its guiding principle is to harmonize prevention, surveillance (entomological and epidemiological) and case management with existing health systems, such that they are sustainable, cost-effective and ecologically sound.

Personal Protective Measures:

Personal protective measures during outdoor activities include topical repellents to exposed skin or the treatment of clothing and using long-sleeved shirts and pants. Additionally, indoor protection can include the use of household insecticide aerosol products, or mosquito coils during the day. Window and door screens can reduce the probability of mosquitoes entering the house. Insecticide-treated nets offer good protection to people against mosquito bites while sleeping during the day. Since Aedes mosquitoes are most active at dawn and dusk, personal protective measures are recommended particularly at these times of day. Personal protection measures and mosquito control should also cover workplaces and schools since the vectors are day-biting mosquitoes.

Entomological Surveillance:

Entomological surveillance should be undertaken to assess the breeding potential of Aedes mosquitoes in containers and monitor insecticide resistance to help select the most effective insecticide-based interventions.

Case management:

There is no specific treatment for dengue infection. However, early detection and access to appropriate healthcare for case management can reduce mortality, as can rapid detection of severe dengue cases and timely referrals to tertiary healthcare facilities.

Most people with dengue have mild or no symptoms and will get better in 1–2 weeks.

Individuals who are infected for the second time are at greater risk of severe dengue. Severe dengue symptoms often come after the fever has gone away such as:

- severe abdominal pain
- persistent vomiting
- rapid breathing
- bleeding gums or nose
- fatigue

HEALTH

restlessness
blood in vomit or stool
being very thirsty
pale and cold skin
feeling weak.

People with these severe symptoms should get care right away.

Enhanced case surveillance:

Case surveillance should be enhanced in all affected countries and globally. Where feasible, resources should be allocated for the strengthening of surveillance to determine the overall dengue burden (i.e., including outpatient cases), counting severe and fatal cases, and for the confirmation and sub-typing of the dengue virus.

Operational research and learning from successful examples:

Countries must learn and adopt successful examples of effective case management, prevention, community engagement, and vector control of dengue and other arboviruses through heightened research projects, particularly given the recent WHO recommendations on clinical trials.

Ministries of Health and partners should closely review local interventions to accept and recommend them for public health programmes for early adaptation to reduce the growing health impact of dengue.

WHO does not recommend that any general travel or trade restrictions be applied to countries/territories/areas based on the available information.

ENVIRONMENTAL

International Maritime Organization (IMO) adopts revised strategy to reduce greenhouse gas emissions from international shipping.

Member States of the International Maritime Organization (IMO), meeting at the Marine Environment Protection Committee (MEPC 80), have adopted the 2023 IMO Strategy on Reduction of GHG Emissions from Ships, with enhanced targets to tackle harmful emissions.

The revised IMO GHG Strategy includes an enhanced common ambition to reach net-zero GHG emissions from international shipping by or around, i.e. close to, 2050, a commitment to ensure an uptake of alternative zero and near-zero GHG fuels by 2030, as well as indicative check-points for 2030 and 2040.

IMO Secretary-General Kitack Lim said:

"The adoption of the 2023 IMO Greenhouse Gas Strategy is a monumental development for IMO and opens a new chapter towards maritime decarbonization. At the same time, it is not the end goal, it is in many ways a starting point for the work that needs to intensify even more over the years and decades ahead of us. However, with the Revised Strategy that you have now agreed on, we have a clear direction, a common vision, and ambitious targets to guide us to deliver what the world expects from us."



Member States of IMO, meeting at the Marine Environment Protection Committee (MEPC 80), adopted the 2023 IMO Strategy on Reduction of GHG Emissions from Ships.

ENVIRONMENTAL

"Above all, it is particularly meaningful, to have unanimous support from all Member States. In this regard, I believe that we have to pay more attention to support developing countries, in particular SIDS and LDCs, so that no one is left behind," he said.

IMO is the United Nations specialized agency with responsibility for developing global standards for shipping and supporting countries to implement those rules.

Elements of the Strategy are outlined below:

2023 IMO Strategy on Reduction of GHG Emissions from Ships

The 2023 IMO Strategy on Reduction of GHG Emissions from Ships (the 2023 IMO GHG Strategy) represents the continuation of work by IMO as the appropriate international body to address greenhouse gas (GHG) emissions from international shipping.

Vision

IMO remains committed to reducing GHG emissions from international shipping and, as a matter of urgency, aims to phase them out as soon as possible, while promoting, in the context of this Strategy, a just and equitable transition.

Levels of ambition

Levels of ambition directing the 2023 IMO GHG Strategy are as follows:

.1 carbon intensity of the ship to decline through further improvement of the energy efficiency for new ships

to review with the aim of strengthening the energy efficiency design requirements for ships;

.2 carbon intensity of international shipping to decline

to reduce CO₂ emissions per transport work, as an average across international shipping, by at least 40% by 2030, compared to 2008;

.3 uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources to increase

uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources to represent at least 5%, striving for 10%, of the energy used by international shipping by 2030; and

ENVIRONMENTAL

.4 GHG emissions from international shipping to reach net zero

to peak GHG emissions from international shipping as soon as possible and to reach net-zero GHG emissions by or around, i.e. close to 2050, taking into account different national circumstances, whilst pursuing efforts towards phasing them out as called for in the Vision consistent with the long-term temperature goal set out in Article 2 of the Paris Agreement.

Indicative checkpoints

Indicative checkpoints to reach net-zero GHG emissions from international shipping:

.1 to reduce the total annual GHG emissions from international shipping by at least 20%, striving for 30%, by 2030, compared to 2008; and

.2 to reduce the total annual GHG emissions from international shipping by at least 70%, striving for 80%, by 2040, compared to 2008.



SAFETY

Protecting Your Eyes in the Workplace

About 2,000 U.S. workers each year sustain job-related eye injuries that require medical treatment, according to the National Institute for Occupational Safety and Health. About one-third of those injuries are treated in hospital emergency departments. Every precaution you can take could be crucial to avoiding eye trauma, vision loss and blindness. Fasika Woreta, M.D., M.P.H., director of the Eye Trauma Center at the Wilmer Eye Institute, answers some key questions to help you protect your eyes in the workplace.

What are potential eye hazards at work?

Eye hazards can take many forms with such a wide array of workplace environments.

- Sharp objects or metal striking, scraping, or penetrating the eye
- Chemical splashes
- Thermal burns to the eye and surrounding area



SAFETY

How can workplace hazards be eliminated?

It's vital that every workplace prioritize a safe environment. Here are some steps that can be taken to implement safer conditions:

- Educate and train all employees on dangers specific to your workplace.
- Install procedures that encourage safety throughout the workplace. This should include information on where protective equipment, first-aid kits and emergency eye wash stations are located.
- Ensure employees working in hazardous environments have access to and are wearing eye safety equipment at all times.
- Install barriers such as shields in areas prone to flying debris and dust.



SAFETY

How can I protect my eyes at work?

The best way to protect your eyes from hazards is to wear personal protective eyewear that best suits your work conditions at all times. Be sure to use eye protection that is not cracked or scratched in a way that impairs vision, and that fits your head and face correctly.

Eye protection options include:

- Goggles
- face shields
- safety glasses
- welding helmet
- full-face respirators

Brush away or vacuum any dust and/or objects from hair, facial area or hats before you remove your protective eyewear. Clean your eyewear after use. You should also avoid rubbing your eyes until your hands have been thoroughly washed.

It's also important to have regular eye exams — recommended every two years — to ensure your vision is in good condition to safely perform your job.



SAFETY

What should I do if my eyes have been harmed in the workplace?

In the event of a cut or injury:

- Do not attempt to remove any objects lodged in the eye.
- Do not attempt to touch, rub or apply pressure to the eye.
- Place a patch or shield over the area around your eye to protect it.
- Go to the nearest eye trauma center or emergency department.
- In the event of chemical or dust/debris exposure to the eye:
 - Find the nearest eyewash station at your workplace and flush out your eye immediately before seeking medical attention. In the event an eyewash station is not near or accessible, any source of clean water may be used.

In the event that you are hit in the eye area:

- Do not attempt to apply pressure to the eye.
- Use ice or a cold compress to reduce any swelling.
- Contact your eye doctor to discuss the injury and if additional treatment is needed.



SAFETY

How to treat 5 common eye injuries

The eyes are an amazing pair of organs that grant us the miracle of sight, yet they are so delicate and prone to injury.

Consider the impact that a loss or impairment of vision would have (or has had) on your life!

Then consider how valuable it is that you are prepared to respond with effective first aid treatment for eye injuries to minimize the potential of prolonged or permanent injury.

Common signs & symptoms of eye injuries

- bloodshot eye or surrounding bleeding
- eye pain or urge to rub
- single weeping eye
- embedded object
- blindness or blurred vision
- bruising (black eye)



First aid steps for eye injuries

NOTE: Always rest and reassure the person first and do not allow them to rub the eye. Do not attempt to remove contact lenses.

Small Foreign Body (dirt, sand, sawdust etc.)

1. If on white of the eye only – encourage them to blink to try to flush the eye or wipe gently across the eye with a wet cloth or tissue, from the inside to the outside corner.
2. Flush the eye with saline or clean running water
3. If unsuccessful, cover with sterile dressing without applying pressure and seek medical help.

SAFETY

Embedded Object

1. DO NOT remove the object!
2. Call for medical assistance
3. If possible, apply padding around the object to secure
4. Keep person warm, calm and still

Chemical or Gas Exposure

1. Flush the eye with running water or eye flush equipment
2. Cover with sterile dressing without applying pressure to the eye
3. Seek medical attention immediately

Welding Flash

A flash burn caused by intense UV light like from a welding torch or direct or reflected sunlight.

1. Apply ice for up to 20 mins
2. Cover with sterile dressing without applying pressure to the eye
3. Seek medical attention immediately

Black or Bruised Eye

1. Apply ice for up to 20 mins
2. Cover with sterile dressing without applying pressure to the eye
3. Seek medical attention immediately



Christmas 2023 Panagia Thallasini



Christmas 2023

Santiago I

