



The Pelagic Observer Program **Safety Manual**

EMERGENCY CONTACTS:

UNITED STATES COAST GUARD:

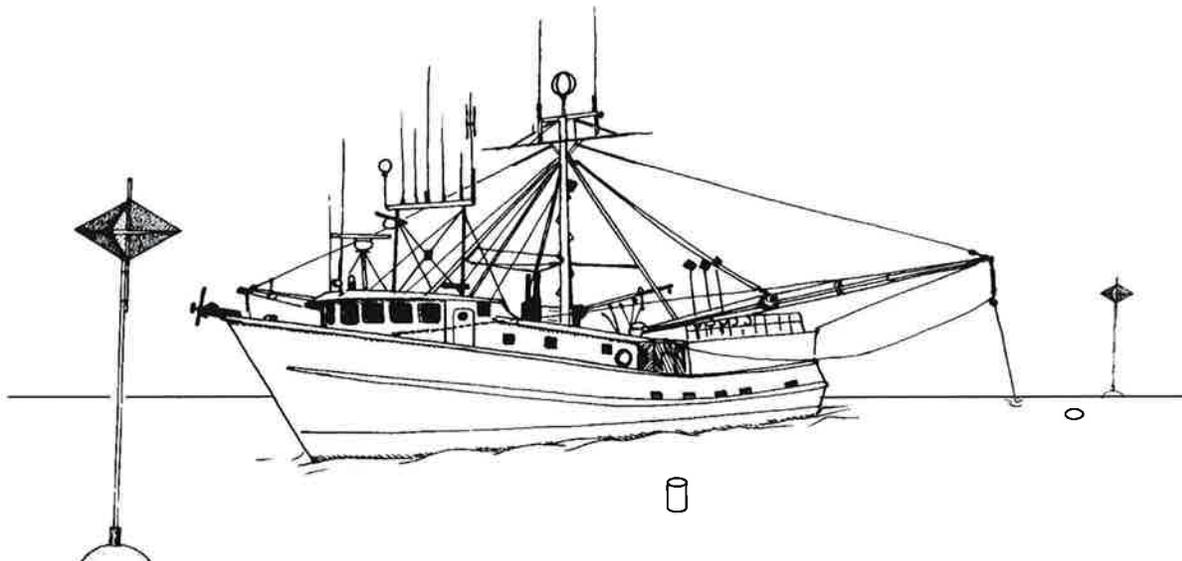
- 1) Channel 16 VHF-FM (156.8 MHz) or 2182 KHz
- 2) 757-398-6390 from cellular or satellite phone
- 3) 911 from cellular or satellite phone
- 4) Activate personal or boat EPIRB.

Pelagic Observer Program:

- 1) 1-800-858-0624 (landline or cellular only)
- 2) 305-361-4563 (satellite phone)
- 3) 305-361-4200 (SEFSC Main Desk)

IAP World Services:

- 1) 228-549-1662



Pelagic Observer Program Safety Manual

The NOAA Fisheries Pelagic Observer Program (POP) delineates safety as the most important concern for the observer occupation. While your job at sea is to collect data and samples, your first and foremost job is to stay safe and uninjured.

If you at any time feel unsafe on a vessel, either before boarding, or during the trip, do not hesitate to refuse the trip and/or have yourself removed from the vessel.

You must take responsibility for your own safety and learn as much as you can before an emergency threatens your well being. Along with the formal training you have received from the POP, use the knowledge and experience of the vessel's captain and crew for safety guidance aboard their vessel.

This manual was designed to aid in safety training and as a safety reference for observers deployed into the field. The information in this manual is not a complete guide. Observers should seek to obtain as much information as possible from multiple sources regarding personal and vessel safety.

Medical Fitness for Sea

Individuals selected for employment with the Southeast Fisheries Science Center (SEFSC), as fishery observers must be fully qualified to safely and efficiently perform the essential duties and responsibilities of their positions.

Living Conditions

Cleanliness, upkeep, safety, comfort of quarters, quality of food, and general attitude of the vessel personnel vary from vessel to vessel. Observers must be flexible and function professionally under a wide variety of living conditions. Avoid altercations with vessels Captain or crewmembers at all costs. If you feel threatened make contact with the United States Coast Guard (USCG), POP, or IAP to report such. If you are in immediate physical danger you can activate your epirob to facilitate a USCG response.

Keep yourself and your personal items and area clean at all times, doing such can help prevent the transmittal of bacteria and germs. If you feel you have come in contact with contaminated items or areas, use the supplied Staph-a-septic© ointment and Hibiclens© cleanser.

Accidents and Illness Aboard

All Accidents and Illness must be Reported within 24 Hours of Occurrence

In the event of an emergency such as an injury or serious illness requiring hospitalization, the captain should be notified, and the USCG should be contacted via radio or satellite phone. The USCG will advise you how to proceed to expedite a safe travel to shore. Do your best to notify the POP as well as a contact at IAP, if at all possible.

If you are injured, regardless of how minor you may perceive the injury to be you must document the incident in your field diary and report it to your supervisor as soon as possible. You must also fill out an IAP Employee Incident Report Form and turn it into IAP (please also copy and send to your Observer Coordinator) even if no medical treatment was/is necessary. These measures are for your protection. Do not neglect your responsibilities to report injuries or illness.

Training

Prior to your first assignment, you will receive training in safety and survival at sea. At a minimum, the training curriculum will include the following subjects:

1. First Aid and CPR Certification
2. Proper use and care of personal flotation devices and immersion suits
3. Abandon vessel and man overboard procedures
4. Life raft deployment and STAY rules; in-water liferaft skills
5. Cold water and hypothermia; in-water survival
6. Familiarity and usage of personal EPIRB
7. Survival skills and kits
8. Use of marine VHF radio, SSB radio, and satellite phone
9. Distress calls and signals; flares
10. Fire safety and prevention
11. Vessel stability and flooding
12. Vessel safety requirements and pre-trip vessel check
13. General safety on small boats
14. At sea personal health and hygiene
15. MRSA Prevention
16. Valise Liferafts

****For any safety questions or concerns contact the POP Safety coordinator or the Program coordinator.****

Included in this Safety Manual are materials used in your safety training and also information on various safety issues.

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Basic Health and Hygiene at Sea

Practice Good Hygiene

- Keep your hands clean by washing them frequently and thoroughly with soap and warm water or using an alcohol-based hand sanitizer. Hand-washing is the best way to avoid spreading germs.
- Keep cuts and scrapes clean and covered with a bandage and avoid contact with other people's wounds or bandages. Make sure cuts and scrapes stay as dry as possible.
- Do not share personal items such as washcloths, towels, or razors.

Antibiotics

- Be aware of proper use of antibiotics. Antibiotics **can** help treat bacterial infections but they **cannot** cure viral infections. Always ask your doctor if antibiotics are the best treatment.
- Always take all your antibiotic medicine as prescribed by your doctor. Using only part of the medicine can cause the infection to remain but it can also cause antibiotic-resistant bacteria to develop.
- Do not save any antibiotics and do not use antibiotics that were prescribed for someone else.

Sleep Deprivation

- Sleep deprivation is inevitable while working out at sea. Signs of sleep deprivation include:
 - Increased sleepiness and fatigue and weariness
 - Poor attention span and motivation, especially for boring tasks requiring sustained concentration (i.e.: tallying fish/hooks on a longline vessel)
 - Memory Lapses
 - Decreased initiative, judgment ability and decision making
 - Increased irritability
- Suggestions for Dealing with Sleep Deprivation:
 - Allow at least 4 hours of uninterrupted sleep each day to maintain minimal performance
 - Attempt frequent “power” naps - 20 or 90 minutes in length
 - Cover your eyes from natural light when attempting to rest
 - Avoid use of antihistamines, motion sickness medication, and all other drugs that will sedate (if possible)
 - Don't abuse caffeine – it will lead to an unavoidable “crash” later in the day
 - Eat small snacks of high carbohydrate foods (breads, rice, cereals, potatoes, some baked goods and apples). The carbohydrates will provide energy to fuel body function and prevent drowsiness.

- Avoid large amounts of protein (meat, dairy items, eggs, fish, legumes). The body has to expend energy to break protein down.

Seasickness

- Seasickness often hampers observers at the beginning of a trip, but most effects of seasickness disappear after a few days.
- Vessel motion, indigestible stomach contents, unpleasant fumes or cooking smells, and anticipatory fear will trigger seasickness.
- The symptoms are nausea, headache, drowsiness, and depression. This is normal; it's just difficult to live with.
- Typically, serious cases can cause severe dehydration and weakness.
- To prevent this make yourself drink water or some non-acidic juice and try to eat some mild food (soda crackers are often recommended).
- Take some seasickness medication along even if you don't plan to use it.
- Scopolamine works very well for many people. Scopolamine is currently sold under two trade names, Transderm Scop (the "ear patches") and Scopace (pill) available only with a prescription.. NASA found scopolamine to be the most effective treatment/preventative for spacesickness (aform of motion sickness).
 - Some people cannot tolerate scopolamine's side effects, which include drowsiness, dry mouth, and headache.
- Dramamine (the trade name of Meclizine), Bonine and Cyclizine (trade name is Marezine) are the usual over-the-counter drugs which will inhibit vomiting.
- The USCG formerly used Meclizine with moderate success. USCG research found that a combination of two drugs, promethazine hydrochloride (an antihistamine, trade name Phenergan), and ephedrine sulfate (a decongestant), was by far the most effective treatment available. Similar tests on Navy and Air Force personnel corroborated the Coast Guard's results.
- The recommended dosage is 25 mg of each drug one to two hours prior to motion stress and at six-hour intervals as needed thereafter.
- This combination of Promethazine hydrochloride and ephedrine sulfate is also known as the "Coast Guard Cocktail". Promethazine hydrochloride is a prescription drug, may cause drowsiness, and ephedrine sulfate may aggravate existing cases of hypertension.
- Neither drug can be taken within 12 hours after ingesting alcohol.
- None of the drugs mentioned here can be taken during pregnancy, and you should consult with your physician prior to taking any of these medications.
- It is recommended that you take one dose of a motion sickness medication as directed before you leave the dock since taking medication afterward will delay or nullify effectiveness.

First Aid Kits

- You are issued First Aid Kits that includes items to treat injuries and those for hygiene. First Aid Kits should ALWAYS be brought with you on the boat.

- Please add any personal items that you may need (prescriptions, extra seasickness medication, etc).
- Inform your coordinator if you run out of anything. It is suggested you add items to personalize your First Aid Kits
- Potential Items to add, or add more of, include:
 - Bandages
 - Gauze
 - Medical tape
 - Band-Aids
 - CPR face shields
 - To be used when giving mouth to mouth
 - Iodine packs
 - Disinfectant, to clean wounds before bandaging
 - Alcohol wipes
 - Disinfectant, to clean wounds before bandaging
 - Triple antibiotic ointment
 - To minimize infection of wounds, treat before bandaging
 - Hydrocortizone cream
 - Anti-itch topical
 - Dramamine
 - Seasickness medication
 - Benadryl
 - For allergic reactions
 - Sting relief
 - Topical sting relief
 - Instant cold pack
 - For heat stroke, sprained joints
 - Water-free hand sanitizer
 - If fresh water isn't available
 - Baby wipes
 - If fresh water isn't available

MRSA Prevention and Treatment

What is MRSA?

MRSA, sometimes called fish poisoning amongst vessels, is Methicillin-resistant *Staphylococcus aureus*. In other words it is a staph infection of the skin that is resistant to various antibiotics (but not all antibiotics). Approximately 25-30% of the US population is colonized with staph (meaning the bacteria is present, but not causing an infection), approximately 1% is colonized with MRSA.

What is CA-MRSA?

CA-MRSA is known as **community associated MRSA**. Since most cases of MRSA occur within healthcare facilities (HA-MRSA), those cases of MRSA occurring outside of such facilities are coined as community associated. Staph or MRSA infections amongst the general community (outside healthcare facilities), usually manifest themselves as skin infections that look like pimples or boils and can come about on healthy people. In healthcare facilities, people with weakened immune systems can manifest pneumonia, blood infections, and wound infections as a result of staph or MRSA.

Can I get MRSA on a fishing vessel?

MRSA is transmitted most frequently by skin-to-skin contact or contact with shared items or surfaces that have been contaminated by someone with the infection (i.e. galley tables, bed linens, towels, bandages, boots, gloves, foul weather gear, etc.)

The National Institute for Occupational Health and Safety (NIOSH) states that MRSA skin infections can occur anywhere, however, some settings have factors that make easier for MRSA to be transmitted. These factors can be bundled into the 5 **C**'s, and are: **C**rowding, skin-to-skin **C**ontact, **C**ompromised skin (cuts or abrasions), **C**ontaminated items and surfaces, and lack of **C**leanliness. These factors can be readily apparent on some fishing vessels.

What does a staph or MRSA infection look like?

These infections manifest themselves as pimples or boils and can be red, swollen, painful, and/or can have pus or drainage.



Photo 1 from CDC/PHIL: Bruno Coignard, Jeff Hageman Photo 2 Copyright Dermatlas, Johns Hopkins University

What are the possible symptoms?

Staph skin infections normally cause a red, swollen, and painful area on the skin. Other symptoms may include:

- A skin abscess
- Drainage of pus or other fluids from the site
- Fever
- Warmth around the infected area

Symptoms of a more serious staph infection may include:

- Pain around the infected site
- Rash
- Shortness of breath
- Fever
- Chills
- Chest pain
- Fatigue
- Muscle aches
- Malaise (general feeling of illness)
- Headache

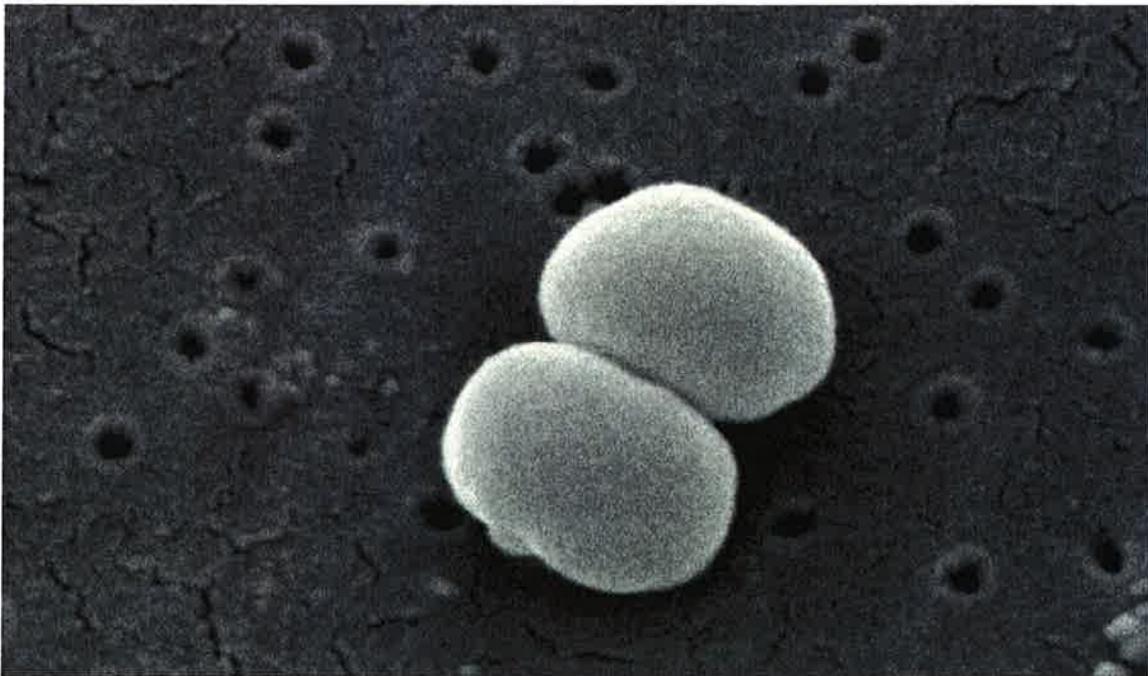


Photo courteous of CDC.

MRSA Personal Prevention

Hygiene:

Practice good hygiene. This doesn't mean dirty people get MRSA or staph, and it doesn't mean because you got MRSA you are "dirty", this means being more cautious will help prevention.

- ✓ Keep hands clean by washing with anti-bacterial soap or Hibiclens© provided by the POP.
 - Wash thoroughly, sing "Happy Birthday" to yourself to allow adequate time. Rinse with fresh water.
 - Alcohol based hand sanitizer works well, but only if used correctly. Use enough to cover hands completely. Rub hands to dry. If your hands are dry before 15 seconds, you didn't use enough gel. Be aware that gels in the 60% alcohol are the most effective. High concentrations are less potent, because proteins are not denatured easily without water.
 - Hand sanitizers should primarily be used only as an optional follow-up to traditional hand washing with soap and water, except in situations where soap and water are not available. In those instances, use of an alcohol gel is certainly better than nothing at all.

- ✓ Keep cuts and scrapes cleaned and bandaged. Use Staphaseptic© as a topical on suspicious boils or cuts.

Contact:

Refrain from sharing personal items with others. Protective equipment, clothing, towels, razors, etc. can carry staph infections. **KEEP YOUR PERSONAL ITEMS PERSONAL.**

- ✓ **BE AWARE!** If you notice a person on board a vessel has oozing wounds or bandages on their body, make special effort to limit contact with that person or their belongings.

- ✓ Ask questions. Most fisherman I have spoken to about MRSA, call it 'Fish Poisoning.', and they have had no problem giving me their "sea-story", regarding it.

- ✓ Limit contact with communal locations on board. For example; if every person on the boat puts their arms on the galley table edge, maybe you should avoid or clean before you do the same.

**** I recommend researching MRSA personally. Typing MRSA into an internet search engine (Yahoo, Google, MSN), will yield many results, but be careful of the accuracy of the articles, blogs, etc. Talking with your primary care physician could yield a plethora of information as well.**