How to Minimize Oceanic Health Risks and Communicate Effectively in Response to Occurring Risks

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***Instructional Objectives (IO)***

Upon completion of this training module, participants will:

 *IO#1:*  Understand and know how to respond to the

injuries due to sharks.

 *IO#2*: Understand and know how to respond to the

injuries due to waves (rip currents).

*IO#3:* Understand and know how to respond to the

injuries due to algae blooms.

*IO#4:*Understand and know how to respond to the

injuries due to jellyfish

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***Behavioral Objectives (BO)***

Upon completion of this training module, participants will:

 *BO#1:* Efficiently respond to shark injuries

 a) Being able to recognize the signs of the immediate

presence of sharks

b) How to properly address a wound

c)How to effectively use communication

 *BO#2:* Adequately respond to wave attacks (rip currents)

1. Being able to recognize the environmental signs of

rip currents and dangerous waves

b) Knowing how to remove yourself or others from the

 situation

1. How to effectively use communication

*BO#3:* Appropriately respond to algae blooms

 a) Recognize the signs of algae blooms

 b) Recognizing the signs and symptoms of the

 reaction to the algae toxins

c) How to effectively use communication

 *BO#4:* Effectively respond to jellyfish

1. Being able to recognize the signs of the

immediate presence of jellyfish

b) How to properly address a wound

c) How to effectively use communication

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Rip Currents

CAUSES OF RIP CURRENTS

* Movement of waves as they recede
* Wave crashes causing water to move back towards open water
* Generally slow

SPOTTING RIP CURRENTS

* Difficult to identify
* Low spots or breaks in sand bars
* Different water color
* Break in incoming waves
* Line of foam moving toward open water

AVOID THE SITUATION

* Learn to swim
* Do NOT swim alone
* Be cautious
* Listen to all lifeguard warnings

IF YOU ARE CAUGHT IN CURRENT

* Remain calm
* Do NOT fight the current
* Swim parallel to shoreline to escape current
* If cannot escape, draw attention to self

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IF OTHER IS CAUGHT IN CURRENT

* Alert lifeguard
* Do not try swim to help person if a lifeguard is available
* Call 911
* Attempt to give victim floatation device

PROPER COMMUNICATION

* Use appropriate dialect and tone to keep victim calm
* Display confidence
* Communicate with surrounding people
* Keep the communicative environment of all participants in the situation under control
	+ Directly call 911
	+ Directly get a lifeguard

POLL QUESTION:

What are helpful things you can do to stay safe in a potential rip current situation?

a) Learn to swim

b) Swim with others

c) Listen to the lifeguard

d) All of the above

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Jellyfish

WHAT TO LOOK FOR

* Flags on beach
* Shore
* Keep your eye out when in knee high waters

SYMPTOMS OF ATTACK

* Red/brown/purplish tracks on skin
* Itching
* Tingling and numbness
* Throbbing pain

HOW TO PROPERLY ADDRESS THE WOUND

* Pull the person out of the water
* Rinse immediately with vinegar
	+ Do NOT use fresh or tap water
* Soak the wound
* Get appropriate medical attention

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PROPER COMMUNICATION

* Use appropriate dialect and tone to keep victim calm
* Display confidence
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	+ Directly call 911
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POLL QUESTION:

When stung by a jellyfish, always rinse the wound for at least 20 minutes with tap or fresh water before anything else.

1. True
2. False

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Algae Blooms

CAUSES OF BLOOMS:

* Increase in nutrients
* Warmer months
* Over fishing
* Over time

WHAT TO LOOK FOR

* Foam
* Scum
* Blue, bright green, brown, red
* Surface waters

SYMPTOMS OF INFECTION

* Rashes
* Skin and eye irritation
* Gastrointestinal upsets
* Headaches
* Malaise

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TYPES OF ILLNESSES

* Rashes/Hives/Skin Blisters
* Runny eyes and nose, sore throat, asthma like symptoms
* Gastrointestis
* Liver toxicity
* Kidney toxicity
* Neurotoxicity

PROPER COMMUNICATION

* Use appropriate dialect and tone to keep victim calm
* Display confidence
* Communicate with surrounding people
* Keep the communicative environment of all participants in the situation under control
	+ Directly call 911
	+ Directly get a lifeguard

POLL QUESTION:

What are two signs to recognize the presence of an algae bloom?

a) Seashells, birds

b) Rough waves, high tide

c) Scum, foam

d) Low tide, high heat

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Shark Attacks

RECOGNIZING THE PRESENCE OF SHARKS:

* “Bump and Bite”
* Warning signs on the beach
* Sharks will more likely attack at dusk, dawn, or during nighttime due to feeding hours
* Avoid areas of animal waste

ATTACKS:

* Remove victim from the water immediately
* Control visible bleeding with direct pressure
* Provide warmth
* Try not to move victim unnecessarily
* Lay person on his or her side if vomiting occurs
* Treat shock

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PROPER COMMUNICATION:

* Use appropriate dialect and tone to keep victim calm
* Display confidence
* Communicate with surrounding people
* Keep the communicative environment of all participants in the situation under control
	+ Directly call 911
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POLL QUESTION:

Sharks can drown.

1. True
2. False

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Case Studies

Erica is enjoying a nice day at the beach. She notices her friend, Aaron, is very far in the water. He seems to be struggling and she notices a lot of choppy water and different colors in the water.

What should she do?

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What warning signs did Erica notice?

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Jody and Bobby are on their honeymoon during the warmer summer months. They researched the area before coming to vacation, due to the high amounts of nearby agriculture the risk for an algae bloom increased. Jody and Bobby however did not think too much about the increased risk. While jet skiing, Bobby noticed the high amount of scum, foam, and very red colored parts of the water. Bobby was curious as to why the ocean would look that way but continued to enjoy the day. Bobby suggested that the two should take a break, while Jody wanted to continue to play. Jody ended up falling off the Jet Ski and swallowing some water. Later that evening a rash started to develop on Jody’s body and she felt very nauseous. Bobby told her to lay down in hopes she would feel better and they could enjoy the rest of the honeymoon.

 What should have Bobby done?

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 What were some of the warning signs?

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 How can Jody combat the reactions/illness?

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Role Play

The instructors will act out two scenes for each dangerous beach scenarios that we discussed. One scene will be the correct actions and one will be incorrect. As a group, you must decide which scene is correct or incorrect. We will discuss what was done well and what was not done well in order to better understand how to respond to different events.

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