Tourism 12- Miss Ashley- Module 6-Responding to Emergencies

p. 98-Responding to emergencies

1. What should you do in a boating emergency?

- Remain calm- Properly assess the situation and take the appropriate actions- Ensure your own safety and that of your passengers and crew- If necessary, signal your need for assistance using an appropriate distress signal

2. What will help you respond in an emergency?

-wearing lifejackets, having an emergency kit for equipment/supplies, and carrying a first aid kit

3. What are you required to do regarding emergencies?

Keep a lookout, and render assistance if it’s safe to do so

p.99 –Sinking, swamping, capsizing and grounding

4. What are the 8 things to do if you run aground?

If your craft has run aground:

1) Immediately shift the motor to neutral

2) Ensure that everyone is wearing a PFD or Lifejacket

3) Visually and/or verbally confirm that all passengers are present and accounted for

4) Determine if there are other craft in the vicinity that may offer assistance

5) Determine if there is any danger of being hit by other boat traffic

6) Inspect the hull and equipment for any damage. Check for rising or accumulating water in the hull

7) If the hull is undamaged, assess the your course of action:

- Is it possible to dislodge the craft from its obstruction?

- Is it necessary to lighten the craft by removing equipment and passengers?

- Is it possible that passengers may be able to push the craft off the obstruction?

- Is it possible to use the reverse thrust of the engine to free the craft from the obstruction?

8) If necessary, signal your need for assistance using an appropriate distress signal

5. What are the 6 things to do if your craft have capsized?

1) Ensure that everyone is wearing a PFD or Lifejacket

2) Visually and/or verbally confirm that all passengers are present and accounted for

3) Determine if there are other craft in the vicinity that may offer assistance

4) Determine if there is any danger of being hit by other boat traffic

5) If you and your passengers are far from shore or unable to reach shore, stay with your craft. If you craft is not fully submerged, climb onto the overturned hull. This will help you retain energy, increase your survival time in cold weather/ water conditions and increase your visibility to other boaters. Only re-board the capsized vessel if it still afloat, seaworthy and safe to do so. If it is appropriate to leave the craft, do so and immediately get assistance once you’ve

reached shore

6) If necessary, signal your need for assistance using an appropriate distress signal

p. 100-Sinking, swamping, capsizing and grounding cont.

6. What are the 7 things to do if your craft is swamped or sinking?

1) Ensure that everyone is wearing a PFD or Lifejacket

2) Visually and/or verbally confirm that all passengers are present and accounted for

3) Determine if there are other craft in the vicinity that may offer assistance

4) Determine if there is any danger of being hit by other boat traffic

5) Attempt to stop any hull leaks or flooding if possible (see “Hull Leaks and Flooding”)

6) If you cannot stop your craft from sinking, immediately swim to safety

7) If necessary, signal your need for assistance using an appropriate distress signal

7. What 6 steps should you take if you notice water accumulating in the hull?

If you witness water accumulating in the hull of the craft immediately take the following actions:

1) Ensure that all passengers are wearing an approved Lifejacket or PFD

2) If the craft is moving, bring it to a complete stop (this will reduce water pressure against the hull and reduce the speed at which water is entering the boat)

3) Identify the source of the hull leak or flooding

4) Stop the hull leak if possible. The use of tapered wooden plugs, a hull patch kit, towel, rag or other maliable material may work

5) Attempt to remove accumulations of water. You can remove water by using a hand-held bailer, manual pump, or bilge pumping system. Ensure you use a device that suits the circumstances and the type of craft (your craft should be equipped with appropriate bailing devices as stipulated by the Small Vessel Regulations - See Appendix A)

6) If necessary, signal your need for assistance using an appropriate distress signal

8. What should you carry on board at all times to stop temporary hull leaks or flooding?

 Tapered wooden plugs- Hull patch kit- Towels, rags, or other maliable material

p. 101-Collisions and Abandoning Ship

9. What are the 6 things you need to do if your craft has been involved in a collision?

1) Ensure that everyone is wearing a PFD or Lifejacket

2) Visually and/or verbally confirm that all passengers are present and accounted for

3) Determine if there are other craft in the vicinity that may offer assistance

4) Determine if there is any danger of being hit by another boat

5) Inspect the hull and equipment for any damage. Check for rising or accumulating water in the hull

6) If necessary, signal your need for assistance using an appropriate distress signal

10. What actions must you take if you have been involved in a collision?

- You are required to stop and identify yourself, your vessel, your home port, and your ports of origin and

destination to the other craft

- You are required to assist the crew of the other vessel if it safe to do so

- If damage exceeding $1000 has occurred, or the seaworthiness of the vessels has been compromised, you are required by law to file an accident report with the local authorities

- If serious injury or death has occurred, you are required by law to report the collision to the local law enforcement agency

11. What 5 things must you do if you have to abandon ship?

1) Ensure that you and your passengers are wearing a PFD or Lifejacket

2) If time permits, signal your need for assistance with a radio, flare, horn, or flashlight

3) If possible, jump to the windward side of the boat (the boat will drift away from you)

4) Once in the water swim well clear of the boat

5) Visually and/or verbally confirm that all passengers are present and accounted for

p. 102-Person overboard

12. What three things should you do to prepare for someone falling overboard?

- Ensure that your emergency equipment is properly maintained and readily accessible

- Practice overboard rescue techniques with your passengers and make them aware of their

responsibilities

- Practice manoeuvring your pleasure craft to properly position your boat to perform overboard

rescue techniques

13. What should you use to retrieve a person who has fallen overboard?

- An approved Lifebuoy- An approved Buoyant Heaving Line- An appropriate Re-boarding Device - A Reaching Assist

14. If you come across a victim of hypothermia that has fallen overboard, describe the steps you should take.

First, you should sound an alarm notifying your passengers and other boaters of the situation and call for help:

1) Shout “Help - Person Overboard!”

2) Assign another passenger to keep a visual contact of the person overboard and continuously point to the person’s location

3) Immediately throw the person a buoyant item such as a PFD or Lifejacket. This will help the person stay afloat and mark their position in the water (in the event that they become submerged or if attempting to rescue under reduced visibility)

Second, you should assess the situation and your preparedness:

1) Are you wearing a PFD or Lifejacket?

2) Do you have the proper emergency equipment on hand and readily accessible?

3) How panicked is the overboard person?

Third, you should remain calm and determine which overboard rescue technique to use:

1) Reaching Assist (such as an oar, paddle, pole,or piece of clothing)

2) Buoyant Heaving Line

3) Life Buoy

p. 103-Person overboard cont.

15. What are the 5 steps for using a reaching assist?

1) Carefully manoeuvre the craft turning the bow into the wind

2) Once in position shut down the engine to avoid injury or accidental movement

3) Move to the side of the boat keeping your weight low -instruct the victim that you're going to help him out of the water

4) Using the reaching assist pull the victim to the side of the boat

5) Using a re-boarding device, such as a portable ladder, assist the victim up and over the side of the boat. In a small boat recover the victim over the stern as it is typically the lowest part of the craft

16. What are the 6 steps for using a buoyant heaving line?

1) Carefully manoeuvre the craft turning the bow into the wind

2) Once in position shut down the engine to avoid injury or accidental movement

3) Throw the heaving line so it lands behind the victim

4) Slowly pull the line towards you so the victim is able to grab onto it

5) Move to the side of the boat keeping your weight low and instruct the victim that you’re going help him out of the water

6) Using a re-boarding device, such as a portable ladder, assist the victim up and over the side of the boat. In a small boat recover the victim over the stern as it is typically the lowest part of the boat

17. What are the 6 steps for using a life buoy?

1) Carefully manoeuvre the craft turning the bow into the wind

2) Once in position shut down the engine to avoid injury or accidental movement

3) Throw the life buoy so it lands behind the victim

4) Slowly pull the line towards you so the victim is able to grab onto it

5) Move to the side of the boat keeping your weight low and instruct the victim that you're going help

him out of the water

6) Using a re-boarding device, such as a portable ladder, assist the victim up and over the side of the

boat. In a small boat recover the victim over the stern as it is typically the lowest part of the boat

p. 104-cold water/cold weather survival

18. What things should you remember when rescuing a person overboard?

- Position your craft downwind from the victim. He or she will drift towards your boat

- Don't panic. Keep a calm head and consider your course of action

- Don’t jump into the water. If the victim is panicking and thrashing in the water he or she may grab hold of you and pull you under

- Practice the emergency recovery techniques described in this section and ensure your passengers become familiar with the equipment,techniques and movement of the pleasure craft necessary to perform a successful rescue

19. What is hypothermia and how is it caused?

Hypothermia is caused by prolonged exposure to abnormally low temperatures:

- Immersion in cold water

- Exposure to cold air and wind while in water soaked clothing

- Prolonged exposure to low water and air temperatures

20. What happens when someone suffers from hypothermia?

If suffering from hypothermia, the victim’s core body temperature drops below normal levels resulting in weakened muscular functions, reduced co-ordination and slowing of mental functions.

21. Describe the three stages of hypothermia.

1) Early Stage: The victim is still conscious but is shivering and exhibits slurred speech

2) Intermediate Stage: The victim may be irrational, confused and sleepy. Will exhibit a slow and weak pulse, slow respiration and lack of co-ordination. Shivering exhibited in the early stage will now be slowed or absent

3) Final Stage: The victim may lose consciousness. Will exhibit weak, irregular or absent pulse and/or respiration

p. 105- Cold water/cold weather survival

22. What should you observe when operating in cold environments?

- Always wear cold weather / cold water protection gear. Worn properly, it can protect you from the elements and delay the effects of hypothermia.

Options include:- Wet Suit- Dry Suit- Survival Suit- Immersion Suit- Exposure Coverall- Multiple layers of dry, light clothing and/or a water or wind proof outer layer can also increase your survival time if immersed in cold water

23. What 6 steps should you take when responding to hypothermia?

1) Ensure that you are wearing an approved PFD or Lifejacket

2) Assess the victim's current condition: What stage of hypothermia is he exhibiting?

3) Clearly identify yourself to the person and ask him to respond

4) Assess what emergency and/or personal items you have onboard that may be used to warm the victim

5) Assess your ability to help the victim:

- Do you have warm dry items to cover and wrap the person?

- Will you be able to get the victim to safe harbour quickly?

6) Exhibit a distress signal indicating your need for assistance if necessary

24. What are the 3 steps in the rescue procedure for someone suffering from hypothermia?

1) Remove the person from the source of cold exposure. (You should use the overboard rescue techniques described in the previous section to remove the person from the water)

2) Provide dry shelter below deck if possible. Use a blanket, towel, or article of clothing to keep the victim warm

3) Attempt to slowly increase the victim’s core body temperature by one or a combination of the following:

- Remove the victim from wet clothing as it can prolong cold exposure and worsen the symptoms of hypothermia. However, only remove wet clothing if you are able to provide a dry covering such as a blanket or a warm environment

- Cover the victim's head and neck- Wrap the victim in dry blankets or towels- Cover the victim with an insulating device (such as a reflective heat blanket) and vapour barrier

p. 106-cold water/cold weather survival

25. What should you remember when dealing with hypothermia?

- If the victim asks for a warm liquid you may provideit to him. However, you should never give the victim

alcohol or hot stimulants

- Do not rub and/or massage the victim’s body or extremities in attempt to warm him up. Doing this may damage nerve endings at the skin and encourage cold blood from the extremities to move to the core of the body

- You may use you own body to transfer heat to the victim

- You should always carry a Safety Kit, including equipment suitable for responding to cold water / cold weather emergencies

26. What 5 steps should you take if you find yourself in cold water as a result of an accident or emergency?

Immediate Action

1) Assess the situation:

- Is everyone wearing a PFD or Lifejacket?- Can you get to shore or safety?- Are there any boaters who can assist you?

- Are you able to signal or call for help?

2) If you are within 50 m of shore and are able to swim to safety you should do so

3) If you are injured, there is help close by or you are farther than 50 m from shore, you should stay where you are

Survival Procedure

4) Immediately signal or call for help if you are able to do so

5) Assume the Huddle position:

- Place your arms around each others mid to lower back and pull together so your chests are close to each other’s sides

- Intertwine your legs

- Place any children in the middle of the huddle

- Keep unnecessary movements to a minimum in order to conserve energy

p.107-Breakdown and mechanics

27. What is the HELP position and how is it performed?

If you find yourself alone and exposed to cold water, use the Heat Escape Lessening Position (H.E.L.P.) to reduce

heat loss from your core body temperature and delay the effects of hypothermia.

H.E.L.P is performed as follows:

1) Cross your arms tightly against your chest

2) Draw your knees up and against your chest

3) Keep you head and face out of the water

28. What 5 things should you do if your craft has broken down or is inoperable?

1) Immediately alter your speed as appropriate to the situation

2) Use an anchor to secure your craft if necessary. If you are in a high traffic area, use a manual propelling device (such as a paddle or oars) to manoeuvre your craft to a safe area before anchoring. If you have lost all power and are drifting towards significant danger, set your anchor immediately

3) Investigate the cause of the breakdown or failure

4) If possible, correct the problem

5) If necessary, signal your need for assistance using an appropriate distress signal

29. What should you remember to carry and what should it have in it?

You should always carry a toolkit including:- Spare bulbs (appropriate for your craft)- spare fuses - Grease, penetrating oil and rags- Spare Oil (4-Stroke or 2-Stroke depending on your type of engine)- Spare safety lanyard (PWC operators)- Spare spark plugs (appropriate for your engine)- Basic toolset- Common nuts and bolts

- Tie straps and duct tape

p. 108-Fighting a fire

30. What are the 5 steps for fighting a fire?

1) Ensure the extinguisher is suitable for the type of fire

2) Stand at least 1 m from the source of the flame

3) Pull the safety pin on the handle of the extinguisher

4) Aim at the base of the flames and squeeze the trigger handle

5) Spray the base of the fire with a left-to-right sweeping motion

31. What are some important fire extinguisher tips?

- Use an extinguisher designed for marine use as it will be more corrosion resistant

- Use an extinguisher with an external gauge (that indicates the condition of the charge)

- Ensure the extinguisher is inspected and maintained regularly

- Remember that the fire-fighting material in dry chemical extinguishers can “cake” and loose effectiveness over time. The extinguisher should be turned upside down and shaken at least once per month. C02type extinguishers should be weighed annually and re-filled when they have diminished to 90% capacity

- Be aware that CO2and Halon type extinguishers utilize colourless, odorless gases that displace oxygen. Proceed with caution if using or storing these type of extinguishers in an enclosed area

32. What are the requirements for fire extinguishers on pleasure craft and what is recommended?

The Small Vessel Regulations require that Class BC extinguishers be used on pleasure craft in Canada. However, the use of a Class ABC fire extinguisher is recommended.

p. 109-Distress signals

33. What must pleasure craft operators be able to recognize, use and exhibit according to Small vessel regulations?

Distress signals

34. How do you use your hands to signal distress?

To use your hands to signal distress, slowly raise and lower outstretched arms to each side in repetition.

35. How do you use a portable horn or whistle to signal distress?

Using a portable horn or whistle, you can signal distress by continuously sounding in one-minute intervals. You can also signal SOS by sounding three short blasts, then three long blasts, followed by three short blasts.

36. What are some other sound signaling devices?

You can signal distress by continuously sounding a fog-signalling device. You may also use a gunshot or other explosive sound-emitting device fired at one minute intervals.

p. 110- Distress signals cont.

37. How do you use a watertight flashlight for a signal?

. To signal distress with a flashlight, flash SOS - Three short flashes, then three long flashes, followed by three short flashes

38. What are the 4 types of flares approved for use in Canada? Describe each.

Type A: Parachute Flare

To discharge this aerial flare read the manufacturer’s instructions, hold away from your body, and pull the release mechanism. When launched this red light flare reaches a height of approximately 300 m and burns for at least 40 seconds. This type of flare can be seen from water, land and air.

Type B: Multi-Star Rocket

Also an aerial flare, this device fires two red stars to a height of approximately 100 m. To discharge, read the

manufacturer’s instructions and trigger the flare from a hand-held position. This type of flare will burn for 4 to 5

seconds and be visible from water, land and air.

Type C: Hand-Held Flare

This is type of flare is designed for hand-held use and is not highly visible from a distance. Because of it’s limited visibility, this flare is most effective when used to help rescuers pin-point your location from the air. To discharge: Read the manufacturer’s instructions, hold downwind and away from your body and trigger the flare. This flare will burn intensely for at least one minute.

Type D: Buoyant or Hand-Held Smoke Flare

This type of flare is most effective for daytime use. Hand-held or floating type smoke flares will discharge intense orange smoke for at least 3 minutes. To discharge: Read the manufacturer’s instructions, pull the release mechanism and hold the flare upright or toss it into the water.

p. 111-distress signals cont

39. How can you use a vhf radio to signal distress? What do you need to say?

- Repeat “Pan Pan” three times to signal the need for assistance

- Repeat “Mayday” three times to signal imminent danger and/or a life-threatening situation

- Once the appropriate distress signal is given, relay the following information:

- The name of your vessel- Your position- The nature of the emergency- The type of assistance needed

40. How can code flags be used to signal distress?

- The International Signal for Distress: Code flag “N” (November) over “C” (Charlie)

- A square flag with a ball (or item resembling a ball) above or below it

41. What is a distress cloth?

A piece of orange-colored material displaying a black square (or approximate shape) and a black circle, identifiable from the air, can be used to signal distress.

p.112-distress signals cont.

42. What is a dye marker?

You may also discharge a dye marker in the water around your vessel. The dye marker will colour the water around your vessel signalling the need for assistance.

43. What is a EPIRB?

An Emergency Position Indicating Response Beacon (EPIRB) sends a distress signal via satellite to a monitoring center. The monitoring center can immediately dispatch assistance to the signal’s exact location.

44. What are other distress signals?

- A high intensity white light flashing 50 to 70 times per minute

- A square shape (or arrangement of items resembling a square shape) positioned on your vessel or in the water near your vessel

- Flames showing onboard a vessel can be used to signal distress. During daylight hours, choose a safe, flammable substance (such as engine oil in a metal pan) to signal distress. Always use caution when using open flame