

9.0 Collision Regulations

Introduction

boater must know the basic rules of navigation
who has the right of way
how to behave in a crossing situation
know and understand the rules of the road
called Collision Regulations (CR)
part of Canada Shipping Act
based on International Regulations for Preventing Collisions at Sea (Canadian modifications)
apply to all vessels boating in Canadian waters.

Part A - General Definitions

Part B - Steering and Sailing Rules

Section I - Conduct of Vessels in any Condition of Visibility

Section II - Conduct of Vessels in Sight of One Another

Section III - Conduct of Vessels in Restricted Visibility

Part C - Lights and Shapes

Part D deals - Sound and Light Signals

Part E - Exemptions (not considered in this course)

Part F - Additional Canadian Provisions

The Collision Regulations booklet was issued with the Boating course and should be referred to in conjunction with this section.

Part A, General

Rule 1: the rules apply to vessels in all navigable waters.

Rule 2: nothing in the Rules absolves a skipper and crew from their responsibility to avoid collision or danger even if they have to depart from the rules in order to do so. They are not there to replace good judgment and the practice of good seamanship. **Whose responsibility is it to avoid trouble? Yours!**

You should not put your vessel in danger by blindly following the rules. You must consider all factors such as water depth, wind, traffic, current and manoeuvrability of your vessel, etc., as you when comply with the rules.

Rule 3: definitions:

- Power-driven vessel: Any vessel propelled by machinery.
- Sailing vessel: Any vessel under sail only.
- Underway: Not tied to a dock, aground or at anchor.

9.4 Part a, Section I, Steering and Sailing Rules marine rules of the road

Two terms are of paramount importance in a crossing situation.

- **Stand-on:** The stand-on vessel is the one required to maintain course and speed. It is not required to take early or substantive action to keep well clear (unless it is apparent that the other vessel has not taken the appropriate action in time to avoid a collision).
- **Give-way:** The give-way vessel shall yield to the stand-on vessel by taking early and substantive action, sounding the appropriate signal, and making a readily apparent alteration to course in order to pass well clear.

9.4.1 Rule 4: States that the Rules in this Section apply in any condition of visibility.

9.4.2 Rule 5: mandates that every boat must have a lookout on duty, constantly watching and listening for anything that might indicate a risk of collision. The lookout should scan all around the vessel, using all available means (hearing, sight, smell, binoculars, etc.) and report all objects of concern.

9.4.3 Rule 6: safe speed and that the following should be taken into account by all vessels:

- (i) The state of visibility,
- (ii) The traffic density including concentrations of fishing vessels or any other vessels,
- (iii) The manoeuvrability of the vessel particularly in respect to its stopping distance and turning ability
- (iv) At night the presence of background light such as from shore lights or from backscatter (random reflections) from her own lights,
- (v) The state of the wind, sea and current, and the proximity of navigational hazards.

The speed at which you navigate must be adapted to the prevailing conditions
safe speed in plain daylight may not be safe at night
or when visibility is restricted by fog
must use judgment to determine safe speed
low visibility, it is good practice to be able to stop your vessel in one-half of the visible distance.

Rule 6 (c) states that in Canadian waters every vessel passing another vessel, or work that includes a dredge, tow, grounded vessel or wreck, shall proceed with caution at a speed that will not adversely affect the vessel or work being passed.

If everyone followed Rules 5 and 6 of the Collision Regulations, collisions at sea would be greatly reduced. Always keep a lookout and never go too fast.

Rule 7: the risk of collision.
Boaters must use every means available to determine if this exists.
If in doubt, assume that it does.
If boat has radar, a systematic plot should be maintained to detect any risk of collision.
Proper use of radar is required in clear daylight as well as at night.

If you watch a vessel approach, and its compass bearing or reference point on your vessel does not change appreciably, you are at risk of collision (see Figure 9.2). Both vessels should do everything necessary to determine if there is a risk, and then follow the rules to avoid a collision.

9.4.5 Rule 8: - suggests the following actions to avoid collision:

- Take positive action in plenty of time, well in advance of any potential meeting, so that the other skipper has time to assess the situation.
- Any action taken should be substantial, so that it is immediately visually apparent to any approaching vessel. A succession of small alterations should be avoided; your actions must be deliberate.
- Pass at a safe distance until all risk of collision is past.

- Reduce speed or stop if you require more time to assess the situation.

Remember that the stand-on vessel must still comply with the rules

9.5 Part B, Section II, Steering and Sailing Rules: with vessels in sight of one another

three situations with which the regulations deal directly

- 1 vessels meeting head on
- 2 vessels crossing each other's paths
- 3 one vessel overtaking and passing another.

9.5.1 Rule 13: any vessel overtaking another shall keep well clear of the vessel being overtaken, until all danger of collision has passed

vessel is considered to be overtaking when it comes up from a direction of more than 22.5° abaft the beam of the overtaken vessel (see Figure 9.3)

At night the overtaking vessel would only see the stern light of that vessel but neither of her sidelights.

9.5.2 Rule 14: in a head-on or nearly head-on situation (Figure 9.4) with a risk of collision, neither vessel has the right of way.

each vessel should alter course to starboard, then straighten course so they pass port to port, or give one short blast on your horn to indicate that you are changing course to starboard, or two short blasts to indicate that you are changing your course to port.

9.5.3 Rule 15: when two power-driven vessels are crossing with a risk of collision, the vessel which has the other on its starboard side (the give-way vessel) shall keep out of the way and avoid crossing ahead of the other vessel. The phrase "on its starboard side" refers to the sector that extends from dead ahead to 112° on the starboard side of the boat (Figure 9.5).

Rule 16 states that any avoiding action shall be clear and substantial

Rule 17 clarifies the situation for the stand-on vessel by declaring that it shall maintain its course and speed.

However if the stand-on vessel becomes so close that collision cannot be avoided by the action of the give-way vessel alone, it shall take action to avoid collision.

The one overriding rule is: Everything possible must be done to avoid a collision!

9.5.4 Rule 9: when travelling in a narrow channel or fairway, a vessel should navigate as close to the starboard-hand side of the channel as practical [see Figure 9.6 (a)] and small sailing vessels should not impede larger vessels [See Figure 9.6(b)].

In a narrow channel that has current or tidal stream, the vessel proceeding against the current must give way to the vessel proceeding with the current. See Figure 9.6 (c).

9.5.5 Rule 10:

- All vessels not using a traffic separation zone shall generally keep clear of it.
- Vessels using a traffic separation scheme shall proceed in the appropriate traffic lane and keep as far as practicable from the separation zone.
- If a vessel must join or depart the scheme, it should use as small an angle to the direction of flow as possible .
- Vessels should avoid crossing traffic lanes, except at right angles to the general flow.

9.5.6 Rule 12: re Sailboats Meeting

- When each boat has the wind on a different side, the one with the wind on the port side shall keep out of the way of the other. This is known as the 'starboard tack rule' (Figure 9.7).
- When both vessels have the wind on the same side, the one to windward shall keep out of the way of that to leeward. This is known as the 'windward vessel rule' (Figure 9.8).

9.5.7 Rule 18: priority of boats in different situations. In the list shown below, a boat must stay clear of any other that is shown above it in the list.

- A vessel not under command
- A vessel restricted by her ability to manoeuvre
- A vessel engaged in commercial fishing
- A sailing vessel
- A power-driven vessel

9.6 Part B, Section III, Conduct of Vessels in Restricted Visibility

9.6 Rule 19: in conditions of restricted visibility every vessel must proceed at a speed safe for the prevailing circumstances. No vessel has the right of way until there is a visual sighting, and the right of way has been established.

9.7.1 Rule 20: rules must followed in all weather. system of lights and sound signals has been established to enable vessels to communicate their actions and intentions.

Every vessel must possess the correct lights as specified in the Regulations and show them from sunset to sunrise. They must also show lights and shapes to indicate any activities in which they are engaged such as fishing or towing. (see Figure 9.9)

9.7.2 Rule 21: defines in detail:

- Masthead Light
- Sidelights
- Sternlight
- Towing light
- All-round light

9.7.3 Rule 23: when underway:

- power-driven vessels shall exhibit a masthead light, sidelights, and a stern light.
- If the vessel is under 12 m (40 ft) it may, in addition to sidelights, exhibit an all-round white light in lieu of a masthead light and stern light.
- If the vessel is less than 7 m (23 ft) and the maximum speed is less than 7 knots, it may exhibit an all-round white light in lieu of a masthead, side and stern lights. If it is practicable, sidelights should also be exhibited.

Rule 25 states that sailing vessels underway must exhibit:

- Sidelights
- A sternlight

If under 20 m (65 ft) the sidelights and sternlights may be combined into a single tricoloured lantern carried at the top of the mast. As an option, in addition to the sidelights and sternlight, a sailboat may also carry two all-round lights in a vertical line, the upper being red and the lower green. However, these two all-round lights cannot be used in conjunction with the combination tri-lantern.

Sailing vessels less than 20 m (65 ft) long may display a combined red, green and white lantern in lieu of sidelight and sternlight.

Illustrations of light combinations for both sailing and power vessels in Safe Boating Guide.

9.7.4 Rule 24: power vessel, **when towing**, shall show the following in addition to the usual lights:

If the length of the tow is less than 200 m (655 ft)

- Two masthead lights in a vertical line
- A yellow 135° towing light above the sternlight

If the length of the tow exceeds 200 m (655 ft)

- Three masthead lights in a vertical line
- A yellow 135° towing light above the stern light

If less than 25 m (82 ft) in breadth an inconspicuous, partly submerged, vessel or object must show an all round white light at, or near, both its forward and after ends.

Caution: a vessel should never steer between a towing vessel and its tow: the towline may lie just below the surface.

9.7.5 Rule 26: decrees that:

- When **fishing** other than trawling, vessels shall exhibit two all-round lights, the upper being red and the lower being white
- When engaged in trawling they shall exhibit two allround lights, the upper being green, and the lower being white
- When making way fishing vessels will also exhibit the usual sternlights and sidelights

Note: **Trolling vessels are not considered "vessels engaged in fishing"** with regard to the Collision Regulations

9.7.6 Rule 27: **vessels not under command** at night shall, if making way, show two all-round red lights in a vertical line, as well as sidelights and a sternlight. During the day they must exhibit two black balls in a vertical line

Vessels **restricted** in ability to **manoeuvre** must show **three all-round lights**, the **highest** and **lowest** being **red**, and the **middle** being **white**. If they are making way they must also show the usual steaming lights. During the **day** they must show three shapes in a **vertical** line, the **highest** and **lowest** being **black balls**, and the **middle** being a **black diamond**

9.7.7 Rule 30: at night, a vessel less than 50 m (164 ft) at anchor shall exhibit an all-round white light

A vessel aground shall also exhibit:

- An all-round white light at night
- Two all-round red lights
- Three black balls in a vertical line during daylight hours

A vessel of less than 12 m (40 ft) is not required to show the all-round red lights or the three black balls.

9.8 Part D Sound and Light Shapes

9.8.1 Rule 33: requires that vessels over 12 m (40 ft) carry a whistle and a bell. Smaller vessels must carry a sound signalling device.

Rule 34: Manoeuvring and Warning Signals: Figure 9.11.

Rule 35: Sound Signals in Restricted Visibility: Figure 9.12.

Rule 37: a vessel is in distress and requires assistance she shall use the signals described in the Collision Regulations. The following are recommended distress-signalling devices:

For daytime use:

- Florescent dye marker
- Safety whistle
- Distress cloth
- Safety blaster horn
- Marine signal mirror
- Code flags
- Type "D" smoke flares

For night time use:

- Type 'w' aerial parachute flares
- Type "B" multi star red aerial flares
- Type "C" hand held flares

Rule 45, re Canadian Stipulations - states that any **government ship** may exhibit a **blue flashing light** when it involved **in search and rescue**, or engaged in **law enforcement** duties in Canadian waters.