

Canoe Rescue Training

Recovery and Re-entry during COVID-19 Pandemic

Recommendations Submitted to Paddle Canada.

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Introduction

Paddle Canada has provided information on running courses during the COVID-19 pandemic period which have been outlined on the Paddle Canada [website](#). The typical techniques used for canoe rescues increase the likelihood of close contact and have not been well addressed in the canoeing program or Paddle Canada COVID-19 recommendations. Completing rescues is a critical canoeing skill even during this time, this document provides some additional information that might be helpful in the training of canoe rescues while minimizing proximity and contact. Most of the recommendations noted in this document are already practiced with regards to skills development and safety, but implementation may take some additional time and considerations. The skills outlined are consistent with the Paddle Canada Lake and Moving Water programs.

This document is specific to canoe rescues (recovery and re-entry); there is already direction with regard to running overall courses during the COVID-19 pandemic period including: health assessment, location, physical distance, disinfection of equipment, and use of PPE. This document and associated material are specific to the modification and considerations related to canoe rescues.

The end goal is to make the rescue more efficient and, in COVID-19 times, maintain physical distance.

Considerations

- Risk of exposure to the virus SARS-CoV-2, COVID-19, while executing a rescue - mitigation strategies (distancing, masks, gloves, sanitizer, other PPE). If the risk is high then the course will not run, or participants that are high risk (e.g. immune compromised, older adults) will not take part in the course.
- Suitability of running course at all (or not going out at all) or deferring the course.
- Distinction between training/practice for rescue and an actual required rescue.
- Risk assessment – how likely is a capsized likely to happen (environmental/water conditions, skill level). If conditions are not favourable then rescue and re-entry training will not be done (moving water, waves/moderate wind, cold water, or any other conditions that are beyond the skill level of any participant).
- Equipment - has equipment provided been sanitized? Where possible, participants should bring and use their own equipment. Personal equipment such as PFDs/Lifejackets that have continuous contact and may be difficult to sanitize.
- Is rescue training required – what level of rescue training is required by the course?
- Distance from shore, depth of water, temperature - within swimming distance, not deeper than 1.5m (5 feet), 15 °C or warmer. Although more advanced courses allow for a higher degree of environmental difficulty, during these times the risk/benefit may not be warranted.
- Where possible boats should have additional floatation, float bags, or sponsoons (either internal or external) installed. These displace more water and may minimize the need for rescue and

make towing and swimming easier/safer. Additional floatation will make boat recovery or self recovery (e.g. [Capistrano flip](#)) easier. In moving water floatation (e.g. end or mid floatation bags) must be secured in the boat.

- Groups/Pairing of people - paddle/practice in household or family groups. If family groups are not practical, then assign people and boats for the duration of the course/clinic.
- Participant skill and strength - are participants physically capable of completing a rescue, deep water re-entry, or swimming a canoe? This is assessed in the recommended process by staged recovery and re-entry steps.
- All individuals must be wearing appropriate floatation (PFD/Lifejacket) and have required safety equipment at hand.
- Always consider self rescue options – swimming, towing, un-supported re-entry, un-supported canoe recovery/re-entry
- Tow rather than entry/re-entry
- Will re-entry aids (e.g. step loop, floatation) be required
- If in moving water - is everyone comfortable paddling in moving water (minimize risk first). If there is a capsize always remain upstream of the canoe.
- Re-entry should be into recovered canoe - not rescue canoe (see conditions)
- Spotting or supporting individuals recovering a canoe, or attempting a re-entry while maintaining 2m physical distance
- Use of hand sanitizer is required, Cloth (non-medical) masks and gloves are recommended for rescue boat people
- Use of disinfectant spray or wipes should be used on all touch points before and after rescue and re-entry – hands, paddles, gunwales. This should be done off the water to minimize contaminating the water.
- Time to complete rescue (recovery and re-entry) – current physical distance recommendations also have a time or exposure component. Contact/proximity times should be minimized (less than 10 minutes). Practice a non-touch/exposure method first to ensure short time periods.

Recommendation for Training/Practice

All participants must have taken the self-assessment screening each day, prior to the start of the course. Individuals will not attend the course if any question is positively answered. Rescue boat/paddlers should be wearing mask and gloves. Hand sanitizer and disinfectant (spray or wipes) must be available.

Rescue participation is an important requirement of most courses and this should be clear in communication before the course begins, mitigation techniques should also be provided.

Except for short periods participants must maintain appropriate physical distance of 2+m. Where possible training/practice should be done within household/family groups. If family groups are not possible assign individuals to the same boat for the duration of the course.

Discuss risk of COVID-19 What is the current risk level from the Provincial Health Officer (i.e. What is the actual risk of contracting or encountering covid).

Discuss risk management – How to minimize risk when planning time on the water (water, wind, distance, current, etc...) for rescue training. How to decide when to be on the water - during the pandemic period, time on the water and conditions should be easily within capabilities, not at the edge

of abilities. Part of this discussion should include when capsize situations usually occur and how to mitigate (landing/launching, loading, waves, rapids).

Discuss the distinction between actual rescues and training/practice rescues is an important distinction.

Determine what amount of training for canoe rescue is required, will swim/tow be sufficient, recovery of boat, or full-blown rescue practice? The approach to all rescues should be low to high risk, fast to slow. Follow standard rescue procedure considerations: TARETHROG - talk/reach/throw/row/go.

Training and practice rescues will be done within easy swimming distance of the shore, and where water is shallow enough that the victim can [just] touch the bottom.

Apply disinfectant or hand sanitizer before & after each attempt at each touch point – hands, gunwales, paddle, bailer, etc... This is above the general treatment of rental or institutional equipment that should be sanitized between each course as part of the Paddle Canada recommendations.

Only two boats (rescue and victim) should be involved with rescue training/practice activity – if available a third boat may be on the water as emergency support, at least 2+m distant. Use the following steps to confirm that rescue or re-entry can be done quickly and efficiently without proximity/contacting other course participants.

- Self rescue by swimming and towing canoe to shore and doing shallow-water recovery (stand and drain canoe). This may include towing by painter or throw bag - note entanglement risk.
- Consider dry land simulation to help understand recovery and re-entry requirements.
- Have participants recover only a capsized boat using [parallel](#) or T rescue. This may include a canoe over dock or parallel recovery.
- Un-assisted Re-entry of boat (shallow water). Recommend side gunwale re-entry rather than end (or between canoes method). If a second canoe provides support it should be from opposite of re-entry, and end(s) of canoe. Supporting individuals, if any, should wear masks/gloves.
- Self rescue: [Capistrano flip](#) and re-entry. If there are sufficient float bags Cap-Flip may not be required - re-entry and bail. If tandem re-entry from opposite sides and ends of the canoe. Airbags or buoyancy should be used for cap-flip/splash-out. This is advanced method and may be out of scope for many paddlers. Splash out and rolls, currently, are out of scope.
- Two canoes, rescue boat and Victim - only one-victim at a time, rescue must be done in a short period of time. Minimizing time is important, this is why practice is done without victims, or un-supported deep-water re-entry. Side re-entry is recommended rather than end entry (or between canoes). Re-entry should be into the recovered boat, not the same boat as the rescuer. Support must be from the side opposite of re-entry, and from the remote end of the canoe. Supporting individuals should wear masks/gloves.

Consider water and environmental conditions before starting any rescue training/practice - if there are large waves, moving water, cold water, etc... Rescue training and practice should not be done in adverse conditions at this time. Rescue training must be well within the capability of individuals participating, if it is unclear start with simplest solutions and least contact/proximity then build on mastered skills.

Techniques (training/practice)

This section provides some commentary on different techniques that would make the recommendation section too long but are important for understanding the context. Included are a few short clips to video clips that may assist in interpretation/understanding. These techniques are already in common use for rescue clinics so there is minimal new learning - just some small modifications for the COVID-19 period.

- **Capsize canoe** - This is a necessary part of rescue training/practice. This should be done by sitting up on a seat and [sliding feet/legs over the gunwale and tilting canoe until it tips or swamps, 'inside' hand should be on gunwale so it does not hit the victims' head \(see: https://youtu.be/qTyWP3hT9IM\)](https://youtu.be/qTyWP3hT9IM). This is a controlled capsize and is done to minimize need for actual rescue or injury. A controlled capsize is useful for course participants that may be nervous about getting in the water or falling out of the canoe. See: <https://youtu.be/qTyWP3hT9IM>
- **Swim to shore** - This will minimize contact with any other individuals - the capsized boat may be recovered by another canoe and towed back to shore. When swimming in moving water always stay upstream of the boat.
- **Swim and tow canoe, or swim and push** - Holding on to the canoe at or near the bow and/or opposite side stern (flatwater), use side-stroke two swim the canoe to the shore (see: Swimming with upright canoe: https://youtu.be/x8_vLQTOmFA or Swim with capsized canoe, shallow water empty: https://youtu.be/x8_vLQTOmFA). In moving water stay upstream of the boat (always), if possible pull by closest end lines or throw bags. Swimming to shore with a throw bag and then pulling the canoe afterward. When tandem work in sync - pushing or moving boat at same time. When using ropes in a capsize situation can be a double-edged sword because of entanglement possibilities.
- **Swim or paddle swamped canoe to shore** - Canoes with sufficient floatation may be re-entered in deep water and paddled with paddle or arms toward the shore. When tandem paddlers will locate themselves at least 2m apart in the upright (swamped) canoe.
- **Tow victim** - [a victim may hold onto the gunwale of the canoe at a reasonable distance from the paddler and be towed to shore \(see: https://youtu.be/WD0RKtSlpJA\)](https://youtu.be/WD0RKtSlpJA). The victim may side-stroke to help the paddlers. This technique is used if the victim is unable to re-enter the canoe, and/or when recovery of a swamped canoe is impractical. The swamped canoe may be dealt with by another rescue canoe. If the victim is nervous, or has limited swimming the recommendation is to have them hold onto the gunwale where they can be seen. In moving water stay upstream of the boat.
- **Self recovery and tow** - The canoe can be flipped right side up emptying most or all of the water. Roll the capsized canoe over your head so it is upside down, and you are inside). Grabbing both gunwales lifting and 'throwing' the canoe up and over ([Capistrano Flip see: https://youtu.be/Ne5DJ-NKjjM](https://youtu.be/Ne5DJ-NKjjM)). Additional floatation under the bow/stern, or having floatation bags, makes this process easier (see: https://youtu.be/rbswMC_j7GM) The floatation may be a drybag or barrel put under one part of the canoe to make the flip easier (I tend to put the drybag/barrel under the stern (or bow) and flip from the opposite end. Not all of the water needs to be emptied from the canoe, only sufficient water for use of a bailer. If re-entry is not feasible (see re-entry below), hold the gunwale at or near the bow (or bow and stern when tandem) and swim to shore. When practicing this technique stay in water that is just shallow

enough to touch bottom when wearing a PFD. In moving water always stay upstream of the boat.

- **Rescue capsized boat only** (no in-water victim) - The boat is either capsized with no victim or if there are victims, they can swim to shore unassisted. Classic T or [Parallel](#) rescue - having additional floatation makes both of these rescues easier. If a tandem boat is used to recover a capsized boat, then the individual not doing the recovery will be doing a sculling brace on the opposite side of the boat. When in moving water time is of the essence - parallel recovery is a more appropriate choice before any moving water rescue is attempted practice should be completed in still water. Example of both [Parallel and T \(Canoe-over-Canoe\) rescue](#): <https://youtu.be/4RDhULRrc1>
- **Re-entry from shallow water** - support or balance may be provided from ends (or middle-opposite) of canoe, not where re-entry is attempted. Re-entry will always be into the recovered canoe (not rescue canoe). [Support may be provided from standing or a stable location \(e.g. dock/shore\)](#). See: <https://youtu.be/dK3tVzMLvTU>. This would be similar to someone climbing out of chest deep water onto a dock or outcrop of some kind. This is used to confirm that an individual is capable of deep-water re-entry. This document is recommending re-entry over the side of the canoe, midship rather than 'cowboy', or bow/stern entry. Most individuals find re-entry over the side gunwale easier. Re-entry is best done by holding the gunwale with both hands and letting your legs float to the surface behind you, then with a strong whip or scissor kick-pull your body over the gunwale and roll your head/torso into the bottom of the canoe. You may want to try a heel-hook re-entry at this point as an alternative. [The optional use of a dry bag full of water over the 'far' gunwale makes unsupported reentry much easier because it balances the weight \(see: https://youtu.be/ppcFv0aNT_4\)](#) .
- **Un-assisted re-entry from Deep Water** (no rescue boat or support) - A victim will re-enter the boat without balance or assistance from another boat (see: <https://youtu.be/ATxHf9vV4cl>). This may not be possible for all individuals or boats. If the individual is capable of re-entry from shallow-water (previous step) then a supported rescue (with re-entry) may be allowed (next step). The process for re-entry from deep water, without assistance, is similar to the re-entry from shallow water. Many people can not re-enter the canoe without some water spilling over the gunwale - this is why we have bailers. If you have a [dry bag/barrel you can clip it to the opposite gunwale](#) from where you will try to re-enter - the additional weight will help counterbalance the canoe during re-entry (see: https://youtu.be/ppcFv0aNT_4). When tandem both individuals may enter the canoe at the same time from opposite sides/ends of the canoe, or re-enter one at a time with the first person balancing the canoe from within.
- **Rescue with boat and one victim** (e.g. one individual in-water) - Similar to the re-entry methods above but the recovered boat is supported from the opposite side (and end) by another canoe. The supporting rescuer should be off set from the victim attempting to re-enter. This is more difficult than the way a rescue is usually supported but it allows for better physical distance. When tandem the non-supporting person is doing a sculling brace on the far side from the recovered canoe. When in moving water and time is of the essence, a parallel rescue is more appropriate. Practice in still water prior to any moving water attempts. The recommendation is for a single in-water victim because of timing and difficulty in physical distancing when re-entering a canoe with more than one person - this should be discussed as part of the course as additional person (just like re-entry into rescue canoe) is still an important skill to understand.

Example of a [full Parallel rescue: https://youtu.be/v3gcsEsAyvs](https://youtu.be/v3gcsEsAyvs), or a [full traditional T \(Canoe-over-Canoe\) rescued: https://youtu.be/0BUAVVQx6po](https://youtu.be/0BUAVVQx6po)

- **Re-entry supports** – [step loop or rescue sling](#), elevator (need extra floatation for this to be effective), drybag filled with water (counter balance). The elevator rescue will not be done or used in COVID-19 practice because it may require re-entry into the rescue boat (unless there are multiple capsized boats, which shouldn't happen during training as only two boats should be in the water).

Reminders:

- If student or instructor is showing any signs of COVID-19 or is in a high risk for catching or transmitting the disease (DO NOT attend course), see assessment tool: <https://ca.thrive.health/covid19/en>
- Regional Public Health and Institutional direction regarding COVID-19 restrictions and gatherings are met.
- Physical distance is maintained as much as possible, and minimum contact times are respected when required. After any [close] contact hand sanitizing and disinfecting of other surfaces is done.
- Use masks and gloves is recommended when there is a chance of contact. Use of PPE at other times when physical distance can be maintained is at the discretion of the individuals.
- Sanitize hands immediately after contacting touch points; also sanitize equipment after rescues.

Further Information:

Paddle Canada COVID-19 Guidelines: <https://www.paddlecanada.com/covid-19-and-paddle-canada/>

Self Assessment Tools: <https://ca.thrive.health/covid19/en>

Paddle Canada Lake Program Manual:

<https://paddle-canada.s3.amazonaws.com/70340584963c0a671f4b4399ee43305e.pdf>

Paddle Canada Lake Safety and Rescue Clinic:

<https://paddle-canada.s3.amazonaws.com/8ced2555f7bd6c440747bae163aa203f.pdf>

Paddle Canada Moving Water Safety and Rescue Clinic:

<https://paddle-canada.s3.amazonaws.com/16e40fd480a312d0920fc5628a8594e3.pdf>

Health Canada Hard-Surface disinfectants and hand sanitizers (COVID-19):

<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19.html>

Notes:

Suggested disinfection solution (spray bottle) should be mixed each day: 1:100 diluted Chlorine bleach (sodium hypochlorite (5.25%) (10ml in 990ml water) - allow to air dry. Chlorine bleach may be hard on some fabrics especially nylon and polyester in ways that are not easily observed - these should be rinsed. DO NOT MIX BLEACH WITH OTHER HOUSEHOLD CLEANERS.

Hand sanitizing should be done with soap or 60%+ alcohol-based hand sanitizer. Wash for 20 seconds.

See recommendations from NRS for sanitizing items like PFDS and apparel

(<https://dh36nblqpps8a.cloudfront.net/assets/pdf/nrs-coronavirus-cleaning-may-2020-2.pdf>)

Individual Video Links:

The following are links that may be useful in rescue techniques. Some of these have been linked in the text above:

- Controlled Capsize (tandem): <https://youtu.be/qTyWP3hT9IM>
- Swim to canoe to shore (capsized canoe) and empty: https://youtu.be/x8_vLQT0mFA
- Swim canoe to shore (empty canoe): <https://youtu.be/q2USaUKoRxc>
- Tow swimmer/victim (with comment): <https://youtu.be/WD0RKTslpJA>
- Shallow-water reentry (practice): <https://youtu.be/dK3tVzMLvTU>
- Deep Water re-entry - no assist: <https://youtu.be/ATxHf9vV4cl>
- Deep Water re-entry with Dry bag assist: https://youtu.be/ppcFv0aNT_4
- Recovery of Canoe only - Parallel and T (canoe-over-canoe): <https://youtu.be/4RDhULRrc1I>
- Capistrano Flip - Shallow Water practice and deep water demo: <https://youtu.be/Ne5DJ-NKjjM>
- Capistrano Flip with Dry-Bag or Barrel Assist: https://youtu.be/rbswMC_j7GM
- Parallel Rescue with victim: <https://youtu.be/v3gcsEsAyvs>
- T (canoe-over-canoe) rescue with victim: <https://youtu.be/0BUAVVQx6po>