

Managing Aquatic Physiotherapy Services during the COVID-19 Pandemic in Australia.

Authorship and version: This document was written by Judy Larsen on behalf of the Australian Physiotherapy Association (APA) Aquatic Physiotherapy group (for publication 24 June 2020) after a consultative process.

Scope

This document covers risk management and practical considerations associated with aquatic physiotherapy practice in Australia during the current COVID-19 pandemic. The document synthesizes current guidance from key government health and peak industry bodies and organisations.

Due to the emergence of new guidance from multiple sources, the relevance of local factors (particularly state-based Health Department advice) and the variety of aquatic physiotherapy services and facilities, this document cannot comprehensively cover all situations. Aquatic physiotherapists are advised to continue to integrate new or updated information into their risk management strategies.

Background

The Australian Physiotherapy Association Aquatic Physiotherapy Group has drafted this document as guidance for physiotherapists currently managing / re-opening their hydrotherapy pools or resuming their aquatic practice. The aim of this document is to primarily assist with appropriate risk management related to COVID-19.

On 26th March, 2020, most swimming pools were forced to close in Australia by the federal government. The risks identified were not related to water transmission of the COVID-19 virus in adequately sanitised pools but with difficulty in managing physical distancing and with cleaning in external pool areas.

It is noted however that land based physiotherapy practices were not forced to close in Australia, as they were seen to be an “essential” health service. Some practices chose to close, many stayed open and many have since reopened, offering both land (adult and paediatric) and telehealth options. Some Australian hydrotherapy pools and aquatic physiotherapy services also remained open.

There was (and remains) some confusion around both dedicated hydrotherapy pools and hydrotherapy services. There is uncertainty as to whether a dedicated hydrotherapy pool is seen as a “health facility” or a “swimming pool”. Many closed due to concern about state rulings over swimming pools and possible insurance implications. Hydrotherapy services find themselves opening under swimming guidance not health facility guidance. It is hoped that this document will also serve to highlight differences between swimming pools and dedicated hydrotherapy pools and services run by physiotherapists and thus enable appropriate restrictions upon re-opening and into the future.

At present (June 24 2020), variations in re-opening restrictions vary from state to state for swimming pools. In some states there is a head limit per pool of 20 (previously 10) persons per “swimming” pool (while maintaining the “four-square-metre” rule). This is likely to increase to 100 as restrictions are lessened. For some states there is simply the four-square-metre rule in pools, in others there is a “ten-square-metre” rule per person. Lane restrictions also exist in some states. Restrictions around children and physical distancing are generally much reduced as seen in many swimming pool and learn-to-swim documents (QAIA June 5th 2020). In some states “swimming pool” change-rooms remain closed.

Looking back at changes to aquatic physiotherapy practice (including closures) related to COVID-19, and to future issues that may eventuate, physiotherapists working in an aquatic environment over which they

may manage applicable restrictions at that time are encouraged to position themselves as health practitioners, health services and/or health facilities which, in Australia were mainly limited by reasonable risk management strategies and by a simple “four-meter-square” rule. This is likely to be more conducive to opening (as opposed to being classified as swimming pools or swimming services).

To re-open or to continue a service, hydrotherapy facilities need to ensure risk management but must also be financially viable.

Risk management involves identifying areas of potential harm and planning and actioning (and documenting) mitigation strategies for these areas. [The Australian Guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools](#) (APA 2015) includes information on safety, risk management, hygiene and infection control. These guidelines were written pre COVID-19 and therefore will not be the only document to refer to when planning your risk management strategy in the current environment. Evolving guidance from the relevant state/territory governments (including the state “roadmap” that affects you directly) and SafeWork Australia and the APA, help direct decisions around re-opening, permitted numbers, change-rooms and other safe practices.

Currently “there is no evidence that the virus that causes COVID-19 can be spread to people through the water in pools, hot tubs, spas, or water play areas. Proper operation and maintenance (including disinfection with chlorine and bromine) of these facilities should inactivate the virus in the water.” Centers for Disease Control and Prevention (CDC) 2020

As physiotherapists, we need to continue best practice care. During the COVID-19 pandemic, the decision to provide aquatic physiotherapy to clients involves: the screening and assessment of each client’s health needs; a thorough risk assessment; consideration of vulnerabilities; and appropriate triage of each client for appropriate healthcare and physiotherapy services.

The following are points to consider when reopening (or continuing to operate) your aquatic service. This document comprises expert opinion, clinical consensus, and where possible, references.

Australian physiotherapists work in a variety of different types of aquatic facilities including hospital and organisation pools, community or council pools, special school pools, private learn to swim pools, private physiotherapy practices with onsite pools, retirement village pools and home pools. Each physiotherapist, service or practice should risk manage and take from this document those points that are relevant to their practice and situation. Not all points will be relevant or feasible in your service.

Where individual aquatic services or dedicated facilities find that restrictions make a return to work unviable or unrealistic, approaches can be made to state allied health officers for advice, or to state chief health officers for possible exemptions. Informing the National Aquatic Physiotherapy Group of specific situations that have either enabled or prevented the re-opening of your practice will help us guide future discussions.

This document offers guidance only and each service must regularly review their individual management issues and the most recent rulings from your health region, state and recommendations from other reliable sources.

Please note, advice may change regularly. The onus is on the reader to source the most up to date information and adhere to both national and state rulings

Considerations for aquatic physiotherapy

1. Planning your return (or continuation of operations)
2. Staff
3. Screening, triage and administrative strategies to minimise risk prior to entry or at entry point
4. Risk from pool water
5. Risks related to physical distancing and hands-on treatment
6. Risk from airborne droplets
7. Risk from emergency procedures
8. Risk from equipment, surfaces in and around the pool or change-rooms: cleaning protocols
9. Responding to breaches of controls or exposure
10. References and Links

The following sections use a risk assessment framework where potential harms are identified and options on how they can be controlled are provided.

The risks for your specific facility and service (physical space, staff and people attending aquatic physiotherapy) and the controls you are putting in place should be documented (this can be done in a format that fits your usual policy and procedures or you could consider using a risk assessment template for example from the Royal Life Saving Society Australia or Safe Work Australia).

Key considerations related to a risk assessment at this time is to check the latest advice from government and key industry and employee associations (or your local infection control department if you have access to one) on both the current situation and control measures.

1. Planning your return (or continuation of operations)

- All states will have a staged roadmap to refer to for the necessary process required to reopen or continue. Check your state government advice.
- It is likely that you will need a Work Place Health and Safety (WHS) plan, and possibly a “COVID-Safe” checklist, however check with your local /state guidelines to see what is necessary.
- You can promote but not enforce the COVIDSafe App for staff and clients. (AGDoH 2020)
- You can encourage but not enforce the flu vaccine (though it may be required by some health/aged care services).
- Prepare a screening/risk tool using readily available information around fever, sore throat, respiratory symptoms and fatigue as well contact with known cases, people quarantining, returned travellers and other evolving advice.
- Most screening advice suggests refusing entry to anyone with obvious, even minimal respiratory symptoms. For clients with chronic respiratory conditions, many will be considered vulnerable and thus attendance may not be appropriate. However, if appropriate, consider liaising with the client’s medical practitioner/specialist to support a COVID-19 safe treatment plan.
- Consider installing a sneeze-guard at your front counter to protect office staff.
- Prepare cleaning protocols (see Section 8) and purchase relevant cleaning products e.g. hand sanitiser, disinfectant (TGA 2020).
- Be aware of safety issues around certain products. For example, 1000ppm chlorine may not be safe to use in a spray bottle. (SAHealth.sa.gov.au 2020). Make sure the product can be safely used near clients.
- Plan and discuss your physical distancing protocols and what fits with your circumstances and your state’s regulations. For example: in a dedicated health facility the pool may have an overall limit based on the four-square-metre rule combined with 1.5m physical distancing, or a flat limit of 20

pool occupants. In a public/community swimming pool options may include a limit of 20 persons in the pool (in some states initially 10) combined with 1.5m distancing. In some states this limit may progress to 50, then 100 per pool. Limits per swimming lane exist in some states, or in some places there is a ten-square-metre rule per “swimmer” It needs to be pointed out that many documents and organisations referred to in this document, including RLSS, ASCTA and QAIA are considering a swimming or a learn to swim population, not a “therapeutic exercise” or an “aquatic physiotherapy” perspective.

- Prepare relevant signage regarding hygiene, cough etiquette, physical distancing and maximum numbers in various spaces. Consider where the signage needs to be displayed for maximum impact (e.g. waiting room, change-room, pool itself). Consider determining and displaying the total number of people in the facility to be put on view at front door. Downloadable options for signage are available on the APA and Safe Work Australia websites or from other local sources. Find the option that best suits your circumstance.
- Consider floor markings to manage queuing and where possible entry /exit pathways.
- Consider a staged return or reopening of certain parts of your service to ensure that the risk controls you have applied are effective and practical to implement.
- In some states change-rooms remain closed in public swimming pools and learn to swim pools. Check local guidance on this however a dedicated hydrotherapy practice may be able to seek dispensation for this being a health care facility. Lack of a change-room may disadvantage some clients e.g. those that need to be transferred via hoist or live in colder climates.
- *Reopening a pool will require consideration of your local and state requirements*

2. Staff

It is important to involve and discuss the plan for return with staff.

- Discuss and educate staff around symptoms and what to do if they have any. Staff must not attend if they have any symptoms. Check your state guidance re COVID-19 testing in this situation. Staff cannot return to work following testing until they have a negative result. Information will vary depending on your state’s situation. Evolving “hot-spot” management needs to be considered if it affects your service (Victorian State Government State and Human Services 2020)
- Consider including all staff in a screening/monitoring process (similar to that used with clients).
- Meet to discuss concerns and issues and provide updated information regularly to staff (consider a communications plan and a way to meet appropriately using physical distancing or video-conferencing).
- Acknowledge and manage staff stress. Discuss and problem solve issues together.
- Discuss with physiotherapists and other staff their concerns and worries around client contact, type of treatment etc.
- Consideration should be given to staff with vulnerable health status.
- Ensure clear, accurate, timely and documented two-way communication with any other departments or managers within and external to your organisation.
- Have a plan in place if a staff member or a client test positive for COVID-19 (WHS plan). It is likely that your state health department will enforce their protocols.
- Ensure all records of staff contact details are current.
- Discuss screening and triage of clients with treating physiotherapists.
- Reflect on local and federal guidelines that protect vulnerable persons (older or with health conditions impacting their immunity) when planning for return. Communicate with your vulnerable clients as to how to best meet their needs while protecting them.

3. Screening, triage and administrative strategies to minimise risk prior to entry or at entry point.

These could include (but are not limited to):

- To avoid overcrowding and to allow triage, all appointments should be by prior booking.
- Confirmation (phone, SMS, email) prior to first and all subsequent appointments regarding screening for active (even minimal) symptoms or exposure to persons with known COVID-19, travel etc. If any symptoms or risk factors, decline appointment or entry (refer to section 1 for suggestions around chronic respiratory patients).
- Keep a thorough record, paper or electronic, of contact details for anyone who is present at the facility, including clients, carers, support workers, pool maintenance staff etc. This is necessary in case contact tracing needs to occur. Name, contact phone, address and date and time attended are necessary. These records should be retained for the required days as specified by the relevant state Health Department.
- On arrival consider health screening all clients, accompanying caregivers, family, staff and maintenance/service providers.
- You can refuse entry if you deem anyone a risk or if required information is not provided.
- Some organisations/facilities may take all staff, clients' and visitors' temperatures at entry. You will need a protocol if you choose to do this.
- Ensure hand sanitiser is available on entry, exit, change-rooms and at various points in between.
- Investigate contactless admission and payment. Where funding requires a signature use a "bring your own biro" policy or provide multiple bios that are put aside to disinfect after use.
- Consider systems such as "pay and/or make your next appointment on the way in" and/or "exit without contacting reception on the way out". Ensure minimum time at reception. Avoid queueing.
- Independent users (those attending adult services to perform independent exercises prescribed by their physiotherapist) may be delayed from recommencing aquatic exercise to prioritise access for clients with limited appropriate activity, rehabilitation or pain management opportunities in the community (IOAPT 2020).
- Consider necessary physical distancing regarding groups and classes. Some services may choose to delay resuming classes depending on your triage and priority clients.
- Although the virus that causes COVID-19 has been found in the faeces of some clients diagnosed with COVID-19, the risk of transmission of the COVID-19 virus from the faeces of an infected person appears to be low (WHO, 2020). Unmanageable faecal incontinence is screened for and remains a priority management area for aquatic physiotherapy. Ensure your normal strategies and management are in place (clothing, toileting, toilet timing, and limiting food/drink immediately prior) (APA 2015).

4. Risk from pool water

"There is no evidence that the virus that causes COVID-19 can be spread to people through the water in pools, hot tubs, or water playgrounds. Additionally, proper operation of these aquatic venues and disinfection of the water (with chlorine or bromine) should inactivate the virus." (CDC 2020)

The English "Pool Water Treatment Advisory Group" (PWTAG) consulted with [Public Health England](#) and informed the Aquatic Therapy Association of Chartered Physiotherapists that they had "checked with our national leads who confirm that coronavirus would be inactivated at the levels of chlorine used in swimming pools." "Public Health opinion is that it is generally safe to go swimming at this time. Water and the chlorine within swimming pools will help to kill the virus. Of concern, though, is the interaction that pool users have with each other beyond the swimming activity. The novel coronavirus (COVID-19) situation is evolving, and characteristics of the virus are still being determined." (ATACP 2020).

Risk mitigation strategies could include (but are not limited to):

- Frequent, regular, testing and interpreting of pool water for pH and disinfectant levels (usually 4 hourly or if automated system once daily and documenting digital reading) (VSGHaHR 2019).
- Pool water pH and disinfectant levels and frequency of testing should comply with state guidelines, taking into account the pool location (indoors/outdoors) and pool temperature.
- Conduct regular microbiological tests of pool water as outlined by your State guidelines.
- Consider the different risk profiles of your clients and activities. Consider risk of aerosol generating procedures (AGPs), i.e. low intensity standing exercise versus high intensity cardiovascular exercise and face out of water activities versus face under water activities.
- In some states shower and change-rooms are to remain closed in public swimming pools until further notice. Check your state guidance. The Australian Swimming Coaches and Teachers Association (ASCTA 2020) recommends showering and changing into bathers at home to minimise change room use and risk of infection via shared surfaces. However, the International Organisation of Aquatic Physical Therapists suggest where feasible and safe, shower before and after pool use (IOAPT 2020).

5. Risks related to physical distancing and hands-on treatment:

Physiotherapists working in pools use many different techniques, on a wide range of client groups. Some clients will be safe and independent in water without the physiotherapist needing to be in close physical proximity whereas others will require hands-on assistance for either safety or to deliver an effective intervention.

When reflecting on the return of clients and also the need for close contact or hands-on therapy, weighing up the potential benefits and harms to yourself and your clients is critical. Factors to consider are COVID-19 risk of transmission, client safety in water, potential decline in the client's physical or mental health without therapy, comorbidities, immune system status, pain, quality of life, best practice and client's wishes. Taking a deliberate approach to weighing up these factors for each client will assist with triaging, will help determine your decision to offer aquatic physiotherapy and will also guide the requirement for hands-on clinical care.

- In health care facilities physical distancing is recommended; however, it is recognised that in some circumstances this may not be able to occur e.g. “during physical examination or clinical care” (AGDoH 2020).
- Consider professional development or clinical reasoning sessions to creatively consider physical distancing (for example, altering the program, using equipment, the pool sides or rails to support or stabilise clients safely and effectively, and complete effective interventions).
- Where possible complete the hands-on contact (treatment or assistance) and resume physical distancing as soon as possible.
- Initially one on one sessions may be the only option.
- Where possible ensure appropriate physical distancing between all people in the facility as advised by state and national health authorities in relation to health facilities.
- Physical distancing may not be able to occur between family members or clients and carers. In some facilities non-essential carers may be excluded to limit numbers.
- Bringing caregivers into the pool to provide physical support has been suggested in a learn-to-swim environment (ASCTA 2020). This could be an option in physiotherapy practice using a family member or usual support worker to perform the aquatic activity allowing physiotherapist to maintain physical distancing. Consider safety of all caregivers. Funding body requirements will also need to be considered.

- Follow the [The Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools](#) (APA 2015) for risk management and screening of all people entering the pool.
- Some pools may choose to partially demarcate areas or to have boundaries or “stations” where clients are required to be stationed to assist with social distancing and separate different activities. Lane ropes may also be used.
- If working in public pools, learn to swim pools and other non-health care facilities you will need to work with the managers of those facilities to ensure compliance with their governing bodies.
- A number of Australian aquatic, sporting and fitness industry bodies including Royal Life Saving Society Australia (RLSSA) and Australian Swimming Coaches and Teachers Association (ASCTA) have put forward their proposed frameworks to adapt the 3 stage plans in place in most states. These frameworks must be endorsed or approved by the state Health Department if they are to be recognised in your state or territory. They may guide your allied health practice, however, they should not override local jurisdictional policies and information from the Australian Physiotherapy Association (APA).
- Display signage, as previously mentioned, to educate regarding distancing.

6. Risk from airborne droplets

Though the science is still evolving, airborne droplets coughed, sneezed or in some other way expelled on the breath of a person with COVID-19 are thought to be a risk to others

- Pre-screening as discussed in sections 1 and 3 will reduce risk.
- Many dedicated hydrotherapy pools have fixed turnover air systems. In other venues ensure adequate ventilation as per local standards for pools. Where possible increase ventilation by opening louvres, windows or doors, or other methods (RLSSA 2020).
- Consider discouraging group conversations or purely social conversations between individuals even if physical distancing is maintained. This will encourage timekeeping to assist with time-tabling and will reduce airborne particles (Stadnytskyi V, Box C, Bax A, Anfinrud P 2020, ATACP 2020).
- Consider your position when completing hands-on care. Where possible, stand to the side or behind a client.
- Aerobic activity (e.g. an aqua fitness classes) may require greater social distancing than more subdued aquatic activities due to respiratory load. Monitor fitness industry rulings and physical distancing rules in your state for this.
- Cough etiquette and respiratory hygiene must be observed at all times. Use appropriate signage to prompt for this.
- All persons should be reminded to avoid touching their face. Use signage to educate.
- Keep up to date with recommendations regarding use of Personal Protective Equipment, including face masks. (AGDoH 2020) “Whether personal protective equipment (PPE) is required should be determined by risk assessment, based on the patient’s presenting complaint or condition.” As with all government advice this may change.
- Some services may choose to utilise facemasks or shields for staff or clients where physical distancing is not able to occur. Aquatic physiotherapists should consider how PPE may be affected by an aquatic environment. In some areas of practice and some types of pools, masks may become damp by humidity or splashes, rendering them less effective protection against droplet contamination.

7. Risks from emergency procedures

- Update your emergency procedures, taking into account the COVID-19 circumstances, from currently available information. In particular, provide guidance around CPR procedures (RLSSA 2020, ARC 2020).
- See *APA Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools* (2015) to review your risk management and screening for emergency situations
- If a patient was to become unresponsive or need assistance (safety/medical) while in the pool, physical distancing cannot be maintained due to the emergency context. Consider reviewing your current policy to ensure clients are assisted to exit the pool as soon as possible if feeling unwell (for example, if feeling dizzy) to limit the likelihood of an emergency rescue.

8. Risk from equipment, surfaces in and around the pool or change-rooms: Cleaning

Most guidelines define two different types of cleaning. Cleaning for a known COVID-19 situation and routine cleaning during the COVID-19 pandemic. Across the broad span of aquatic practice there will be varying cleaning protocols and products used. Unless there is a known staff member or client with COVID-19, routine practices of mechanical cleaning plus disinfection is appropriate. This is in the context of the low rate of community transmission of COVID-19 in Australia at the time of this publication (June 2020). Follow your own institutional guidelines as required. Hospitals and Aged Care facilities may have their own protocols.

Keeping up to date with changes occurring with guidelines and regulations may require all protocols to be adapted.

- Encourage handwashing and/or the use of hand sanitiser at frequent points during a client's time in the facility (e.g. on arrival, after use of change-room or toilet, before exiting etc). Supply hand sanitiser at multiple points in your facility.
- Remove communal water stations, tea/coffee stations, magazines, hairdryers etc.
- Implement routine environmental cleaning and disinfection practices. Most councils, Health Departments or Safe Work Australia will suggest a cleaning protocol, your usual practices (heightened) with appropriate products, as well as frequently touched surfaces (e.g. door handles, taps, rails, chair rails, hoists) cleaned more frequently.
- Limit pool equipment available for use and discourage sharing of equipment. Store extra or unnecessary equipment.
- Where there is no evidence of COVID-19, routine cleaning of equipment used in pools and rails (e.g. on ramp) is sufficient. Some may choose to wash with detergent and water plus disinfectant or a 2-in-1 detergent /disinfectant. Rinse well to ensure product does not interfere with pool chemistry. For some facilities guidance has been to use the pool water to wipe/soak. Monitor changing advice regarding cleaning.
- Discourage people from sharing items that are difficult to clean, sanitize, or disinfect, or that come in contact with the face (for example, goggles, nose clips, and snorkels) (CDC 2020).
- Consider if clients can provide their own equipment to minimise sharing of equipment.
- Discuss the use of slings (for hoists) and your cleaning protocol for them. Clients may be able to bring their own. Consider the use of disposable slings.
- Encourage clients and carers to wipe down equipment (hoist or water wheelchair) or change-room areas/beds before and after use with disinfectant and wipes provided.
- Where COVID-19 is not present, use normal laundry practices.
- Establish a protocol for cleaning so that furniture (including wheelchairs), pool equipment and other items are disinfected before being given to the next user and are kept separate from ones that have not yet been cleaned. Consider labelling containers for used equipment that has not yet been cleaned and disinfected (CDC 2020).

- No-touch waste bins are suggested.
- If introducing new products, e.g. hand sanitiser and cleaning solutions, ensure risk assessments including Safety Data Sheets are completed in line with local Work Health & Safety guidelines. Consider PPE required during use of cleaning products and safe storage of chemicals.
- If you work in a public or community pool you may want to ask the organisation what their cleaning protocol is. You may not be able to control or modify it, but you can implement processes to ensure your own cleaning practices are appropriate for you and your clients.
- A product list of appropriate disinfectants is available through the Therapeutics Goods Association (TGA 2020).
- If COVID-19 is identified, there will be guidance from local authorities regarding cleaning.
- Safe Work Australia have a cleaning checklist that could be modified for your use. (Safe Work Australia 2020)

9. Responding to breaches of controls or exposure

Part of your risk assessment includes a management plan should there be a known exposure to COVID-19. Consider who is responsible for liaising with and following your state's Health Department advice if this happens.

This document offers guidance only and each service must regularly review the issues and the most recent rulings from your health region, state and other reliable sources.

Please note, advice may change regularly. The onus is on the reader to source the most recent information and to review all hygiene and safety practices.

10. Referencing and Links

Evidence regarding COVID-19 is rapidly emerging and evolving. References are current at this time of writing, however the onus is on the reader to check all information remains current.

Australian Government Department of Health (AGDoH): Coronavirus disease (COVID-19) Guidance on use of personal protective equipment (PPE) in non-inpatient healthcare settings, during the COVID-19 outbreak, May 2020 <https://www.health.gov.au/sites/default/files/documents/2020/05/coronavirus-covid-19-guidance-on-use-of-personal-protective-equipment-ppe-in-non-inpatient-health-care-settings-during-the-covid-19-outbreak.pdf>

Australian Government Department of Health (AGDoH): COVIDSafe App (2020) <https://www.health.gov.au/resources/apps-and-tools/covidsafe-app>

Australian Physiotherapy Association (APA) Aquatic Physiotherapy Group, Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools. Second edition, 2015. https://australian.physio/sites/default/files/tools/Aquatic_Physiotherapy_Guidelines.pdf

Aquatic Therapy Association of Chartered Physiotherapists (ATACP) Novel coronavirus (COVID-19) latest information - PWTAG - The Pool Water Treatment Advisory Group (March 13 2020) <https://atacp.csp.org.uk/news/2020-03-13-novel-coronavirus-covid-19-latest-information-pwtag-pool-water-treatment-advisory>

Australian Resuscitation Council (ARC) FREQUENTLY ASKED QUESTIONS ABOUT RESUSCITATION DURING COVID-19 PANDEMIC (June 5 2020) <https://resus.org.au/>

Australian Swimming Coaches and Teachers Association (ASCTA): Best Practices for Restarting Swim Schools and Learn to Swim (May 15 2020)

<https://www.ascta.com/sites/default/files/assets/documents/Swim-School-Best-Practices-Guidelines.pdf?fbclid=IwAR04jvrhLBl4tT7kDvxvzGjLLvyp7uTqEMeY590krwmt1CsbfOdrkPHdQpg>

Centers for Disease Control and Prevention (CDC). Water and COVID-19 FAQs. Press-Release at (April 23 2020). <https://www.cdc.gov/coronavirus/2019-ncov/php/water.html>

Centers for Disease Control and Prevention (CDC). Considerations for Public Pools, Hot Tubs, and Water Playgrounds During COVID-19 2020 (May 26 2020) <https://www.cdc.gov/coronavirus/2019-ncov/community/parks-rec/aquatic-venues.html>

Centers for Disease Control and Prevention (CDC) [Coronavirus Disease 2019 \(COVID-19\)](#) Frequently Asked Questions, (June 24 2020) https://www.cdc.gov/coronavirus/2019-ncov/faq.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fphp%2Fwater.html#COVID-19-and-Water

Centers for Disease Control and Prevention (CDC). Considerations for Public Pools, Hot Tubs, and Water Playgrounds During COVID-19. (Press-release at May 8 2020) <https://www.cdc.gov/coronavirus/2019-ncov/community/parksrec/aquatic-venues.html>

Department of Health Tasmanian Government (DoHTasGov), COVID-19 North West Regional Hospital Outbreak Interim Report, (April 29 2020) https://www.health.tas.gov.au/_data/assets/pdf_file/0006/401010/North_West_Regional_Hospital_Outbreak_-_Interim_Report.pdf

Fitness Australia (FI): FRAMEWORK OF OPERATIONS FOR FITNESS FACILITIES UNDER COVID-19 RESTRICTIONS (May 18 2020) https://bp-fitnessaustralia-production.s3.amazonaws.com/uploads/uploaded_file/file/478042/FA_Framework_of_Operations_v2.pdf

International Organisation of Aquatic Physical Therapists (IOAPT) , Statement from the International Organisation of Aquatic Physical Therapists about COVID-19 and the practice of Aquatic Physiotherapy IOAPT (May 12 2020) <https://www.wcpt.org/sites/wcpt.org/files/files/IOAPT%20Statement%20-%20Covid-19%20and%20practice%20of%20Aquatic%20Physiotherapy%20%2812-05-20%29.pdf>

Qld Aquatic Industry Alliance (QAIA) Swimming Pool and Aquatic Centre Industry COVIDSafe Plan (June 5 2020) https://www.covid19.qld.gov.au/_data/assets/pdf_file/0009/130005/Swimming-Pool-and-Aquatic-Centre-Industry-COVID-Safe-Plan.pdf

Royal Life Saving Society Australia (RLSSA) GUIDELINES FOR SAFE POOL OPERATIONS MANAGING THE RISK OF COVID19 IN AQUATIC FACILITIES (MAY 11 2020) https://www.royallifesaving.com.au/_data/assets/pdf_file/0017/28016/Guidelines-for-Managing-the-Risk-of-COVID-19-in-Aquatic-Facilities-Final.pdf

Royal Life Saving Society Australia (RLSSA) BASIC LIFE SUPPORT RESPONSE DURING COVID-19 (April 7 2020) <https://www.royallifesaving.com.au/about/news-and-events/news-items/basic-life-support-response-during-covid-19>

Safe Work Australia, swa.gov.au: Coronavirus Cleaning Checklist (2020)

https://www.safeworkaustralia.gov.au/sites/default/files/2020-04/COVID-19_Cleaning-Checklist.pdf

Safe Work Australia, swa.gov.au/Coronavirus: Recommended cleaning: Supplementary information (May 26 2020) <https://www.safeworkaustralia.gov.au/sites/default/files/2020-05/cleaning-table-covid19-26May2020.pdf>

Safe Work Australia: COVID-19 Information for workplaces (2020)

<https://www.safeworkaustralia.gov.au/covid-19-information-workplaces>

SAHealth.sa.gov.au Fact Sheet for healthcare professionals: Guideline to dilution for chlorine-based disinfectant solutions (Feb 2020)

https://www.sahealth.sa.gov.au/wps/wcm/connect/d3396d00411006b8875bcf8f6fad9ea1/FactSheet-Sodium+hypochlorite+dilutions_v4.0+%28Feb2020%29.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d3396d00411006b8875bcf8f6fad9ea1-n5jnAlj

Stadnytskyi V, Box C, Bax A, Anfinrud P (2020) The airborne lifetime of small speech droplets and their potential importance in SARS-CoV-2 transmission, Proceedings of the National Academy of Sciences of the United States of America 202006874; DOI: 10.1073/pnas.2006874117

Therapeutic Goods Administration (TGA) Australian Government Department of Health (June 24 2020) Disinfectants for use against COVID-19 in the ARTG for legal supply in Australia

<https://www.tga.gov.au/disinfectants-use-against-covid-19-artg-legal-supply-australia>

Victorian State Government State and Human Services (VSGSHS) June 25 2020: COVID-19 suburban testing blitz Hotspot intervention [chrome-](#)

extension://ohfgljdgelakfkefopgkcohadegdpjf/https://www.dhhs.vic.gov.au/sites/default/files/documents/202006/2001628_COVID-19_COVID-19%20suburban%20testing%20blitz.pdf

Victoria State Government, Health and Human Resources (VSGHaHR): [Water quality guidelines for public aquatic facilities - managing public health risks](#), 2019

<https://www2.health.vic.gov.au/Api/downloadmedia/%7B553C4C76-313A-4018-B14E-49713A1C6C34%7D>