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Post Pandemic Aquatics: Professionals on Deck

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Abstract

As aquatic programs re-open and/or expand as COVID restrictions lift, avoiding virus transmission is a top health and safety concern. This article presents options for safe social distancing for professionals and participants during teaching of swim lessons, coaching sessions, and aquatic exercise classes. Emphasis is on practical, session-to-session issues. Suggestions are applicable to all ages of participants in aquatic programs. Focus is on information for aquatic professionals providing direct participant service. Guidelines for program management are also included.

Keywords: COVID, risk management, safety, swim lessons, aquatic exercise, coaching, facility management, facility maintenance

With vaccines available, many aquatic programs have been re-opening and/or expanding to pre-pandemic levels. It is apparent that it is going to be some time before any population group is relatively free from virus concerns. Aquatic professionals likely will not be able to control who receives a vaccine. Nor will vaccine effectiveness be universal especially as new variants emerge across the globe. While a vaccine may work for some variations, at this writing there is no way to predict when and/or if in the future the virus will be totally eradicated.

Karl Knopf summarized the heart of the issue when he wrote “Does the instructor provide the client with a safe and sane water fitness class that is enjoyable and satisfying?” (2004). Yes, Knopf is referring to aquatic exercise classes, but his basic construct applies also to instructional swim as well as coaching situations. Note Knopf’s order of priority: safe, sane, enjoyable, satisfying. Safety is the priority.

Post pandemic safety for professionals and participants alike includes keeping everyone safe from disease transmission. How does one accomplish this when old procedures and habits are “ingrained,” when wearing a mask in the aquatic environment is not advisable, and social distancing becomes an important defense against contagion?

Changing Procedures and Habits

Existing traditional procedures and habits are difficult to change. Many swim instructors and water exercise leaders enjoy teaching from in the water with their participants. Coaches are more familiar with working from the deck. Coaches along with almost everyone else have participants use equipment. Participants have learned specific ways of doing things and have usual behaviors in place. Pool rules have been in place for years. How does safety, in light of post pandemic practicalities, fit into new safety parameters?

Aquatic professionals have learned to deal with some contagion risks. Personal protective equipment is now available in deck level first aid kits. Lifeguards have been trained in using masks, BVMs, gloves, and other protection gear. These standard practices are no longer enough. We must be prepared to rethink and retrain. HIV and hepatitis were contact spread. COVID is both airborne AND contact spread, and new variants now are even more highly contagious. These factors dictate the need for changes in our procedures and habits.

Masks are recommended and generally accepted because the airborne aspect of COVID is well documented. Research shows that human coronavirus, 229E, which causes upper respiratory tract infection in healthy individuals and serious disease in patients with comorbidities, can remain infectious on surface materials common to public and domestic areas for several days (Warnes et al., 2015; Beeching et al., 2020). This research confirms a significant infection risk exists for anyone touching a contaminated surface (Warnes et al., 2015).

More recent research validates this information. Research by Siddiquie, Agrawai, and Josh (2020), referring to COVID-19, I found that “there are two modes of transmission: first is through respiratory droplets, and the second is through contact routes” (p. 343). New procedures and habits must be developed to meet this challenge.

About COVID Testing

While testing is useful to determine incidence and possible spread of a virus, testing, whether by scientific analysis or by a simple temperature test, is not reliable for identifying individuals capable of spreading the virus. Regarding scientific testing, Beeching, Fletcher, and Beadsworth (2020) report “Antibody tests are primarily used to determine if a person has already had COVID-19. Specific IgM and IgG antibodies should start to become detectable after 4-5 days, with positive IgM antibodies in 70% of symptomatic patients by days 8-14 and 90% of total antibody tests positive by days 11-24.” (p.1). Note, there is a time lag between actual infection and when a positive test could result. Thus, someone could report a negative test and still be transmitting the virus.

In many areas temperature checks have become popular. Research results have been variable. Using fever as a screening tool for COVID-19 may provide a false sense of security (Mitra et al., 2020). Obviously, someone with a fever should not be participating in an aquatics program; however, absence of a fever doesn't mean an individual is virus free. Therefore, the best plan of action for maintaining health and safety of participants and staff is to limit airborne and contact transmission.

Limiting Airborne Transmission

As of this writing, the wearing of appropriate face masks is the standard means of mitigating airborne transmission of the virus. Of course, masks are not particularly appropriate or safe in the aquatic environment. For most in-water activities, masks will become wet and cling to the face, inhibiting breathing and possibly creating a choking or hypoxia hazard. For land-based activity, masks can inhibit speech, thereby limiting instruction, coaching, and more importantly, inhibiting the provision of safety directions and warnings. The heat and humidity in some pools could also contribute to heat exhaustion for the mask wearer, participant or professional.

There are a variety of plastic face coverings currently on the market. Sometimes these are worn over a mask and in this case they act as a splash guard during first aid emergencies. When worn without a mask underneath, they generally do not provide adequate protection from viral transmission. Directions for correct wearing of masks stipulate the mask should fit snugly against the skin, be over the nose and well under the chin, contacting the skin on all edges. The object here is that no direct air can flow inside the face shield, under an open or loose edge. This lack of skin contact negates the function of the mask.

Without masks, social distancing becomes the only defense against airborne transmission. To insure appropriate social distancing, first and foremost, determine what six feet actually means. Six feet is two lengths of a standard yard stick. Six feet is two arms' lengths for an average size adult. Measure it out. For a child, 6 feet is more than two arm's lengths.

It is also important to remember that during aquatic activity respiration rate increases and exhalation can be more forceful. In addition, saliva can be part of the expired air. Six feet is the minimum for social distancing where no strenuous exercise is involved. The more vigorous the activity, the greater the social distance required. Before deciding appropriate distance for an activity, assess the level of exertion by participants.

In order for the six-foot social distance to be maintained:

- Limit the number in any group activity. Consider mobility as well as stationary activity. Depending on the size of the pool or pool area, group size probably should be smaller.
- Change mobile activities to stationary activities. For example, instead of jogging back and forth, jog in place.
- Provide visual cues or markers to remind participants where their personal space starts and ends. Lane lines, cones on the deck, ropes on floaties, poly spots on the bottom, and/or tape on walls can all provide additional reminders.

- Have any needed participant equipment out on the deck, spaced appropriately so that participants do not need to cue-up to get equipment.
- Avoid including partner activities such as partner stretching where contact is closer than six feet.
- If a participant needs in-water assistance, ask that they bring a family member or caregiver with them to provide that assistance.
- If activities involve mobility, as in back and forth in the pool, stagger the individuals by having participants count off and move when their number is called, rather than allowing everyone to move at once.
- If the activity will be stationery, but vigorous, try to have participants face away from each other, back-to-back, for example, to mitigate transmission through forceful exhalation.
- Teach, coach, and/or lead from the deck, rather than in the water. The Aquatic Exercise Association (AEA) recognizes deck instruction as the preferred method of leading aquatic fitness (2005). Participants will be able to see and hear better and the professional will be safer. Appropriate footwear and/or a non-slip mat can aid in safe traction for the leader.
- Stagger entries and exits from the pool. Send participants every few seconds, rather than all at once so that they can keep an appropriate distance from each other. Remind participants that social distancing also applies in the locker room and showers.
- Close off lockers on a staggered basis to force social distance in the locker room.

Limiting Contact Transmission

Aquatic professionals are somewhat acquainted with limiting contact transmission from limiting physical contact with individuals who have drippy colds, open sores, and other body fluid problems. Individuals with these types of circumstances should already not be sharing equipment and the equipment they use should already be going through disinfecting after use. These precautions have applied to very specific circumstances. Now contact transmission and the mitigation thereof applies to everything and everyone. Policies and procedures must be expanded.

While users of chlorinated pools may assume that the chlorine in the pool is enough to handle contact transmission, this is not the case. Discussing disinfectants and sanitizers, Chen (2020) reports “the strength levels of some common disinfectants are dependent upon concentration and contact time. Chlorine bleach solution at 100-200 ppm is a sanitizer but is considered a disinfectant at 500 ppm or more” (p. 4). It takes a *disinfectant* to reduce COVID and this concentration is higher than that in typical pool water.

Each aquatic environment is different. Consult a specialist to determine what is needed for disinfecting of equipment and other contact surfaces. Most pools already have procedures in place for handling bloodborne pathogens. This is a place to start. Use those procedures to clean and remember to flush with clear water after each cleaning. Avoid generalizing from one facility to another. Chemical use varies from pool to pool. Be prepared to customize policies and procedures for each specific venue.

To further mitigate contact transmission:

- Provide sanitizer in the locker rooms so participants can sanitize their locker before and after use.
- Schedule activities so there is time between sessions for sanitizing equipment.
- Establish a means of keeping used/unclean equipment apart from clean/sanitized equipment.
- Encourage participants to provide their own equipment. Water exercise participants who use the same equipment for each session, can and should own their own. Many manufacturers may be willing to provide quantity purchasing pricing for your program.
- Remind participants to not share equipment.
- Remind participants each person should only handle their own equipment and not hand out, use, or put away equipment others have had contact with.

Maintaining a Safe Aquatic Program

Establishing and maintaining safety procedures is not a one-time task. Disease transmission knowledge is constantly changing as new viruses, variants, transmission modes, and infection rates come to light. It is critically important that all aquatic professionals continually update their personal knowledge base and modify practices accordingly. To make sure knowledge and personal practice extend throughout an aquatic program:

- Be sure knowledge and practice is based on reputable scientific data. Do not rely on each social network posting or random internet site. Check all sources for authenticity. Do not rely on rumor. Do not spread opinions. Be factual. Rely on the latest recommendation from the Centers for Disease Control.
- Be sure all aquatic staff are involved in developing and implementing health and safety procedures. Uniformity will help participants to learn and practice what is necessary, no matter who is the on-deck professional or what the activity.
- Be sure guidelines and procedures are clearly communicated to all participants. This includes using printed as well as aural formats and involving participants, parents, children, and any other caregivers.

- Be prepared to remind participants. Do not expect everyone to remember from session to session.
- Be prepared for reviewing practices with new participants who may not be familiar with procedures.
- When developing guidelines, include a provision for consequences for lack of compliance. There is always one person who sees no need to (whatever the procedure is). Safety is not negotiable. Rather lose one participant than lose the group or have to shut down due to illness of staff.

Conclusion

Remember, the main goal is safety! That must be the first goal of any aquatic program. The challenge is to maintain safety in what is a brand-new era for the entire world – the world of the highly contagious virus. How each aquatic professional meets that challenge will determine not only the personal health of that professional and the participants in the program, but the very future of our aquatic profession.

References

- Aquatic Exercise Association (2005). AEA Standards & Guidelines for Aquatic Fitness Programming – Deck Instruction. *AKWA*, 18(4), December/January.
- Beeching, N., Fletcher, T., & Beadsworth, M. (2020). Covid-19 testing times. *BMJ*, 369:m1403. <https://doi.org/10.1136/bmj.m1403>
- Chen, T. (2020). *Reducing COVID-19 Transmission Through Cleaning and Disinfecting Household Surfaces*. Vancouver, Canada: National Collaborating Centre for Environmental Health, April 28.
- Grosse, S. (2005). Deck or Pool? Re-thinking the Age-Old Dilemma. *AKWA*, 18(4), December/January.
- Knopf, K. (2004). Editorial. *AKWA*, 18(1). June/July.
- Mitra, B., Luckhoff, C., Mitchell, R., O’Rielly, G., Smit, D., Cameron, P. (2020). Temperature screening had negligible value for control of COVID-19. *Emergency Medicine Australasia*, 32(5), 867-869. October.
- Siddiquie, R., Agrawai, A., & Joshi, S. (2020). Surface alterations to impart antiviral properties to combat COVID-19 transmission. *Transactions of the Indian National Academy of Engineering*, 5: 343-347.
- Warnes, S., Little, A., & Keevil, C. (2015). Human coronavirus 229E remains infectious on common tough surface materials. *mBio*, 6(6). E01697-15. <https://doi.org/10.1128/mBio.01697-15> November.