



How to Practice Physical Distancing in your Water Exercise Classes

As pools are starting to open after the Covid-19 lockdowns, water exercise instructors are reckoning with how teaching group classes is changing. We must reopen swimming pools in a responsible manner and continue helping our students improve their health and fitness.

The Wavemakers® online mentorship for water exercise instructors is at the forefront of this effort and developed this six-step framework for teaching purpose-driven pool workouts that practice physical distancing guidelines:

1. Follow CDC Guidelines for Safe, Healthy Water Exercise
2. Introduce Dual Depths for Physical Distancing
3. Teach Exercises That Work Best for Your Depths
4. Use Effective Dual Depth Teaching Strategies
5. Get Started with Basics
6. Overcome Common Obstacles

1: FOLLOW CDC GUIDELINES FOR SAFE, HEALTHY WATER EXERCISE

Here's the good news. 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. (14)

However, aquatic facilities and exercise programs must follow local guidelines and that of the Centers for Disease Control and Prevention. (17)

The CDC recommends:

Practicing physical distancing of at least 6 feet, both in and out of the water, from those you don't live with or wearing a face covering to reduce the spread of COVID-19. If you can touch someone you don't live with a pool noodle (typically just over 5 feet long), you are too close. Face coverings should not be worn in the water. *Exceptions should be made to rescue a distressed swimmer, provide first aid, perform cardiopulmonary resuscitation (CPR), or evacuate the water or deck due to an emergency.*

Improving indoor air quality in all shared spaces and asking the pool operator if:

- Air-handling systems optimized by ensuring appropriate directionality, filtration, exchange rate, proper installation, and up-to-date maintenance.
- Introduction and circulation of outdoor air increase as much as possible, by opening windows and doors, using fans (minimize air from fans blowing from one person directly at another), or other methods. (Note: Do not open windows and doors if doing so poses a safety risk to staff, patrons, or swimmers.)
- Addition of portable solutions (for example, portable HEPA filtration units) has been considered to augment air quality in areas when permanent air-handling systems are not a feasible option.
- HVAC engineer has been consulted if needed.

This means your students can continue with regular participation in water exercise to improve their physical and mental health. Especially during these challenging times, the support of buoyancy makes water exercise essential for those with chronic pain conditions such as arthritis. Exercising in the pool can improve strength, bone health and cardio fitness by working against the natural resistance of water. It can also have a positive effect on mental health and improve quality of life while decreasing disability, which is always important and especially now that many people are self-isolating. (1,2,3,4,5,6)

2. INTRODUCE DUAL DEPTHS FOR PHYSICAL DISTANCING

As pools strategize to reopen for purpose-driven aquatics they must find new ways to use the pool that promote physical distancing. For group exercise, this means more dual depth classes.

Unless you're in a diving well or warm-water pool that tend to be a single depth, spacing exercisers tends to put people into varied depths of water: Shallow, deep, and/or transitional.

Dual depth classes involve participants simultaneously exercising in more than one depth.

There are three depths participants might be positioned:

Shallow water – mid-rib cage to mid-chest in depth. Pools with a depth range of 3.5 - 4.5 feet (1.07 - 1.37 meters) seem to be the most useful for shallow water exercise.

Deep water – when the body is suspended vertically and free to move in any direction without experiencing impact or weight bearing. A pool depth of 6.5 feet (1.98 meters) or more provides the ideal environment for a deep-water workout.

Transitional – the area between shallow and deep where exercisers are immersed armpit to neck depth. The characteristics of this depth are more like deep water, with exercisers able to “just touch” flat footed on the bottom.

Dual depth classes are a simple solution to practice physical distancing and provide exercisers opportunity for purpose-driven exercise. To be effective, instructors must provide suitable programming that works across variable depths.

3. TEACH EXERCISES THAT WORK BEST FOR YOUR DEPTHS

Not all water exercises work in all depths. Understanding what moves work in variable depths is the first step to successfully teaching dual depth classes. Here, we share universal moves for any depth and how to use the Wavemakers® 6-7 formula to create new variations of each.

- a. Moves for all Depths
- b. New Variations using the 6-7 Formula

a. MOVES FOR ALL DEPTHS

Two-footed moves such as jumping jack, cross country ski, tuck and twist work best. There's one exception and that's jogging. This alternating knee lift is suitable for all depths because it doesn't rely on pushing off stable ground to be effective. In fact, jogging is a great "go to" exercise between more difficult transitions because of its simplicity.

	SHALLOW	TRANSITIONAL	DEEP
1	Jumping jack	Jumping jack	Jumping jack
2	Ski	Ski	Ski
3	Tuck	Tuck	tuck
4	Twist	Twist	Twist
5	Jog	Jog	jog

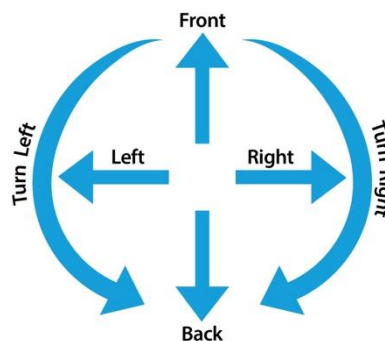
Coaching Tip: The deeper you go, large weight shifting moves that require pressing off the pool floor such as rocking front to back do not work. It's possible for instructors to teach two completely different exercises such as rocking in shallow and bicycle for deep. This requires advanced coaching skills and can be added with experience.

b. CREATE NEW VARIATIONS OF EACH MOVE WITH THE 6-7 FORMULA

Each of the five moves listed above: jumping jack, ski, tuck, twist and jog can be transformed into hundreds of new variations using the 6-7 Formula.

I created the 6-7 because, as I learned in my fellowship with the Gray Institute, life doesn't move in one direction, and neither should your workouts. **Moving in six directions** is a simple way to create exercises that mirror how we move in real life: forward, backward, right, left, turn right and turn left. See the image below:

6 DIRECTIONS + 7 FOOT POSITIONS = NEW MOVES



For each of the “Moves for all depths” try **moving the arms in six directions**. Not only does this strategy help you be creative, moving in six directions moves the arms in ways to engage the core for better and faster results. Here’s an example:

Jog with arm swing

- Jog with arm swing front to back
- Jog with arm swing right and left
- Jog with arm swing right and left rotation



Add more variability using **7 basic foot positions**. Just like an elastic band needs to be stretched for it to be launched across a room, muscles need flexibility and strength to reach, step, bend or move in any direction life takes. The foot positions allow the body to stretch and strengthen the body in slightly different ways to build total body strength. Here’s an example of 7-foot positions applied to jogging:

Jog with 7-foot positions

- Jog with feet neutral
- Jog with right foot forward
- Jog with left foot forward
- Jog with feet wide
- Jog with feet narrow
- Jog with toes out
- Jog with toes in

Watch the video to see the 6-7 in action: [20 NEW WAYS TO JOG IN THE POOL](#)

Now that you know how to build an expansive library of moves packed with purpose, it’s time to lead the workout. Teaching is a constant dance between delivering choreography and coaching movement. Let’s explore coaching strategies for teaching dual depth classes.

4. USE EFFECTIVE DUAL DEPTHS TEACHING STRATEGIES

Each of the five recommended “Moves for All Depths” exercises require different instructions for each depth the move is performed. As a water exercise coach, at first this double duty cuing can feel overwhelming. To get started, focus on three things that help participants learn how to effectively use water:

- a. Teach sculling
- b. Develop awareness
- c. Be an intensity coach

a. TEACH SCULLING

Knowing how to use the hands enables students to change the workload of any exercise. Slice, closed hand and flat palm progressively increase surface area of the hand and intensity. Use of a flat palm moving in a figure 8 pattern is a must-learn skill for water exercise. Known as sculling, this hand motion helps participants engage the core and improve upper body strength.

Watch the sculling demonstration video: [3 WAYS TO USE SCULLING](#)

Sculling is particularly important when exercising in transitional and deep water to avoid the common problem of drifting and is also the first step in developing movement awareness.

b. DEVELOP AWARENESS

Participants need instructions to help them **feel the move**, which is especially tricky if a student is in an unfamiliar depth of water, because the exercise will feel different.

To help decide what cues work best, let's review the different ways to contact the pool floor.

This is particularly important because, impact changes how muscles react and therefore influences what cues to give.

- Grounded – one foot always in contact with the pool floor
- Rebound – or bounce, can range from low impact to explosive plyometrics
- Neutral – having a light contact with the pool floor
- Suspend – elevated off the ground

When teaching dual depth classes consider the type of impact to determine the cues to give.

- Deep water = suspend
- Transitional water = hybrid of neutral and suspend
- Shallow water = all impact options are possible: grounded, rebound, neutral and suspend. For simplicity, when teaching dual depth classes use rebounding moves as they are most common. With experience, other options can be added.

The following chart provides important coaching cues to help participants *feel the move*.

MOVES FOR ALL DEPTHS: COACHING TIPS

SHALLOW Rebound	TRANSITIONAL Neutral or Suspend	DEEP Suspend
Jumping jack Both feet <i>press off</i> the pool bottom while hands <i>press out to the side and down</i> .	Jumping jack Both feet <i>press out</i> while hands <i>press down</i> elevating to feet wide and land narrow.	Jumping jack Both feet <i>press out</i> while hands <i>press down</i> elevating to feet wide and land narrow.
Ski Both feet <i>press off</i> the pool bottom while arms swing in opposition <i>pressing front and back</i> .	Ski Both feet land center split front to back to elevate pressing against the water. Use of arms for sculling is essential and speed should be slower.	Ski Ensure basic ski is achieved with correct synchronization of arms and legs for spinal safety before variations. Cue good alignment and demonstrate <i>wrist turning so that the palm leads</i> the arm to keep position and not travel.
Tuck Both feet <i>press off</i> the pool bottom while hands <i>press down</i> . Use this “go to” exercise to safely transition to a new move.	Tuck Cue to <i>press legs down</i> against buoyancy and encourage strong arms in opposition so as the legs <i>press legs down</i> , the arms pull up toward the surface.	Tuck Ensure <i>feet are flexed</i> to maximize surface area and cue to <i>press down with full hip extension</i> .
Twist Both feet <i>press off</i> the pool bottom. Think shoulders over hips with arms moving opposite direction to the body.	Twist Start and return with 2 feet center. Break twist down into more moves. For example: tuck, twist right, center, press legs down - 4 count - Repeat left. Arms should move in opposition so as the legs move right, arms go left.	Twist A wide leg is a great place to practice twist for assisting with stability progressing to legs together to increase the balance challenge. The 4 count choreography from transitional works well.
Jog Sink into the hips, land toe to heel and <i>press off</i> the pool bottom. Use this “go to” exercise to safely transition to a new move.	Jog Slower tempo, <i>press heels down and scull for lift</i> .	Jog Use <i>flexed foot</i> to press down and cue <i>full hip extension</i> .

Coaching Tip: Strategize the order of coaching instructions by asking the question: Where are most participants? If the majority of exercisers are in shallow water with some in deep water, deliver shallow water commands first followed cues for deep-water. Consistency in cueing eliminates confusion as to who the cue is meant for.

c. BE AN INTENSITY COACH

Research supports that a self-perceived measure of how hard one is working is closely related to actual workload. (8, 9, 10, 11, 12, 13) The most popular scales to measure Rating of Perceived Exertion (RPE) in the pool are:

1. American College of Sports Medicine (ACSM) 3-point Intensity Scale
2. The Aquatic Exercise Association (AEA) Aquatic Exercise Intensity Scale

The disconnect is oftentimes participants do not have a true understanding what each level of effort feels like. Helping students perceive the effort being used to do each exercise—especially ones new to them—is critical for best results.

Be an intensity coach! Teach participants how to monitor how hard they are working with a vocabulary that helps them understand each level.

Since there is so much to think about when teaching dual depths, start by using the 3-point scale and graduate to the 10-point scale with experience.

ACSM 3-POINT INTENSITY SCALE

INTENSITY	DESCRIPTION
Light	Feels relatively easy and comfortable to do.
Moderate	Feels more difficult. At the high end of moderate mouth breathing is a must because nose breathing isn't enough to give you the oxygen you need.
Vigorous	Feels challenging, hard and uncomfortable to do.

Coaching Tip: The best way to teach the scale is using a build-up drill which simply takes one exercise through each level of effort.

Here's an example of using jogging as a build-up drill:

- Jog at light intensity for 15-seconds
- Jog at moderate intensity for 15-seconds
- Jog at vigorous intensity for 5 to 10-seconds
- Repeat 1-3 times

Coaching intensity takes practice. Start by developing a short list of coaching commands. Use the same cues every time you teach so participants learn to associate the word that you use with expectations.

Once participants have a firm grasp on how each level feels, add a few more commands to your list. Here are a few ideas shared by the Wavemakers community to help get you started.

CUES FOR INTENSITY

LIGHT
<p>This move feels like an easy walk from your car to class</p> <p>You are feeling comfortable and moving</p> <p>Settling into your spot in the pool with safe distancing</p> <p>Gently sway your arms</p> <p>You could do this all day. Feels good to move!</p> <p>Feel the support of buoyancy</p> <p>Notice the water moving around you like a gentle breeze</p> <p>Feel a slight increase in heart rate</p> <p>Breathing a little harder, but you can speak in full sentences</p>
MODERATE
<p>Your muscles are responding with "I remember -this is exercising!"</p> <p>Your heart rate starting to increase and muscles are working</p> <p>You could say a few words to water friends if you were not 6 feet away</p> <p>Feel the water pushing back against you</p> <p>Late for an appointment, a brisk walk</p> <p>Notice breathing starting to become more labored</p> <p>Now you can only say one or two words before you need to take a breath</p> <p>The water feels thicker, a little like honey resisting every move</p>
VIGOROUS
<p>You are breathing through your mouth now</p> <p>You have no interest in talking</p> <p>You are just focusing on how hard you are working</p> <p>If you're uncomfortable, you're in the right place! Welcome to vigorous.</p> <p>Muscles are burning and heart is pounding</p> <p>the traffic light is going to change in seconds and you need to cross the road</p> <p>Your muscles are saying STOP and your mind says. Keep going! You've got this!</p> <p>Focus! This is it! Own it!</p> <p>sorry I can't talk now</p> <p>The water feels like thick mud. It's hard. Don't give in keep moving...smile your beautiful!</p>

Choose the coaching phrases at each level of intensity that feel the most like something you would say and incorporate them into your classes to help your students "feel" the work.

5. GET STARTED WITH BASICS

As fitness leaders we typically plan appropriate time for warm-up, conditioning, and warm-down; basic components of a workout. But, extended time off requires a different approach.

Rather than box yourself into a specific time for each phase of the workout, think of your first few workouts as an extended warm-up. Here's an example of such a workout plan:

- (1) **Get familiar with basic moves.** Try a jog with varied foot positions.
- (2) **Move in six directions.** Do an arm swing: front to back (15-seconds), right to left (15-seconds), right and left rotation (30-seconds). Repeat on both sides of the body
- (3) Repeat step 1 and 2 with new cues that focus on how each move feels.
- (4) **Learn to move the water.** Teach sculling with feet in varied foot positions.
- (5) Repeat steps 1, 2, 3, 4. Boost confidence with words of encouragement.
- (6) **Get familiar with intensity.** Teach the ACSM 3-point with a build-up drill.

As you lead the workout get feedback along the way. Ask students: *How do you feel? Do you notice moves they are struggling with? Could you try a different cue?*

Coaching Tip: For both newbies and experienced water exercisers, a focus on basics is the perfect way to ease into their program after an extended time off.

6. OVERCOME COMMON OBSTACLES

Now that you know more about dual-depth classes, you have a unique opportunity to plan for purposeful water exercise with physical distancing.

As you do so, here are some common issues you might need to overcome:

If no equipment is permitted and I must stay in shallow water, how do I physical distance?

Transitional depth offers an extension to the shallow end and no equipment needed. However, instructors must plan for the unique coaching cues required for each depth.

How do I increase intensity when my space no longer allows me to do traveling moves?

Travel is just one way to up intensity. Teach participants sculling and how to effectively monitor their effort using the ACSM 3-measure scale. Once participants understand how to use the water, they'll realize travel is not the only way to increase intensity.

What about equipment?

Many facilities are recommending participants purchase their own equipment. **Webbed gloves** help improve muscle engagement and are especially beneficial for stability and alignment when exercising in transitional and deep water. **A flotation belt** is recommended when exercising in deep water and a nice assist for suspended moves in transitional water.

How do I keep participants in each depth engaged?

Rely on repeaters. More repetition of a move is particularly useful when teaching dual-depths. It allows participants the time feel how to move against the water and gives instructors the time to address each group of exercisers with the cues they need.

What about the safety of the water exercise coach?

Water exercise coaches that lead from the deck need to practice self-care. Due to slippery and hard surfaces it's important to avoid bouncing and jumping.

- Use a stool for partially seated demonstration
- Put flip flops on your hands and show "hands as your feet"

Are there tools to assist with physical distancing?

Try using cones placed on deck to help mark 6-foot distancing guidelines. *Wavemaker Christina White writes encouraging messages on the cones as an added personal touch!*

What tempo of music works best?

Expect the speed at which participants move to be different in each depth. In shallow you have the ability to push off the pool bottom allowing for quicker transitions. Push off, is not available in transitional and deep-water making movement of the same exercise slower.

- Consider using the words: slow, medium and fast to cue speed
- Use instrumental music to avoid competing with music lyrics

CONCLUSION

These strategies really work. Take it from Wavemaker, Chris Dimond, who reflects after teaching with the recommendations outlined in this paper for two months post-lockdown:

"The key is for instructors to be able to go with the flow, be willing to think outside the box, be ready to adjust at a moments notice, and accept things are different."

To deliver purpose-driven workouts in all depths, stay focused on the things that work with the guidelines we just covered. Here is a quick review:

1. **Follow CDC Guidelines for safe, healthy water exercise.** This article is one of many by the 30+ organizations coming together as the **Aquatics Coalition** to share expertise, best practices and work completed to advocate for safer post-lockdown return to purpose-driven instructional aquatics. More resources available at: www.aquatics-coalition.org
2. **Stick to moves that work in all depths.** Jumping jack, cross country ski, tuck, twist and jog work well in shallow, transitional and deep water. Use the 6-7 formula to create purpose-driven total body workouts that feel fresh every time you teach.

3. **Teach sculling.** This skill is not just for swimmers! Knowing how to push and pull against the water gives participants the ability to adjust the intensity of any move and avoid drifting into the space of others.
4. **Develop awareness.** When participants are new to exercising in the pool or have had extended time off, it can take 2-4 weeks (or more) to skillfully move in the water. And after an extended time away from the pool, even basic moves may feel new. While it may feel monotonous, allow time for participants to learn the moves, understand how they should feel, and a little extra time to really own the move!
5. **Be an intensity coach.** Avoid the temptation of doing high intensity segments such as Tabata intervals during the first few weeks back. The most important thing to learn in this phase of training is how to use the water and move in and out of different levels of intensity: light, moderate and vigorous.
6. **Plan for an easy start.** Take advantage of the opportunity to start from scratch and build even better programs that help people get stronger, boost immunity and build resiliency.

Bottom line: Let's use this time to get hyper focused on the things that make water exercise classes safe and highly effective.

Author

Laurie Denomme, B., Kinesiology
Founder of Water Exercise Coach
Creator of Wavemakers®

Deepest gratitude to Katrien Lemahieu, Mick Nelson, Sue Nelson, Jeanmarie Scordino, Lori Sherlock, Craig Stuart, and Steph Toogood for their contributions to this paper.

Special thanks to the passionate people inside Wavemakers. I'm forever grateful for the collective wisdom of a community that is committed to learn, grow and share so that we can individually and collectively be better water exercise coaches for the people in our community.

Contact Information

WaterExerciseCoach.com
laurie@waterexercisecoach.com

Originally Published: June 26, 2020

Updated: June 30, 2020

Additional CDC guidelines for public safety in and around the pool are addressed in: “Use of Social Distancing Practice During Swimming Lesson Programs” by Starfish Aquatics Institute (15, 16). This document is available at: www.aquatics-coalition.org

Staff and attendees staying home and isolating from others if diagnosed with COVID-19; waiting for COVID-19 test results; or have cough, fever, shortness of breath, or [other symptoms of COVID-19](#). Check out [steps you can take if you are sick](#) and [when you can be around others](#).

Staff and attendees staying home and monitoring health for 14 days after the last time close contact with (less than 6 feet from) someone with COVID-19. Check temperature twice per day and watch for [symptoms of COVID-19](#). If possible, stay away from people who are at [higher-risk](#) for getting very sick from COVID-19. Follow step 1 if you develop symptoms of COVID-19.

REFERENCES

1. https://www.cdc.gov/healthywater/swimming/swimmers/health_benefits_water_exercise.html
2. Kanitz AC, Delvatti RS, Reichert T, et al. Effects of two deep water programs on cardiorespiratory and muscular strength responses in older adults. *Experimental Gerontology*. 2015; 64:55-61.
3. Nagle, Elizabeth F. Ph.D., FACSM; Sanders, Mary E. Ph.D., ACSM-CEP, RCEP, CDE, FACSM; Becker, Bruce E. M.D., M.S., FACSM AQUATIC EXERCISE FOR HEALTH: PROBING THE DEPTHS OF HIIT FOR CARDIOMETABOLIC TRAINING, ACSM's Health & Fitness Journal: 7/8 2019 - Volume 23 - Issue 4 - p 14-26.
4. Cole, A.J., Becker, B.E., *Comprehensive Aquatic Therapy* 2nd Ed., Butterworth-Heinemann, 2004. ISBN: 0-7506-7386-9
5. E, Piotrowska-Całka. (2010). Effects of a 24-week deep water aerobic training program on cardiovascular fitness. *Biology of Sport*. 27. 10.5604/20831862.913074.
6. Sova, R., *Aquatics: The Complete Reference Guild for Aquatic Fitness Professionals*, DSL Ltd., 2000. ISBN: 1-889959-07-3
7. <https://www.cdc.gov/healthywater/swimming/index.html>
8. American College of Sports Medicine Guidelines For Exercise Testing and Prescription 8th ed Lippincott Williams and Wilkins, Philadelphia 2010
9. Aquatic Exercise Association. *Aquatic Fitness Professionals Manual* 7th Edition, Human Kinetics, 2018. ISBN: 978-1-4925-3374-0.
10. Pinto SS, Alberton CL, Zaffari P, et al. Rating of Perceived Exertion and Physiological Responses in Water-Based Exercise. *J Hum Kinet*. 2015;49:99-108. Published 2015 Dec 30. doi:10.1515/hukin-2015-0112
11. Colado, J. C., & Brasil, R. M. (2019). Concurrent and Construct Validation of a Scale for Rating Perceived Exertion in Aquatic Cycling for Young Men. *Journal of sports science & medicine*, 18(4), 695–707.
12. Colado JC, Tella V, and Triplett NT. A method for monitoring intensity during aquatic resistance exercises. *J Strength Cond Res* 22: 2045–2049, 2008.
13. Colado, J.C., Travis Triplett, N. Monitoring the Intensity of Aquatic Resistance Exercises with Devices That Increase the Drag Force: An Update (2009) National Strength & Conditioning Association 31(3):94-100.
14. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>
15. <https://www.cdc.gov/coronavirus/2019-ncov/community/parks-rec/aquatic-venues.html>
16. <https://www.usaswimming.org/utility/community-quarantine-resources/aquatics-coalition>
17. <https://www.cdc.gov/coronavirus/2019-ncov/community/parks-rec/aquatic-venues.html>
18. Gray Institute. Gray Institute of Functional Transformation Fellowship (2011).