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## Swimming Past the Pandemic: Importance of Evidence-Based Science

Stephen J. Langendorfer Ph.D.

*Bowling Green State University - Emeritus Professor, Developmental Aquatic Kinesiology,*  
slangen@bgsu.edu

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## Swimming Past the Pandemic: Importance of Evidence-Based Science

Without the benefit of hindsight, I am inclined to predict that the seriousness of our current COVID-19 pandemic probably stands in a whole different category as a momentous event compared to those other notable events in our collective lifetimes. Never in my wildest nightmares had I envisioned being quarantined in my house and near neighborhood or having a huge proportion of the U.S. population out-of-work and the country in effect shut down. I recall a history professor during my college years in the early 1970s saying that we had so many governmental and economic safeguards in place that another “Great Depression” like the one my parents lived through was impossible! Apparently no one bothered to inform this novel coronavirus of that erroneous opinion!

As many regular readers know, for much of the past several decades I have been an avid daily swimmer (some may call me “obsessive” or “relentless”). In January, I underwent a third rotator cuff surgery that I had expected to hold me out of the water for maybe 3 months. Foolish thinking on my part, indeed! I now realize that based on my age and some chronic health issues, if I am infected by COVID-19, I might not survive. Except in some bizarre post-nuclear zombie movie, it never ever dawned on me that I could die simply by leaving my house and having a chance encounter with another human being who may have no illness symptoms!

Suddenly, the prospect of getting back into the water, instead of being something I look forward to with the greatest of eagerness, now poses the greatest of existential threats to my life. If I got infected by any of dozens of chance encounters going to, into, and from the pool, it could be the last thing I ever do! An existential dilemma for a rabid swimmer if I have ever faced one!

During my self-imposed quarantine, I regularly have read informed and informative papers about this current pandemic, chief among them was a very well-reasoned paper from a COVID-19 Study Group at the Imperial College in London, UK. I wish this paper was required reading for everyone, especially those who now are clamoring to be able to get back to “normal” and “restart” the economy immediately, the health consequences be damned. Are people really claiming that “the economy” is more important than an individual’s life and existence? Really?!

The “evidence” from most sources says that there are only three conditions under which we should dare return to “normalcy.” The first instance would be the result of the development of so-called “herd immunity.” This prospect is horrific to consider because it means that upwards of 50-80% of the population needs to contract COVID-19 which means that the death toll in the U.S. alone could reach two million or more people

according to the Imperial College paper. The second instance is for the development and distribution of a *safe* and *effective* vaccine. I emphasize both *safe* and *effective* because unless a vaccine is 75-90% effective without dire side effects, it cannot create a state of “vaccine-induced herd immunity.” The other challenge of the vaccine is that there is no guarantee that an effective one can be developed. Recall that no vaccine yet exists for HIV infections or for the common cold (among which some are coronaviruses). If one can be developed, the earliest date at which it could be available for widespread distribution would be 12-18 months which means somewhere between March 2021 and September of 2021! The final instance that could allow us to return to a certain degree of “normalcy” would be more realistic: the introduction of a widespread “test, contact trace, and quarantine” program nationwide to further limit the spread of the virus as has been done somewhat successfully in South Korea and Germany, countries much smaller in population and area than the U.S. Whether we can scale such an effort up in the U.S. and other large countries is still an open question, especially without the federal government (e.g., Centers for Disease Control and Prevention) being in charge.

What does this all have to do with swimming? It should remind us that whether it is our behaviors during the pandemic day-to-day or how we train when we can swim again, we should be using sound, evidence-based information. That means cross checking information like journalists do to be certain the information is both accurate and reliable. It also means that unless we can limit ourselves to swimming in selected safe venues (e.g., in open water) for June, July, and August 2020 mainly, we (especially me!) ought not safely return to swimming until sometime in 2021, maybe even later!

I have participated in discussions about how to create “safe social distancing” in pools by making swimmers stay at least 6 feet (i.e., 2 meters for the rest of the world) away from other swimmers. This so-called “safe distance” to avoid infecting or being infected was identified on stationary and sedentary humans breathing normally. Do swimmers who are exercising and breathing more rapidly and heavily need a greater safe distance from other swimmers? We do not know the answer to that or many other questions. Perhaps more critically, how do we maintain safe social distancing out of the pool on the deck and in locker and changing rooms? Essentially all the non-water surfaces around a pool and in changing rooms (including showers and toilets) potentially can be contaminated by a single, asymptomatic individual.

I would like to share a link to a terrific article by a Dr. Erin S. Bromage, a biologist, who described the risks associated with everyday and work activities. The examples he provided about contact tracing of early virus clusters was extremely informative and contains some practical examples of what to do and not do in our work-a-day and

everyday lives. I recommend spending the 12-15 minutes reading this post. <https://www.erinbromage.com/post/the-risks-know-them-avoid-them>

Recall that the whole social distancing and sheltering in place efforts were last resort options to ensure the safety not only of persons who may be get infected, but also all the individuals with whom they may come in contact and for all the health care workers who have to treat ill individuals. This brings me back to the three options that will allow us to rein in the pandemic: a safe and effective vaccine, sufficient herd immunity across the population, and/or testing, contact tracing, and quarantining. Except for the latter option, the first two options appear to be unlikely in our near future.

I wish I or anyone was privy to some other “magical cure,” but as far as I have read, no one has such a panacea nor will they. My advice to everyone, swimmer or not, is to keep following the Centers for Disease Control and Prevention (CDC) guidelines for good hygiene including washing your hands frequently and well for 20-30 seconds, wearing masks in public, and maintaining a safe distance from everyone else. I also urge patience and to be ready to stay the course for a much longer time. As for me, you will see me walking on my treadmill or pedaling one of my bikes around my neighborhood and city while wearing a mask and longing to return to the pool, but not until I get my vaccine!

Be safe, stay healthy (physically and mentally), and be kind to yourselves while we weather perhaps the most difficult event of our lifetimes.

Steve Langendorfer  
Founding Editor  
International Journal of Aquatic Research and Education