

IATF COVID-19 Statement May 31, 2020

This statement is NOT about patients recovering from a COVID-19 infection. The statement depends on the state-of-knowledge as per date above. Knowledge and guidelines, like the WHO guidelines¹, will change in time and will be updated when necessary.

**Patients recovering from a COVID-19 infection may show a wide array of complications requiring a rehabilitation pathway which may include aquatic therapy². Applications of aquatic therapy will not be described in a future document. Neuromusculoskeletal symptoms like e.g. muscle weakness will be treated as usual for the moment. Until research indicates the COVID-19 recovery trajectory includes unique symptoms, IATF advocates impairment directed best practice interventions.*

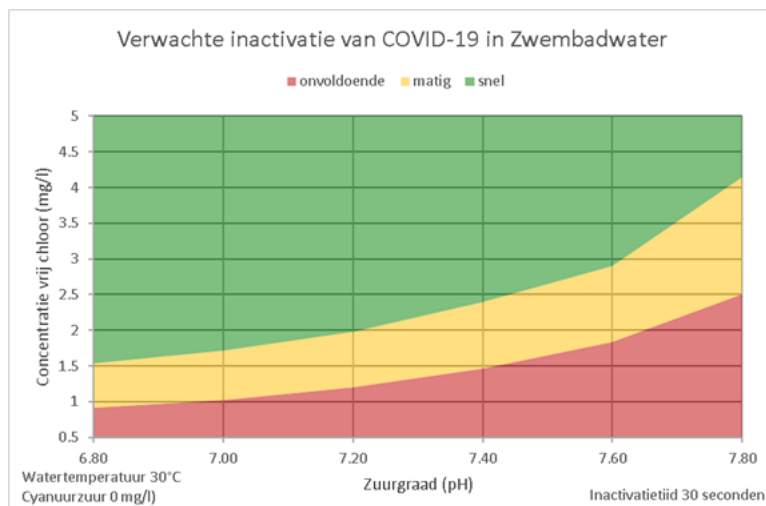
The COVID-19 pandemic is a health problem affecting almost every country in the world. Restricting the pandemic and the virus spreading from one person to another is the top priority. To this end, almost all of the countries concerned adopted rules for their territory that must be observed by their population.

Aquatic therapy as one healthcare service is impacted by COVID-19. It is currently unclear whether aquatic therapy should be provided during the pandemic or suspended. Ultimately, answering this question depends on **national/regional regulations** to contain and control the pandemic. In those countries where skilled aquatic therapy (by health professionals) is not explicitly prohibited, and national rules for aquatic therapy are not clearly defined, the Association IATF recommends the following.

A COVID-19 triage should be performed according to the national regulations:

- If increased COVID-19 risk (based on symptoms³): no face-to-face treatment
- If no increased COVID-19 risk: face-to-face treatment can be considered.
 - face-to-face treatment can be hands-off or hands-on
- The health care professional needs to decide if face-to-face aquatic therapy is necessary to prevent irreversible decline, based on normal screening procedures, the benefit-risk balance will direct practice.
- If patients do not need hands-on treatment, national rules for social distancing should be followed in the pool and all aquatic environment areas.
- National rules count for the amount of space per person in the pool (e.g. one per 10 m²).
- If hands-on treatments are necessary, the therapist should consider to wear personal protective equipment as indicated by national regulations.

- Caution with hands-on treatments in which faces of therapist and patient are close, e.g. WST exercises on therapist's lap, BRRM patterns in which the therapist holds hands or arms, Aqua-T-Relax.
- Avoid intensive aerobic training which increases respiration. This might increase aerosol production and possibly spreading the virus.
- Pool staff should be limited in order to reduce the amount of social / therapeutic contacts. If possible, specific staff should be assigned to work in the pool area.
- Patients and therapists should perform a full body and hair rinse before therapy for about 60 seconds, as recommended^{4,5}. This helps to decrease the disinfection by-products⁴ in the pool, which eases to maintain an adequate level of free chlorine (or bromine)
 - The American Centers for Disease Control and Prevention states "There is no evidence that COVID-19 can spread to people through the water used in pools, hot tubs, or water playgrounds. Proper operation and disinfection of pools, hot tubs, and water playgrounds should kill the virus that causes COVID-19. Limit close contact with people outside your home in public spaces, both in and out of the water"⁶. Inactivation time of the virus that causes COVID-19 is not known yet. A panel of European and CDC experts met May 8th and based recommendations about disinfection on knowledge of the Adenovirus, as presented in the Dutch guideline^{7,8}, in order to have a 99.99% reduction in 30 seconds:
Inside pools: free chlorine 1.2 mg/l and pH 7.2
 - Bromine concentrations are unknown



Expected COVID-19 inactivation in swimming pool water⁷
Green = fast, yellow = moderate, red = insufficient

- Patients who belong to groups at higher risk for severe illness from COVID-19⁹ should be judiciously treated in an aquatic environment with careful scheduling to avoid other patients and staff.

- Also, post-COVID patients should be judiciously treated in an aquatic environment with careful scheduling to avoid other patients and staff.
- Pool/poolside/changing room equipment, door handles etc. must be disinfected after each treatment according to existing regulations. WHO¹⁰ suggests a 5000 ppm bleach solution.
- Air quality: CDC recommends that pool operators should monitor proper ventilation in the pool basin area in order to prevent development of bio-aerosols^{11,14}. REHVA¹² states “Increase air supply and exhaust ventilation and – when possible – use more window airing, Nishiura et al¹³ analyzed superspreading events of COVID-19 and showed that closed environments with minimal ventilation strongly contributed to a characteristically high number of secondary infections. Contamination further depends on distance, contact time, coughing, sneezing and the intensity of respiration. Relative humidities and air temperature as common in pools do not affect the COVID-19 virus¹².”

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