



Background on the Aquatics Coalition

The Aquatics Coalition is comprised of more than 20 water safety and competitive water sports organizations spanning from learn-to-swim programs, health and rehabilitation groups to competitive aquatics organizations. This diverse group joined together with one aim: advocate for a return to purpose-driven instructional aquatics by developing tools to guide a safer return to water. The Coalition is not advocating to open pools for unrestricted recreational use, but rather solely for purposeful aquatics activity.

Pillars of prevention

Pools and aquatic facilities have instituted numerous safety measures to reduce the risk of SARS-CoV-2 transmission, many of which have been proposed by the Aquatics Coalition. These measures include:

- COVID-19 Safety Education for staff and swimmers
- Sign-up systems/reservations
- Health screenings and informational placards at entrances
- Maintenance of appropriate social distancing between staff and participants
- Capacity limitations in venues, locker rooms, restrooms
- Facility cleaning protocols
- Pool and ventilation maintenance guidelines
- Required mask usage unless swimming
- Hand sanitization stations

Background on the Survey

As pools began to open across the country during the summer of 2020, the Aquatics Coalition began discussing the effectiveness of the new safety protocols put in place to allow safe access to pools for purposeful aquatics. A survey was created by the Aquatic Coalition to better understand the effects of COVID-19 on aquatic facility operations and activities, specifically how the COVID-19 pandemic has affected purposeful aquatics programs such as learn to swim, lifeguard training, competitive swimming, aquatic fitness/exercise and pool based physical therapy. The survey was distributed through the Aquatic Coalition network, including USA Swimming, the U.S. Swim Schools Association, the Association of Aquatic Professionals, the Aquatic Exercise Association, and the Aquatic Therapy and Rehab Institute, and was conducted between October 2020 and December 2020.

Survey Data

Survey Respondents and Facility Type Data

The survey received 556 responses from individuals representing 1206 facilities and aquatics programs across 50 jurisdictions (49 states and the District of Columbia). The facility types represented in the survey responses were indoor pools, outdoor pools, recreation centers, YMCAs, private fitness centers, rehabilitation/therapy centers, private or homeowner's community pools, and hospital pools (See Fig. 1: Count of Facility Type). The majority (71.6%) of survey respondents operated year-round facilities, 6.8% operated seasonal facilities and 21.4% operated both types of facilities.

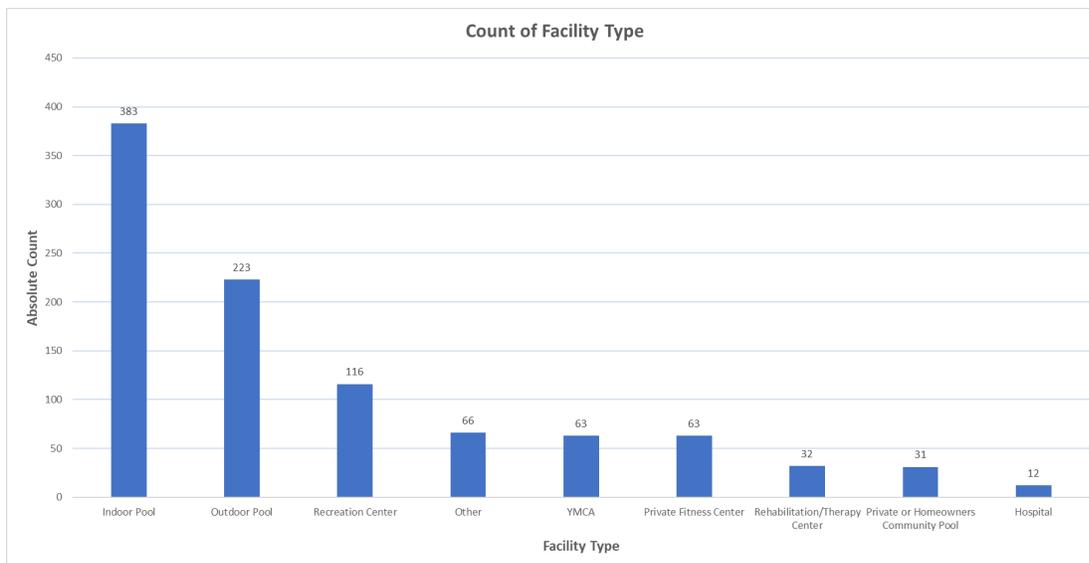


Fig. 1. Count of Facility Type (Respondents could identify their facility type as any or all of the following: Indoor Pool, Outdoor Pool, Recreation Center, YMCA, Private Fitness Center, Rehabilitation/Therapy Center, Private or Homeowners Community Pool, Hospital, Other.)

The majority of survey respondents (40.6%) operate pool-only facilities; 36.2% operate multipurpose facilities; and 21.4% of the respondents operate both multi-purpose and pool-only facilities. Overall, at the time of the survey, 88.3% of facilities were currently open or had been opened since the beginning of the COVID-19 pandemic. Of multi-purpose facilities, 91.9% were open or had opened; a slightly lower percentage of pool-only facilities (84.7%) were open or had opened.

Closure Data

Of the survey respondents who gave a reason for non-opening, 50.8% cited that they had never opened due to government regulations, 36.1% indicated that they had indefinitely closed their facility, while 14.8% cited budget concerns as the reason for never having opened. A small proportion of survey respondents (8.2%) had opened but later had to close due to COVID-19 cases.

At the time of the survey (October – November 2020), the median amount of time that a facility was open was 4 months, suggesting that closures of approximately 3-4 months were common.

Analysis of Open Facilities

In regard to program types being offered by the open facilities, the three main types are Competitive Training (*offered by 24.7% of open facilities*), Aquatic Fitness/Exercise (*offered by 21.8% of open facilities*) and Learn-to-Swim (*offered by 20.9% of open facilities*). Safety protocols were enforced and managed during these activities.

Most open facilities restricted access to just internal programs and groups (*46.7%*), although some open facilities were open to the public and other outside groups (*29.4%*). That being said, over two-thirds of open facilities required reservations (*71.8%*).

Survey responses indicated that between 2019 and 2020 there was a 48.8% decrease in attendance. This number is based off survey respondents who were able to provide quantitative estimates of attendance levels in both 2019 and 2020. Additionally, there were numerous respondents who provided qualitative feedback underscoring the significant and extreme decline in attendance levels in 2020.

The survey also indicated that staffing levels were severely impacted in 2020. The majority of facilities (62.5%) that provided staffing level information reported decreases. The observed decreases are likely due to a combination of reduced attendance and related revenue loss. Given that only two out of 18 facilities that reported increases in staffing levels also reported increases in attendance, it is possible that an increase in staffing levels was required to comply with the increased safety protocols.

From a revenue perspective, the vast majority (89%) of survey respondents who responded to revenue-related questions reported decreased revenue. At the same time, only 38.7% of that cohort reported decreased expenses and 34% reported increased expenses.

Analysis of Specific Types of Purposeful Aquatics

The survey also included questions about specific types of purposeful aquatics, in order to be able to better disentangle the effects on distinct parts of the aquatic industry. In regard to Learn to Swim, just under one-third (26.6%) of survey respondents indicated that they were considering closing their Learn to Swim Program indefinitely. Furthermore, the average Learn to Swim attendance decreased by 59.6%. Additionally, 18.3% of survey respondents offering Learn to Swim programs were offering only private lessons, and 15% of survey respondents were only offering semi-private lessons to children from the same family.

In regard to Competitive Aquatics, on average, there was a decrease in the number of athletes by 29.1%. Only 36.8% of survey respondents did not foresee a possible future closure of the facility being used for competitive aquatic programming, and 83.3% of survey respondents indicated that they did not have alternative practice venues in the event of a facility closure.

COVID-19 Related Findings

Slightly over one fifth of survey respondents (22.3% of survey respondents, 33.1% of question respondents) reported that they were aware of a case of COVID-19 in someone affiliated with the facility since the onset of the pandemic. However, out of all of the survey responses, only one positive case was reported to have resulted from an exposure at the facility.

Most reports of positive cases were in persons who did not participate in programs. These included family members or close contacts of program participants (37.2%). Roughly one-third of positive cases that survey respondents were aware of had been identified in staff (33.1%) and students or program participants (26.6%) respectively. The two age groups with the highest frequency of positive cases were individuals under 18 and individuals 18-24. The majority (78.6%) of survey respondents reported that contact tracing had been performed at their facilities at some point following a positive case.

Conclusions

These results support anecdotal evidence indicating that pools have operated with little COVID-19 transmission using safety precautions. Although the study is not representative, and is limited by potential self-reporting biases and lack of ubiquitous testing and reporting from all patrons and staff members, the limited number of reported cases is encouraging.

Survey results show broad revenue loss, an expected finding reflective of the experience of many small business-based industries^{1,2}, likely with resulting long-term financial difficulties¹. Indeed, given that this survey was distributed in the Fall of 2020, it is likely that the negative financial effects will be increased by the shutdowns that occurred over the course of the winter¹. Furthermore, the reported reduction in staff levels is likely due to involuntary lay-offs and/or the inability to hire seasonal staff. Therefore, the adverse financial fallout is not limited to the facilities but has likely affected the local community as well.

The reduction in Learn to Swim offerings is alarming due to the importance of access to swim lessons to mitigate drowning events in a community, specifically for children^{4,5}. Drowning is the leading cause of death among children aged 1-4 years old, second only to congenital anomalies⁶; for children between the ages of 1 and 14, drowning remains the second-leading cause of unintentional injury-related death⁷. Additionally, racial, and ethnic minority children are at greater risk for drowning than their white peers^{8,9}. Furthermore, the limitation of Learn to Swim programming to private and semi-private lessons at many facilities may exacerbate the existing divide in swim lesson access between economically privileged and economically disadvantaged children, and associated differences in the likelihood of drowning⁹.

In summary, results suggest limited transmission in controlled aquatic settings with safety measures in place. Additionally, COVID-19 related lockdowns had negative effects both on the aquatic industry as a whole, as well as on the local communities in which these facilities are located. Additional research is needed to understand more about how the COVID-19 pandemic has affected purposeful aquatic activities and identify potential long-term impacts on health and safety.

Citations

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