

Let's Talk Air & What Makes Learning to Swim a Great Low Risk Activity Choice

We've established that viruses such as COVID-19 are not shown to be transmitted in properly maintained pool water. [1] So let's talk about the air surrounding the pool. Many learn to swim programs are conducted indoors allowing for year-round instruction to build and maintain skills. After talking with industry experts we've uncovered some interesting information on ways ventilation for indoor pools is far superior at minimizing virus transmission than most indoor spaces.

Keith Coursin is the President of [Desert Aire](#). He has served on several ventilation committees including the CDC's Model Aquatic Health Code Committee. He shared that mechanical engineers use the *ANSI/ASHRAE Standard 62.1- 2020 Ventilation for Acceptable Indoor Air Quality* to determine how much ventilation air the dehumidification equipment must be designed for an indoor pool. When looking at the standard, indoor swimming pools are required to have a very high ventilation rate. It's been designed this way to help remove byproducts of the chlorine used to maintain the pool water. Keith shared this comparison of the ventilation rate:

Indoor pool ventilation is:

- 8 times more than an office space
- 4 times more than an elementary classroom
- 2.6 times more than a science laboratory

Keith said, “in fact, there is no other building type listed in the standard that comes close to the required ventilation rate of an indoor pool.” So what does all this mean? The air you find at an indoor pool is better ventilated than many other indoor spaces you will be in.

In this great video below, the aquatics engineering experts at [Counsilman Hunsaker](#) share that for years, designers have been exploring ways to increase air turnover, minimize air velocity and introduce fresh air to handle the air requirements to maintain indoor pools. They confirm, as Keith stated, that the indoor pool area will have the highest air turn-over and most fresh air of any other space within that building. Additionally reducing air velocity is important in indoor pools to reduce evaporation, however it turns out that reducing air velocity also helps minimize the spread of airborne pathogens. Research has also shown that relative humidity between 40-60% is ideal to create a healthy indoor space and minimize the spread of airborne viruses.[2] Indoor pools are designed with HVAC systems to maintain proper humidity levels.

Proper health protocols that swim schools have in place are still an important way to help prevent the spread of viruses. That said, it’s great to learn that these environments, by their design, have the ability to minimize the spread of airborne viruses. If you are looking for an activity to get your kids out of the house for some exercise and social interaction, learning to swim can be a great lower risk choice. Your child will also be learning a lifesaving skill making it a win-win all

around! We hope to see you at the pool soon!

[1]

<https://www.cdc.gov/coronavirus/2019-ncov/community/parks-rec/aquatic-venues.html>

[2]

[https://www.sciencedaily.com/releases/2020/08/20200820102503.htm](https://www.sciencedaily.com/releases/2020/08/202008200820102503.htm)

<https://www.sylvane.com/blog/higher-indoor-humidity-prevents-flu/>