

Holder for Sanitizer Spray Bottles and Towels

BASIC THEORY BEHIND THE SAFETY OF THE RE-USABLE TOWEL:

- Virus particles are very easy to inactivate on hard surfaces. It's once they get into the body that you have a big problem. That's why continual sanitizing of body contacted surfaces—before and after use—is so important. If you want to prevent virus spread in the gym, nip the problem at (potentially) the last source of contact before the virus can enter the body—the hard, body contacted, surfaces of equipment. That's where a good, conveniently located sanitizing system comes in—with a high quality sanitizer and a way to wipe the surface (mostly) dry. [Air drying of wetted surfaces has it place in the industry; that concept will not be addressed in these bullet points].
- The mechanism of action for hospital grade broad spectrum sanitizing solutions is to "dismantle" (break apart) virus and germ particles when applied to the surface(s) to be sanitized. For the fitness industry, the most effective and safe sanitizing active ingredient is Quaternary Ammonium. The most challenging part of neutralizing virus and germ particles on hard surfaces in the fitness center setting is that the EPA standard (for virtually all sanitizing products) for (virtually) fully effective inactivating of the particles on surfaces is a two to five, or up to 10 minute "dwell time." The dwell time is the time a solution must be in contact with the surface to be sanitized before it is wiped off. This is very hard to accomplish in the fitness center setting, (or in the community setting in general) as machines turn over very quickly—rarely is there the luxury of waiting 5+ minutes before wiping the solution off. The good news is that about 99% of the virus particles are neutralized 30 seconds to one minute after coming in contact with the solution. Common sense recommendation: After applying a sanitizing solution wait "for a bit" before wiping it off. The EPA adds that extra margin of safety—most likely with a hospital-type setting in mind where the best assurance of absolute cleanliness is necessary/preferred.
- Virus particles are very small (millions could fit on the head of a pin) and they are not alive; that's why the word "kill" is not quite appropriate when referring to eliminating virus particles. High quality sanitizing solutions/products break-up the virus particles by chemically disrupting the lipid containing outer shell of the particle, and/or neutralizing the protein molecules inside the particle. In any case when the particle is "dismantled," it is rendered ineffective—and cannot be "magically" reassemble lying in pieces-parts on the disinfectant wetted surface or when picked up by the wiping "instrument" such as a towel, disposable wipe or paper towel.
- When the dismantled particle(s) are wiped into the fabric matrix of a towel they are wiped into the towel WITH the sanitizing solution that was applied to the surface. The residual wetness of the towel is generally the wetness of the sanitizing solution that remains on the towel. Remember the "dwell time" concept mentioned above...well the dismantled particles/sanitizing solution "combination" absorbed into the towel can and should be considered to be on the dwell-time clock. As long as the towel is wetted with sanitizing solution the time the particles are exposed to the sanitizing solution SHOULD be considered the dwell time. And, don't forget that that same towel will, generally, soon be used again to wipe up more sanitizing solution and dismantled virus particles. What you have is a perpetually solution-wetted towel matrix that has dismantled/neutralized/inactivated particles in it—with an extended dwell time being "applied" to the particles as long as the towel remains at least somewhat wetted. The reusable towel is clean; possibly the cleanest surface in the fitness center.