Concerns of Automatic Hand Dryer Use Related to COVID-19 Transmission

Published scientific literature has so far not addressed any role that automatic motion-activated hand dryers may have in spreading the virus SARS-CoV-2, which causes the disease COVID-19. However, current CDC and OSHA guidance still discourages public use of these common appliances on the grounds that their fans could disturb dust or generate infectious, virus-laden droplets or aerosols. AIHA committees have recognized the possibility that high-velocity air generated by automatic hand dryers can suspend virus-laden dust particles and contribute to SARS-CoV-2 exposure. However, AIHA has not identified any peer-reviewed articles specifically addressing automated hand dryers as a route of exposure or any existing epidemiological evidence which associates automatic hand dryer use with COVID-19 outbreaks.

In contrast, CDC and OSHA both officially recommend¹ regular and effective handwashing to prevent or reduce the spread of COVID-19. A well-known step towards effective hand hygiene is completely drying your hands after washing. Many facilities only offer automatic hand dryers in their restrooms or lavatories, so discontinuing their use could contribute to viral exposures resulting from an interrupted hand hygiene routine.

How can the risk of virus-laden particles spreading due to automatic hand dryer use be weighed against the benefits of a complete hand hygiene routine? At this time, AIHA committees have not found compelling evidence of either risks or benefits associated specifically with automatic hand dryer use. This ambiguity may leave employers, building operators, and members of the public unsure if they should use or avoid the appliances.

Paper towels are a relatively low-risk alternative to automatic hand dryers since their use is not likely to generate aerosols. Reusable cloth roll towels that can be laundered by an outside company offer another hand-drying option. Until experts, health organizations, and federal agencies can provide evidence-based guidance, individuals must reduce their exposure to conditions and environments that are likely to spread COVID-19 by generating infectious airborne particles.

Without clear evidence of whether the risks of using automatic hand dryers outweigh the benefits, AIHA makes the following recommendations for workers and members of the general public:

1. If available, use disposable paper towels to dry your hands after thoroughly washing them with soap and water.
2. If disposable paper towels are not available, dry your hands with any reusable cloth roll towels that have been provided by facility management.
3. If neither paper nor cloth towels are available, use any available automatic hand dryers.
4. At all times within a restroom, wear a respirator or face covering to reduce the risk of inhaling aerosols and minimize others’ exposures to your respiratory droplets.

Employers and facility operators should ensure that restrooms are properly exhausted, have adequate ventilation rates, and are periodically cleaned and disinfected as supplemental measures to limit COVID-19 cases associated with restroom amenities. Employers must also require that all individuals on the premises wear a respirator or face covering. Finally, AIHA encourages automatic hand dryer manufacturers to sponsor scientifically robust research of any airborne particles or aerosols generated by their products to determine if they may contribute to SARS-CoV-2 transmission. Researchers should publish any such findings in peer-reviewed journals.