

# Hand Dryers and Hygiene

## A definitive statement on the bacterial safety of warm air

American Dryer, Inc. wants our distributors and end-users to be confident in the safety and health benefits of warm-air hand and hair dryers. It is important to us that you feel comfortable and assured that our products are both reliable and hygienic.

Several studies have been published in well-known medical reviews on the health benefits and hygienic superiority of warm-air dryers. Hand dryers are almost unanimously declared to be more sanitary than other drying techniques.

Only one study, the Westminster report, has suggested something other than the praise warm-air dryers have always received. After careful scrutiny, independent researchers found the testing methods in the report to be inaccurate and incomplete. According to Dr. Syed Saatar of the University of Ottawa, "certain flaws in the methodology...compromise its value" (3). This heavily biased paper, funded by the Association of Makers of Soft Tissue Papers, was not published or recognized by any medical or health review. In an attempt to spread false and damaging information to the public, however, the researchers sent copies to many major media centers in the hope that this information would be eagerly gobbled up by the media scaremongers.

Most researchers claim that "irrespective of the hand-washing agent used" electric air-drying produces "the highest and cloth the lowest reduction in numbers" of bacteria and viruses on washed hands (Ansari et al. 243). Theories explaining why warm-air dryers are more hygienic have been put forward by medical authorities.

Doctors at the University of Ottawa have proposed that "the blowing of warm air may lead to an accelerated dehydration of the skin surface, thereby affecting the viability" of the microorganisms (248). Moreover, the warm air may "penetrate all the crevices in the skin, whereas absorbent towels may not reach such areas, even though the skin appears dryer" (Ansari et al. 248). Hand dryers are so effective that researchers Meers and Leong have declared that there is "no bacteriological reason to exclude them from clinical areas" (171). Paper towels, on the other hand, create unsanitary conditions even after use. The *European Cleaning* review affirms

that "unless paper towel waste is regularly cleaned, it can be a lasting source of bacteriological infection" (63).

Furthermore, researchers find that "on no occasion" is there any evidence for the actual growth of bacteria or fungi" inside a dryer (Saatar 3). As a result of the dry atmosphere caused by constant heating, washroom bacteria counts are often two-to-four times lower inside the dryer than on other surfaces in the washroom, such as the sinks, doorknobs and soap dispensers (Saatar 7).

Warm-air dryers prove to be the leader in efficient and hygienic methods of drying. In addition, they are the most cost-efficient and environmentally sound drying technique. Whether American Dryer dryers are installed in schools, restaurants, shopping centers, industries or hospitals, each individual who uses our product is guaranteed safety and satisfaction. We are confident that you will agree that warm-air dryers are clearly the best alternative in drying.

### Bibliography

- Ansari, Shamin A., et al. "Comparison of cloth, paper, and warm air drying in eliminating viruses and bacteria from washed hands." American Journal of Infection Control 19 (1991): 243-249.
- Meers P.D. and K.Y. Leong. "Letters to the Editor: Hot-air hand dryers." Journal of Hospital Infection 14 (1989): 169-181.
- Poore, David P. "Microbial aerosol production by various hand drying techniques." Biosafe Investigation Unit, Quality, Service and Scientific Resource Division: Centre for Applied Microbiology and Research (1995):2-8.
- Redway, K. et al. "Hand drying a study of bacterial types associated with different hand drying methods and with hot air dryers. An unpublished report from the Applied Ecology Research Group, University of Westminster, London, England, for a study sponsored by the Association of the Makers of Soft Tissue Paper. (March 1994): 1-15.
- Saatar, Syed A., Ph. D. "Bacteria on Washed and Dried Hands "A Critical Review of Two Unpublished Reports from the University of Westminster." University of Ottawa (1994):3-21.
- "The Drier Argument". European Cleaning (September 1994): 63.