



ELECTRIC HAND DRYERS IN PUBLIC TOILETS POSE POTENTIAL HEALTH RISK ACCORDING TO NEW STUDY

An independent study by the University of Westminster has found that using an electric hand dryer can significantly increase the number of bacteria on peoples' hands and contaminate the environment in which they are placed – a real concern considering the number of public washrooms that have electric dryers installed worldwide.

The University of Westminster Hygiene Study was commissioned by the European Tissue Association in late 2008 and compared three different hand drying solutions: paper hand towels, traditional warm air dryers and new generation jet air dryers. Scientists compared the number of bacteria on subjects' hands before and after they had washed and then dried their hands using each of these methods. The study affirmed the superior hygiene benefit of paper hand towels finding that:

- The total number of bacteria after washing and then drying hands with a paper towel was **reduced** by an average of 76 per cent on the finger pads and 77 per cent on the palms

On the contrary, the study found that:

- Using a traditional warm air dryer **increased** the number of bacteria present on the finger pads by 194 per cent and 254 per cent on the palms
- Drying with a jet air dryer resulted in an average **increase** of 42 percent on the finger pads and 15 per cent on the palms

Matt Trute, Category Manager for Hand Towels at Kimberly-Clark Professional comments:

“Hand hygiene plays a key role in preventing illness and infection caused by bacteria – that’s the very reason why we wash and dry our hands. This research clearly demonstrates the superiority of paper hand towels over electric dryers when it comes to reducing germs and even suggests that using an electric hand dryer could be detrimental to our health”.



The study also examined each drying method and its potential to cross contaminate other washroom users and the washroom environment. Again, paper towels outperformed the dryers, with tests revealing that:

- Paper towels demonstrated no significant spread of micro-organisms
- The jet air dryer can blow micro-organisms from the hands and unit up to two metres away, which has the potential to contaminate other washroom users and the washroom environment
- The traditional warm air dryer spread micro-organisms up to 25 centimetres from the dryer, creating some level of contamination risk

The study strongly confirms that paper towels are the safest drying method, with Keith Redway, a Senior Academic in the Department of Biomedical Sciences at the University of Westminster concluding:

“The results of all parts of this study suggest that the use of warm air dryers and jet air dryers should be carefully considered in locations where hygiene is of paramount importance, such as hospitals, clinics, schools, nurseries, care homes, kitchens and other food preparation areas,” (European Tissue Paper Industry Association, 2009, para 8).

“Using paper towels results in a significant decrease in the numbers of bacteria on the hands, a clear advantage compared with the increase observed for both types of electric hand dryer tested in this study. In addition, paper towels are far less likely to contaminate other washroom users and the washroom environment,” he added (European Tissue Paper Industry Association, 2009, para 12 & 13).

Sources:

New evidence suggests electric hand dryers in public toilets pose health risk. (2009). Retrieved February 17, 2009, from <http://www.europeantissue.com/item.aspx?id=308>