New evidence suggests electric hand dryers in public toilets pose health risk

The electric hand dryers found in thousands of public toilets can dramatically increase the number of bacteria on people’s hands after washing them and contaminate the washrooms where they are installed.

Scientists at the University of Westminster discovered the shocking findings during a study in which they compared the numbers of bacteria on subjects’ hands before and after they had washed them and then dried them in a public washroom using either paper towels, a traditional warm air dryer or a new-style jet air dryer.

During their research, they discovered that:

- after washing and drying hands with the warm air dryer, the total number of bacteria was found to increase on average on the finger pads by 194% and on the palms by 254%
- drying with the jet air dryer resulted in an increase on average of the total number of bacteria on the finger pads by 42% and on the palms by 15%
- after washing and drying hands with a paper towel, the total number of bacteria was reduced on average on the finger pads by up to 76% and on the palms by up to 77%.

The scientists also carried out tests to establish whether there was the potential for cross contamination of other washroom users and the washroom environment as a result of each type of drying method.

They found that:

- the jet air dryer, which blows air out of the unit at claimed speeds of 400 mph, was capable of blowing micro-organisms from the hands and the unit and potentially contaminating other washroom users and the washroom environment up to 2 metres away
- use of a warm air hand dryer spread micro-organisms up to 0.25 metres from the dryer
- paper towels showed no significant spread of micro-organisms.

The results will come as a surprise to many people. Consumers, healthcare institutions and businesses such as restaurants have often been told over the years that electric hand dryers are the most hygienic way to dry the hands after washing them. It’s a message which seems to have sunk in: a recent consumer survey found 58% of people in the UK thought electric hand dryers were more hygienic than both textile-based towels and paper towels.

For more information about this story, please contact:

Roberto Berardi
Chairman of the European Tissue Symposium
Office: 00 39 011 8128810
Mobile: 00 39 348 3257079
Email: roberto.berardi@fastwebnet.it

[1] Intermetra, June 2008 – Users’ preferences in hand drying systems
Results shown are for UK 58%. Other regions polled had following results: Total European average 49%, Poland 62%, Sweden 29%, France 54%, Spain 59%