

THE ANSWER IS BLOWING IN THE WIND

Why Paper Towels are More Hygienic than Hot Air Dryers

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A recent study by the University of Westminster in London, England looked at the effects on bacterial counts of Towel Drying versus Hot Air Hand Dryers.

Microbiological studies revealed that using paper towels after washing further reduced bacterial counts by an average of 42%. With hot air dryers, however, bacterial counts on hands increased by over 500%. This 500% increase included all types of bacteria including skin and gut bacteria. The presence of gut bacteria is indicative of fecal contamination. Bacteria were present in the air flows of 100% dryers tested with 6 species of enterobacteria (gut) isolated from air flows of 63% of dryers. In a previous study under natural conditions, towels were found to be more efficient in drying the hands than hot air dryers where many people completed drying their hands on clothes.

The significant decreases in bacterial counts through the use of paper towels is due to the mechanical friction created by the towel which removes bacteria from the skin and deposits them on the sterile cellulose fibres of the towel. Hot air dryers recirculate the air of washrooms including dust particles, which strike hands thereby picking up measurable quantities of bacteria. This bacteria laden dust then collects inside the dryer ready to deposit on the hands of the next user.

It suggested that the use of hot air dryers for hand drying should be reconsidered for the following reason:

- 1) Hot air dryers increase the numbers of bacteria present on the hands before washing and drying.
- 2) They may contribute to the bacteria already present on the hands have the potential to add pathogenic types of bacteria
- 3) Some of the bacteria blown out from hot air dryers are likely to be inhaled or contaminate the eyes.

It is therefore suggested that the use of hot air dryers should be carefully considered on health grounds, especially in the sensitive locations such as hospitals, catering establishments and food preparation areas.

Source: The Applied Ecology Research Group, University of Westminster, 115 New Cavendish Street, London, England W1M 8JS