

Michael Barnaby
Public Information
(239) 332-9627
Michael_Barnaby@doh.state.fl.us



HAND AIR DRYERS: AS SANITARY AS YOU THINK?

Surprising – And Important -- Study Results

The ubiquitous, efficient and soothing hand dryer seen in today's public places may not be as sanitary as you might think. In fact, it may very well be blowing some really nasty germs on you.

A study by the Applied Ecology Research Group of the University of London compared paper towel hand drying to hot air drying, with the goal of comparing bacterial types and counts remaining after handwashing. Sample sites included various types of buildings such as hospitals, restaurants, railway stations, colleges, bars and retail stores.

According to Michele Savage, a Registered Nurse at the Lee County Health Department's Epidemiology Department, "Proper handwashing is the single most effective method of preventing the spread of disease. Organisms such as Staphylococcus can be significantly reduced by proper handwashing and drying. Staph bacteria can cause conditions such as impetigo or abscesses."



A full 100% of the samples taken from air inlets and 97% from nozzles contained potentially harmful bacteria.

Previous microbacterial studies had revealed that using towels after washing reduced bacterial counts on the hands by an average of 42% for paper towels and 10% for cotton towels. But that study also found that with hot air dryers bacterial counts *increased by more than 500%*.

The Westminster experiment came to a similar conclusion. Drying your hands with a paper towel offers the best bacteria reduction. Hot air dryers, on the other hand – no pun intended – were found to actually *increase* what's called skin and gut bacteria on the hands by an astonishing 436%. A full 100% of the samples taken from air inlets and 97% from nozzles contained potentially harmful bacteria.

Staphylococci and micrococci, probably from skin and hair, were blown out of all 35-hand dryers sampled. Further 95% of those tested showed evidence of the potential pathogen *Staphylococcus aureus*. And at least 6 species of gut, or enterobacteria, were found, indicating fecal contamination.

The study's concluding advice should be obvious: "It is concluded that hot air dryers have the potential for depositing pathogenic bacteria onto the hands and body. Bacteria could also be inhaled, and are distributed into the general environment whenever dryers are running. It's suggested that the use of hot air dryers should be carefully considered on health grounds, especially in sensitive locations."