

# Paradigm Shifts in Hygiene Expectations Are Paper Towels Meant To Replace Jet Air Dryers?



With increased hygiene awareness among users worldwide, there is a broad agreement that the use of disposables is the future of hygiene.

Our recent study<sup>#</sup> among users and facility managers across Australia and Thailand revealed some interesting paradigm shifts toward hygiene expectations in restrooms. This study helped us identify some interesting statistical data (below) that share clear insights.

## PAPER TOWELS

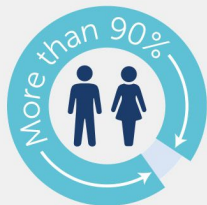


Paper towels are the recommended hand-drying method of the World Health Organization (WHO) <sup>7</sup>

## JET AIR DRYERS



Jet air dryers can harbor bacteria on their surfaces and in their airstreams, which could lead to cross-contamination. The bacteria could be carried in the airstream and deposited on wet hands.



More than 90% of users view touchless paper towel dispensers as a somewhat important element to drive their confidence in a restroom facility



Less than 50% of users consider JAD to be a very important element to drive their confidence in a restroom facility

## WHEN IT COMES TO DRYING HANDS HYGIENICALLY

23% strongly agree  
I prefer paper towels over air dryers  
for drying my hands



More than **50%** users prefer drying hands with paper towels in offices, healthcare, government, dining and education facilities

23% strongly agree  
Paper towels are more hygienic  
than jet air dryers

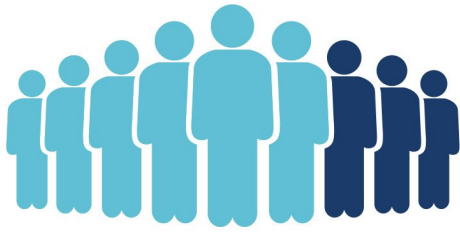
17% strongly agree  
I dislike jet air dryers.



More than **50%** users moderately agree they feel uncomfortable when the JAD is in use.

17% strongly agree  
I avoid using jet air dryers  
where possible

# When paper towels run out in a restroom....



More than 50%  
of the users would rather...

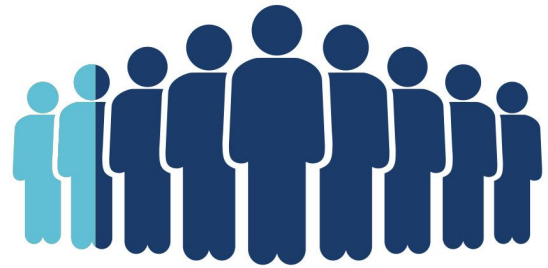
Leave their  
hands dry  
over time

OR

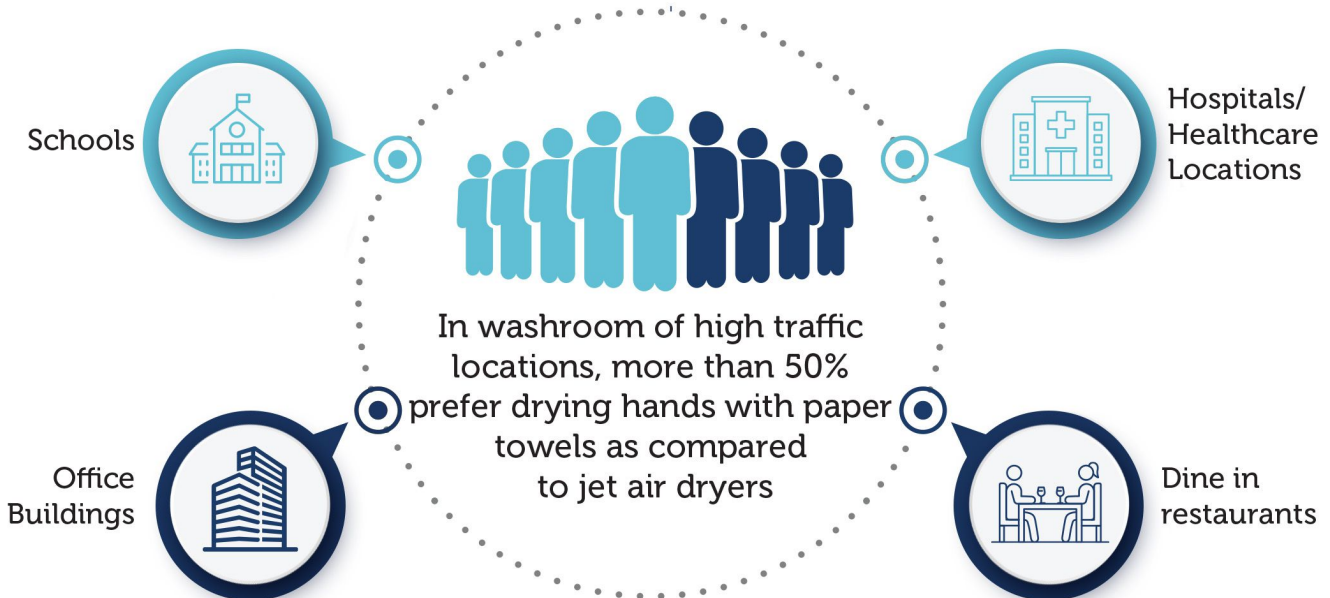
Use their  
own  
tissues

OR

Wipe them  
on their  
clothes



Only 16% would resort  
to using the JAD quickly  
but reluctantly



Hygiene excellence should be centred around users' experience

Over 1/3<sup>rd</sup> users strongly agree that the condition of your restroom is a reflection of how much you care about them

Over 1/3<sup>rd</sup> users stated touchless paper towel dispensers are a key feature they want to see in a restroom facility



Even with JAD installed, more than 50% facility managers plan to add on a Paper Towel Dispenser to elevate their hygiene management.

Learn more about Paper Towels vs Jet Air Dryers in our next page!

# All You Need To Know About Paper Towels vs Jet Air Dryers



Only 24% of people wash their hands properly most of the time. Water left on hands after washing allows for bacteria to adhere to hands once touching a contaminated surface which creates the possibility for cross contamination\*. Therefore, hands should be dried properly after washing, using the right hand-drying method. From effectiveness to user experiences, learn how jet air dryers fare compared to drying hands with paper towels.



## PAPER TOWELS

### Did you know?

Drying hands with a paper towel can remove up to 77% of the bacteria that remain on hands after washing.<sup>1</sup>



## JET AIR DRYERS

### Did you know?

Using a jet air dryer dispersed **1,300 times more germ particles** than drying with paper towels.<sup>2</sup>

Studies suggest that paper towels can dry hands efficiently, remove bacteria effectively, and cause less contamination of the washroom environment, according to a review article in Mayo Clinic Proceedings.<sup>8</sup>

## HOW WELL DO THEY WORK?

Even with HEPA filters, and diligent cleaning and maintenance, air dryers will not leave your hands or your restroom as clean as drying with paper towels

According to a European study, there were up to 95% less bacterial counts found on paper towel dispenser surfaces than jet air dryers tested.<sup>4</sup>



## HOW HYGIENIC ARE THEY?

The rubbing process of paper towels physically removes bacteria along with moisture.



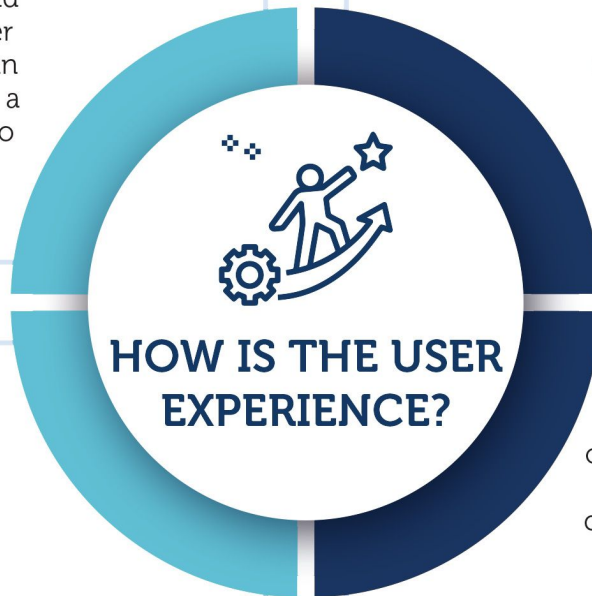
5 times more bacterial count found on floor in washroom with Jet Air Dryer.<sup>5</sup>



Studies suggested that JADs have a higher risk of dissemination of residual germs from hands after handwashing<sup>5</sup>

Given the strong preference of using paper towels, hand hygiene adherence would possibly decrease if paper towels are not available in washroom, according to a review article in the Mayo Clinic Proceedings.<sup>8</sup>

When drying your hands with a JAD, water droplets that may contain germs are expelled into the air, travelling as far as 3m and lingering in the air for up to 15 mins.<sup>2</sup>



On top of the benefits shared, paper towels are 38% quieter than a Jet Air Dryer, giving an almost noiseless experience at your facility.<sup>5</sup>

According to a Canadian study, many hand dryers operate at levels far louder than their manufacturers claim and at levels that are clearly dangerous to children's hearing.<sup>6</sup>

Paper towels are the recommended hand-drying method of the World Health Organization (WHO)<sup>7</sup>

## IN CONCLUSION

Jet air dryers can harbor bacteria on their surfaces and in their airstreams, which could lead to cross-contamination. The bacteria could be carried in the airstream and deposited on wet hands.

With this information at hand, we encourage facility managers to look deeper into their users' perception of comfort and hygiene to secure a reputable image of the facility.

### References:

1. University of Westminster. "Changes in the number of different types of bacteria on the hands before and after drying using paper towel, continuous cloth roller towel, warm air dryer and jet air dryer" (2010)
2. Kimmitt PT, Redway KF. Evaluation of the potential for virus dispersal during hand drying: a comparison of three methods. *J Appl Microbiol.* 2016 Feb;120(2):478-86. doi: 10.1111/jam.13014. PMID: 26618932.
3. E, Best & Parnell, Peter & J, Couturier & F, Barbut & A, Le & Luca, Arnoldo & Madia, Antonio & Brusaferrero, Silvio & Wilcox, Mark. (2018). Multicentre study to examine the extent of environmental contamination by potential bacterial pathogens, including antibiotic resistant bacteria, in hospital washrooms according to hand-drying method. *Journal of Hospital Infection.* 100. 10.1016/j.jhin.2018.07.002.
4. A total of 120 sampling sessions occurred over 12 weeks in each of three hospitals' washroom (UK, France, Italy). Best et al: Environmental contamination by bacteria in hospital washrooms according to hand-drying method: a multi-centre study
5. Comparison between KCP ICON hand towels dispenser and one of the leading jet air dryer brands
6. Study was conducted in public washrooms with hand dryers in Alberta, Canada from December 2015 to February 2017
7. A Guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy (Section II.1.1) A guide to the implementation of the WHO multimodal hand hygiene improvement strategy E, Best & Parnell, Peter & J, Couturier & F, Barbut & A, Le & Luca, Arnoldo & Madia, Antonio & Brusaferrero, Silvio & Wilcox, Mark. (2018). Multicentre study to examine the extent of environmental contamination by potential bacterial pathogens, including antibiotic resistant bacteria, in hospital washrooms according to hand-drying method. *Journal of Hospital Infection.* 100. 10.1016/j.jhin.2018.07.002.
8. Huang, C., Ma, W., & Stack, S. (2012). The hygienic efficacy of different hand-drying methods: a review of the evidence. *Mayo Clinic proceedings*, 87(8), 791-798. <https://doi.org/10.1016/j.mayocp.2012.02.019>

§ Compared hand drying with Paper Towels

^Compared with Washrooms with paper towels, according to study done in UK and France with 1 hospital in each country and 120 sampling sessions per hospital

\*<https://www.cdc.gov/healthywater/hygiene/hand/handwashing.html>

# Kimberly-Clark Professional, Hygiene Behaviors Study conducted across Australian and Thailand respondents (End-users (n=807) and Choosers (n=305)), January-February 2022. End users and choosers data is unweighted.