

# HAND HYGIENE

## Australian Hand Washing Habits

### Research Objectives:

- What are the hand washing habits of people away from home?
- What proportion of people wash or don't wash hands after using the toilet?

### Research Findings:

- Two in five people did not wash and dry hands after using the toilet
- Soap was rarely used with most people just wetting their hands
- Men were least likely to wash and dry hands with almost half mature men not doing so
- Males were almost twice as likely not to wash and dry hands as women
- Pre teen & teen boys and men over 55 were the least likely to wash and dry their hands
- Girls became dramatically more consciousness of hand hygiene as the hit their teens

### Methodology:

This research used an observation method. The observational study was conducted in male and female public toilets in two major NSW shopping centres over both Saturdays and Sundays at each location. The sample size for the study was 979 people.

### Source:

*"Hand washing Hygiene in Public Toilets"*  
Conducted by Market Research & Associates, November 2000.

## Handtowels vs Other Hand drying Methods

### Objectives:

- What are people's preferred method of hand drying when away from home

### Research Findings:

- 1 out of every 5 who actually washed hands did not dry them
- Paper towels were the preferred method of hand drying over air blowers or using their clothing in public toilets
- Paper dispensers were installed at the observation site to check preference against air blowers
  - 69% voluntarily used paper towels from dispensers to dry hands
  - Only 18% used air blowers
  - 13% used their clothing
- Preference for paper towels was equal for both sexes
- Young and middle adults of both sexes had the highest preference for paper towels (around 75%)

## Methodology:

An observation study of 979 people combined with focus group discussions were held to examine attitudes to hand hygiene. Four focus groups were undertaken; Two female and two male groups, ranging in age from 25-55 years.

## What motivated people to prefer paper towels (focus groups)

- Because they are 'personal' and untouched but most of all because it was seen as the fastest method of drying hands.
- People also like the sense of 'closure' from drying with a paper towel.

**Given the strong preference for using paper towels researchers claimed that hand hygiene compliance would possibly decrease if paper dispensers were not available.**

## Source:

*"Hand washing Hygiene in Public Toilets"*  
Conducted by Market Research & Associates, November 2000.

## Hand washing and Hand drying

The key to hygienic hand washing is not just the use of soap and water but more importantly effective hand drying.

There are generally three methods of hand drying, they include are hot air blowers, cloth cabinet roll towels and single sheet disposable paper towels.

Surprisingly, hot air blowers actually increase bacteria levels by up to 500%. It is the least effective hand drying solution. It's unhygienic and unproductive to use a hot air blower in a food preparation environment.<sup>2</sup>

Most people do not dry their hands for long enough under a hot air blower. Damp, warm hands provide the perfect environment for bacteria to multiply. What's more, bacteria can be found in and around the inlet and outlet nozzle, turning the blower into a "germ incubator".<sup>1,2</sup>

A fresh cabinet towel however, does reduce the level of bacteria from hands. But, once the towel is in use, bacteria is accumulated from other users. Cabinet towels can become 'community towels'. Cross infection may occur when a portion of the towel is reused thus spreading bacteria to the hands and face. Cabinet towels operate on a 'shared stock system' therefore towel customers will be unaware as to who or what industry previously used the towel they currently have.<sup>1</sup>

Quite simply, the most effective hand drying method is the use of a single sheet disposable paper towel.

The rubbing or abrasive action of a paper towel actually removes high concentrations of bacteria from hands after washing. A paper towel is disposable and never shared. It allows you to dry the tips of your fingers, the web, palm and back of your hand with ease. Paper towels are easy to store and easily maintained. They remain the preferred method of effective hand drying in the food business.<sup>1,2</sup>

## Sources:

1. *"Hand Drying Hygiene Facts"* - University of Westminster.
2. *"Evaluation of Risks Related to Microbiological Contamination of Ready-to-eat Food by Food Preparation Workers and the Effectiveness of Interventions to Minimise Those Risks"*.  
Jack Guzewich, RS, MPH. Marianne P. Ross, DVM, MPH. (1-29).

## Bar Soap vs Liquid Soap

The single most effective way of preventing the spread of bacteria is to wash your hands. Hand washing stops cross contamination, which leads to food poisoning. Research has shown that how we wash our hands determines how clean they become.<sup>1,2</sup>

The most common hand-cleaning agents are bar soap and liquid soap in disposable plastic containers. When in use, bar soap remains moist for long periods of time. It's usually kept in a container, on or next to a wash basin. More often than not, it resides in surface water. An environment which provides the perfect opportunity for bacteria and organisms to grow. Most bars of soap in communal areas are used by a number of different people. This means that one bar of soap can be in direct contact with skin bacteria from more than one person. Cross infection can and does occur under these circumstances.<sup>2</sup>

Liquid soap on the other hand is much cleaner to use. Liquid soap is dispensed straight from a plastic container. It has not been exposed to skin bacteria or other contaminants. As a result, cross contamination is not likely to occur, providing you with a cleaner, more hygienic alternative.<sup>2</sup>

### Sources:

1. *"Evaluation of Risks Related to Microbiological Contamination of Ready-to-eat Food by Food Preparation Workers and the Effectiveness of Interventions to Minimise Those Risks"*. Jack Guzewich, RS, MPH. Marianne P. Ross, DVM, MPH. (1-29).
2. *"Microbial Flora of In-Use Soap Products"* Mollie E. McBride. (338-341).

## Washroom and Toilet Bacteria

Washrooms and toilets are great places for bacteria to grow.

Did you know that every time a toilet is flushed, with the lid up, a fine aerosol mist is sprayed into the air, over an area of up to 6 square metres?

This mist contains different types of faecal bacteria like E.coli and Staphylococcus which can cause sickness and discomfort.<sup>1,2</sup>

Research has shown that the highest concentration of harmful bacteria found in toilets and washrooms are located in and around moist areas. These includes urinals, toilet seats, tap handles, the inside handle of an entrance door or in wash basin overflow areas. Up to 90% of the area surrounding a wash basin is contaminated with a high concentration of bacteria. Cross infection via the body and hands is common and can result in food poisoning.<sup>1</sup>

Regular, sanitary cleaning of washrooms and toilets is the only way to reduce bacteria numbers and prevent cross contamination.<sup>1</sup>

### Sources:

1. *"A bacteriological survey of washrooms and toilets"*. M.F. Mendes and D. J. Lynch. (183-189).
2. *"Food Safety Standards Costs and Benefits"*. Australia New Zealand Food Authority. (13-42).