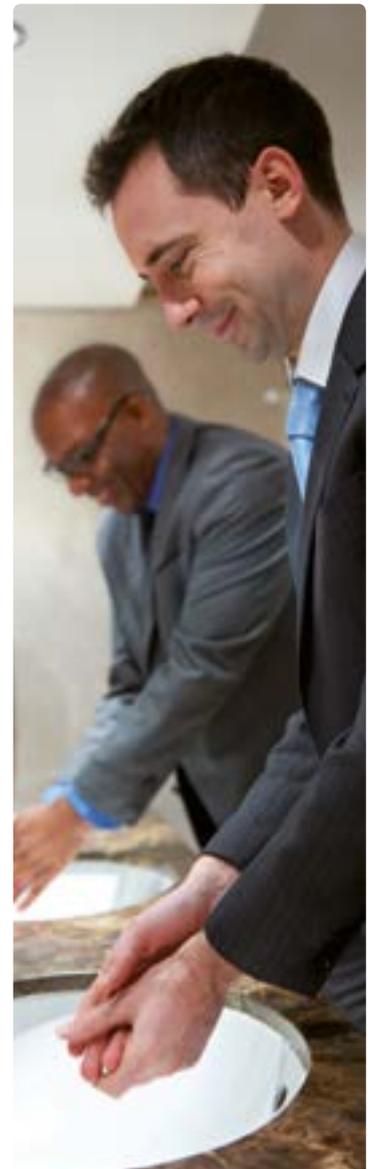


## A Pragmatic Approach

Probing the Key Characteristics of  
A High Hand Wash Compliance Office



Author:

Kanagachandran  
Kanagasooriyam  
*Microbiologist - Technical  
Services, Rentokil Initial*



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## Probing the Key Characteristics of A High Hand Wash Compliance Office

### Background

Time off from work in office environments as a consequence of infectious diseases are influenced by a multitude of person dependant and environmental factors. Attempts should be made at least to minimise the effects of these root causes where and whenever feasible. The "Germ Journey" which consists of a chain of events from the exposure of infectious microorganisms to subsequent transmission, establishment in new hosts and generation of disease symptoms ultimately leads to the reduction of working capacity. This has severe implications on the productivity of organisations and institutes with potential economic losses.

It has been well established that both animate and inanimate surfaces are vital elements of cross-contamination of microorganisms. Fomites and the human hand have been identified in a number of research studies as potential vehicles of germ transmission.

Due to the increase automation and the advancements in technology, electronic equipment continues to have an increasing presence in a typical office environment. A number of previous studies in clinical and academic environments have taught us that those surfaces such as keyboards have become reservoirs for germs (Rutala et al, 2006; Anderson and Palombo, 2009). A recent publication demonstrated the bacterial abundance between offices among the various surface types and US cities. About 500 different genera of bacteria from 20 different divisions were identified

(Hewitt et al., 2012).

It is shocking to learn from a review that only approximately 19% of the world population washes hands with soap after contact with excreta.

A recent survey at motorway service station toilets in the UK revealed that 99% claimed they have washed their hands after going to the toilet. However, electronic recording devices revealed only 32% of men and 64% of men actually did (BBC News Magazine, 15 Oct 2012). According to hygiene expert Dr. Lisa Ackerley, 'many people do not think that they carry any diseases because they live in a country with modern facilities and think things are clean'. (BBC News Magazine, 15 Oct 2012).

### Introduction and Context

Work already undertaken by Initial has concluded that offices, which often have a large number of hand contact surfaces, are becoming increasingly unhygienic places as more workers eat lunch at their desk with contaminated contact surfaces such as desks and computer keyboards.

The latter in particular maybe rarely, if ever, cleaned. In food and healthcare environments the role of contaminated surfaces in the spread of infection is proven and well recognised with the only question being the precise level of risk they pose.

This study addresses the potential for offices

to act as a hub to contribute to the spread and transmission of infectious diseases and how such spread can be influenced through the implementation of:

- a good cleaning regimen
- regular washroom servicing
- hygiene awareness training
- compliance monitoring
- the development of a positive office hygiene culture

The study was designed to capture three intervention arms, daily bioburden assessment, a detailed hygiene attitude, beliefs & self-reported practises questionnaire and monitoring of hand compliance.



## Recommendations

This study has enabled Initial to continue making headway to ensure that offices achieve the highest hygiene standards through training and communication tools to influence hygiene culture providing expert advice on cleaning regimens, the provision of antimicrobial hardware, regular washroom servicing and by monitoring hand wash compliance.

Since human behaviour is one of the difficult factors to change instantly, attitudes, cultural changes and most importantly sustainability in office environments are crucial components of a multifaceted approach for successful office hygiene.

## Key Findings and Outcomes

- The findings suggest the office has the potential to serve as a hub for the spread and transmission of a range of potential pathogens which could in turn lead to absenteeism. The low levels of bioburden detected on the washroom and office surfaces at the Initial office were mainly composed of *Staphylococcus aureus* (often isolated from people's hands) which highlights that bacteria can be transferred readily between washroom and office surfaces by hand contact.
- Effective cleaning practices and regular servicing have been shown to minimise the microbial load on critical washroom hand contact surfaces which could help to reduce microbial spread. Initial have demonstrated in this study that it is possible to design and maintain public washrooms that can be hygienically operated with minimal risk to their users.
- Initial understands, characterises and can influence through training/knowledge sharing, the components of a positive hand hygiene culture, and that this can lead to higher hand hygiene compliance. Differences in the core hygiene cultures of two facilities studied resulted in contrasting hand hygiene compliance rates.
- With the deployment of a proprietary Hygiene Attitudes, Beliefs and Self-reported Practices questionnaire and the deployment of a hand wash compliance monitoring system it was possible to increase the hand wash compliance and hand sanitiser usage for an already high hand wash compliance office.

## Sources to references made within this white paper:

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Riverbank, Meadows Business Park, Camberley GU17 9AB

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