

# The Effects of Hand Hygiene on Absenteeism in the Workplace

## Case Study



## The Challenge

Employees can acquire infections everywhere, including the workplace. Many of which can be caused through hand transmission. Workplaces can hold viruses and bacteria for hours to months on surfaces such as phones, doorknobs, and office equipment. A study has found that an office desk can harbor **400 times more germs** than that of a toilet seat.<sup>1</sup>

In the US, it is found that absenteeism and presenteeism, attending work while sick, has cost employers more than **\$260 billion each year**.<sup>1</sup>



## Results and Findings

### *Importance of Hand Hygiene in Preventing Absenteeism*

According to the CDC, one of the best ways to decrease the number of absences in the workplace is to promote better hand hygiene practices.

A one-year study was conducted in high occupancy office buildings to investigate the effects of hand hygiene in absenteeism. The intervention consisted of distributing hand hygiene supplies, such as alcohol-based hand sanitizers, and placing them in high traffic common areas, cubicles, and proving them to individual employees.<sup>2</sup>



**24.3% lower incidence of hand hygiene preventable health care claims**



**7.7% less absences from intervention group**

During the intervention, there was a **24.3% lower incidence** of hand hygiene preventable health care claims within those who participated in the intervention compared to those who did not.<sup>2</sup> Furthermore, participants from the intervention showed **7.7% less absences**.<sup>2</sup>

The implementation of the intervention also showed an **increase** in the frequency of hand sanitization, overall improving employee satisfaction with office cleanliness.<sup>2</sup>



## Hand Hygiene and Absenteeism in Healthcare

Studies have found automated hand hygiene compliance systems (HHCSs) to be an effective tool to monitor and assess hand hygiene performance. A study conducted in Wheat Ridge, Colorado, installed the HHCS in the hospital's emergency room.<sup>2</sup>

After 2 years of observations, they found the **average monthly hand hygiene compliance rate to be 94%**<sup>2</sup>. They also saw a decrease of over **4000 overtime hours** worked by substitute staff.<sup>2</sup>

In terms of absenteeism, they saw a reduction of **4.6 hours per month** in sick call hours was reduced.<sup>2</sup> This allowed the hospital to cut costs from overtime hours paid or sick callouts.

However, such hand hygiene monitoring systems can pose great challenges and frustrations to its end users.

## Challenges with Hand Hygiene Monitoring Systems



### Manipulation of the System

Triggering the sensor without performing the hand hygiene event to avoid an alert or to keep their record positive.



### Lack of Privacy with Data

Discomfort in the idea of sharing individual data collected in fear that their performance may be criticized, or the outcomes may be undesirable.



### Sustainability of Systems

Badges are enforced on the individuals, which may cause some frustration or lack of cooperation.

## The Solution

CleanHands is a real-time monitoring tool that helps facilities understand overall hand hygiene performance. With data-driven insights, it can help facilities drive lasting behavior change, improve staff habits, and increase overall hygiene levels - which is key to addressing staff absenteeism.



## Benefits



### System is Not Attached to the User

Data tracking cannot be manipulated as the sensors are attached directly to the hand hygiene dispensers. With this, the data recorded minimizes false results.



### Encourages Behaviour Change

The responsibility is no longer solely placed on the individual, but with the whole team, encouraging sustained behavioural change. Thus, better likelihood for cooperation and less frustration from the staff.

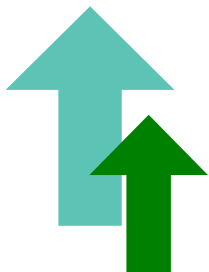


### Fully Anonymous Monitoring

This can ease staff worries about lack of privacy or potential fears of being criticized for their performance.

## The CleanSlate Effect on Hand Hygiene

We do more than just clean phones. We enable hand hygiene.



**50-110%**

increase in hand hygiene events near a CleanSlate sanitizer

**>285%**

increase in hand sanitizer use directly adjacent to a CleanSlate sanitizer



## References

<sup>1</sup>Arbogast, J. W., Moore-Schiltz, L., Jarvis, W. R., Harpster-Hagen, A., Hughes, J., & Parker, A. (2016). Impact of a Comprehensive Workplace Hand Hygiene Program on Employer Health Care Insurance Claims and Costs, Absenteeism, and Employee Perceptions and Practices. *Journal of occupational and environmental medicine*, 58(6), e231–e240. <https://doi.org/10.1097/JOM.0000000000000738>

<sup>2</sup>Strauch, J., Braun, T. M., & Short, H. (2020). Use of an automated hand hygiene compliance system by emergency room nurses and technicians is associated with decreased employee absenteeism. *American Journal of Infection Control*, 48(5), 575–577. <https://doi.org/10.1016/j.ajic.2019.11.023>

<sup>3</sup>Dyson, J., & Madeo, M. (2017). Investigating the use of an electronic hand hygiene monitoring and prompt device: Influence and acceptability. *Journal of Infection Prevention*, 18(6), 278–287. <https://doi.org/10.1177/1757177417714045>