



Volume 31, Issue 6, Pages 364-370 (October 2003)

The effect of hand hygiene on illness rate among students in university residence halls

Cindy White, PhD, Robin Kolble, BSN, Rebecca Carlson, MSN, Natasha Lipson, BA, Mike Dolan, BS, Yusuf Ali, PhD, Mojee Cline, PhD

Abstract

Background

Several studies have indicated a connection between hand sanitization and infection control in numerous settings such as extended care facilities, schools, and hospitals. The purpose of this study was to assess the effectiveness of both a hand-hygiene message campaign and the use of an alcohol gel hand sanitizer in decreasing the incidence of upper-respiratory illness among students living in university residence halls.

Method

This study involved a total of 430 students recruited from 4 residence halls during the fall semester at the University of Colorado at the Boulder campus. Dormitories were paired into control and product groups. In the product groups, alcohol gel hand-sanitizer dispensers were installed in every room, bathroom, and dining hall. The data were statistically analyzed for the differences between product and control groups in reported symptoms, illness rates, and absenteeism from classes.

Results

The overall increase in hand-hygiene behavior and reduction in symptoms, illness rates, and absenteeism between the product group and control group was statistically significant. Reductions in upper respiratory-illness symptoms ranged from 14.8% to 39.9%. Total improvement in illness rate was 20%. The product group had 43% less missed school/work days.

Conclusion

Hand-hygiene practices were improved with increased frequency of handwashing through increasing awareness of the importance of hand hygiene, and the use of alcohol gel hand sanitizer in university

dormitories. This resulted in fewer upper respiratory–illness symptoms, lower illness rates, and lower absenteeism.

a University of Colorado Boulder, Colorado, USA

b Gojo Industries Akron, Ohio, USA

Reprint requests: Yusuf Ali, PhD, Gojo Industries Inc, PO Box 991, Akron OH 44309

PII: S0196-6553(03)00041-5

doi:10.1016/S0196-6553(03)00041-5

© 2003 The Association for Professionals in Infection Control and Epidemiology, Inc. Published by Elsevier Inc All rights reserved.