



Absenteeism & Hand Sanitizers ***Abstract Summary***

Alcohol-free instant hand sanitizer reduces elementary school illness absenteeism.

[Fam Med.](#) 2000 Oct;32(9):633-8

[Dyer DL](#), [Shinder A](#), [Shinder F](#).

Research Division, Woodward Laboratories, Los Alamitos, Calif., USA.

BACKGROUND AND HYPOTHESES: A substantial percentage of school absenteeism among children is related to transmissible infection. Rates of transmission can be reduced by hand washing with soap and water, but such washing occurs infrequently. This study tested whether an alcohol-free instant hand sanitizer (CleanHands) could reduce illness absenteeism in school-age children. **METHODS:** A 10-week, open-label, crossover study was performed on 420 elementary school-age children (ages 5-12). Students were given a brief orientation immediately prior to the start of the study on the relationship of germs, illness, and hand washing. Each student in the treatment group then received the test product in individual bottles, with instructions to apply one to two sprays to the hands after coming into the classroom, before eating, and after using the restroom, in addition to their normal hand washing with soap and water. The control group was instructed to continue hand washing as normal with non-medicated soap. After 4 weeks of treatment and a 2-week wash-out period, the control and experimental groups were reversed. Data gathered on absenteeism were classified as gastrointestinal or respiratory related and normalized for nonillness-related absenteeism and school holidays. **RESULTS:** Compared to the hand washing-only control group, students using CleanHands were found to have **41.9% fewer illness-related absence days, representing a 28.9% and a 49.7% drop in gastrointestinal- and respiratory-related illnesses, respectively.** Likewise, absence incidence decreased by 31.7%, consisting of a 44.2% and 50.2% decrease in incidence of gastrointestinal- and respiratory-related illnesses, respectively. No adverse events were reported during the study. **CONCLUSIONS:** **Daily use of the instant hand sanitizer was associated with significantly lower rates of illness-related absenteeism.**

Reduction of illness absenteeism in elementary schools using an alcohol-free instant hand sanitizer.

[J Sch Nurs](#). 2001 Oct;17(5):258-65

[White CG](#), [Shinder FS](#), [Shinder AL](#), [Dyer DL](#).

Los Alamitos Unified School District, Los Alamitos, CA, USA.

Hand washing is the most effective way to prevent the spread of communicable disease. The purpose of this double-blind, placebo-controlled study was to assess whether an alcohol-free, instant hand sanitizer containing surfactants, allantoin, and benzalkonium chloride could reduce illness absenteeism in a population of 769 elementary school children and serve as an effective alternative when regular soap and water hand washing was not readily available. Prior to the study, students were educated about proper hand washing technique, the importance of hand washing to prevent transmission of germs, and the relationship between germs and illnesses. Children in kindergarten through the 6th grade (ages 5-12) were assigned to the active or placebo hand-sanitizer product and instructed to use the product at scheduled times during the day and as needed after coughing or sneezing. Data on illness absenteeism were tracked. After 5 weeks, **students using the active product were 33% less likely to have been absent because of illness when compared with the placebo group.**

Effect of hand sanitizer use on elementary school absenteeism.

[Am J Infect Control](#). 2000 Oct;28(5):340-6

[Hammond B](#), [Ali Y](#), [Fendler E](#), [Dolan M](#), [Donovan S](#).

GOJO Industries, Inc, Akron, OH 44309, USA.

BACKGROUND: Several studies have indicated a connection between handwashing and illness-related absenteeism in school settings. The difficulty of ensuring consistent and effective handwashing among student populations has also been noted. The purpose of this study was to assess the effectiveness of the use of an alcohol gel hand sanitizer in the classroom to help decrease the illness-related absentee rate for elementary school students. **METHODS:** This study involved 5 individual school districts, 16 individual schools, and more than 6000 students in Delaware, Ohio, Tennessee, and California. Individual schools in each district were paired into product and control groups. In the product group schools, an alcohol gel hand sanitizer was used by the students and staff when entering and leaving the classroom. Absenteeism due to infection was recorded, and the data were statistically analyzed. **RESULTS:** **The overall reduction in absenteeism due to infection in the schools included in this study was 19.8% for schools that used an alcohol gel hand sanitizer compared with the control schools (P <.05).** Data from the school system with the largest teacher population (n = 246) showed that teacher absenteeism decreased 10.1% (trend) in the schools where sanitizer was used. **CONCLUSION:** Elementary school absenteeism due to infection is significantly reduced when an alcohol gel hand sanitizer is used in the classroom as part of a hand hygiene program.

A randomized, controlled trial of a multifaceted intervention including alcohol-based hand sanitizer and hand-hygiene education to reduce illness transmission in the home.

[Pediatrics](#). 2005 Sep;116(3):587-94

[Sandora TJ](#), [Taveras EM](#), [Shih MC](#), [Resnick EA](#), [Lee GM](#), [Ross-Degnan D](#), [Goldmann DA](#).

Division of Infectious Diseases, Children's Hospital Boston, Harvard Medical School, Boston, MA, USA. thomas.sandora@childrens.harvard.edu

OBJECTIVE: Good hand hygiene may reduce the spread of infections in families with children who are in out-of-home child care. Alcohol-based hand sanitizers rapidly kill viruses that are commonly associated with respiratory and gastrointestinal (GI) infections. The objective of this study was to determine whether a multifactorial campaign centered on increasing alcohol-based hand sanitizer use and hand-hygiene education reduces illness transmission in the home. **METHODS:** A cluster randomized, controlled trial was conducted of homes of 292 families with children who were enrolled in out-of-home child care in 26 child care centers. Eligible families had ≥ 1 child who was 6 months to 5 years of age and in child care for ≥ 10 hours/week. Intervention families received a supply of hand sanitizer and biweekly hand-hygiene educational materials for 5 months; control families received only materials promoting good nutrition. Primary caregivers were phoned biweekly and reported respiratory and GI illnesses in family members. Respiratory and GI-illness-transmission rates (measured as secondary illnesses per susceptible person-month) were compared between groups, adjusting for demographic variables, hand-hygiene practices, and previous experience using hand sanitizers. **RESULTS:** Baseline demographics were similar in the 2 groups. A total of 1802 respiratory illnesses occurred during the study; 443 (25%) were secondary illnesses. A total of 252 GI illnesses occurred during the study; 28 (11%) were secondary illnesses. **The secondary GI-illness rate was significantly lower in intervention families compared with control families** (incidence rate ratio [IRR]: 0.41; 95% confidence interval [CI]: 0.19-0.90). The overall rate of secondary respiratory illness was not significantly different between groups (IRR: 0.97; 95% CI: 0.72-1.30). However, families with higher sanitizer usage had a marginally lower secondary respiratory illness rate than those with less usage (IRR: 0.81; 95% CI: 0.65-1.09). **CONCLUSIONS:** A multifactorial intervention emphasizing alcohol-based hand sanitizer use in the home reduced transmission of GI illnesses within families with children in child care. Hand sanitizers and multifaceted educational messages may have a role in improving hand-hygiene practices within the home setting.

Evaluating Effects of an Alcohol Hand Sanitizer Program on Employee Absenteeism: Pilot Results

James W. Arbogast, Ph.D.*Cristina Ferrazzano Yaussy, MPH*, Todd Cartner*
*Skin Care Science and Technology Research and Development, GOJO Industries, Inc. Akron, Ohio

Background:

It is well recognized that hands are the primary mode of transmission of many infectious diseases. Most workplace environments share key predisposing factors that contribute to infection transmission, such as close working environments, shared bathrooms, and break rooms for eating or cafeterias. Absenteeism caused by transmissible diseases is a major contributor to lost productivity in the workplace and to most companies. The objective of this pilot study was to examine the effectiveness of an alcohol-based hand sanitizer program on reducing employee absenteeism due to transmissible infections. Concurrently, the feasibility of executing a workplace study was also examined.

Design:

34-week prospective intervention study.

Setting/Participants:

FedEx Custom Critical Custom Critical, in Green, OH. The study populations were created using two different floors in the same building, with approximately 250 employees on each floor. The sample populations were composed of similar “white-collar” jobs including customer service, sales/marketing, and operation managers. The employees in each group did not interact with each other on a regular basis.

Intervention:

Alcohol-based instant hand sanitizer and educational program.

Conclusions:

This study demonstrates that using an alcohol-based instant hand sanitizer in conjunction with a simple educational program in a workplace setting could produce a positive effect on absenteeism. **The absenteeism rate observed in the intervention population was 21% lower than the non-intervention population**, indicating this addition to a workplace wellness program could gain an employer several employee work days per year. Additionally, it appears the program is most effective during winter months when transmissible diseases are most prevalent.

The effect of a comprehensive handwashing program on absenteeism in elementary schools.

[Am J Infect Control](#). 2002 Jun;30(4):217-20

Guinan M, McGuckin M, Ali Y.

Agnes Irwin School, Rosemont, PA, USA.

Handwashing is one of the most important factors in controlling the spread of micro-organisms and in preventing the development of infections. The objective of this study was to determine the effectiveness of a comprehensive handwashing program on absenteeism in elementary grades. Two hundred ninety students from 5 independent schools were enrolled in the study. Each test classroom had a control classroom, and only the test classroom received the intervention (education program and hand sanitizer). Absenteeism data were collected for 3 months. **The number of absences was 50.6% lower in the test group (P <.001).** The data strongly suggest that a hand hygiene program that combines education and use of a hand sanitizer in the classroom can lower absenteeism and be cost-effective.