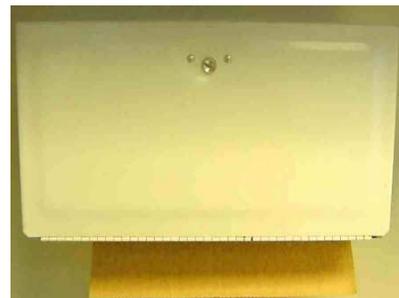


Cross-Contamination and Paper-Towel Dispensers (1/04)

Bacterial transfer and cross-contamination potential associated with paper-towel dispensing. Harrison WA, Griffith CJ, Ayers T, Michaels B. Am J Infect Control 2003;31:387–391.

Paper towels, dispenser exits, and dispensing mechanisms (e.g., levers, mount location) have been identified as potential sources of contamination, especially for paper towels hanging in sink splash zones. The aim of this study was to evaluate the transfer and cross-contamination potential between hands, towels, and dispenser exits if one or more is contaminated using bacteria representative of the skin's flora. The study used a generic folded paper-towel dispenser in conjunction with different brands of paper towels. **The results indicate that zig-zag transfer of bacteria between paper-towel dispensers and hands can take place if either one is contaminated. This potential should be considered in the design, construction, and use of paper-towel dispensers.**



DIS Comment: Contamination of hand-contact surfaces could be implicated in the spread of infections, could act as a reservoir for microorganisms, and could contribute to hand contamination during or after handwashing. Faucet handles have long been identified as a possible site for cross-contamination because they are touched early in the hand-hygiene process with contaminated hands and are more likely to be wet. It is frequently suggested to use automatic faucets or to use a paper towel to turn off the faucet after drying your hands. The importance of hand drying as the critical last step in the handwashing process is frequently overlooked. Paper towels are recognized as the most hygienic method of hand drying; multiple-use cloth towels of the hanging or roll type are not recommended for use in health-care settings. Paper-towel dispenser exits are a source of potential cross-contamination as they are the final surface that may be touched. Paper towels should be dispensed from holders that require the user to remove them one at a time without hand or paper towel contact with other surfaces. Lever-operated towel dispensers should be activated before beginning handwashing. Users reaching into the dispenser cabinet with wet, contaminated hands and touching the paper slot or other paper towels could increase the risk of other people contaminating their hands. This is frequently the case when dispensers malfunction and towels become jammed. All hand-drying materials should be placed near the sink in an area that will not become contaminated by splash. This article highlights the need for educating personnel on the potential spread of pathogens from paper-towel dispensers and the need for careful selection of paper towel types and their dispensers on the basis of functionality.