



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Kaleigh E. Solow	Project Number S1321
Project Title The Bacteriological Study of Bacteria from Public Restrooms Transferred onto Hands	
Abstract Objectives/Goals The purpose of his experiment was to determine if people leave public restrooms with more bacteria on their hands then when they entered. Methods/Materials To carry out the experiment, ten people were tested and each person represented one trial. Each person's hand was swabbed before entering the restroom, and (with a new sterile swab) after leaving the restroom. The sterile swabs, now contaminated, were plated in two different methods to ensure accuracy. One swab was plated directly, and the other swab remained in a sterile broth for three hours and was then plated. Also tested were eight independent areas in the restroom: the outside door handle, the inside door handle, the light switch, the towel dispenser, the toilet seat, the soap dispenser, the flush handle, and the toilet paper dispenser. Results The results of the experiment indicated that the original hypothesis, which stated that people would leave the public restroom with more bacteria on their hand, was correct. The final conclusion was determined by calculating the average number of bacteria grown in the before and after trial of each method used. Furthermore, the toilet seat and paper towel dispenser were the most contaminated areas of the restroom. Conclusions/Discussion Overall it can be concluded that the restroom is indeed a frightening place filled with transferable bacteria from the thousands of others who have relieved themselves in the same exact place. Observe good sanitary practices while in the restroom because most likely you will pick up bacteria left by another person. Although the bacteria may not be harmful, it very likely could be harmful bacteria that could cause disease.	
Summary Statement The purpose of his experiment was to determine if people leave public restrooms with more bacteria on their hands then when they entered.	
Help Received used lab equipment at University of California Irvine under the supervision of Dr. H. Beismann	