How Germy Is It?

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For my Science fair project, I investigated the cleanliness of public restrooms, specifically finding which area was the grossest. My hypothesis was that door handles would be the dirtiest surfaces due to the high frequency of contact by various individuals. To conduct my experiment, I collected samples from different surfaces in a public restroom. Including the counter, door handle, soap dispenser, and stall handle. I used sterile swabs to gather bacteria from each surface and then transferred the samples to agar plates to allow bacterial growth to occur. After incubating the plates over a 7 day period in a room temperature environment, I observed and recorded the number of bacterial colonies present on each plate. My finding confirmed my hypothesis. The door Handles had the highest number of bacterial colonies compared to the other surfaces tested. The bacterial growth on the door handle samples were significantly more extensive than the soap dispensary, and counter. The stall handle's were actually quite close to the door handles. This is likely due to the fact that many people touch door handles, and handles in general without washing their hands, transferring bacteria from various sources. Overall, my project highlighted the importance of Proper hand hygiene and the need for regular cleaning of high-contact surfaces like door handles in public restrooms. These measures can help reduce the spread of bacteria and maintain a cleaner,healthier environment.

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