

# Staphylococcus aureus

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Staphylococcus aureus is a strand of Staph that has developed into a superbug that affects 500,000 patients in American hospitals annually. To help decrease this statistic the spreading of the bacteria must be prevented. The bacterium is spread through the air and skin to skin contact. This study was conducted to observe the spread of Staph aureus from hospital personnel to their household contacts. Over a week's period 53 human subjects were gathered to be tested for Staph aureus. One group was to consist of the general population and the other group tested was hospital personnel household contacts. Sterile cotton swabs were used to obtain bacteria from the anterior walls of the nares. Then the bacteria were immediately inoculated onto blood agar petri dishes. The petri dishes were left in an incubator at 36.6 degrees Celsius for a 24 hour period to allow the cultures to grow. The cultures were then visually identified to be positive or negative for Staph aureus. The positive were then further identified using Gram stains. The results were then tallied and calculated. The hospital household contacts were found to have 25% colonized with Staph aureus and 75% were free of Staph aureus. The general population was found to only have 10% colonized with Staph aureus, while 90% were free of Staph aureus. The results obtained proved the hypothesis to be correct.