

# Antibiotics vs. Bacteria (pt 3)

Vaclaw, Eve (School: Bartlesville High School)

For the past three years, I have been conducting research and experiments on several different antibiotic ointments and their effectiveness against different bacteria. This year, Neosporin and Mupirocin were tested against Staphylococcus Aureus to observe how significant the difference was between the two. All experimental procedures were conducted in a Biosafety Cabinet in a lab that only my supervisor (Shelley Brown) and I had access to. Five petri dishes swabbed with the staphylococcus and antibiotic discs that had been saturated with the ointments were placed into an incubator for 48 hours. It was found that after 48 hours of incubation, Mupirocin was showing consistent results of an inhibition zone measuring at 2.5 cm, while Neosporin was only measuring at most 1 cm. While Mupirocin was 2x more effective than Neosporin, the over-the-counter ointment is more widely available and cheaper for those who don't have access to prescriptions and easily develop skin infections such as those apart of the homeless population.