

Gwen Spencer
Death to E. coli

The purpose of my experiment was to find which household cleaner out of the six I chose killed the bacteria *E. coli* best. My test group of cleaners consisted of bleach, hydrogen peroxide, Pledge, Pine-Sol, hand soap and dish soap. These are common cleaners used in kitchens, where *E. coli* is often found on wooden cutting boards and sinks. I used K12 strain *E. coli* to represent the bacteria. I also used seven Petri dishes with pre-set nutrient agar in the bottom. One of the seven Petri dishes was a control dish. My control dish had no chemicals or solutions. On average, bleach had the biggest zone of inhibition, which I measured at 23 millimeters. Pine-Sol had an average of 16mm, while hydrogen peroxide had one of 10 mm. The hand and dish soap zones were negligible. Pledge did not have a zone of inhibition at all. The conclusion drawn from my data was that bleach was the strongest household cleaner and most effective toward killing *E. coli*.