HOLLY BLANKENSHIP, and STEVEN ROOF, Dept of Biology, Fairmont State University, Fairmont, WV 26554. Effects of ethanol treatment time on bacterial recovery.

95% Ethanol is commonly found to be one of the main active ingredients in most alcohol wipes, which are commonly used to disinfect the skin before a vaccination. The objective of this study was to determine the effect of contact time on the recovery of bacteria from a surface. Overnight cultures of E. coli were spotted on glass slides and allowed to dry. Filter paper squares saturated with 95% ethanol were applied to the bacterial spots for varying amounts of time (10, 20, 40 and 80 seconds). After removing the filter paper 100 ul of sterile water was applied to the slide, and immediately 50 ul was removed and serially diluted to determine the number of bacteria recovered from the slide. As expected majority of the results showed that the eighty-second ethanol exposure time had the lowest number of bacterial colonies recovered. Unexpectedly, the water control (sterile water on filter paper) had an even lower number bacterial of colonies recovered when compared to the ethanol treatments. Overall, the trials performed with water were the most effective at reducing the number of bacteria recovered.