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This research is useful in forensic laboratories to prevent contamination. If a cleaner was found to remove all traces of blood, it could be used to sterilize lab benches and equipment to ensure no cross contamination between pieces of evidence. It could also be used in the field to determine which presumptive test would be more useful in different scenarios. The purpose of this project was to determine if common household cleaners could efficiently remove the presence of blood. To test this theory, I used hydrogen peroxide cleaner, dawn dish soap, and Clorox bleach to clean blood from three surfaces, laminate flooring, textured glass, and carpet. This was done using two different cleaning materials, paper towels and microfiber cloths, at 3-time intervals. After removing the visual evidence of blood, I tested for residual blood using two different presumptive tests, tetramethylbenzidine and phenolphthalein.

Results show that three out of the twelve variable combinations gave all positive results. Over 50% of the presumptive tests ran on textured glass were negative. From the results of the presumptive tests, it was found that the tetramethylbenzidine test was more sensitive than the phenolphthalein test. Household cleaners do not effectively clean up blood, leaving behind enough residual blood to test positive using presumptive blood tests. The tetramethylbenzidine test was more sensitive than the other. More variables should be tested to determine the effects of household cleaners on surfaces such as furniture. Different presumptive tests should also be examined.