The purpose of this project was to determine if indoor swimming pools lead to more breathing issues, such as asthma, compared to outdoor swimming pools. This could benefit mankind by informing those with breathing issues to avoid indoor swimming pools or to help reduce breathing problems among youth.

For the procedure, Madagascar hissing cockroaches were placed into three groups with three cockroaches per group. In group 1, the cockroaches were exposed to an indoor swimming pool situation. This was done by simulating a chlorine swimming pool inside the cage and then placing saran wrap over the top and poking some air holes to allow for breathing. The outdoor pool was simulated in the same way but with no covering over the cage. The control did not have any simulated swimming pool with chlorine in it. The mass and length of each cockroach was recorded three times a week for two weeks. Also during that time, the Vernier probe ware and software was used to measure their respiration rates to see if there were any breathing issues. Data concludes researchers’ hypothesis was correct.