



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Gabriela Levikow	Project Number J1723
Project Title Does the Emergency Ride Affect the Bacteria Inside?	
Abstract Objectives/Goals Each year in the United States there are about 1 billion colds. Some of these are caused by emergency vehicles. I hypothesized that out of the ambulance, police car, and fire truck, the police cars would have the most bacteria inside. Many criminals go inside police cars and the officers most likely do not clean the inside as well as they could. Bacteria are important in determining how often people get sick. In emergency vehicles, bacteria could be everywhere because of the everyday situations the workers face. Methods/Materials I was very careful to make sure my experiment was as accurate as possible. I thought about how to control my test so that I could get the best possible results. I swabbed the vehicles in the same place every time, and I transferred the swabs into the agar plates the same way every time. I looped my agar plates the same way every time. I also made sure I wore gloves every time I dealt with the bacteria. The incubation period was the same for each plate, two days. Results I found that out of the three vehicles, the police cars had the most bacteria inside. On average, the police cars had about 917 bacteria spores in the four places I swabbed. The ambulances had 130 bacteria spores inside, and the fire trucks had about 221 bacteria spores present. Conclusions/Discussion As you can see, there was a big difference in the numbers.	
Summary Statement My science fair project determined which emergency vehicles tend to have the most bacteria spores inside; comparing ambulances, fire trucks, and police cars.	
Help Received Dad set up appointments to swab vehicles, also took pictures; mom helped type papers; teacher provided microbiology lab.	