

Saving One Child's Life at a Time

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An overlooked conflict in the today's world is children dying in hot cars. Therefore, the purpose of this experimentation is to improve on making a self cooling car seat prototype model and have it decrease from an above 100 °F temperature to an average high temperature of 88 °F in the car seat's apparatus. The procedure in this experiment involves switching the ice pack to a chemical called calcium ammonium nitrate which is released at different times with the pressure of water as a substitute for kinetic energy. Also, I incorporated fans in the sides of the car seat to add extra support to reduce the chance of heat exhaustion. I switched the thermostat that was previously on there to an arduino system to prepare for my future plans to make it SMS compatible and have more power range to work with. The results of this project went successful because it accomplished the goal of getting the temperature to an average high temperature in all five trials I went through. Therefore, this project will reduce the chance of having a child die in a hot car when they are left.

Awards Won:

Drexel University: Full tuition scholarship \$200,000