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*Stopping the Spread of H1N1: A Computer Simulation*

This project was designed to watch the spread of H1N1 and determine the most effective way of stopping it. By creating a computer model using International Data Language (IDL), I was able to simulate the spread of H1N1 throughout a school without involving live subjects. Then by altering the model, I was able to simulate different ways of slowing H1N1 infections. By gathering information from different authoritative sources I created an accurate model. Using the research I came up with assumptions for the numbers needed for the model to run (example: how many students come in sick and the percent chance of being infected). Using IDL, I created a non-invasive model of the spread of H1N1. Using the model I changed the variables to create different simulations. Results show that there are many ways of slowing the spread of H1N1. In most of the simulations there was a second outbreak of H1N1 after the initial infection hit its peak. Most simulations had between 500 and 700 of the 1000 students infected. The most interesting result was when I combined variables of washing hands and cleaning the classrooms at lunch. Only the students who were originally infected got sick. The other interesting result was when I closed the school for 10 days after 50 students were infected. When school reopened, H1N1 appeared to come back even stronger. This implies that closing the school is an ineffective way of stopping the spread of H1N1.