Epidemiology



Regarding the figure showing the number of deaths due to influenza, some of the primary differences between the 2009 and 2010 flu season are that the 2010 flu season appears to have started earlier—the rate at which the % deaths due to flu increased sooner than the 2009 flu season. In addition, the 2010 flu season had slightly higher % deaths due to influenza than the 2009 flu season. Furthermore, the 2010 flu season surpassed the epidemic threshold for a longer duration than the 2009 season.

One reason that the 2010 flu season occurred sooner in the season than the 2009 season could possibly be due to environmental factors. For example, it's possible that unseasonably cooler temperatures occurred sooner in 2010 than in 2009, which causes people to stay indoors more and spread the influenza virus more often. A reason the % deaths due to the flu was higher in 2010 could be because of economic factors. As we all know, families were strapped for cash in 2010 due to economic recession. It's possible that families didn't have the finances to get proper medical treament.

One could test these theories by graphing the % deaths versus average temperatures for a particular season and determining whether there is a correlation. One could also test the theory that finances affect the ability of individuals to obtain proper medical treatment by comparing average income of individuals in 2010 and the % deaths, then, compare the average income of individuals in 2010 to 2009 to determine if income affects the % deaths due to the inability of individuals to get medical treatment.