

# MORTALITY VS. VISIBILITY

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**Distance to Mountain Range : Approximately 15 miles  
3 % of U.S. Population : Approximately 8 million people**

**A model has been developed to depict the estimated increase in the mortality rate as a function of the decrease in visibility. The results of this model in a graphical form are shown above. It can be observed that mortality increases as visibility decreases, and that the effect is highly significant. This model does not consider the additional negative health effects that occur from the toxic nature of particulate matter<sup>1</sup>.**

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**Additional Notes:**

**The American Heart Associations establishes that an increase in the density of particulate matter will cause an increase in mortality. The expected increase is expressed in a differential form of an increase of 1% mortality of an increase of 10ug (micrograms) per cubic meter.<sup>2</sup> Additional sources<sup>3</sup> refer to an increase of 3.4% mortality increase per equivalent density change, however the more conservative approach will be adopted within this model.**

**TO BE CONTINUED**

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