

Geog 480
Assignment 3
Dr. Jonathan Mayer
Spring, 2012

In *When Smoke Runs Like Water*, Dr. Devra Davis discusses the work of Herbert Needleman on the effects of lead on child development and behavior. Many representatives of industry vilified him for this, and it even affected his scientific reputation until the epidemiologic community realized that his work was good science. However, the attacks on Needleman did their damage, and it has been hard for him to get research funding, and his publication record dropped after his pioneering work.

In this assignment, you are asked to find three original research articles on the health effects of lead. Please select one of Needleman's research papers—that is, one of his papers that used data, in which he was either the *first* author, or “*senior author*” (last author). This may necessitate a trip to the Health Sciences Library if you cannot find the article online! Then, select two other articles on the effects of lead on the same, or other, conditions. You should be able to find papers on lead and that same condition if you look hard.

Please write your paper in which you compare the three papers using the criteria selected for the first two papers. These include study design, specific research questions, sampling and the population selected, etc. Are the conclusions of these papers valid? In other words, does the research in the specific paper justify the conclusion? What is the “theoretical” basis that underlies the research question for each paper? In other words, what led the researchers to conduct the research, or why did they do it? Are there any policy implications of each paper? If so, what policy implications? Explain the policy implications. Will the policies that seem to follow from your analysis of the power be easy to legislate and then implement? Explain.

The last paper will be due on Monday, June 4th (first day of finals week)