ES 203
Lead in Lewiston

Here is an opportunity for you to apply what you are learning in class by beginning to think about how one would assess the risk posed by lead in Lewiston.

1. Begin by clearly stating what definition of “risk” you think should be used.

2. Decide what the scope of a risk assessment should be. Do you think the most important thing is to assess the risk to all living organisms in Lewiston from lead exposure or do you want to narrow your assessment to the effects on children under 6? Why did you make the choice that you did?

3. Begin to identify the hazard posed by lead in Lewiston by trying to assess the extent of possible exposure. How many people live in Lewiston? What percentage of the housing stock is older than 1978? Information on Lewiston statistics can be found at the US census site (http://www.census.gov/) or at the Lewiston web site (http://ci.lewiston.me.us/).

4. How do we know that lead poses a hazard? Summarize some of the information you have read that identifies lead as a hazard.

Additional resources for learning about lead are:

- EPA web site – general information on lead doses and effects [http://www.epa.gov/lead/](http://www.epa.gov/lead/)
- HUD’s web site on housing and lead [http://www.hud.gov/offices/lead/](http://www.hud.gov/offices/lead/)
- The Coalition to End Childhood Lead Poisoning [http://www.leadsafe.org/index.htm](http://www.leadsafe.org/index.htm)
- Maine State action guidelines for child blood lead levels [http://www.state.me.us/dhs/bohdcfh/led/clinical.htm](http://www.state.me.us/dhs/bohdcfh/led/clinical.htm)
- Maine State Lead Poisoning Prevention site: [http://www.state.me.us/dhs/bohdcfh/led/index2.htm](http://www.state.me.us/dhs/bohdcfh/led/index2.htm)

5. Describe an accepted model that links exposure to lead to blood lead levels. There are a couple of exposure models. For this you can use the information you are given in lab (the HUD model) or another model. Explain the information you would need to gather or the assumptions you would need to make in order to determine the levels of lead that residents of Lewiston are being exposed to.

6. Describe the relationship between blood lead levels and health effects. The resources listed in item 4 may provide information in addition to material available in your course pak or from lecture.