

ASSIGNMENTS FOR UPCOMING TOPICS CLASS (10/28/03, Week 9):
Air Pollution Impacts Assessment (Pat Kinney, facilitator)

Everyone should read the same material:

- Patz, JA and Balbus, JM, 2001, "Global Climate Change and Air Pollution: Interactions and Their Effects on Human Health," Chapter 2 in *Ecosystem Change and Public Health: A Global Perspective*, ed. by JL Aron and JA Patz.
- Bernard, SM, JM Samet, A Grambsch, KL EBi, and I Romieu, 2001, "The potential impacts of climate variability and change on air pollution-related health effects in the United States," *Environ Health Perspect* 109 (suppl 2): 199-209.

Here are FOCAL QUESTIONS to consider as you think about readings. Please be prepared to lead a class discussion that addresses and expands upon these questions (as indicated in the revised class format):

Group 1:

1) Which air pollutants are related to weather and climate? How are they related?

Group 2:

2) Can controlling greenhouse gas emissions also help reduce levels of other air pollutants? How so?

Group 3:

3) Which pollutants are of concern from a public health perspective and why?

Learning Objectives in Air Pollution Impacts Assessment readings:

- Identify mechanisms by which climate change can affect air pollutant exposures
- Compare local vs. regional vs. global scale climate processes that can affect distribution of various short-lived vs. long-lived air pollutants
- Describe key sources of greenhouse gases, criteria air pollutants, and air toxics in the US: to what degree do sources overlap or interact with one another?
- Explain evidence linking temperature and (ground-level) ozone concentrations
- Describe relationships between land use/land cover factors that could influence exposures to air pollutants: what factors, which pollutants, what are the connecting mechanisms?
- Propose possible adaptive measures to potential climate-related air pollution changes
- Identify research needed in future to better assess air pollution-related health effects stemming from climate change