

Integrating Environmental Health Information and Interventions into Medical Education: Barriers and Opportunities

Lawrence Deyton, MSPH, MD

Professor of Medicine and Health Policy and
Senior Associate Dean for Clinical Public Health

“Preventing Air Pollution-related Cardiopulmonary Illnesses”

- Clinicians *should* be EPA’s biggest allies
- Clinicians’ education provides only cursory the facts about the relationship of air pollution exposure to disease and prevention and...
- Fails to provide clinicians with any training about what they can do for “Preventing Air Pollution-related Cardiopulmonary Illnesses”

NB: Don't shoot the messenger:

“Traditionally, medical schools do not include a significant amount of content on air pollution – main emphasis is on cigarette smoke”

“Unlike other topics, I have not seen national recommendations about what should be the core content of air pollution in medical school.”

“I've been on test writing committees for many years for the NBME and ABIM and have never been asked to write a question on air pollution.”

“We all assume that air quality is getting better, what is the compelling reason to include this topic?”

Expanding scope of practice post-ACA:

- Excellence in providing care to individual patients and...
- Understand and work within health systems and teams to address community factors that lead to and perpetuate poor health (social determinants of health)
- Clinicians' education must now include **Clinical Public Health**

How Clinicians Can Eliminate Childhood Asthma in Washington, DC

Required for all 180 1st year GW med students

3-day interactive and field-based program:

- Children with asthma and families
- Schools/school nurses
- Clinicians/clinical support services and coordination
- Home/environmental assessment
- Community organizations
- Government agencies (health, environment, transportation, energy)

Students groups develop innovative proposals in four major domains associated with childhood asthma:

- *Environmental factors*
- *Social determinants of health*
- *Health care*
- *Asthma management adherence*

Student proposals focus on four spheres of influence within a child's life:

- *Home*
- *School/Pre-School/Childcare*
- *Community/Neighborhood*
- *City/District of Columbia*

Student Proposals – presented to panel of experts & families of children with asthma:

- Proposal to WMATA for changes in Metro and implement a Core System Loop to decrease auto emissions in Wards 7/8
- Employ community members as educators about environmental asthma triggers in high prevalence communities
- Targeted education to pregnant DC residents from high risk neighborhoods about preventable risk factors for developing childhood asthma
- Improvement of indoor air quality in DC schools to decrease asthma-related school absences

- Develop and disseminate a standards/core curriculum for clinicians on air pollution
- Create incentives to promote innovations in clinician education to transmit that core curriculum
- Target clinicians' various roles: clinical, health systems and community
- Meet with licensing and credentialing bodies – promote this core curriculum as part of credentialing and licensure requirements