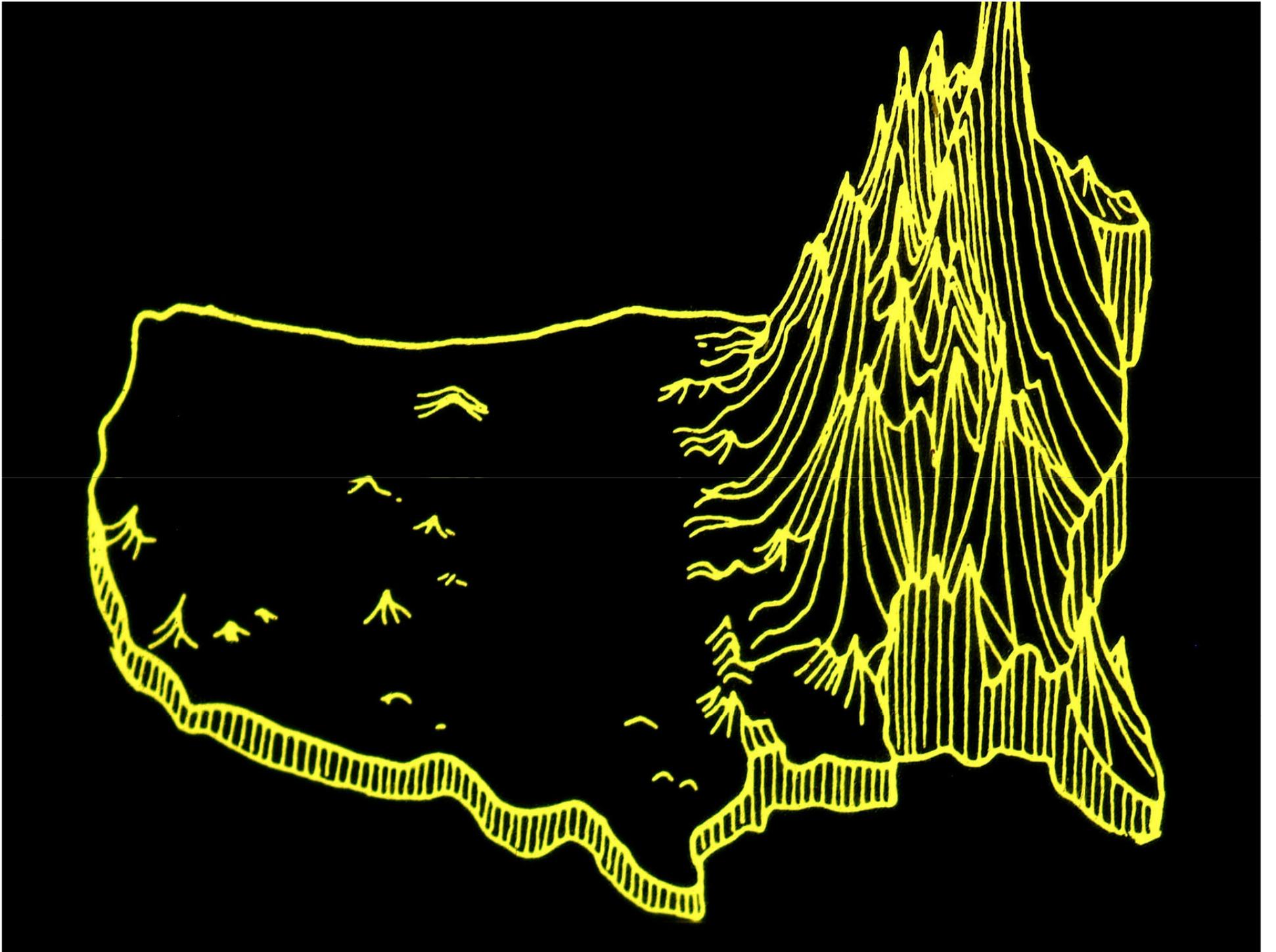


Air Pollution and Health

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Perception of risk of air pollutant exposure in patients with asthma.

SE Peters, E Kearns, NS Ferguson, K Anderson

British Thoracic Society

Abstract: Thorax 1995; 50: A70

Air pollutants in asthma : indoor exposures seem more relevant when judged by patients.

K Anderson, SE Peters, E Kearns, NS Ferguson, GP Morris

American Thoracic Society, New Orleans

Abstract: Am J Resp and Crit Care Med 1996; 153: A702.

Isolation and source apportionment of environmental polycyclic aromatic hydrocarbons (PAH) from human lung tissue.

C McRae, MH Jackson, MR Adamson, K Anderson, CE Snape.

British Thoracic Society London
Abstract 1998; 53: A69







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R ▲ 13
P ▲ 0

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European “Year of the Air” 2013

- European Union revising air pollution control policies
- Key directive 2008/50/EC – minimise the effect of AP on human health.
- The WHO guidelines are not the EU guidelines.
- Ref Brunekreef and Maynard : Atmos Environ 2008; 42: 6425-30.

Ten Principles for Clean Air

Brunekreef et al, European Respir J, 2012; 39: 525-8

- 1. Air, food and water should be safe.**
- 2. Outdoor air pollution in Europe causes morbidity and mortality.**
 - PM 2.5 costs 18M US work days
 - Ozone costs 11M US school days
 - PM10 in 2005, 625M restricted EU activity days
- 3. Fine particles and ozone need reduction policy – mortality increases 6-8% for every 10ug/m³**

The Ten Principles *continued*

4. Roadside pollution.

Ultrafines, and black carbon as well as fine particles and ozone.

5. Non Tailpipe emissions

6. Roadside NO₂

The Ten Principles *continued*

- 7. Global warming and heatwaves**
- 8. Biomass combustion**
- 9. European limits for public good or not?**
- 10. EU pollution reduction policy to prevent ill health**

The way to go ?

- MicroRNA
- Vascular disease
 - Stroke, myocardial disease
- Inhaled pollutants
 - Susceptibles – asthma and copd mainly
- The fit individual

Know and Respond

10 males & 10 females on LTOT with chronic respiratory failure

- 5/20 have Internet

- 15/20 do not have access

- 5/20 do not own a mobile phone

- 15/20 own a mobile however 8 of those say they do not have it switched on, cannot access texts and only have it for emergencies

So only 7/20 have access to texts

Graduate Joggers : all have textphones but no clue about AP !!

The way to go ?

- Spare the air – California where AP education starts in schools
- Is there a challenge for those most susceptible. – Bucknall, Home COPD management failures. BMJ March 24th 2012.
- Is there a challenge for those who should know better?