



**Addressing Public Health Concerns
Associated with Marcellus Shale:
Perspectives of the PA Dept of Health**



Background

- Pennsylvania currently ranks 2nd in the nation in the number of sensitive environmental sites
 - 95 Superfund sites
 - 589 CERCLIS sites
- These sites commonly associated with public health concerns
- PADOH also fields hundreds of complaints annually
 - Excess of cancer
 - Other non-cancer public health concerns



Background

- Since 1989, PADOH has received a grant from ATSDR to investigate public health concerns associated with Superfund and CERCLIS sites
- Known as the Health Assessment Program
- Total of:
 - 228 reports generated
 - 384 health education/community involvement
 - 115 technical assist/site reviews



Marcellus Shale

- PADOH receiving an increasing number of concerns related to Marcellus Shale activities
- From citizens, health care providers, facilities
- Areas of concern include:
 - Perceived adverse health consequences (usually acute)
 - Interpretation of lab test results
 - Testing questions
 - Interpretation of environmental findings



Marcellus Shale

- As of now, in Pennsylvania there has been no systematic assessment of the public health concerns
- No systematic approach to addressing or investigating health concerns or possible risks of exposure

Health Impact Assessment for Battlement Mesa, Garfield County Colorado

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Public Health Concerns

- Emergencies due to accidents
- Water-related issues
 - Private wells
 - Municipal supplies
 - Waste water treatment and discharge
- Air pollution
- Solid waste
- Agricultural issues
 - Food
 - Animals
 - Fish



Public health concerns (cont'd)

- Injuries (e.g. motor vehicle)
- Occupational health
- Mental health & well-being



Role of Public Health

1. Responding to public health concerns raised by citizens, providers, or public officials
 - a) Emergency situations
 - b) Acute health impacts
 - c) Perceived excess in cancer
 - d) Excessive non-cancer health problems



Role of public health

2. Retrospective and prospective assessment of environmental data for public health impact
 - b) Data collected by state and federal agencies
 - c) Data provided by the public
 - d) Data from academic partners
 - e) Data collected by industry

Includes:

Air monitoring

Water testing (public and private)

Solid waste testing

Fish and food data



Role of public health

3. Assessing clinical data

- a) Lab tests done on patients
- b) Reviewing available databases for impacted communities
 - a) Cancer registry
 - b) Hospitalizations
 - c) Lab testing
 - d) Sentinel conditions

Assimilation and comparison of available health, environmental, and risk factor data (environmental public health tracking)



Role of public health

1. Prospective health monitoring
 1. Biomonitoring
 2. Systematic environmental data
 3. Population-based health monitoring
 4. Occupational health and safety

Would likely require comparison (or control) populations



Role of public health

- Health care provider education
- Health care provider consultation
- Lab quality assurance



Public health activities

- Are of increasing levels of complexity and cost
- Ideally done in partnership:
 - Federal partners
 - Academic centers
 - Private sector



“The difference between a mountain and a molehill is your perspective. “

Al Neuharth

“It’s déjà vu all over again.”

Yogi Berra