



*WORKSHOP TO DEVELOP RECOMMENDATIONS FOR ENVIRONMENTAL MONITORING
RELATED TO UNCONVENTIONAL OIL AND GAS EXTRACTION*

STATE PERSPECTIVES ON HEALTH IMPLICATIONS AND DATA NEEDS

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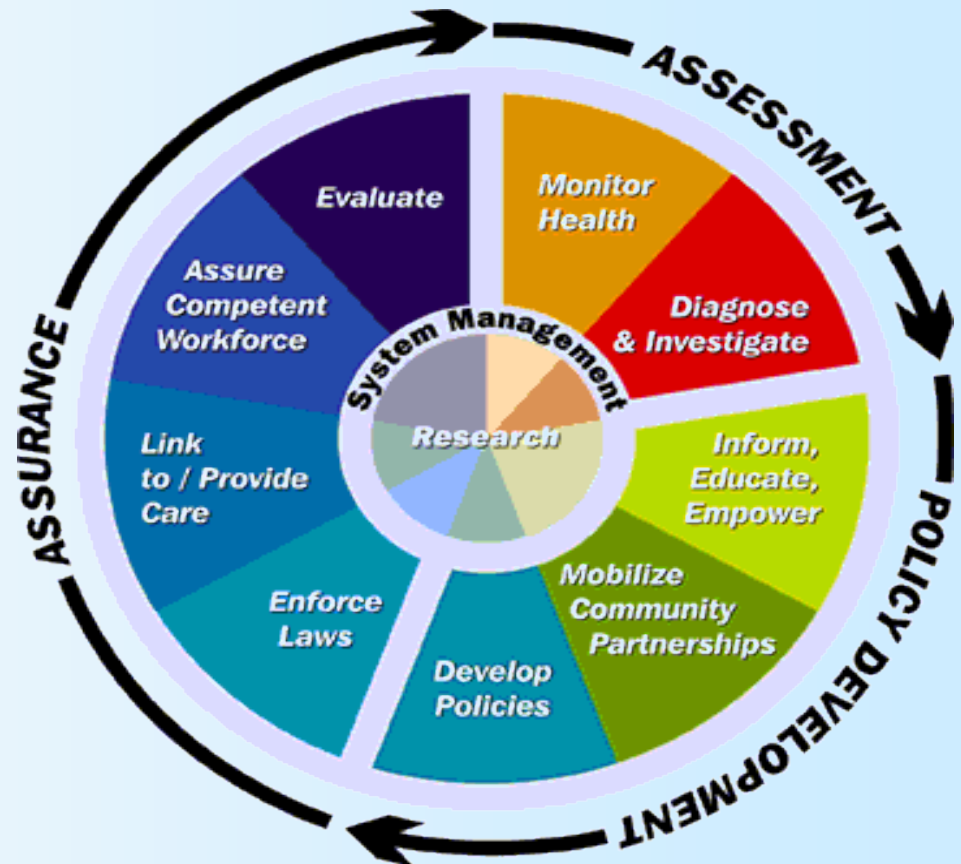


GOALS

- Discuss one state's approach to data development for unconventional oil and gas extraction
- Consider lessons from national discussions about state needs

ROLE OF PUBLIC HEALTH

- Epidemiology/
Surveillance
 - Environmental
 - Occupational
 - Injury
- Regulation/
Assurance
 - Food
 - Indoor environments
 - Medical waste
- Response/Assessment



MARCELLUS SHALE SAFE DRILLING INITIATIVE



- June 6, 2011 – Governor O’Malley’s [executive order](#) establishes Marcellus Shale Safe Drilling Initiative
- Executive order notes EPA study due in 2012 and 2014 does not address air quality concerns, greenhouse gas emissions, seismic risks, public safety concerns, or impacts to terrestrial and aquatic ecosystems
- Initiative created to “assist State policymakers and regulators in determining whether and how gas production from the Marcellus shale in Maryland can be accomplished without unacceptable risks of adverse impacts to public health, safety, the environment and natural resources.”



ADVISORY COMMISSION MEMBERSHIP

Representatives from:

- Local government (2)
- Academic expert in geology or natural gas production
- Gas industry
- Environmental organization
- Regional business
- Private citizen
- Any other agency representative thought by Departments of Environment or Natural Resources to be necessary



TASKS OF THE MARCELLUS SHALE SAFE DRILLING INITIATIVE

- Determine funding (severance task, other)
- Determine liability standards
- MDE and DNR to conduct studies of natural gas extraction and best practices
 - Best management practices
 - Economic impacts
 - Environmental/ecological impacts



PUBLIC HEALTH PROJECT

- December, 2012 – appointment of public health professional to Advisory Commission
- January, 2013 – development of a proposal for a public health project to provide “a baseline assessment of current regional population health, an assessment of potential public health impacts, and possible adaptive and public health mitigation strategies in the event that natural gas extraction takes place within Maryland’s Marcellus Shale resource.” (from MDE-DHMH inter-agency memorandum of understanding)



PROJECT STRUCTURE

- Scoping
- Baseline assessment of population (demographics, morbidity/mortality, local health priorities, vulnerabilities)
- Impact assessment
 - Hazards associated directly with natural gas operations (chemical, physical)
 - Hazards associated with population changes/secondary impacts
 - Potential impacts associated with extraction (normal operating conditions, upset conditions, cumulative exposures, vulnerable populations)
- Final report
 - Monitoring and assessment during, after extraction operations (environmental, population)
 - Potential public health response and mitigation strategies
 - Informed by other State studies on economic impacts, environmental monitoring

CHALLENGES AND OPPORTUNITIES



- Other states have done/attempted similar projects
- Challenges/opportunities:
 - Hazard assessment
 - Exposure assessment
 - Common pooled health outcomes data
 - Learning from those states/communities already engaged in extractive operations
 - Value of sentinel cases and free flow of information