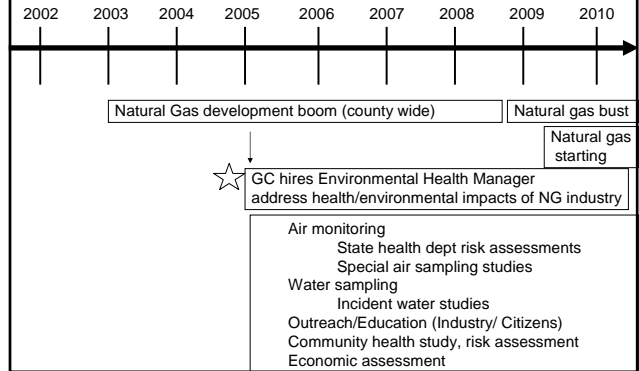


Use of Health Impact Assessment to Help Inform Decision Making for Natural Gas Drilling Permits In Colorado

Roxana Witter MD, MSPH
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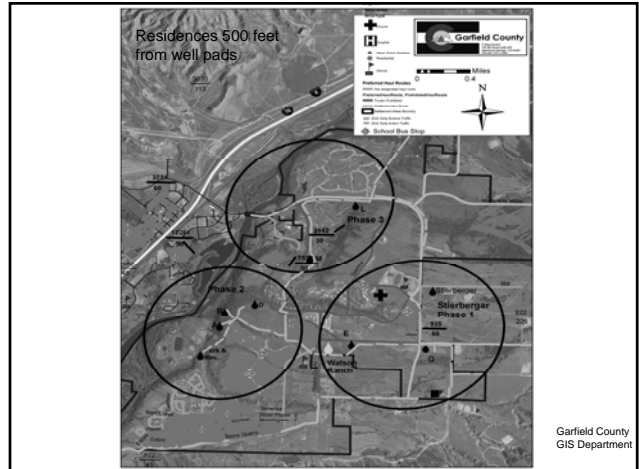
American Public Health Association
November 9, 2010

Years of work in Garfield County before the HIA



Battlement Mesa HIA timeline

2009			
May	June Announcement of drilling plans in Battlement Mesa	July	Dec Garfield County PH and CSPH decide to collaborate on HIA
Sept	Oct	Nov Battlement Mesa citizens petition county commissioners	Pew announces HIA rfp Garfield County PH and CSPH decide to collaborate on HIA
2010			
Jan Stakeholder meetings Garfield County agrees to fund HIA	Feb Stakeholder meetings	Mar Stakeholder meetings	April Stake holder meetings
May HIA contract starts	June Stake holder meetings	July Stakeholder meetings HIA consultation (Pew funded)	Aug
Sept Draft HIA released Public comment period	Oct Public comment period extended	Nov Public comment closes	Dec Final HIA report



Battlement Mesa Baseline

BM Demographics

20% over 65
(Co 10%)

46% "susceptible"
(under 18 or over 65)

BM Health

Same or lower rates of disease, deaths, cancers, and poor birth outcomes as comparable Co populations

BM Community

Impact of gas boom

Violent crimes increased

Chlamydia cases doubled

Schools enrollment increased by a third

Health Risk Assessment

Air

- County ambient air monitoring data
- Air toxics (hydrocarbons, carbonyls), particulates

Water

- Post incident samples

BTEX and carbonyls risk drivers

Potential for increased risk of acute health outcomes and cancer

8 Areas of Concern

Natural Gas Development

Stakeholders

Previous experience in Garfield County (HRA)

Previous CSPH literature review, white paper

- Air quality
- Water quality
- Traffic
- Noise
- Economic conditions
- Social conditions
- Health infrastructure
- Accidents/malfunction

Health impacts

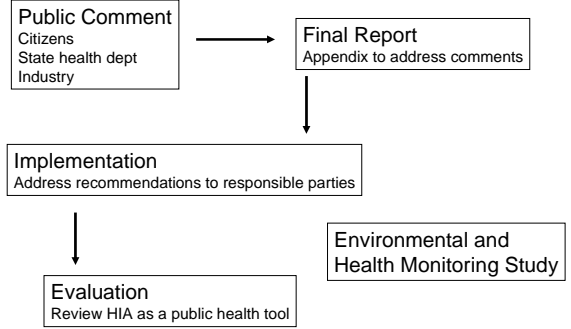
Assessment of Potential Health Impacts

Area of Concern	Potential impact	Rank
Air Quality	Negative	1
Water/Soil Quality	Negative	3
Traffic	Negative	2
Noise	Negative	5
Community Wellness	Negative and Positive	4
Employment/Economy	Negative and Positive	5
Health Infrastructure	Negative and Positive	7
Accidents/Malfunctions	Negative	6

Recommendations

- How can the potential negative health impacts be mitigated?
 - Promote pollution prevention
 - Decrease fugitive emissions
 - Monitor air and water
- How can the potential positive health impacts be supported?
 - Protect public safety
 - Manage traffic
 - Address pipeline safety
 - Address boomtown effects
 - Housing and public services
 - long term planning

Next steps



Conclusions

- Battlement Mesa HIA is specific to that project at that place
- Principles of HIA could be used to look at other locals, projects
- HIA is a tool for understanding potential health impacts before a project starts
- Goal of HIA is to provide useful data for informed decisions
- Allow decision makers to include health in their processes

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