

RESULTS

Perceptions and Concerns. (Qualitative data from focus groups, interviews, public meetings and complaint reports)

Key Informant Interviews

A total of 23 interviews were conducted between October 2005 and October 2007; 16 (69.6%) were conducted in person, 7 (30.4%) were conducted by telephone.

Table 9. Interviewee Demographics

Gender	Residence	Residence Time in the County	Distance of Residence from Natural Gas Extraction or Production Activities	How Did Individual Hear About Study?
Female: 12 (52.2%)	Rifle: 5 (21.7%)	Range: 9 months to 20 years	Range: 150 feet to 6.5 miles	Meeting (public meeting or GVCA* meeting): 18 (78.3%)
Male: 11 (47.8%)	Parachute: 10 (42.6%) Silt: 8 (34.8%)	Mean: 9.8 years Median: 9.5 years	Mean: 0.93 miles Median: 0.25 miles	Newspaper article: 4 (17.4%) Word of Mouth: 1 (4.3%)

* GVCA: Grand Valley Citizens Alliance

Key Words and Common Themes Analysis

Transcriptions from the key informant interviews and focus group discussions were reviewed for key words and themes, which were then grouped into thematic categories. The comments and concerns of 119 individuals are represented below.

Physical Health Issues/Concerns. (Note: The following concerns may or may not have been associated with environmental exposures.)

- Increase in or exacerbations of allergies and asthma
 - Related concerns: coughing, wheezing, other respiratory complaints
- Generalized chemical sensitivities
- Fibromyalgia/chronic pain
 - Related concern: chronic fatigue, lethargy
- Chronic colds
 - Related concerns: concern about compromised immune systems

- Headaches, dizziness, burning/itching eyes, nausea/vomiting, sinus problems – most often attributed to odors
- Burning/itching skin
- Mental health issues such as stress, depression, anger, inability to sleep
- Cancer (adrenal cancer, brain tumors, unknown/presumed cancers or “fear of developing cancer”)
- Loss of voice or speech problems
- Trauma/work-related injuries
- Age-related illnesses
- Diabetes
- Obesity
- Perceptions that pre-existing health conditions have been exacerbated; people “feeling worse” than in the past

Social/Community Issues and Concerns

- Increase in child and spousal abuse; child neglect; stressed family relationships
- Alcohol abuse (especially among high school students)
- Drug abuse (especially methamphetamine use)
- High suicide rate
- Increase in sexually transmitted diseases related to increase in temporary workers
- Lack of health insurance
 - Related concerns: lack of dental care for children and preventive care
- Access to healthcare and mental health services
- Number of low income families
- Growth issues: Availability of housing and community services, increase in low-income families, cultural clash (long-time residents, industry workers), traffic, public safety

Environmental Concerns

- Noise
- Odors
- Dust
- “Toxic” chemicals in water and air

Wildlife/Domestic Animals

- Reported changes in herd animal reproductive patterns/illnesses
- Decreases in bird, insect, and deer populations

Garfield County Health Risk Study - Community Interviews/Focus Groups

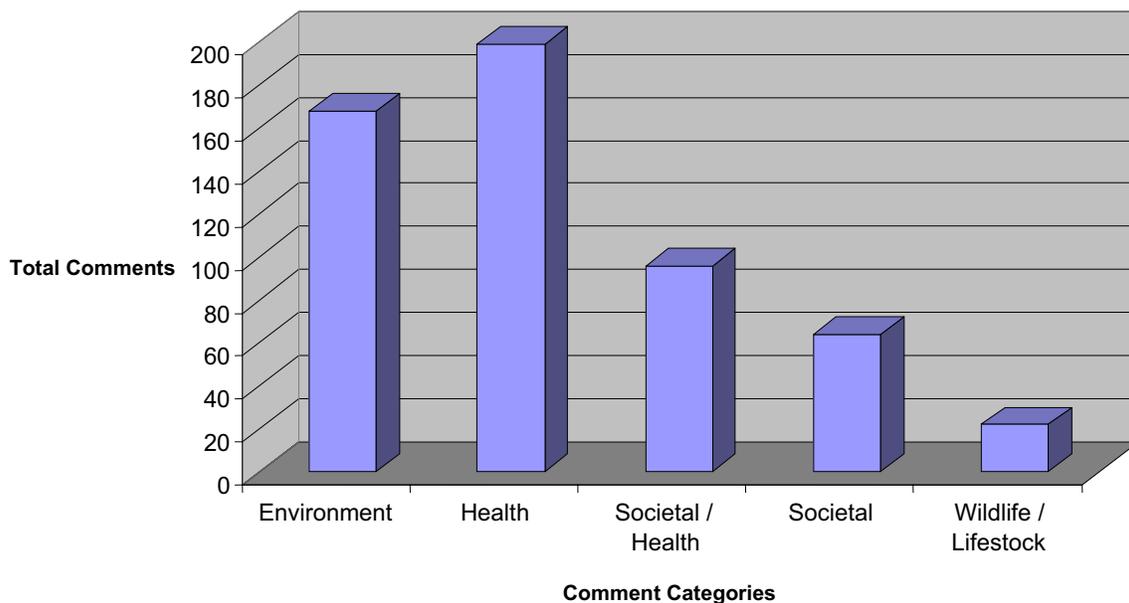


Figure 19. Community Interviews/Focus Group Comments

Garfield County Environmental Health Phone Log Complaints

For the documented time period, the log contains 372 calls. *The largest number of complaints/concerns was related to odors (93 calls).* Other complaints/ concerns included the following:

- Road conditions (31 calls)
- Ground water concerns (25)
- Noise (25)
- Safety (24)
- Dust (23)
- Spills (23)
- Property damage (18)
- Visual appearances (14)
- Permitting (14)
- Surface water concerns (13)
- Specific health concerns (13)
- Traffic (10)
- Trespassing (9)
- Surface use agreements (9)
- Flaring (7)
- General environmental concerns (7)
- Industry worker speeding (5)
- Stormwater (3)

- Fire (2)
- Pit water (production water) containment (2)
- Smoke (1)
- Trash (1)

Quantitative Health Data. Final data collection for this report took place in January 2008, unless otherwise noted. Thus, these data are the most currently available at that point in time.

Vital Statistics

- Tables 8 through 11 present vital statistics data and trends for 1996 and 2002-2006 by county. Table 12 provides selected birth statistics by County for 2006, specifically.
- According to the annual birth rate data for the years 1996 and 2002 – 2006, birth rates for all counties have been essentially stable during this period. The exception is Montrose County, for which there was a drop in the birth rate between 1996 and 2002, after which the birth rate stabilized between 2002 and 2006. Garfield County had the highest average annual birth rate during this period.
- The percentage of teen mothers has been stable over the study period, with the exception of Delta County, which saw a drop in the percentage of mothers who are between the ages of 10 and 17 years between 1996 and 2002. Based on the average annual rate for the period 2002-2006, Garfield County had the lowest rate of teen mothers among the comparison counties.
- The rate of low birth weight (<2,500 grams) babies among the four counties is similar.
- Mesa County had the lowest rate of mothers who did not receive prenatal care during the first trimester of their pregnancies. The rates for the other three counties were similar.
- The highest rate of mothers who had less than 12 years of formal education was in Garfield County.
- Garfield County's rate of neonatal and infant deaths was similar to that of Mesa County, and higher than that of Delta and Montrose Counties.
- The age-adjusted, total death rate for Garfield County was comparable to the age-adjusted, total death rate for Delta County, and lower than the age-adjusted, total death rates for Mesa or Montrose Counties. The graph in the section below provides a comparison of crude, total death rates for the four counties over the period of 1990 – 2006. Garfield County had the lowest crude death rate for the past 2 ½ decades.