

Mental Health in Colorado's Oil and Gas Communities

As of 2017, 17.6 million Americans lived within one mile of an active oil or gas well. Alongside ongoing discussion surrounding the economic and physical health impacts of oil and gas production, there must also be consideration of the impact of industrial development on the mental health of nearby communities.

CHRONIC STRESS

- According to a <u>2020 study</u> of Colorado Unconventional Oil and Gas Production (UOGP)*, UOGP activity near local communities can trigger "chronic stress" among community occupants. Whereas stress in this context takes the form of anxiety about health risks or other external concerns, chronic stress is prompted by feelings of powerlessness, lack of understanding, and institutional inequalities.
- 90% of the study's respondents reported experiencing chronic stress, with a key cause being their inability to influence where UOGP development is placed, and how close they could be situated to community members' homes. Perceived bureaucratic bias towards oil and gas companies in the local decision-making process was also a strong driver of feelings of institutional hopelessness, and therefore chronic stress.
- 90% of interviewees complained about a lack of access to peer-reviewed, reliable sources of information on the public or environmental health risks of UOGP, preventing occupants from alleviating some of their concerns about UOGP's impact on their towns and neighborhoods. Considering that 95% of participants said that they harbored at least some disquiet about the health risks of UOGP, lack of access to information is a significant stressor and chronic stressor.

*Unconventional Oil and Gas production includes methods of oil/gas extraction that use procedures outside of the traditional methodology, such as hydraulic fracturing or horizontal drilling.



CHRONIC STRESS (Continued)

• This stress has a serious influence on the mental health of affected individuals. In fact, 75% of study participants said that UOGP activity contributed to longer, more severe bouts of depression. A 2016 study of Texas Residents found that living near UOGP production decreased their subjective well-being.

ANXIETY AND DEPRESSION

- Distress arises out of environmental change in someone's locale. Changes to an ecosystem can be associated with anxiety among nearby populations, especially if the subjects have a personal connection to the land in question.
- Industrial activity, such as Unconventional Oil and Gas Production, is often linked to environmental degradation and economic disruption, leading to depression.
- Exposure to noise aggravates mental health conditions related to stress and diminishes quality of life.
- In Colorado, the permitted noise thresholds for the average UOGP site result in sleep disturbance and severe annoyance or interference with day-to-day life for nearby communities.
- Light pollution from UOGP operations at night adds an additional stressor to the mix. Light at night impacts circadian rhythms and alters hormone releases.

CONCLUSION

- As Colorado continues to pursue UOGP, we must be mindful of the corresponding effects on Coloradans' mental well-being, including but not limited to:
 - More severe periods of prolonged depression and chronic stress.
 - Distress from changes in one's environment or other forms of distress linked to the environmental degradation of one's surroundings and the abrupt disruption of one's way of life.
 - A marked decline in community members' quality of life through noise exposure, low frequency noise, and light pollution.