National Institute for Occupational Safety and Health



NIOSH Centers Meeting 2022

Needs and Opportunities: NIOSH Oil and Gas Extraction Sector Program

Ryan Hill, MPH Director, NIOSH Western States Division July 28, 2022 **Needs and opportunities for extramural collaboration:** NIOSH Oil & Gas Extraction Sector Program

Overview:

- ✓ Oil and gas extraction (OGE) industry
- ✓ NIOSH OGE Sector Program
- Center collaboration: Colorado Center for Health, Work and Environment
- ✓ OGE priorities for extramural collaboration

The oil and gas extraction industry

Operates and develops oil and gas field properties

The industry includes the exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property



Photo courtesy of hydrocarbontechnology.com



Photos by NIOSH.

Oil and Gas Extraction Workplace



Photos by NIOSH.

Fatal Work Injuries, Oil and Gas Extraction Industry, 2003-2020



<u>Note</u>: Fatality counts from BLS Census of Fatal Occupational Injuries. Worker Estimates from BLS Quarterly Census of Employment and Wages. Rate per 100,000 workers per year. Includes NAICS 211, 213111, 213112.

NIOSH OGE Sector Program

- Mission: to improve worker safety and health in the oil and gas extraction industry
- Use our expertise in industrial hygiene, toxicology, epidemiology, engineering, and communications to identify and control workplace hazards
- Our work is done in partnership with industry



Photo by NIOSH.

Data-driven

- NIOSH worker safety and health survey
- Fatalities in oil and gas (FOG) database



- Exposures to drilling contractors
- Silica controls
- Reducing noise exposures



- Evaluating invehicle monitoring systems
- Increasing seat belt use



- NIOSH Center for Work and Fatigue Research
- Assessing fatigue risk among oil and gas workers

J Data-driven

- <u>NIOSH worker</u> <u>safety and</u> <u>health survey</u>
- Fatalities in oil and gas (FOG) database



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- <u>Reducing noise</u> <u>exposures</u>



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- <u>Assessing</u>
 <u>fatigue risk</u>
 <u>among oil and</u>
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Center Collaboration

Oil and Gas Safety and Health:

- Silica in the Oilfield Summit (2021)
- Spring Safety and Health Summit (2022)

Intergovernmental Personnel Act (IPA):

- Qualitative research for two NIOSH fatigue studies
- Assessing workplace and community noise exposures

Center for Health, Work & Environment

colorado school of public health

NIOSH OGE Priorities for Extramural Collaboration

- Enhance surveillance: motor vehicle events, chronic health conditions
- Evaluate poorly characterized hazards (e.g., dermal exposures, noise, fatigue)
- Health equity research
- Stress, anxiety, depression, fatigue, and adverse health outcomes
- Substance use/misuse among oil and gas extraction workers
- Join our NORA Oil and Gas Extraction Sector Council

Thank you!

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NIOSH Oil Gas

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

