

Health and Safety Leader Interview Guide

Assessing Fatigue and Fatigue Management in U.S. Onshore Oil and Gas Extraction

National Institute for Occupational Safety and Health

Opening script (10 minutes)

Hello. My name is [name] and I'm here with my colleague(s) [name(s)]. Thank you for taking the time to speak with me today. We appreciate your willingness to participate! I'd like to talk with you about fatigue while working in oil and gas for the next 60 minutes. We asked to interview you because we are conducting a study to understand how fatigue affects workers in the upstream oil and gas industry and your company has volunteered to participate. We sent you the consent form via email. If you have not had the opportunity to review it prior to our call, please take a moment to review the form.

- Do you have any questions for us?
- Do you give consent to be interviewed?
- Do you give consent for the interview to be recorded?

As we just mentioned during the consenting process, your participation is strictly voluntary, and all of your responses will be completely anonymous. What is said here, stays here so that we can create a safe environment to speak freely without judgement or negative repercussions.

Ground rules

During our 60-minute chat today, I want to learn from your experience working in oil and gas – especially employee experiences with fatigue and the potential for companies to use fatigue management practices. When it comes to those experiences, you are the expert. My role will be to help guide the discussion today. I ask that you share your experiences in the industry. There are no right or wrong answers. I will not share your individual responses with your company.

I will record our discussion today as I want to be able to capture everything that is said, but we will not include your name or the name of your company in the transcript or final reports.

Do you have any questions? Are you ready to get started?

[Begin recording if consent to record was verbally obtained]

Introductions and warm up question

Please give me a brief overview of how long you have worked in oil and gas and your current role within the company.

Main questions (45 minutes)

Defining fatigue & general perceptions

1. Tell me about your role as a health and safety senior leader for an OGE company? What kinds of companies do you work for or with (operators, drilling, servicing, other? NAICS codes if available)? What is the approximate size of these companies (number of workers)?
2. Today, we're here to talk about fatigue at work. What does fatigue mean to you?

[After some discussion, define fatigue so that the interviewee and interviewer have a shared understanding of what fatigue represents.]

When you are fatigued you lack the energy to complete tasks. On the other hand, when you are sleepy you are likely to fall asleep. So, fatigue is the body's response to not getting enough sleep or having to exert yourself mentally or physically without enough rest. Today, we're going to talk about 'fatigue.'

3. Do you think fatigue is a problem in oil and gas work? In your company or companies that you work with?
 - a. How does it compare to other occupational health and safety issues?
 - i. How would you say fatigue compares to other similar impairment issues, such as substance use, heat stress, and mental wellbeing?
 - b. What do you consider to be signs of fatigue?
 - i. Which of these signs of fatigue do you think happen most frequently within your workforce?
 - ii. Do you see these signs of fatigue more during specific operations or tasks?
 - iii. Do you see these signs of fatigue more during certain times of the day? Or on a certain days of a hitch (work rotation)?
 - c. What are the effects of fatigue in your organization? Or how do the companies that you work with identify or measure fatigue? [ex: vehicle maintenance costs, injury rates, near misses, PSIF's]
 - i. Based on these measures, how often do you think these happen in a month?
 - ii. Which measure(s) have you found to be most helpful to indicating fatigue?

Fatigue risk management

4. [This question is dependent on whether the senior leader being interviewed is employed or works for an Operator or Contractor]
 - a. If you work for an operator, does your company require contractors to have fatigue management systems or fatigue mitigation strategies that contractors have to adhere to?
 - b. If you work for a contractor, do operators you work for have fatigue management systems or fatigue mitigation strategies in place that your company has to adhere to?
 - i. Does your company have any internal fatigue management systems or fatigue mitigation strategies that were not developed or required by the operator that your company is contracted by?
 - ii. If both “b” and “b.1” were answered “yes”, which fatigue management system or fatigue mitigation strategies take precedence over the other?
5. What policies or practices do you have, or do you recommend related to fatigue?
 - a. What has your company or companies that you work with done to identify the causes of fatigue?
 - i. This can be in the form of studies, evaluations, or with the use of technologies.
 - b. Do you or companies that you work with monitor fatigue in any way? How or in what ways?
 - i. Are there any procedures in investigations to see if accidents are related to fatigue or impairment?
 - ii. Monitor leading/lagging indicators?
 - Change in company injury rate
 - Change in worker’s comp costs
 - Change in percent overtime worked
 - Detection and treatment of sleep disorders
 - Maintenance costs on vehicle fleets
 - Staff morale
 - Absenteeism rates
 - Productivity
 - iii. Do you use or recommend any fatigue detection technologies? Which kinds? What has been your experience using them? How did you decide to use this technology?
 - c. What kinds of mechanisms do you have or recommend for employees to report fatigue concerns?

- i. Scenario: What would the protocol be if a worker told their supervisor that they were too fatigued to safely operate a certain piece of equipment?
- ii. Is there a graduated plan for responding to fatigue at your company or companies that you work with?

Graduated approach example:

- 1. Have worker retake the alertness test
 - 2. Move worker to another task
 - 3. Give a warning
 - 4. Report them
 - 5. Move off job
- d. What workplace practices have you implemented at your company or seen implemented in companies that you work with to address fatigue risk?
 - e. What kind of training do you provide related to fatigue?
 - f. What kind of informational resources do you give to employees or companies that you work with related to fatigue?
6. What are some of the successes and challenges your company or companies you have worked with run into while trying to mitigate fatigue risk?
- a. Do some of the fatigue risk mitigation strategies work better than others that you've tried?
 - b. What has been some of the worker and supervisor reactions to some of the ways fatigue risk is mitigated?
7. What are your top three health and safety concerns in your company or companies that you work with?
- a. If fatigue is a top 3: Why is fatigue one of the top three?
 - b. If fatigue is not in the top 3: Where does fatigue fall on the priority list for health and safety concerns?
 - c. Do you think there is any relationship between fatigue and any of these top three health and safety concerns?
 - d. What initiatives or programs does your company have to address these health and safety concerns?

Discussion of who could help employers with fatigue risk mitigation strategies

8. What tools, strategies, or resources related to fatigue management would be useful to you?

9. When you are looking for safety and health resources such as for fatigue, what sources to you typically go to?
 - a. For example: trade magazines, health and safety websites, contacting other mining H&S professionals?

Closing Script (5 minutes)

10. Is there anything you think is important for me to know that we haven't already talked about? Do you have any questions or comments about anything that we've talked about today?

Thank you very much for taking the time to talk with me today. Just in summary, today we talked about the role of fatigue in oil and gas work in your company. We had a great conversation about the things that contribute to fatigue and how employers can help manage fatigue. Over the next several months we will be completing our project and analyzing results. We will publish aggregate anonymized results once finished. In the meantime, please feel free to reach out to me for any reason, our contact information is in the informed consent document.