

WELCOME – STEP 1

1. Welcome to the April Safety Toolkit – Fatigue Management You play an important role in the health and safety across the company, and we thank you for your contribution! Without your focus and dedication to making safety a priority, our people would suffer, our clients would suffer, and our families would suffer. We hope you find the safety tools provided in this Toolkit and in Toolkits like this in the coming months as just some of the many resources afforded to you to communicate Fatigue Management. As always, the work you do matters, and we are so grateful to have you on the team!

HOW TO USE THIS SAFETY TOOLKIT

1. Supervisor/Lead Script – Start Here! Way to go! Now keep reading and you'll be all set. This script sets you up for success.
2. Supervisor/Lead PowerPoint – Use this as a training moment for your team. Everything you need to know and communicate for each slide is contained in this script! Skip ahead if you are ready to give this training to your team. It's always a good time to learn about Fatigue Management. The presentation should last about 45 minutes depending on group participation.
3. Teaching Tool – We have included a Fatigue Management Quiz and Answer Key to test your knowledge.
4. Site Communication Poster – A PDF version of the monthly infographic if you would like to display it at your workplace.
5. Sign-In Sheets – Please complete this form when completing Fatigue Management training and turn-in to the appropriate point of contact as a record of training.
6. What's next? – Use this QR code for yourself AND share it amongst everyone on your team for additional safety resources based on the theme of Fatigue Management. Look for Interactive resources, recommendations for phone apps, checklists, handouts, and more. Check it out!



SUPERVISOR/LEAD POWERPOINT SCRIPT – STEP 2

NOTES ON THESE SLIDES:

- KLP: Key Learning Point (objective of the slide)
- F: Facilitator

Slide 1: Title Page (30 Seconds)

KLP: You set the tone. If you believe safety is important, the audience will believe safety is important.

The facilitator opens the session by welcoming everybody to the training and noting the monthly focus – Fatigue Management.

F: Today's task is to attend training on Fatigue Management. Cell phones should be turned off or silenced during this training. If you need to take a call, please go to (designated area), take the call, and return as soon as possible. {Address any other important announcements or business now.}

Slide 2: Housekeeping (1 Minutes)

KLP: Opportunity for a HSE (Health Safety and Environmental) Moment

F: Prior to training, determine if any fire drills are planned and the response expected from the facility and muster points if alarms should go off. It is important to remind employees that should they need to leave the location at any time, they should inform the Facilitator because, in the event of a fire incident, we need to know their whereabouts. This is an opportunity right at the start of the day to brief the employees on HSE procedures in general for the running of the training course. [If your job site is outdoors, do not overlook this safety moment. Adjust the plan in the event of a job site fire.]

F: Hello Team, I have verified with the HSE department and have confirmed that there are no Fire Drills or Emergency Drills scheduled for today. If we hear an alarm, we will follow site protocol for emergency response.

F: {Point out the fire exits and muster point}

F: Once we are at the muster points, we will do a role call to account for all attendees.

Slide 3: Presenter (2 Minutes) & Introductions (5 Minutes)

F: {This is your moment! This is a chance to visibly “Walk the Talk”}

Share:

- Your personal experience of safety and impact on the company.
- Importance of making the most of this opportunity to think about the importance of HSE and discuss with employees.
- Appreciate that you are a leader and that you make an impact.
- Importance of taking personal responsibility to make a positive impact.
- You get out of this training what you put into it.
- HSE matters to our company.
- The safety program is going to help people feel empowered and take the initiative to improve their own HSE performance through proactive attitudes and behaviors.

You may wish to share:

- A story of your experience in the safety program and how it has changed the way in which you behave.
- Some lessons learned from an incident when you have been involved in the investigation, highlighting the devastating impact that accidents have on people’s lives, or you can describe your experience of being involved in an environmental incident. How did this affect the company, and more importantly, affect the lives of others not working for the company?

F: Go around the room and ask everyone to give their name and what their position is. {Wait for their responses, smile, and nod as they participate. Be careful about timing here---if you ask an additional intro question of the participants and give a long-winded answer yourself, your participants will follow with long stories/explanations, and you can accidentally take up a lot of time.}

Slide 4: Why am I here? (1 Minute)

F: Each one of us is the last line of defense to protect workers from injury or the environment from damage, should management systems and collective protections fail. Supervisors and

workers are the KEY to HSE. We can promote or destroy the HSE climate through our own behavior and how other workers perceive it.

F: Supervisors and workers are responsible for enforcing safety rules. Regardless of our position, employment status, or background, everyone is responsible for HSE, and everyone can be a HSE leader by demonstrating positive attitudes and behavior.

Slide 5: Fatigue (2 Minutes)

F: Fatigue can be defined as “extreme tiredness resulting from mental or physical exertion or illness”. Fatigue is the body’s signal that a rest period is needed. Fatigue reduces energy, the ability to do things and the ability to focus. Ongoing fatigue can affect quality of life and state of mind.

F: According to the National Safety Council, 13% of workplace injuries can be attributed to fatigue.

F: Other studies on the impact of overtime and long work hours on occupational injuries and illnesses show that working 12 hours per day is associated with a 37% increased risk of injury.

F: It is imperative to ensure workers are well-rested, both physically and mentally.

(Dembe A, Ericson JB, Delbos RG, Banks SM [2005]. The impact of overtime and long work hours on occupational injuries and illnesses: New evidence from the United States. Occup Environ Med 62:588_597.)

Slide 6: Causes of Worker Fatigue (2 Minutes)

F: There are several causes of worker fatigue, but some of the primary causes are too little, poor quality, or interrupted sleep.

F: As mentioned before, evening and night shift workers are at an increased risk of worker fatigue. This is because the human body is naturally programmed to sleep during nighttime hours. When you disrupt the body’s circadian rhythm (or its 24-hour body cycle), the risk of worker fatigue increases.

F: The body’s circadian rhythm cycle involves regulating several aspects such as sleeping, waking, digestion, body temperature, adrenalin, blood pressure and pulse. Our bodies naturally coordinate high activity during the day and low at night.

F: Working long hours or working extended or irregular shifts can have negative effects and cause physical, mental, and emotional stress.

(<https://www.osha.gov/worker-fatigue/hazards>)

Slide 7: Circadian Rhythm (3 Minutes)

F: Let's take a deeper look into the body's circadian rhythm and how it naturally affects our bodies throughout the day, assuming you go to bed around 10:30 PM and wake up around 6:30 AM.

F: Around 2 AM is where your body reaches its deepest sleep.

F: Around 4:30 AM is when your body is at its lowest temperature.

F: Around 6:45 AM is typically when your body will see its highest blood pressure rise.

F: Around 7:30 AM, your body stops secreting melatonin.

F: Around 10:00 AM is when your body is at its highest alertness.

F: Around 12:30 PM is typically when you have your best coordination.

F: Around 3:30 PM is when your body has its fastest reaction time.

F: Around 5:00 PM is when you have your best muscle strength and cardiovascular efficiency.

F: Around 6:30 PM is when your body's blood pressure will typically be at its highest.

F: Around 7 PM, your body temperature will usually be at its highest.

F: Around 9 PM, your body prepares for sleep by beginning to secrete melatonin.

Slide 8: Healthy Sleep (2 Minutes)

F: It is true that employees working shift work or extended hours can find it difficult to get enough good quality sleep.

F: Healthy sleep is broken down into a cycle of several sleep stages. While the quantity of sleep is important, the quality of the sleep also makes a difference. Disruption in the sleep cycle impacts the quality of sleep you receive and can affect how you feel when you wake up.

F: When your body is able to cycle through all the sleep stages, you are more likely to wake up feeling refreshed, in a good mood, and to have enough energy to get through the day.

Slide 9: Improving Sleep Quality (4 Minutes)

F: Though it may be difficult for some shift workers with schedules that have changing schedules, committing to a consistent sleep schedule is one of the best ways to ensure a healthy sleep.

F: Other ways to improve your quality of sleep are:

- Trying to get at least 7-9 hours of sleep per 24 hours.
- Develop a bedtime routine of wind-down activities to prepare for a good night's sleep.
- Take naps. Shorter naps that last between 15-20 can boost alertness and performance. Naps that are shorter than 15 minutes typically can be too short to be beneficial. Naps longer than 20 minutes can lead to the feeling of "sleep inertia". Sleep inertia is a period of grogginess that typically lasts 15-30 minutes after waking up. Sometimes sleep inertia can last up to 2 hours. Long naps that last 90 minutes or more can be beneficial and can reduce your sleep debt but should be avoided in the 4-6 hours before your main sleep as they can make it more difficult to fall asleep.
- Create a comfortable sleep environment in a dark, quiet room set a comfortably cool temperature.
- Be mindful of your caffeine, nicotine, and alcohol intake prior to bedtime. All can impact your sleep quality.
- Consider any food intake prior to bedtime. Food consumption should be limited before bedtime, if possible, but going to bed hungry can negatively impact sleep. Choosing a light meal before bedtime can reduce or prevent discomfort caused by indigestion.
- Know if any of your medications cause stimulant effects and do not take them near bedtime.
- Consider fluid intake prior to bedtime as drinking too much before bed can lead to a disruption in your sleep cycle to use the bathroom.
- Exercising regularly, as it can lead to better quality sleep.

Slide 10: Effects of Worker Fatigue (3 Minutes)

F: One of the primary effects of worker fatigue is a decreased alertness, which can directly cause an increase in work related accidents and injuries.

F: In a study of worker schedules noted in the Handbook of Occupational Health Psychology, it was identified that accident and injury rates are 18% greater during evening shifts and 30% greater during night shifts, when compared to day shifts.

F: Sleep loss can drastically impair performance. According to the Sleep Health Foundation, "17 hours without sleep is as dangerous as having a blood alcohol content of 0.05% and 24 hours without sleep, as dangerous as having a blood alcohol content of 0.08%."

F: Not only can worker fatigue lead to major accidents, such as motor vehicle crashes or unintended explosions, but it can also have a direct impact on workers' health.

F: According to OSHA, studies on worker fatigue have shown that fatigue can be directly linked to health problems such as:

- Heart disease
- Stomach and digestive problems
- Musculoskeletal disorders
- Reproductive problems
- Depression
- Some cancers (breast and prostate)
- Sleep disorders
- Poor eating habits/obesity
- Worsening of existing chronic diseases such as diabetes and epilepsy

(<https://www.osha.gov/worker-fatigue/hazards#ref1>)

(Quick, J. C., & Tetrick, L. E. (Eds.). (2003). Handbook of occupational health psychology. American Psychological Association. <https://doi.org/10.1037/10474-000>)

(<https://www.sleephealthfoundation.org.au/sleep-disorders/shift-work>)

Slide 11: How Tired Are You? (10 Minutes)

F: In 2003, a developer named Helen J Michielson, with the assistance of other developers, created the Fatigue Assessment Scale (FAS). The FAS is a 10-item scale that evaluates symptoms of chronic fatigue. In order to ensure that the scale evaluates all aspects of fatigue, it measures both physical and mental symptoms.

F: The total scores range from 10 to 50, with the higher score being more severe. The scoring break down is as follows:

- Scores above 22 represent significant fatigue
- Scores less than 22 indicate “normal” levels of fatigue
- Between 22 and 34 indicates mild-to-moderate fatigue
- 35 or more indicates severe fatigue

F: Fill out the Fatigue Assessment Scale on your quiz to determine how fatigued you are. {Allow time for team to complete assessment and discuss scores.}

(<https://novopsych.com.au/assessments/health/fatigue-assessment-scale-fas/>)

Slide 12: Reducing Worker Fatigue (2 Minutes)

F: There are several ways employers can reduce worker fatigue in their workplace.

F: Firstly, the employer should recognize any federal agencies applicable to the work being conducted and their laws and restrictions on the number of hours a worker can be on the job. Several federal agencies have established work shift limits that can aid your company in developing their own guidelines for managing worker fatigue.

F: Additionally, the employers should examine staffing issues including workload, work hours, understaffing, and worker absences. They can also arrange work schedules to allow regular opportunities to get the appropriate amount of sleep.

F: Employees should be trained in the hazards, symptoms, and impact of worker fatigue for their own health and the safety of both them and their coworkers.

Slide 13: Let's Talk About Fatigue (3:32 Minutes)

VIDEO – 3:32 Min

(Click play to play clip)

Slide 14: One Team

F: Questions?