Shift Work and Fatigue Management
Shift Work

• Shift work refers to working during the evening, night, and early morning

• Shift work includes any shifts worked outside of 7am to 6pm

• Approximately 15.5 million people are rotating shift workers
Shift Work

• It takes about 10 days for your body to adjust to night shift work

• Shift workers get approximately 2-3 less hours of sleep than those who have a regular sleep pattern from 11pm-7am

• Rotating forward through day, afternoon, and night shift is better for most people
Shift Work

Every worker’s body reacts to shift work differently depending on their
• Health
• Fitness
• Age
• Lifestyle
• Domestic responsibilities
Shift Work

Dangers of shift work

• Feeling groggy and being less alert
• Being less likely to notice dangerous conditions
• Having a slower reaction time when responding to emergencies
• Having significantly higher accident and injury rates
• Fatigue
Fatigue

• Fatigue is the number one shift work safety problem
• Fatigue is mental or physical exhaustion that prevents workers from functioning normally
• Not everyone responds to fatigue in the same manner
Sleepiness versus Fatigue

• Sleepiness is that normal drowsy feeling after a long day at work
• Sleepiness can be fixed with one night of good sleep; fatigue cannot
• Fatigue is the build-up of lack of sleep, poor sleep, and working long hours over time
• Sleepiness is worsened by sitting or lying down
• Fatigue is lessened with adequate rest periods
Fatigue

Key principles of fatigue

• Fatigue, like other hazards, needs to be managed
• Do not underestimate the risks of fatigue
• Employers are legally responsible for managing risks from fatigue
• Changes to work hours must be assessed
Causes of Fatigue

Fatigue can be caused by work and non-work related factors

- The time of day work takes place
- Length of time spent at work
- Type and duration of work
- Work environment
- Quality and quantity of rest before and after work
- Family commitments
- Second jobs
- Individual health factors
- Repetitive, monotonous work
At-risk Groups

The following groups are at a particularly high risk for fatigue

- Night shift employees
- Employees working longer than 8 hours per shift
- Employees working in extreme temperatures
- Employees performing physically intense labor
- Employees who must mentally concentrate for long periods of time
- Employees working in noisy environments
- Employees performing highly repetitive tasks
Signs of Fatigue

Signs of fatigue

• Tiredness after sleep
• Psychological disturbances
• Loss of energy
• Inability to concentrate
• Reduced coordination
• Muscle weakness
Symptoms of Fatigue

• On average, shift workers have more health-related problems than those who work during the day

• Shift work increases the chances for psychological problems
  – Depression
  – Alcoholism
  – Criminal behavior
Symptoms of Fatigue

Short-term symptoms include the inability to:

• Concentrate and avoid distraction
• Think analytically
• Make decisions
• Remember and recall events
• Control emotions
• Coordinate hand and eye movements
• Clearly communicate
Symptoms of Fatigue

Long-term symptoms include

- Digestive problems
- Heart disease
- Stress
- Mental illness
- Obesity
- Cardiovascular disease
Consultation between workers and management must occur when

• Fatigue has been identified as a hazard in the workplace
• The organization changes work schedules and working procedures
• There are indications of fatigue that affect the health and safety of workers
• A near-miss occurs
Eliminating and Reducing Fatigue

Management and worker responsibility

- Management
  - Ensure risk management processes are in place
  - Minimize systems of work that could increase fatigue
  - Allow opportunities for workers to rest throughout their shift
  - Provide training and information to workers about the signs, symptoms, and risks related to fatigue
  - Ensure workers performing shift work are properly supervised
  - Give workers adequate notice between shift changes and rotations
  - Save high-risk work for the day shift when workers are more alert
Eliminating and Reducing Fatigue

Management and worker responsibility

- Management
  - Give shift workers consecutive days off
  - Provide quiet, dark rest areas
  - Provide alternative transportation to and from work to limit fatigue-related vehicular accidents
  - Shorten shifts that are over 8 hours long if possible
  - Don’t provide incentives for overtime shift work
  - Don’t allow employees to work more than 10 consecutive shifts without 2 or more days off
Eliminating and Reducing Fatigue

Management and worker responsibility

• Workers
  – Participate in risk management processes to help reduce fatigue
  – Use time off to recuperate if needed
  – Participate in education and training regarding fatigue
  – Avoid behaviors that contribute to fatigue
  – Recognize signs of fatigue and take action
Eliminating and Reducing Fatigue

Sleep during the day is of poor quality because of circadian disruptions and environmental factors.
Eliminating and Reducing Fatigue

Tips for sleeping

• Use blackout curtains and sound insulation on doors and windows
• Maintain a cool environment
• Turn phones down or off
• Take a shower or relaxing bath
• Do everything that you would before a normal night’s sleep
• Read or listen to music
Eliminating and Reducing Fatigue

Maintain good health and physical fitness

• Maintain a regular sleep schedule
• Eat a well-balanced diet
• Participate in physical activities during free time
• Look for signs of depression and sleep, heart, and indigestion problems
• Spend time with family and friends