



## Investigation Procedure Checklist - Establishing Link Between Fatigue and Unsafe Act/Decision

### Performance Impairment Indicators

#### Attention

- Overlooked sequential task element
- Incorrectly ordered sequential task element
- Preoccupied with single tasks or elements
- Exhibited lack of awareness or poor performance
- Reverted to old habits
- Focused on a minor problem despite risk of major one
- Did not appreciate gravity of situation
- Did not anticipate danger
- Displayed decreased vigilance
- Did not observe warning signs

#### Memory

- Forgot a task or elements of a task
- Forgot the sequence of tasks or task elements
- Inaccurately recalled operational events

#### Alertness

- Succumbed to uncontrollable sleep in form of microsleep, nap, or long sleep episode
- Displayed automatic behaviour syndrome

#### Reaction Time

- Responded slowly to normal, abnormal, or emergency stimuli
- Failed to respond altogether to normal, abnormal, or emergency stimuli

#### Problem-Solving Ability

- Displayed flawed logic
- Displayed problems with arithmetic, geometric or other cognitive processing tasks
- Applied inappropriate corrective action
- Did not accurately interpret situation
- Displayed poor judgment of distance, speed, and/or time

#### Mood

- Was less conversant than normal
- Did not perform low-demand tasks
- Was irritable
- Distracted by discomfort

#### Attitude

- Displayed a willingness to take risks
- Ignored normal checks or procedures
- Displayed a "don't care" attitude

#### Physiological Effects

- Exhibited speech effects - slurred, rate, content
- Exhibited reduced manual dexterity - key-punch entry errors, switch selection

Fatigue Adapted from Lerman, S., Eskin, E., Flower, D., George, E., Gerson, B., & Hartenbaum, N. et al. (2012). Fatigue Risk Management in the Workplace. *JOEM*, 54(2).

# Fatigue Incident Investigation Information

1. **Date, time and place** of the accident. (not the time of the report)
2. **Work Schedule History (Schedule, Rotation, Shift Length, Breaks)**
  - ⌚ Describe the actual work schedule (regular hours plus overtime) for the **four days** prior to the accident. (*Fill out by date and shift until all four days prior to the accidents are covered*).
  - ⌚ How long from the last scheduled break?
  - ⌚ How long in duration was the last scheduled break?
  - ⌚ Shift Work
    - How many hours into the shift did the incident occur? (ex. 3 hours in)
    - How far into the work schedule was the individual involved?
    - List Day #/Shift #: (ex. Day 12/28)
    - What shift was the individual working (day or night)?
3. **Work Task and Work Environment**
  - ⌚ What task was being performed at the time of the incident?
  - ⌚ What was the work environment like?
  - ⌚ How mentally or physically stimulating was the task and work environment prior to the accident?
  - ⌚ Rate Physical Factors, Mental Factors, Environmental Factors on a Scale of 1 - 5 (with 1 being low and 5 being very fatiguing)
4. **Individual Worker Factors:**
  - ⌚ Previous Sleep Assessment: Number of hours of actual sleep in previous 24, 48 and 72 hours (i.e. 3 days) prior to the accident.
  - ⌚ Overall quality of sleep 24, 48 and 72 hours (i.e. 3 days) prior to the accident.
  - ⌚ Did any health problems affect the individuals sleep during the month leading up to the accident?
5. **Incident Information**
  - ⌚ Any signs/symptoms of fatigue during the persons waking hours prior to the accident. (either self reported or observed by others)?
  - ⌚ What, if any, fatigue assessment had occurred prior to and during the work shift? (ex. Fatigue Likelihood Assessment score, self-reporting of fatigue, supervisor noting of symptoms, Samn-Perelli Scale, etc.)
  - ⌚ Observations/witness accounts indicating lack of attention to work environment
  - ⌚ Observations/witness accounts indicating impairment of worker abilities (mental/physical/emotional)
6. **Other Relevant Information**
  - ⌚ Any other information regarding the incident or worker relating to fatigue that could be relevant to the investigation.