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**THE IMPACT OF COMMUTE TIMES ON THE FATIGUE AND SAFETY OF LOCOMOTIVE ENGINEERS & CONDUCTORS: DRAFT QUESTIONNAIRE**

1. **How old are you?**
   * Less than 25 years
   * 25 to 34 years
   * 35 to 44 years
   * 45 to 54 years
   * 55 to 64 years
   * 65 + years
2. **What is your gender?**
   * Male
   * Female
3. **Are you a:**
   * Locomotive engineer
   * Conductor
4. **Do you work on a:**
   * Freight train
   * Passenger train
5. **In total, how long have you worked as a locomotive engineer or conductor?**
   * **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** years \_\_\_\_\_\_\_\_\_\_\_\_ months
6. **In total, how long have you worked in the rail industry?**
   * **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** years \_\_\_\_\_\_\_\_\_\_\_\_ months

**ANSWER THE NEXT SET OF QUESTIONS THINKING ABOUT THE LAST MONTH OF WORK:**

1. **In the LAST MONTH, how many *hours per day* did you usually worked** (*i.e., sign on to sign off)***?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_** hours

1. **In the LAST MONTH, how many *days per week* did you usually worked?**

\_\_\_\_\_\_\_\_\_\_\_\_ days

1. **In the LAST MONTH, which category best describes your usual work?**
   * Majority of work is at night
   * Majority of work is in the day
   * Regular rotating work *(tours of duty switch between day and night on a regular roster)*
   * Very irregular work *(i.e., tours of duty have no regular pattern)*
2. **In the LAST MONTH, how many times were you called in for work on your days off?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ number of times called in for work**

1. **In the LAST MONTH, how much did the start time of your tours of duty vary from day to day?**
   * Less than 2 hours
   * 2 hours or more, but less than 4 hours
   * 4 hours or more, but less than 8 hours
   * 8 hours or more
2. **In the LAST MONTH, how often did your tours of duty change from day work to night work during a one-week period?**
   * Zero times
   * Once
   * Twice
   * More than two times
3. **On average, in the LAST MONTH, how many hours did you sleep per day (*i.e., in a 24-hour period)* during your work week?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** hours

1. **Was this sleep typically during the daytime or nighttime?**
   * Day
   * Night

**The following statements are about your experience of FATIGUE and STRAIN at work OVER THE LAST FEW MONTHS.**

**Choose from “Strongly Disagree” to “Strongly Agree” which best indicates your response.**

1. **I never have enough time between work shifts to recover my energy completely**

|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly

Disagree Disagree or Disagree Agree Agree

1. **I usually feel exhausted when I get home from work**

|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly

Disagree Disagree or Disagree Agree Agree

1. **Even if I’m tired from one shift, I’m usually refreshed by the start of the next shift**

|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly

Disagree Disagree or Disagree Agree Agree

1. **I rarely recover my energy fully between work shifts**

|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly

Disagree Disagree or Disagree Agree Agree

1. **Recovering from work fatigue between work shifts isn’t a problem for me**

|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly

Disagree Disagree or Disagree Agree Agree

1. **I’m often still feeling fatigued from one shift by the time I start the next one**

|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_|

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly

Disagree Disagree or Disagree Agree Agree

1. **In the LAST MONTH, how did you normally commute from home to work/from work to home? (*Tick main mode of transport)***
   * Drive my own car
   * Drive my own motorcycle
   * Public transportation (train, bus, etc.)
   * Car/van pool
   * Ride a bicycle
   * Walk
   * Other
2. **In the LAST MONTH, if you drove your own car, did you normally commute to/from work alone?**
   * Usually alone
   * Not usually alone
   * N/A – I didn’t drive my own car
3. **In the LAST MONTH, on how many days during a work week did you commute from home to work?**
   * 1
   * 2
   * 3
   * 4
   * 5
   * 6
   * 7
4. **In the LAST MONTH, on days when you commuted to work, how long did it usually take you to get:**
   * To work from home? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ minutes
   * To home from work? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ minutes
5. **Did you typically make stops or detours during your commute to work from home? (e.g., stop at shops, pick up/drop off children)**
   * Yes
   * No
6. **Did you typically make stops or detours during your commute to home from work? (e.g., stop at shops, pick up/drop off children)**
   * Yes
   * No
7. **In the LAST MONTH, approximately how many miles was your commute, one way?**

**\_\_\_\_\_\_\_\_\_\_\_\_** miles

**ANSWER THE NEXT SET OF QUESTIONS THINKING ABOUT THE LAST SIX MONTHS OF WORK:**

1. **In the LAST 6 MONTHS, how frequently have you felt too tired to drive home after work?**
   * After every tour of duty
   * Several times a week
   * About once a week
   * Once every few weeks
   * Once every couple of months
   * Rarely (i.e., once in 6 months)
   * Never
2. **In the LAST 6 MONTHS, during your commute to work from home have you: *(Tick all that apply)***

|  |  |
| --- | --- |
| 🞎 Crashed | 🞎 Fallen asleep while driving |
| 🞎 Felt drowsy | 🞎 Pulled over to take a nap |
| 🞎 Nearly had a crash | 🞎 Fallen asleep while stopped at a red light |
| 🞎 Fallen asleep while stopped in traffic | 🞎 Had to have a nap at home before driving to work |
| 🞎 Drifted out of the lane of traffic | 🞎 Run off the road in your vehicle |

1. **In the LAST 6 MONTHS, during your commute to home from work have you: *(Tick all that apply)***

|  |  |
| --- | --- |
| 🞎 Crashed | 🞎 Fallen asleep while driving |
| 🞎 Felt drowsy | 🞎 Pulled over to take a nap |
| 🞎 Nearly had a crash | 🞎 Fallen asleep while stopped at a red light |
| 🞎 Fallen asleep while stopped in traffic | 🞎 Had to have a nap at work before driving home |
| 🞎 Drifted out of the lane of traffic | 🞎 Run off the road in your vehicle |

1. **In the LAST 6 MONTHS, how often have you experienced fatigue while operating a train?**
   * Every tour of duty
   * On most tours of duty
   * About half the tours of duty
   * Occasionally
   * Rarely
   * Never
2. **To what degree do you think fatigue impacts your operation of a train?**
   * No impact
   * A minimal impact
   * Moderate impact
   * A significant impact
3. **In the LAST 6 MONTHS, when were you most likely to experience fatigue while operating a train? *Tick all that apply***

|  |  |
| --- | --- |
| 🞎 Early morning *(3am to 6am)* | 🞎 If I’m feeling bored |
| 🞎 Morning *(6am to 12pm)* | 🞎 If I haven’t had enough sleep |
| 🞎 Early afternoon *(12pm to 3pm)* | 🞎 If I started work really early in the morning |
| 🞎 Late afternoon *(3pm to 6pm)* | 🞎 Towards the end of a long tour of duty |
| 🞎 Evening *(6pm to 9pm)* | 🞎 If I operate on the same route a few times in a row |
| 🞎 Night *(9pm to 12am)* | 🞎 If I started work late in the evening |
| 🞎 Late night *(12am to 3am)* | 🞎 After a long commute to work |
| 🞎 After extended limbo or deadheading time | 🞎 Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

1. **In the LAST 6 MONTHS, how long after the start of your tour of duty were you most likely to feel fatigued?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** hours

1. **In the LAST 6 MONTHS, what factors contributed most to your fatigue at work? *Tick all that apply***

|  |  |
| --- | --- |
| 🞎 Night work | 🞎 Irregular work |
| 🞎 Long work hours | 🞎 Not enough sleep before work |
| 🞎 Long commute to work | 🞎 Work starting early morning (i.e., before dawn) |
| 🞎 Long commute to home | 🞎 Boredom / monotony |
| 🞎 Stress | 🞎 Insufficient rest away from home |
| 🞎 Not enough time off between work | 🞎 Poor train cab design |
| 🞎 Social life during days off | 🞎 Not enough rest breaks |
| 🞎 Excessive limbo or deadheading time | 🞎 Being called into work on days off |

1. **In the LAST 6 MONTHS, have you experienced a fatigue-related safety incident when operating a train?**
   * Yes
   * No
2. **If yes, what happened?**
   * Missed signal
   * Crash
   * Near miss
   * Nodded off while controlling the train
   * Missed designated stop
   * Late braking for designated stop
   * Going too fast
   * Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. **Did you report the incident?**
   * Yes
   * No
4. **Does your company offer an anonymous reporting system for fatigue-related or safety-related incidents?**
   * Yes
   * No
   * Not sure
5. **In the LAST 6 MONTHS, how often do you use each of the following strategies to cope with fatigue when operating a train? *(Rate each strategy separately)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never** | **Rarely** | **Sometimes** | **Often** | **Always** |
| Listen to music | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Eat or snack while operating train | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Drink caffeine (e.g., coffee, black tea) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Make additional effort to focus | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Adjust the ventilation (e.g., turn on air con or open window) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Use over the counter stimulant (e.g., NoDoze) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Take a quick nap | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Drink energy drinks (e.g., Red Bull, Monster, 5-Hour Energy) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Talk to conductor or engineer | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Stand while operating train | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Talk on cell phone | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Move body (i.e., walk, stretch, exercise) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Play games/use apps on cell phone | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Smoke/chew tobacco | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |

1. **In your opinion, how effective are the following strategies to reduce fatigue while operating a train (i.e., regardless of whether you use the strategy)? *(Rate each strategy separately)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **effective** | **Slightly**  **effective** | **Somewhat**  **effective** | **Effective** | **Very**  **effective** |
| Listen to music | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Eat or snack while operating train | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Drink caffeine (e.g., coffee, black tea) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Make additional effort to focus | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Adjust the ventilation (e.g., turn on air con or open window) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Use over the counter stimulant (e.g., NoDoze) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Take a quick nap | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Drink energy drinks (e.g., Red Bull, Monster, 5-Hour Energy) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Talk to conductor or engineer | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Stand while operating train | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Talk on cell phone | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Move body (i.e., walk, stretch, exercise) | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Play games/use apps on cell phone | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |
| Smoke/chew tobacco | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |

1. **Does your company provide you with a computer train line-up?**
   * Yes
   * No
   * Not sure
2. **How reliable is the information provided in the computer train line-up?**
   * Very reliable
   * Somewhat reliable
   * Not particularly reliable or unreliable
   * Somewhat unreliable
   * Very unreliable
3. **In the LAST MONTH, what percentage of computer train line-ups you received were accurate?**
   * **\_\_\_\_\_\_\_\_** %
4. **Does your current company have a fatigue management policy?**
   * Yes
   * No
   * Not sure
5. **Does your current company educate employees about fatigue?**
   * Yes
   * No
   * Not sure
6. **How much of a problem is fatigue for YOU PERSONALLY in your job?**
   * A major problem
   * A substantial problem
   * A minor problem
   * Not a problem at all
7. **How much of a problem is fatigue for locomotive engineers and conductors IN GENERAL?**
   * A major problem
   * A substantial problem
   * A minor problem
   * Not a problem at all
8. **How well do you believe fatigue is managed in the rail industry?**
   * Extremely badly
   * Quite badly
   * Ok
   * Quite well
   * Extremely well