

Appendix D

Questionnaire on heat stress app to be taken during shift

The image displays two screenshots of a mobile application interface for a 'Mid-shift Questionnaire'. The top status bar shows 44% battery and the time 4:02 PM on the left and 4:03 PM on the right.

Left Screenshot (4:02 PM):

- Header: Mid-shift Questionnaire
- Section: **Fatigue**
- Text: *Please rate how much you agree or disagree with the following statements:*
- Statement 1: I am physically exhausted right now. (Input field)
- Statement 2: I feel mentally tired or unable to concentrate right now. (Input field)
- Section: **Work Tasks**
- Text: *Please indicate which work tasks you just completed, starting with the most recent:*
- Form fields: Task, What time did you start this work task?, 04:02 PM, What time did you end this work task?, 04:02 PM, Describe your exertion level during this task.

Right Screenshot (4:03 PM):

- Header: Mid-shift Questionnaire
- Text: *Please indicate which work tasks you just completed, starting with the most recent:*
- Form fields: Task, What time did you start this work task?, 04:02 PM, What time did you end this work task?, 04:02 PM, Describe your exertion level during this task.
- Buttons: REMOVE TASK, ADD ANOTHER TASK, DONE

Both screenshots show a standard Android navigation bar at the bottom with back, home, and recent apps icons.

Questions to be taken on smart phone app

1. Please rate your level of physical fatigue right now (0 to 10)
2. Please rate your level of mental fatigue right now (0 to 10)
3. How do you feel right now? (extremely alert, very alert, alert, rather alert, neither alert nor sleepy, some signs of sleepiness, sleepy but no effort to keep awake, sleepy but some effort to keep awake, very sleepy with great effort to keep awake)
4. What tasks or activities were you doing in the last 15 minutes before beginning this assessment? (Note: participants enter tasks starting from most recent on back)
Describe _____
About what time did you start this work task? _____
Where were you in the mine? _____
How much physical effort did that activity take? (0 to 10)
5. How hot do you feel right now? (scale 1 comfortable, 2 slightly warm, 3 warm, 4 hot 5 very hot)

Public reporting burden of this collection of information is estimated to average 1 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to - CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333 ATTN: PRA (0920-1331).