

A QUESTIONNAIRE ON HEAT STRESS

The US Utility GPU Nuclear has initiated a study on Heat Stress problems in the Nuclear Power Industry. The BNL ALARA Center is assisting GPU in this study. The results of the study will be shared with those who fill out this questionnaire. If you wish to participate in this study please complete the attached form and return it to:

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General Public Utilities
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U.S.A.

Telephone: (201) 316-7915

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Basic information about yourself

Title: _____ Last Name: _____ First Name: _____

Job title: _____

Organization: _____

Nuclear Power Plant: _____

Address: _____

Phone: _____ Fax: _____

- Written guidance on stay times based on

- temperature
- humidity
- work effort
- protective clothing
- use of personnel cooling devices
- use of engineering controls

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| _____ | _____ |
| _____ | _____ |
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- Employee Training

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| _____ | _____ |
|-------|-------|

- Medical Evaluations

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| _____ | _____ |
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- Personnel Monitoring

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| _____ | _____ |
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- Post job review for heat related experiences

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4.0 Job Evaluation & Counter Measures

- Do you evaluate jobs and maintain a list of potential "heat stress" jobs?

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- Do you or have you collected data on candidate heat stress jobs such as typical temperatures, humidity, radiant and convective heat sources use of protective clothing, type of work? (e.g. level of effort)

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- Do you have a structured preventive program including use of one or more of the following?

- acclimatization
- modification of protective clothing
- use of central or local air conditioning
- hydration regimes
- use of personnel protective devices
- insulation of hot surfaces

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5.0 Environmental Evaluation

- Do you or have you used the following techniques?

- dry bulb temperature (e.g. regular thermometer or electric thermometer)
- WBGT
- sling psychrometer

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6.0 Personnel Protective Equipment

- Do you or have you used the following?

- ice vests
- circulating air garments
- chilled water cooling garments
- reflective clothing

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| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

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TO

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YES NO

11. Smoker:

12. Known Medical Condition:

- Diabetes Mellitus
- Hypertension
- Thyroid Disease
- Cardio-Respiratory Illness
 - Angina/Atherosclerotic Heart Disease
 - Chronic Obstructive Pulmonary Disease
 - Pneumoconiosis
 - Asthma
- Acute Infections
 - Respiratory
 - GI (vomiting, diarrhea in recent past)
- Prescription Medication (specify below)

13. Symptoms/Signs Observed:

- Increased Body Temperature
- Flushing
- Sweating
- Dizziness/Lightheaded
- Cardiac Rate Changes (Brady-Tachycardia)
- Hypo-, Hypertension
- Muscle Cramps/Tetany
- Loss of Consciousness
- Chest Pain
- Other (specify) _____

14. Treatment Provided:

- Removal to cool environment
- Fluids, oral
- Fluids, parenteral
- Ice packs
- Water compresses
- Hospitalization

15. Follow-up Actions:

- None
- Restricted Duty
- Lost Time
- Other (specify) _____

ATTACHMENT I

HEAT RELATED ILLNESS OR INJURY CASE EVALUATION

Examples of Activity Levels (Question 6.1)

LIGHT ACTIVITY

sit/stand still
walk slowly
inspect visually
calibrate instruments, etc
operate equipment controls
work with hands only

MODERATE ACTIVITY

walk
survey environment
sort materials
turn valve manually
work with arms and hands

HEAVY ACTIVITY

handle materials manually
mop/sweep
decontaminate manually
hoist manually

VERY HEAVY ACTIVITY

handle heavy materials
climb stairs/ladders
scrub/brush/scrape
saw manually
shovel