

Heat-generating Machinery

- ◆ Is heat-generating machinery (e.g. diesel air compressors or generators) kept away from workers so far as reasonably practicable?

Working at Poorly-ventilated Areas

- ◆ Are blowers or fans used to increase air flow in poorly ventilated areas (e.g. shafts, underground pipes, enclosed workrooms)?

Performing Heavy Manual Work

- ◆ Are mechanical aids provided or powered lifting machinery used, as appropriate, to minimize physical exertion?
- ◆ Is the work reorganized to minimize intensity and pace of bodily movement of workers so far as reasonably practicable?
- ◆ Are suitable rest breaks (or job rotation) arranged for workers?

Provision of Drinking Water on Site

- ◆ Is sufficient potable drinking water provided on site?
- ◆ Is the drinking water provided at locations within close proximity to all workers?

Clothing

- ◆ Do the workers wear thin and air permeable clothing?
- ◆ Are the reflective vests used by the workers air permeable and fitting their body-build?
- ◆ Are adequate precautions (e.g. providing cooling vests) adopted at workplaces with a higher risk of heat stroke (e.g. in poorly ventilated places with hot machinery in use)?

Acclimatization

- ◆ Are the workers acclimatized to the hot work environment?
- ◆ For workers new to a hot work environment, is a lower workload or shorter working duration arranged for them as a start, with the workload increased gradually over a number of days to help them acclimatize to the hot environment?

Checklist for Heat Stress Assessment at Construction Sites

Construction workers generally have a higher risk of heat stroke in summer due to extensive manual work in an outdoor environment, whether or not directly under the sun. In accordance with the Occupational Safety and Health Ordinance (Cap. 509) and Factories and Industrial Undertakings Ordinance (Cap. 59), employers have a duty to ensure, so far as reasonably practicable, the safety and health of their employees at work. Such duty includes the provision and maintenance of systems of work that are, so far as reasonably practicable, safe and without risks to health. Contractors / employers should, therefore, provide and maintain safe systems of work to adequately protect their employees at construction sites from the risk of heat stroke. Contractors / employers should arrange for a suitable assessment of the risk of heat stroke to their workers and, based on the assessment results, take out effective preventive measures.

To assist contractors/employers in assessing the risk of heat stroke at construction sites, the Labour Department has produced this

checklist, setting out a number of relevant factors that should be taken into account in the assessment. **The list of factors merely serves as a reference and should not be construed as exhaustive.** In using the checklist, contractors/employers should, therefore, also consider other factors that are relevant to the particular circumstances of their sites. Contractors/employers may appoint a person who is familiar with the work process and has basic occupational safety and health knowledge about heat stress to conduct the risk assessment. After the assessment, the assessor should, based on the findings, draw a conclusion and recommend necessary measures to prevent the risk of heat stroke. Contractors / employers / assessors are strongly recommended to read this checklist in conjunction with another publication produced by the Labour Department, entitled "Risk Assessment for the Prevention of Heat Stroke at Work", which provides guidance on how to use a checklist to assess the risk of heat stress at a workplace in general and what preventive measures could be taken against heat stress effectively.

Factors to be considered in heat stress assessment at construction sites:

Outdoor Work

For work conducted at a fixed location (e.g. bar-bending, trench digging, constructing a shaft, attending a drilling rig)

- ◆ Is sunshade set up at these locations to block away the sunlight?
- ◆ Are blowers or fans used, as appropriate, to enhance air movement at these locations to facilitate cooling of the workers?

For mobile work (e.g. bar-fixing, concreting, levelling)

- ◆ Are workers provided with light-coloured safety helmets with wide-brim or flaps to block out the sunlight?
- ◆ Is a sheltered resting place set up within a short distance from each working location?

In Case of Very Hot Weather Warning, High Humidity or High UV Level

- ◆ Are administrative control measures (e.g. rescheduling outdoor work to cooler periods during daytime, and arranging job rotation or suitable rest breaks) taken, where reasonably practicable, to avoid prolonged working in a hot environment?
- ◆ Is cool drinking water provided and readily accessible to workers?
- ◆ Are workers reminded to take plenty of water and stay alert of their own physical conditions?