SAFETY SERVICES COMPANY
Construction

Location: _____ Instructor: _____ Date/Time: _____

TOPIC C009: BEAT THE HEAT (A)

Introduction: Many factors beyond just the temperature can cause heat illnesses like heat cramps, heat exhaustion, and even hyperthermia. If you're working in a hot environment, you need to know how these factors can cause heat stress and affect you.

Hazard Recognition & Mitigation:

Air Temperature & Humidity: The air temperature is the most obvious risk factor. Humidity is another, because the main way your body cools itself is by sweating, working in high humidity conditions hinders this process.

Heat Sources: Working in direct sunlight is one potential cause of heat stress, the other is known as radiant heat. When the ground absorbs heat from sunlight or when machinery generates heat, radiant heat is created. Some surfaces absorb and give off more heat than others. For example, asphalt gives off more radiant heat than grass.

Air Movement: The lack of air movement is another heat stress factor. Moving air increases the evaporation of sweat and helps your body cool itself. Circulating air evens out the temperature inside, can bring in cooler fresh air, and removes heated air.

Workload: How long and hard you're working are two specific factors affecting your risk of heat stress. A heavy workload is tiring and inhibits the body's ability to cool itself. The length of time you work in high heat conditions also plays a part in heat stress.

Clothing & PPE: Clothing and additional personal protective equipment (PPE) can contribute to heat stress. Long pants, sleeves, and gloves may be necessary for your work, but in a hot environment, they inhibit cooling. As an example, a full-face respirator limits breathing and cooling to such a degree that a medical evaluation must be conducted to ensure you can safely wear it under necessary conditions.

Personal Fitness: A person's age, weight, fitness, lifestyle, and acclimation are all heat stress factors. Medications can affect your ability to regulate its temperature. Drinking caffeine and alcohol reduces your ability to hydrate in hot environments.

Acclimatization: If you're not used to working in hot conditions, you can get exhausted more quickly. This is common for new workers, but also affects seasoned workers who have been away from the worksite for as little as three days. This applies to all workers during a heat wave when the temperature suddenly increases.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

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