

Heat Stress

and the Work Environment



What is Heat Stress?

- Illness caused by exposure to hot temperature;
 - Often occurs when the body is unable to maintain a healthy temperature when exposed to extreme temperature.



Body's Response & Effects

Body's Response to heat

- The body tries to maintain a constant internal temperature
- When the internal temperature rises, the body attempts to get rid of excess heat by:
 - Increasing blood flow to skin surface
 - Releasing sweat onto skin surface

Effects of Body's Response

- Reduced blood flow to brain
 - Reduced mental alertness and comprehension
- Reduced blood flow to active muscles
 - Fatigue, loss of strength
- Increased sweating
 - Slipperiness

When cooling mechanisms fail

#1

High air temperature reduces effectiveness of the cooling system

#2

High humidity reduces evaporation rate of sweat

#3

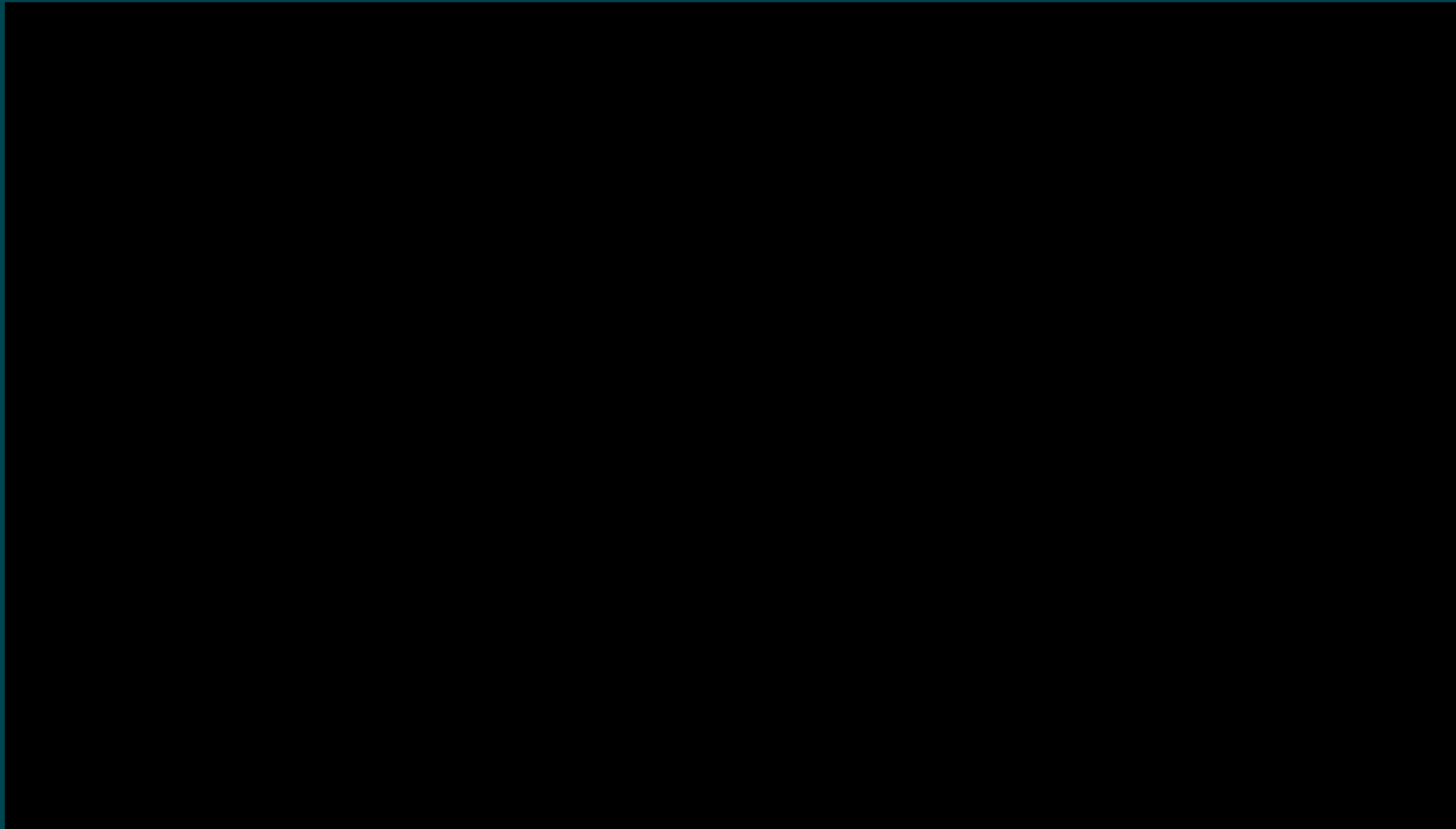
Excess loss of sodium

#4

Dehydration



Enjoy the short video ...



Preventing Heat Illness




1. Know the factors that increase risk

- The environment you're working in
 - The work you're doing
 - Your own conditioning
-

2. Think about what you can do to prevent heat stress

- Drink plenty of fluids
- Choose proper clothing
- Take it easy during the hottest parts of the day



1. Know the factors that increase risk

Environmental Factors

- Air temperature
- Humidity
- Radiant heat source
- Air circulation

Work-related Factors

- Workload
 - Type of work, Level of physical activity, Time spent
- Clothing
 - Weight, Color, PPE and clothing

Personal Factors

- Age
- Weight/Fitness
- Use of drugs, alcohol, caffeine, medication
- Prior heat-related illness

2. Think about what you can do to prevent heat stress

Drink plenty of fluids

- Don't rely on your thirst
- 5-7 oz. every 20 minutes

Choose proper clothing

- Choose light colors and lightest weight possible
- Select proper personal protective equipment

Take it easy during the hottest parts of the day

- Schedule tasks with some consideration of the heat
 - Work/rest cycles
 - Heaviest tasks early morning or dusk
- Eat properly, get enough sleep & rest



Do you have any questions?

Feel free to ask!



Thank You & Have a Nice Day!

Let's work together to create a safe &
positive work environment.

ATTENDANCE FORM

Purpose: ☐ Meeting ☒ Training / Seminar / Workshop

Type of Training: ☒ Classroom ☐ Practical / Hands On ☐ Technical Sharing

Training Facilitator / Trainer: Edrian

Topic/Subject	HSSE-Heat Stress	Date	25/7/2023
Venue	Meeting Room DB	Time	8:30 AM
Meeting Coordinator		Meeting/ Training Duration	30 mins

No.	Name	Position	Signature
1	Fakhrul Hazim	TM	
2	GAZALI METRY	DM	
3	pozaiman	Ac	
4	HENIE KEN	SE	
5	Habreen.	SE	
6	Syaiful Sidek	PCE	
7	ERsan Jui	DHT	
8	Ali Akbar	DAT	
9	Jasemmus.	SE	
10	PIPIE	PCE	
12	Shamsulyni	PCE	
13	Hamizan	TA	
14	Ag Amrie	TSA	
15	HILLARRY	TSA	

Remark / Comment: Agasrawi Sudarso

Good presentation. Able to answer well questions from the floor.