Heat Exposure

An awareness guide for workers, JOHSC and Union representatives in the motion picture industry

ARCOSE CONSULTING LTD

June 23/2022

What is heat stress?	A serious condition where the body temperature rises above normal range and can lead to heat cramps, heat exhaustion, and heat stroke. These are serious conditions that can lead to injury, hospitalization, and fatality.
Concerns about heat stress?	Talk to your joint occupational health and safety committee, Actsafe, production safety team, or WorkSafeBC!

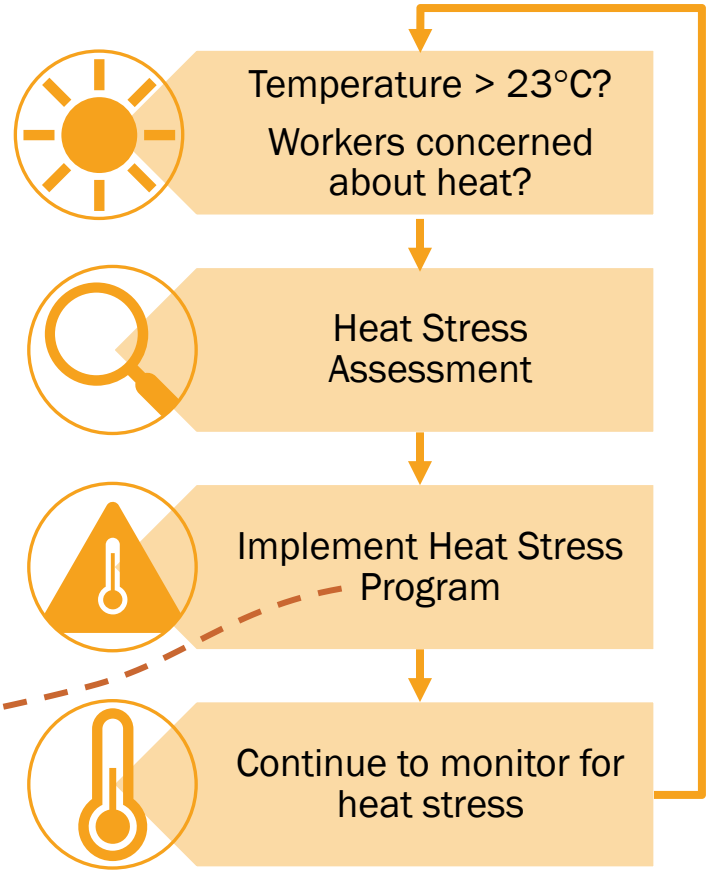
What to expect from your employer?

WorkSafeBC OHSR 7.29

If a worker is or may be exposed to thermal conditions which could cause heat stress, the employer must:

1. Conduct a heat stress assessment AND
2. Develop and implement a heat stress exposure control plan if a worker is or may be exposed to thermal conditions which could cause heat stress

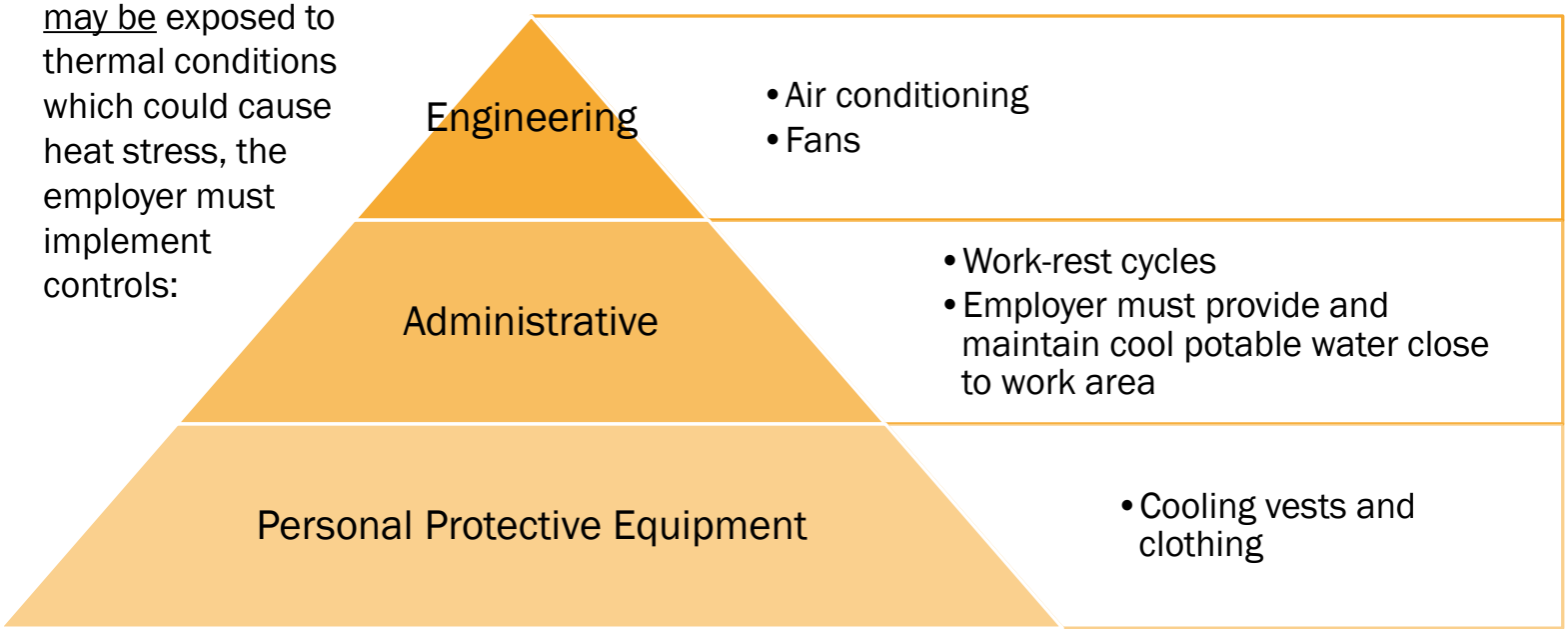
Did you know? An ECP is an integral part of a heat stress program and includes details on assessing risk and exposure, controlling exposure, training workers and more!



Controlling Heat Exposure

WorkSafeBC OHSR 7.30

If a worker is or may be exposed to thermal conditions which could cause heat stress, the employer must implement controls:



Humidex

Heat stress assessment tool

ARCOSE CONSULTING LTD

A commonly used method to assess heat stress using dry bulb temperature and humidity.

1. Plot temperature and humidity obtained into the **Humidex Table**
2. Compare the value you get to the **Humidex Based Heat Response Plan** table

It is important to consider other factors when using the humidex, this includes type of clothing being worn and radiant heat sources present

°C	Relative Humidity (in percent)																	
	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10
49																			50
48																			49
47																		50	47
46																		49	46
45																	50	47	45
44																	49	46	43
43																49	47	45	42
42															50	48	46	43	41
41															48	46	44	42	40
40														49	47	45	43	41	39
39													49	47	45	43	41	39	37
38												49	47	45	43	42	40	38	36
37											49	47	45	44	42	40	38	37	35
36									50	49	47	45	44	42	40	39	37	35	34
35								50	48	47	45	43	42	40	39	37	36	34	33
34							49	48	46	45	43	42	40	39	37	36	34	33	31
33					50	48	47	46	44	43	41	40	39	37	36	34	33	32	30
32			50	49	48	46	45	44	42	41	40	38	37	36	34	33	32	30	29
31	50	49	48	47	45	44	43	42	40	39	38	37	35	34	33	32	30	29	28
30	48	47	46	44	43	42	41	40	39	37	36	35	34	33	31	30	29	28	27
29	46	45	43	42	41	40	39	38	37	36	35	33	32	31	30	29	28	27	26
28	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
27	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25		
26	39	38	37	36	35	34	33	33	32	31	30	29	28	27	26	25			
25	37	36	35	34	33	33	32	31	30	29	28	27	26	26	25				
24	35	34	33	33	32	31	30	29	28	28	27	26	25						
23	33	32	31	31	30	29	28	28	27	26	25								
22	31	30	30	29	28	27	27	26	25	25									
21	29	29	28	27	26	26	25												

Humidex 1 – Moderate work unacclimatized & heavy work acclimatized	Response	Humidex 2 – Moderate work acclimatized worker OR light work unacclimatized worker
25 – 29	Supply water to workers on an “as needed” basis	32 - 35
30 – 33	Post heat stress alert notice; encourage workers to drink extra water; start recording hourly temperature and relative humidity	36 – 39
34 – 37	Post heat stress warning notice; notify workers that they need to drink extra water; ensure workers are trained to recognize symptoms	40 – 42
38 – 39	Work with 15 minutes relief per hour can continue; at least 1 cup (240 mL) of water every 20 minutes. Worker with symptoms should seek medical attention	43 – 44
40 – 41	Work with 30 minutes relief per hour can continue in addition to the provisions listed previously	45 – 46
42 – 44	If feasible, work with 45 minutes relief per hour can continue in addition to the provisions listed above	47 – 49
45 or over	Only medically supervised work can continue	50 or over

Heat Humidex Calculator (OHCOW)

WorkSafeBC Heat Exposure Guidelines

Heat Stress Awareness course