# PORTACOOL HEAT AVVARENESS

Portacool portable evaporative coolers are designed to provide comfort to any hot area. Our products are designed with safety, productivity, sustainability and total cost of ownership in mind. Portacool portable evaporative coolers are a smart investment that deliver monetary benefits that can go a long way towards paying for themselves.



## AWARENESS

Safety is more than a state of mind or philosophical approach – safety is a responsibility that businesses have to each of their employees. The goal is for each worker to return home safely at the end of the workday.

According to the National Weather Service, heat is the weather event that produces the greatest number of fatalities (ahead of flooding and tornado) each year.

#### 1. Be aware of temperatures >90°F

Use caution when engaging in strenuous activity during extreme heat. It can do more harm than good.

#### 2. Acclimatization is key

Allow time for the body to adapt to high-heat, high-humidity environments.

#### **3. Choose weather-smart attire**

Opt for loose-fitting clothing made from lightweight materials and lighter colors. This type of clothing will be more comfortable when you sweat, and lighter colors reflect heat more efficiently.

#### 4. Stay hydrated

It is crucial for water to be accessible at all times during high temperatures. Do not wait until you feel thirsty.

#### 5. Schedule rest breaks

Scheduling breaks allows your body to cool down and reduce the possibility of over heating.

#### 6. Implement a buddy system

By monitoring one another for signs and symptoms of heat related illnesses, you can prevent serious injuries before they occur. Training in this area to identify the symptoms is worthwhile.



STUDIES SHOW THAT WHEN IN-PLANT TEMPS RISE OVER 85°, OUTPUT DROPS BY 18% AND ACCURACY SUFFERS FROM A 40% INCREASE IN ERRORS.

### PERFORMANCE

Productivity is a crucial word in today's business climate. It can be a contributing factor to a company's success or failure. A cool working environment isn't an extravagance. It is a key component to combating the toll heat takes on worker productivity.

Effective Temp	Loss in Output	Loss in Accuracy
75 <b>°</b>	3%	Negligible
80 <b>°</b>	8%	5%
85°	18%	40%
90 <b>°</b>	29%	300%
95 <b>°</b>	45%	700%
100°	62%	>>
105°	79%	->>

Study for NASA. \*Comfort Conditioning the Plant with Evaporative Cooling.\* Plant Engineering pg.76 Joseph Marg and "Evaporative Air Conditioning Handbook." John Walt, PE and Will Brown PE 3rd edition pg 201.



PORTACOOL

WHEN COMFORT COUNTS"



ARE YOU HYDRATED? USE THE COLOR CHART TO IDENTIFY HYDRATION LEVEL BASED ON URINE RESEMBLANCE.



When workplace temperatures rise, the body can't regulate heat as well. Excessive perspiration occurs, body fluids are lost and worker productivity can suffer by up to 12% with as little as 1% body fluid loss.

OVER HYDRATION	OPTIMAL HYDRATION	DEHYDRATED

## **HEAT ILLNESSES**

Heat related illness and deaths are a real concern for employers and workers. According to the National Safety Council, 11 American workers die on the job each day due to various accidents and injuries.

Take time to become familiar with the symptoms and responses to unprotected heat exposure.

Heat Cramps: Painful muscle spasms, usually in the abdomen and legs. Possible heavy sweating.	Apply firm pressure on cramping muscles, then gently massage to relieve muscle spasm.			
<b>Heat Exhaustion:</b> Heavy sweating, fainting, nausea, fast pulse, low blood pressure, weakness, pale and clammy skin and possible vomiting.	Stop exertion, move to a cool spot and rehydrate. If vomiting occurs and continues, seek medical attention immediately.			
Heat Stroke: High body temperature (above 103°F), hot, red, dry or moist skin, strong rapid pulse and possible unconsciousness.	Call 911 immediately - this is a medical emergency. Move victim to a cooler area and reduce body temperature with cold bath or sponging. Do NOT give fluids!			

Air Temp.	70°	75°	<b>80°</b>	85°	90°	95°	100°	105°	110°
Relative Humidity ↓	Apparent Temperature(F°)→								
0%	64°	69°	73°	78°	83°	87°	91°	95°	99°
10%	65°	70°	75°	80°	85°	90°	95°	100°	105°
20%	66°	72°	77°	82°	87°	93°	99°	105°	112°
30%	67°	73°	78°	84°	90°	96°	104°	113°	123°
40%	68°	74°	79°	86°	93°	101°	110°	122°	137°
50%	69°	75°	<b>81°</b>	88°	96°	107°	120°	135°	150°
60%	70°	76°	82°	90°	100°	114°	132°	149°	
70%	70°	77°	85°	93°	106°	124°	144°		
80%	71°	78°	86°	97°	113°	136°	157°		
90%	71°	79°	88°	102°	122°	150°	170°		
100%	72°	80°	91°	108°	133°	166°	104°		
CAUTION				DANGE	R		EXTREM		EB

## HEAT INDEX CHART





