


KAUST Health and Safety Toolbox Talk	Toolbox Talk Number	HSE/RF/TBT/005	 جامعة الملك عبد الله للعلوم والتقنية King Abdullah University of Science and Technology
	Title	Heat Illness Prevention: Risk Assessment	
	Date of issue	May 02 nd , 2017	

HEAT STRESS TABLE

		Relative Humidity %																					
		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
Temperature (C)	52																						
	51						Stop Work - Implement Red Flag Work Procedure																
	50																						
	49	49	49	49	50	55	59	65	71														
	48	48	48	48	49	53	57	62	67	73													
	47	47	47	47	47	51	55	59	64	70													
	46	46	46	46	46	49	53	57	61	66	72												
	45	45	45	45	45	47	51	54	58	63	68	73											
	44	44	44	44	44	46	48	52	56	60	64	69	75										
	43	43	43	43	43	44	47	49	53	57	61	65	70										
	42	42	42	42	42	42	45	47	50	54	58	62	66	71									
	41	41	41	41	41	41	43	45	48	51	54	58	62	67	72								
	40	40	40	40	40	40	41	43	46	48	51	55	59	63	67	72							
	39	39	39	39	39	39	40	41	43	46	49	52	55	59	63	67	72						
	38	38	38	38	38	38	38	39	41	43	46	49	52	55	59	63	67	71					
	37	37	37	37	37	37	37	38	39	41	43	46	49	51	55	58	62	66	70				
	36	36	36	36	36	36	36	36	38	39	41	43	46	48	51	54	58	61	65	69	74		
	35	35	35	35	35	35	35	35	36	37	39	41	43	45	48	50	53	57	60	64	68	72	
	34	34	34	34	34	34	34	34	34	35	37	38	40	42	44	47	49	52	55	58	62	66	
	33	33	33	33	33	33	33	33	33	34	35	36	38	40	42	44	46	48	51	54	57	60	
	32	32	32	32	32	32	33	33	33	33	33	34	36	37	39	40	42	44	47	49	52	54	
	31	31	31	31	31	31	31	31	31	31	32	33	34	35	36	38	39	41	43	45	47	49	
	30	30	30	30	30	30	30	30	30	30	30	31	32	33	34	35	36	38	39	41	42	44	

Heat Index is a single value that takes both temperature and humidity into account. Use the Heat Index to indicate the level of **Heat Illness** conditions on a given day (see table below). Monitor temperature (with a standard thermometer) and humidity throughout the day, but no less than once every hour during peak summer months usually from 1 July to 1 September annually. The onus is on Contractors to inform their staff using email, SMS, radio or other reasonable means of current conditions.

NEVER IGNORE ANYONE'S SYMPTOMS DESPITE YOUR MEASUREMENTS!

HEAT INDEX TABLE

Danger Category	Humidex Value	Heat Syndrome	Recommended Resting Time	Recommended Water Intake
Caution	27 - 32	Fatigue is possible with prolonged exposure and activity. Continuing activity could result in heat cramps.	Normal/Scheduled	1 Glass/20 minutes
Extreme Caution	33 - 39	Extreme caution: heat cramps and - exhaustion are possible. Continuing activity could result in heat stroke.	7 minutes per hour	1 Glass/15 minutes
Danger	40 - 51	Danger: heat cramps and heat exhaustion are likely. Heat stroke is probable with continued activity.	10 minutes/hour. Control working at heights closely or stop work.	1 Glass/10 minutes
Extreme Danger	>52	Heat stroke is imminent.	All non-protected work stop. Work can only continue for specific activities, with a specific plan and risk assessment and approval from KAUST HSE in place.	

Note! 1 Glass = 250 ml. DO NOT drink more than 1.5 liters per hour (maximum water absorption rate of body)
For more information, please contact rf.safety@KAUST.EDU.SA