Medical Threat Assessment / Preplanning Template

Operational Information						
Date:		Location:				Latitude:
Time:						Longitude:
Operation type & no. involved	Warrant (#):	Suspect (#):	Hostage (#):	Protection (#):	Open Terrain Search (#):	Other: (#):
LE Personnel	Tactical:	EMS / Medics:	Detectives:	Patrol:	K9:	Other: (#):

Hospital Facilities		Type	Address	Distance	ED Contact No.
1	WFU / Baptist Medical Center	Trauma Center (Level 1)	Medical Center Blvd, Winston-Salem, NC		(336) 713-9100
2	Forsyth Medical Center	Community Hospital	3333 Silas Creek Parkway, Winston-Salem, NC		(336)
3					

Helicopter Plan			
Primary aircraft: **AirCare**	Contact no: **(336) 716-3669**	Alternate aircraft: MedCenter Air (Charlotte) 800-421-9195	
Landing Zone	Address:	Latitude:	Longitude:
	LZ Type:	Obstructions / Debris:	

Weather											
Temp Hi:	Precip (%):	Heat Index:	***Hydration & Rest Guide (for operations >4 hrs)***								
Temp Lo:	Sunrise AM	Cold Risk? Yes / No	WB Temp	<60	60-78	78-82	82-85	85-88	88-90	>90
Wind (mph):	Sunset PM	Uniform Adjustments? Yes / No	H20 Qt/hr	0.5	0.5	0.5	0.75	1.0	1.5	2.0
Humidity (%):	Night Ops Yes / No	Recs:	Rest min/hr	0	0	0	10	15	30	40

Animal Threats					
Domestic Animals	Yes / No	#:	Types:		Animal Control: (xxx) xxx-xxxx (vs "Obtain via dispatch")
Poisonous Snakes	Yes / No	#:	Types:		
Wild Animals	Yes / No	#:	Types:		
Police Dogs	Yes / No	#:	Police Vet: Dr. _____	Vet contact no: (xxx) xxx-xxxx	After hrs contact no: (xxx) xxx-xxxx
Police Vet address:					

Plant Threats			
Poisonous plant exposure likely?	Yes / No	Types:	Poison Control: (800) 222-1222
Uniform Adjustments needed?	Yes / No	Recommendations:	

Hazardous Materials				
Ignition risks or NFDD use anticipated?	Yes / No	Types:	Recommendations Nomex? Yes / No Other special PPE? Yes / No List:	HazMat Team: (xxx) xxx-xxxx (vs "Obtain via dispatch")
Clandestine Lab?	Yes / No	Types:		
Industrial chemicals?	Yes / No	Types:		
Other HazMats?	Yes / No	Types:		

Public Works					
Street Closings	Yes / No	Location:	Gate Access	Yes / No	Location / Code:
Road Hazards	Yes / No	Location:	EMS Staging	Yes / No	Location:

Extended Operations					
Work cycles determined	Yes / No	List:	Restroom facilities determined:	Yes / No	List:
Nutrition secured / checked	Yes / No	List:	Sleep area determined:	Yes / No	List:

Other				

Rest and Hydration Guideline Notes

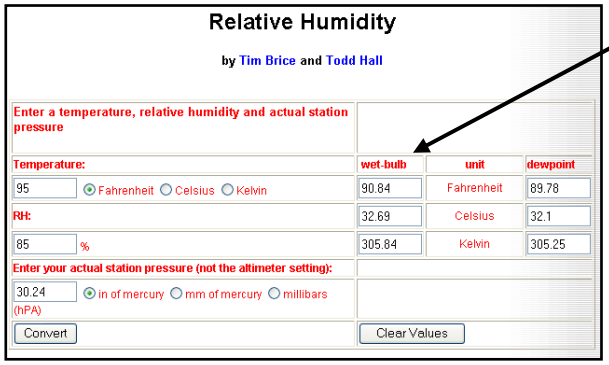
Wet Bulb Temperature Information

The wet bulb temperature is a better measure of the heat stress on the human body than air temperature alone, and is the best way to guide the need for rest and hydration. It is a complex calculation that incorporates air temperature, pressure, and relative humidity, which affects the ability for sweat to evaporate and cool the body. The wet bulb temp is usually lower than the air temperature, except at very high humidity levels.

To directly measure wet bulb temperature, you can use a fancy gadget. (Example: Kestrel 3500 Weather Meter. Cost ~$180.)

To estimate the wet bulb temperature you can calculate it:

1. Get the **temperature**, **relative humidity,** and barometric **pressure** for your location from www.weather.com or other online weather services. (Enter your zip code, then use actual conditions or forecast conditions for your operation.)
2. Enter the values into an online calculator. Try www.srh.noaa.gov/elp/wxcalc/rh.shtml for a good one.
   A. Enter the values.
   B. Click "Convert".
   C. Read your wet bulb temperature in the column on the right.



Fluid Replacement and Work/Rest Guide

Heat Category	WBGT Index, °F	Easy Work		Moderate Work		Hard Work	
		Work/ Rest	Water Intake (Qt/H)	Work/ Rest	Water Intake (Qt/H)	Work/ Rest	Water Intake (Qt/H)
1	78° - 81.9°	NL	½	NL	¾	40/20 min	¾
2 (GREEN)	82° - 84.9°	NL	½	50/10 min	¾	30/30 min	1
3 (YELLOW)	85° - 87.9°	NL	¾	40/20 min	¾	30/30 min	1
4 (RED)	88° - 89.9°	NL	¾	30/30 min	¾	20/40 min	1
5 (BLACK)	> 90°	50/10 min	1	20/40 min	1	10/50 min	1

Easy Work = Walking hard surface 2.5 mph <30# load, Weapon maintenance, Marksmanship training
Moderate Work = Patrolling, Walking sand 2.5 mph no load, Calisthenics
Hard Work = Walking sand 2.5 mph w/load, Field assaults

- The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specified heat category. Fluid needs can vary based on individual differences (± ¼ qt/h) and exposure to full sun or full shade (± ¼ qt/h).
- **NL** = no limit to work time per hour.
- **Rest** means minimal physical activity (sitting or standing), accomplished in shade if possible.
- *CAUTION: Hourly fluid intake should not exceed 1½ quarts.*
  Daily fluid intake should not exceed 12 quarts.
- If wearing body armor add 5°F to WBGT in humid climates.
- If wearing NBC clothing (MOPP 4) add 10°F to WBGT index for easy work, and 20°F to WBGT index for moderate and hard work.

Heat Index Information

The "Heat Index" (HI) is sometimes referred to as the "apparent temperature" and can also be used to guide rest and hydration. The HI, given in degrees Fahrenheit, is a measure of how hot it really feels when the relative humidity (RH) is added to the actual air temperature.

To find the Heat Index, look at the Heat Index Chart or Calculator below. As an example, if the air temperature is 94° F, and the relative humidity is 55%, the HI -- or how hot it really feels -- is 106° F. This is at the intersection of the 94° row and the 55% column.

Important: Since HI values were devised for shady, light wind conditions, exposure to full sunshine can increase HI values by up to 15° F. Also, strong winds, particularly with very hot, dry air, can be extremely hazardous. Note on the HI chart the shaded zone above 105° F. This corresponds to a level of HI that may cause increasingly severe heat disorders with continued exposure and/or physical activity.

Relative Humidity (%)

Air Temperature °F	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136												
108	130	137											
106	124	130	137										
104	119	124	131	137									
102	114	119	124	130	137								
100	109	114	118	124	129	136							
98	105	109	113	117	123	128	134						
96	101	104	108	112	116	121	126	132					
94	97	100	103	106	110	114	119	124	129	135			
92	94	96	99	101	105	108	112	116	121	126	131		
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	80	81	81	82	82	83	84	84	85	86	86	87

Heat Index (Apparent Temperature)

With Prolonged Exposure and/or Physical Activity

Extreme Danger
Heat stroke or sunstroke highly likely
Danger
Sunstroke, muscle cramps, and/or heat exhaustion likely
Extreme Caution
Sunstroke, muscle cramps, and/or heat exhaustion possible
Caution
Fatigue possible

You can get your current and forecast **relative humidity** from www.weather.com or other online weather services.

For an **online heat index calculator** see www.crh.noaa.gov/gjt/Weather_Info/heat_index.php.