

**BY ORDER OF THE COMMANDER
42D AIR BASE WING (AETC)**

**MAXWELL AFB SUPPLEMENT 1
AETCI 48-101
17 DECEMBER 2001**



Aerospace Medicine

é PREVENTION OF HEAT STRESS DISORDERS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Maj Michael J. Mader)
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AETCI 48-101, 4 October 2000, is supplemented as follows. This document is substantially revised and must be completely reviewed.

1.3.9. (Added) (MAFB) Supervisors ensure that all military members who have received treatment from an off-base medical provider for any heat related injury/illness report to sick call before resuming work. This is to ensure that documentation of the injury/illness is tracked and kept with the personnel's medical record and that the supervisor and worker receive appropriate guidance on continued hot work. **NOTE:** Off-base medical facilities do not readily release or transfer medical records without consent from the patient. Supervisors of civilian members who suffer a heat illness report the illness to the Civilian Personnel flight and follow the recommendations of the medical provider. The Office of Worker's Compensation Programs (OWCP) point of contact within the Civilian Personnel flight notifies the Medical Group's Public Health (PH) Flight (42 ADOS/SGGM) of the illness. The Services Division (42 SPTG/SVMT) uses a similar method to report heat illnesses for Non-Appropriated Fund (NAF) employees.

1.6.1.4. (Added) (MAFB) Physicians treating a heat stress injury/illness must complete the AF Form 422 and refer the patient to Public Health for further investigation.

1.6.6. (Added) (MAFB) **The 42d Aeromedical Dental Squadron (ADOS).** Oversees the overall heat stress program outlined in AETCI 48-101.

1.6.6.1. (Added) (MAFB) The Bioenvironmental Engineering (BE) (42 ADOS/SGGB), Public Health, and Flight Medicine (42 ADOS/SGGF) flights collaborates with unit commanders and supervisors to ensure the success of the program.

1.6.6.2. (Added) (MAFB) The Occupational Health Working Group (OHWG) reviews heat illness cases from PH and determine a means of awareness, prevention, and management at each workplace.

1.7. (Added) (MAFB) The Base Command Post (42 ABW/CP) records WBGT measurements when provided by BE and provides this information to supervisors requested.

1.8. (Added) (MAFB) The Base Fitness Center (42 SPTG/SVMP) personnel posts appropriate flags during normal duty hours, Monday through Friday, 0800 to 1800, to inform fitness center patrons of the latest heat conditions.

10. (Added) (MAFB) WBGT Monitoring:

10.1. (Added) (MAFB) BE maintains an automated WBGT monitoring system during the hot season, which allows users to obtain the WBGT index at any time by calling 953-WBGT (9248). The hot season is defined as the time when the outdoor high temperature is 85°F or greater, approximately 15 April – 15 October. Supervisors and trainers of personnel working outdoors are expected to get an update of the WBGT index at least every two hours, on days with a forecasted high of 85°F or greater, and hourly when the WBGT index is 85°F or greater. The automated remote sensing unit is maintained outdoors at Maxwell AFB's Fire Station (Bldg. 1092).

10.2. (Added) (MAFB) When the automated system is unavailable, BE is responsible for monitoring the WBGT at Maxwell AFB during normal duty hours, Monday through Friday from 0800 to 1800, according to AETCI 48-101, paragraph 2. The location of the alternate site is outdoors on the northeast corner sidewalk of Maxwell AFB's Ambulatory Health Care Clinic (Building 760). It is placed on a tripod, under direct sunshine, not shielded from the wind, and at a height of approximately four feet above the ground to achieve optimum accuracy. BE also monitors WBGT outside normal duty hours in hot weather during disaster responses, utility outages, or similar urgent activities.

10.3. (Added) (MAFB) Organizations that conduct routine operations in hot environments outside these normal duty hours or in remote locations are responsible for measuring the WBGT themselves, with annual training and certification provided by BE. Organizations that infrequently require WBGT measurements during non-duty hours request support from BE at least 48 hours in advance or as soon as possible for unplanned urgent activities. All organizations conducting monitoring of WBGT are required to have a site-specific operating instruction (OI), which are provided annually to BE for review no later than 31 March (before the hot season begins).

10.3.1. (Added) (MAFB) Although Gunter Annex is several miles from Maxwell AFB, the WBGT measurements taken at Maxwell AFB is used to plan activities in the heat.

10.3.2. (Added) (MAFB) Officer Training School (OTS) Vigilant Warrior site, located at Lake Jordan, is a remote location that requires WBGT monitoring. This is performed by trained and certified OTS personnel.

10.3.3. (Added) (MAFB) A justification for operating other remote monitoring locations is forwarded to 42 ADOS/CC for approval by the unit's Squadron Commander or equivalent. The justification must be received at least 2 weeks before monitoring is planned to begin to enable Bioenvironmental Engineering to review the OI and conduct certification training.

10.4. (Added) (MAFB) BE utilizes a heat stress monitoring instrument to monitor the WBGT Index. Acquisition (via purchase or rent) and maintenance of heat stress monitoring instruments are the responsibility of the unit conducting the measurements. The unit is responsible for consulting BE on the purchase of a WBGT monitoring instrument. Calibration of all WBGT measuring instruments is performed by the manufacturer and at the manufacturer's recommended frequency. When necessary, devices may be borrowed on a short-term basis from BE on completion of WBGT Monitoring training and certification.

10.5. (Added) (MAFB) Manual monitoring ceases when the WBGT is below 85°F at 1600 or later; when the outdoor temperature drops below 80°F; or when the weather becomes inclement (heavy rain, high winds, etc.). If hot weather conditions return before 1600, monitoring is resume. The WBGT measuring instrument must be removed and stored in a secured location when the weather becomes inclement or when the monitoring is terminated for the day.

10.6. (Added) (MAFB) At remote locations, the WBGT measuring instrument is set up at least 30 minutes before the anticipated start of activities. Measurements are taken hourly, or at 30-minute intervals if an increased level of observation is warranted.

10.7. (Added) (MAFB) Documentation of all WBGT measurements is recorded on a data log indicating: date, time of reading, wet bulb, black globe, and dry bulb temperatures, WBGT index, reported flag condition, the initials of the person performing the monitoring, and any comments necessary. Results from remote locations are maintained by the unit measuring the WBGT and provided to BE in electronic format within 2 normal duty days of collection. BE maintains the master record of WBGT measurements for the base.

11. (Added) (MAFB) **WBGT Notification:**

11.1. (Added) (MAFB) During normal duty hours, organizations routinely calls the automated system to obtain the WBGT when outdoor temperatures reach or exceed 85°F, and will pass the information to supervisors and trainees as necessary. When the system is inoperable, BE notifies the organizations of the WBGT index via a conference call. The conference call number during normal duty hours is 953-9666. The organizations on the WBGT Conference Call list are as follows:

42 ABW Command Post	953-7333
908th AW Command Post	953-2717
42 CES EMCS	953-4143
CDC-Maxwell	953-6667
42 CES Orderly Room	953-6046
42 CES Customer Service-Gunter	416-4045
42 SFS Desk Sergeant	953-7222

42 Services Division	953-5078
42 Comm Focal Point	953-7091
Ritchey Leadership Center	953-7545
OTS (Main CQ)	953-9390
OTS (VW Flight)	953-6256
OTS (COT)	416-1598
CDC-Gunter	416-3185
Youth Center-Maxwell	953-6292
Youth Center-Gunter	416-6507
42 TRNF Vehicle Dispatch	953-5038
Gym-Gunter	416-1251
Gym-Maxwell	953-5953

NOTE: Since all of the above organizations will engage in a conference call, do not connect automatic answering machines to these extensions, or forward this extension to another line with an answering machine. The expectation is that the organization participating in the WBGT conference call will answer the telephone call.

11.2. (Added) (MAFB) Flag conditions are displayed by the following organizations at their locations: OTS/22TRSS (centrally located between Buildings 1485, 1487, 1488), the Maxwell Fitness Center (Bldg 841), and the Gunter Fitness Center, Gunter Annex (Bldg 800).

11.3. (Added) (MAFB) Other organizations that require the current WBGT Index or reported flag condition when the automated system is inoperable contact the Command Post on an as-needed basis. If the information is needed routinely, a written request to be added on the WBGT Conference Call list in paragraph 11.1 is submitted to 42 ADOS/CC by the squadron commander and BE ensures that the organization is added.

12. (Added) (MAFB) **Modification of Outdoor Activities:**

12.1. (Added) (MAFB) For planning purposes, anticipate Red Flag conditions (WBGT index of 88 °F) to occur from 1000 – 1800 approximately half the days from 1 June – 31 August, and Yellow Flag conditions (WBGT index of 85 °F) to occur all other times from 0900 to 1800 during 15 April – 15 October. Anticipate black flag conditions an average of 20 days per year, during July and August.

12.2. (Added) (MAFB) Commanders of education and training organizations establishes written policy regarding heat stress prevention, including who is authorized to reduce or suspend outdoor physical activities, when flag conditions warrant. The policy should identify high-risk activities by name (such as “PFT,” “Project X,” “Confidence Course,” etc.) and recommend actions based on the reported flag condition. This written policy can be in the form of training aids, briefing materials, OIs, or other effective formats. The policy is reviewed by Bioenvironmental Engineering as part of its routine monitoring program.

13. (Added) (MAFB) **Medical Support for Unique Training Situations or Outdoor Activities:** Independent Duty Medical Technicians (IDMTs) are available during field training

exercises for officer trainees and instructors. The IDMTs are assigned to the 22d TRSS and provide medical support as needed.

14. (Added) (MAFB) **Other Procedures:**

14.1. (Added) (MAFB) Public Health (42 ADOS/SGGM) establishes procedures to evaluate trends in heat related illnesses, and documents the procedures in written format, such as an OI. At a minimum the procedures include: collection of data from all heat related illnesses occurring on Maxwell AFB, breakdown of data into logical work environments that warrant monitoring for heat related illnesses, tracking of the illness rate by work environments with reporting to appropriate levels of command on a routine basis, and establishment of an illness rate that will trigger an investigation of a work environment for ways to reduce the illness rate.

14.2. (Added) (MAFB) The Yellow Team (42MDOS/SGOLF) establishes procedures for how clinical providers and medical technicians notifies course supervisors of trainees that are at increased risk of heat stress disorder due to an illness or medication, and documents the procedures in written format, such as an instruction.

14.3 (Added) (MAFB) Occupational Health Working Group (OHWG) will be responsible for developing and maintaining a Training Aid for use by training instructors who supervise trainees exposed to hot environments. The Training Aid summarizes important information to assist instructors with compliance with AETCI 48-101 and this Supplement. BE makes the Training Aid available in electronic format for easy reproduction to all training schools on the base as part of pre-season training and education efforts. Commanders of training courses ensures that the information on the Training Aid is distributed to all applicable instructors. The OHWG also is responsible for developing and maintaining a Heat Stress Fact Sheet for use by supervisors of permanent party personnel who are exposed to hot environments. The Fact Sheet summarizes important information to assist supervisors with compliance with AETCI 48-101 and this Supplement. BE distributes the Fact Sheet to workplaces as part of its routine monitoring program.

14.4. (Added) (MAFB) For purposes of compliance with AETCI 48-101 and this supplement, permanent party training instructors exposed to hot environments in a training context complies with the same guidelines as trainees.

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