

Heat Stress Monitoring **Guide**



MONITORING MADE EASY

Australia's leading provider
of workplace monitoring
solutions and equipment

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HEAT STRESS MONITORING GUIDE

AES provides an extensive range of physiological monitoring equipment to help identify and reduce heat stress in the workplace. Our equipment assists in monitoring worker well-being including core body temperature, activity level, and hydration status.

Heat Shield

The LSI Lastem Heat Shield WBGT monitor is an essential tool for the health and safety professional in their evaluation of the environment for risks relating to heat stress. Its compactness, ruggedness and ease of use, make the Heat Shield the ideal solution for everyday monitoring in both indoor and outdoor harsh working environments.

- Measures globe temperature, wet bulb temperature, dry bulb temperature and relative humidity
- Quick, reliable and accurate assessment of indoor and outdoor WBGT index
- Built-in radio technology for simultaneous, wireless monitoring in different locations/heights
- Predicted Heat Strain (PHS) calculations





Equivital

Equivital leverages data sent from an intrinsically safe version of EQ02 LifeMonitor, worn on the body, to provide real-time safety, welfare and location information of workers within a facility. This information is sent using Radio/Satcom/GSM/GPRS/WiFi and can be viewed by key personnel locally or remotely.

- Displays heat stress, safety and performance monitoring in real-time
- Includes interactive map for location tracking
- Customisable analytics and after-action review
- Track and predict heat injury
- Designed for long term wear
- ATEX/Intrinsic safety approvals



Equivital Black Ghost



CorTemp®

CorTemp® Ingestible Core Body Temperature Sensor wirelessly transmits accurate core body temperature reading as it travels through the digestive tract. The sensor's signal passes harmlessly through the body to the CorTemp® Data Recorder worn on the outside of the body.

Core body temperature and heart rate are two of the most objective measures for heat stress. The CorTemp™ wireless Core Body Temperature/Heart Rate Monitoring system delivers both with the highest degree of accuracy, comfort and ease of use.

- Wireless monitoring of core body temperature
- Accurate sensor results within $\pm 0.1^{\circ}\text{C}$



CorTemp®

Kenzen

Kenzen Patch™ is a small flexible device that provides safety monitoring of key physiological indicators for workers. Worn during the work shift, personalised health insights and notifications will be received to help you stay safe in the most strenuous scenarios.

The sensor technology and programmed algorithms provide real-time feedback on performance, motion and vitals.

- Real-time reporting of heart rate, sweat rate, body temperature and activity
- View personal trends and historic reports
- Real-time alerts with OSHA-based follow-up recommendations
- Add flags to capture important health events



Kenzen Patch

Kenzen Dashboard

HydraTrend™

HydraTrend™ Test Strips are intended for self-monitoring of urine pH and specific gravity for hydration status monitoring.

Hydration test kit results are easy to read by simply comparing the results on the test strip to the colour chart on the bottle.

- Convenient and easy to use
- Quick feedback on hydration status which can be used to adjust fluid intake
- 30-60 second results



Real-time Outdoor Heat Stress Monitoring System

LSI LASTEM has developed a weather station suitable for WBGT index permanent real-time monitoring for the health and safety of workers in severe outdoor high thermal stress conditions.

The system consists of sensor, data logger and mounting accessories, for the measurement of air temperature, relative humidity, radiant temperature and wet temperature (other meteorological sensors are available).

- Automatic Weather station including sensors for WBGT calculation: wet temperature, globe temperature, air temperature (and RH%). Other meteorological sensors are available
- Permanent and real-time system
- Real-time dashboard





Checklist for risk-managing heat in the workplace

Risk factors to consider:

- Are ambient conditions hot?
- Are days and nights hotter than usual?
- Is it humid?
- When is work done?
- How often can workers take breaks somewhere cool?
- Is there air movement or a breeze?
- Is the work intense or long?
- Are workers physically fit and acclimatised?
- Do workers wear hot clothing (including PPE)?
- Are the workers qualified, trained and experienced?
- (If known) do workers have medical conditions?
- Is there cool drinking water or electrolyte drinks on hand?

** Info referenced from Safe Work Australia*

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