# Basic Thermal Comfort Risk Assessment for Outdoor Work

It is important to note that that this assessment is to be used as a guide only. A number of factors are not included in this assessment such as employee health condition and the use of high levels of PPE (particularly impermeable suits). In these circumstances experienced personnel should carry out a more extensive assessment.

|  |  |  |
| --- | --- | --- |
| Criteria | For each row choose the applicable statement and enter the score in the score column (1, 2 or 3) |  |
|  | **1** | **2** | **3** | **Score** |
| Hot surfaces | Contact neutral | Hot on contact | Burn on contact |  |
| Exposure period | < 30 min | 30 min - 2 hours | > 2 hrs |  |
| Confined space | No |  | Yes |  |
| Task complexity | Simple | Moderate | Complex |  |
| Climbing, ascending, descending | None | Moderate | Significant |  |
| Distance from cool rest area | <50 Metres | 50-100 Metres | >100 Metres |  |
| Distance from drinking water | <30 Metres | 30-50 Metres | >50 Metres |  |
| Clothing (permeable) | Single layer (light) | Single layer (mod) | Multiple layer |  |
| Understanding of heat strain risk | Training given |  | No training given |  |
| Air movement | Windy | Some wind | No wind |  |
| Resp. protection: (-ve pressure) | None | Half Face | Full Face |  |
| Acclimatization | Acclimatised |  | Unacclimatised |  |
|  |  |  |  |  |
| Total A |  |  | **Total (add scores)** |  |
|  | **2** | **4** | **6** |  |
| Work Rate (B) | Light | Moderate | Heavy |  |
| Add A and B |  |  | **Total A + B = C** |  |

WGBT temperature can be viewed on the [Bureau of Meteorology website](http://www.bom.gov.au/products/IDV65079.shtml) (<http://www.bom.gov.au/products/IDV65079.shtml>) for most areas of Victoria.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | Score |
| Wet Bulb Globe Temperature (WBGT) (D) | < 24 C | > 24 – 27 | > 27 – 30 | > 30 |  |
|  |  |  |  |  |  |
| FINAL SCORE |  |  |  | **Total C X D** |  |

|  |  |
| --- | --- |
| Work Rate | Description |
| Light work: | Sitting or standing to control machines; hand and arm work assembly or sorting of light materials |
| Moderate work: | Sustained hand and arm work such as hammering, handling of moderately heavy materials |
| Heavy work | Pick and shovel work, continuous axe work, and carrying loads up stairs |

If the total is **less than 28** then the risk due to thermal conditions are low to moderate.

If the total is **28 to 60** there is a potential of heat-induced illnesses occurring if the conditions are not addressed. Further analysis of heat stress risk is required and ‘general control’ measures should be considered (refer to Section 5.3 of the Outdoor Work Standard).

If the total **exceeds 60** then the onset of a heat-induced illness is very likely and action should be taken as soon as possible to implement controls. . Please contact [Health, Wellbeing and Safety](https://www.deakin.edu.au/about-deakin/faculties-and-divisions/administrative-divisions/human-resources-division) (HR) or your local OHS officer.