# Fact Sheet Heat Stress An Indoor and Outdoor Concern Sex-Based Differences

This fact sheet outlines some **general differences in heat regulation between women and men.** The following information is not universally applicable but rather gives an overview of the more common trends in male and female physiology.



**Body Size** 



Fat & Muscle Composition



**Menstrual Cycle** 

## Factor

# Recommendation

### **Body Size**

People with **bigger bodies** (often men) are more likely to rely on sweating to help with cooling. This puts them at a **higher risk of dehydration.** 

People with **smaller bodies** (often women) are more likely to have their blood vessels dilate in order to dispel heat and cool the body. This puts them at a **higher risk of low blood pressure**, which may induce nausea, lightheadedness, and other related symptoms.







- Stay hydrated
- Drink electrolytes
- Wear PPE that allows for evaporation



- Be aware of low blood pressure symptoms
- Take extra precautions if feeling
  unwell





## Factor

#### Fat & Muscle Composition

Generally, women tend to have a higher composition of fat tissue than men, which absorbs less heat than muscle. This means that their body temperature will rise faster compared to someone with a lower body fat percentage, which has implications for workers who must adapt to high temperature environments.



## Recommendation

Heat acclimation involves repeated exposure to high temperatures, allowing the body to adapt.

 Women may require longer to adapt to high temperatures (up to twice as long compared to men)



#### **Menstrual Cycle**

People who experience a menstrual cycle tend to have a higher resting body temperature during their luteal phase (phase between ovulation and menstruation). During this phase, heat stress indicators such as sweating or shivering happen at a higher body temperature than during the rest of the menstrual cycle. This higher body temperature in the luteal phase could put the person at higher risk of heat illness.  Take extra precautions during the luteal phase (approximately day 14 - day 28 of the menstrual cycle) to avoid heat stress





For other infographics in this series, or to learn more about working in the heat, see our Heat Stress Toolkit:

