

HEAT ACCLIMATION

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Heat acclimation, or the gradual increase of work in a hot setting, is essential to preventing heat-related injury. As the outdoor temperature starts to rise, firefighters should gradually increase their exposure to hot environments over a 7-14 day period.

PHYSIOLOGICAL ADAPTIONS

That improve the body's ability to handle heat stress

	Decreased Heart rate Body temperature Sweat electrolyte loss		Increased Sweat rate Blood flow Physical performance
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Exposure to extreme heat and physical exertion can activate platelets and impair vascular function - which can lead to a cardiac event. These physiological adaptations to acclimation may reduce the chance of a cardiovascular event.

PREPARING FOR HEAT ACCLIMATION



Stay hydrated throughout the day, aiming for a minimum of 125 oz of fluid daily.



Hydrate well during exercise with 8-10 oz every 15 minutes with water, LiquidIV, or sports drink.



Wear breathable clothing that expels heat and sweat when exercising.



Take regular breaks to rehydrate and prevent overheating.

ACCLIMATION TIPS

Typically, acclimation requires at least two hours of heat exposure per day (which can be broken into two, 1-hour periods) over 7-14 days.

Acclimation can occur faster for those who participate in a consistent strength and conditioning program.

Exposure can include outdoor warmups, workouts, cool-downs, walks, or even outdoor drills.

Stay committed. After 1 month away from work in the heat, most people's heat tolerance will have returned to baseline.

SIGNS OF HEAT STRESS

Heat stress is a series of conditions where the body is under stress from overheating.

- Headache
- Nausea
- Irritability
- Thirst
- Disorientation

Prevent heat stress with regular water breaks and appropriate clothing. Stop activity and seek shade or air condition if the above symptoms occur.

