

# EXERTIONAL HEAT & HYDRATION GUIDELINES

Middle School Athletics | NFMSS Member School Reference

## WHY THIS MATTERS

Exertional heat stroke (EHS) is one of the leading causes of sudden death in young athletes. Middle school athletes are at particular risk due to a lower sweat rate, higher surface-area-to-body-mass ratio, and frequent under-reporting of symptoms. Early recognition and immediate cooling save lives.

## HEAT INDEX ACTIVITY MODIFICATION GUIDELINES (Based on WBGT / Heat Index)

Use a sling psychrometer or WBGT device for accurate readings. In absence of a device, use local heat index.

Heat Index (°F)	WBGT Approx.	Risk Level	Required Actions
< 80°F	< 18°C	<b>Low</b>	Normal practice; provide water breaks every 30 min.
80–90°F	18–23°C	<b>Moderate</b>	Water breaks every 20 min; watch for early symptoms; shorten practice if needed.
90–100°F	23–28°C	<b>High</b>	Mandatory water breaks every 10–15 min; reduce intensity; allow rest in cool area.
100–104°F	28–31°C	<b>Very High</b>	Limit activity to 1 hour; NO conditioning drills; cancellation strongly recommended.
> 104°F	> 31°C	<b>EXTREME — Cancel</b>	Suspend all outdoor athletic activity immediately.

## HYDRATION PROTOCOLS

<b>Before Practice</b>	Athletes should arrive well-hydrated. Drink 16–20 oz of water 2 hours before activity. Avoid caffeinated or energy drinks.
<b>During Practice</b>	Provide 6–8 oz every 15–20 minutes at minimum. During high-heat conditions, increase to every 10 minutes. Encourage athletes NOT to wait until thirsty.
<b>After Practice</b>	Replace 24 oz of fluid for every pound lost during activity. Weigh athletes before/after in high-risk conditions. Sports drinks with electrolytes are appropriate for sessions over 60 minutes.
<b>Urine Color Check</b>	Pale yellow = well hydrated. Dark yellow = mildly dehydrated. Amber or brown = seriously dehydrated; remove from activity and consult medical staff.

## RECOGNIZING HEAT ILLNESS — KNOW THE DIFFERENCE

Condition	Signs & Symptoms	Immediate Action
<b>Heat Cramps</b>	Muscle spasms, usually legs or abdomen	Rest in cool area; stretch/massage; fluids with electrolytes
<b>Heat Syncope</b>	Fainting or near-fainting; pale skin; low pulse	Lie flat; elevate legs; cool athlete; monitor; call parents

# EXERTIONAL HEAT & HYDRATION GUIDELINES

Middle School Athletics | NFMSS Member School Reference

<b>Heat Exhaustion</b>	Heavy sweating; weakness; cool/pale/moist skin; rapid weak pulse; nausea; possible vomiting;	Remove from play, cool with possible fans; give fluids if conscious
<b>Heat Stroke</b>	<b>HIGH body temp (103°F+); HOT/RED/DRY or damp skin; rapid pulse; confusion; possible unconsciousness</b>	<b>CALL 911 IMMEDIATELY. Cool-water immersion NOW. Do NOT wait for EMS.</b>

## ACCLIMATIZATION GUIDELINES FOR PRESEASON

Days 1–5: Helmets only (if applicable); single practice; 3-hour max. Days 6–10: Shoulder pads added; still single practice. Days 11+: Full equipment and two-a-days permitted ONLY after 10-day acclimatization period. Athletes who miss 5+ days must restart acclimatization. These guidelines apply to ALL NFMSS-affiliated preseason programs regardless of sport.

Source: NATA, NFHS, and American College of Sports Medicine (ACSM) guidelines.