

Council Program Guidelines: Regarding Response to Adverse Heat and Humidity Conditions

INTRODUCTION

Situations intermittently exist during council program activities, including summer camp, where adverse health outcomes may occur due to high heat and humidity (H&H). These guidelines address various factors related to H&H conditions that require special attention. Specifically, the guidelines address determination of H&H conditions, routine proactive actions to avoid adverse health outcomes, a tiered warning and response system, individual actions to avoid adverse effects of H&H, and reporting and review of incidents where adverse health outcomes occur.

GENERAL CONSIDERATIONS

Temperature, relative humidity, level of activity, and hydration combine to impact the risk for adverse health outcomes. Attention to all of these variables is essential for an effective plan. These guidelines are not prescriptive, but should help manage the risk for heat exhaustion, heat stroke, dehydration, and other heat-related injuries.

APPLICABILITY

An H&H plan should be used in any council (and potentially district and unit) program (e.g., summer camp, strenuous outdoor activities) when excess H&H raise the risk of adverse heat illnesses. The responsibility for the development and implementation of this plan should rest with the council's professional program staff, the council program committee, and the council health and safety/enterprise risk management committee.

DETERMINATION OF RISK FOR ADVERSE HEALTH OUTCOMES RELATED TO EXCESSIVE H&H

The H&H risk table found in Appendix A at the end of this document and on scouting.org at www.scouting.org/filestore/pdf/680-022.pdf is the basis for detection of heightened risk from excessive H&H. This table is applicable to all Scouting programs, and councils should ensure education of leaders about risk and response to excessive H&H. Councils where areas of "red" risk occur several times a month during warm weather and councils where "black" levels of risk occur even once a month during the summer should develop an H&H plan specific to their council sites and programs. The council health and safety committee may be a resource for plan development. Once such a plan is developed, it should be shared with Scouting units so each unit has enhanced awareness of the risk and response to excess H&H.

In virtually every area of the country, relatively accurate predictions of both heat and humidity are available on at least a daily, if not an hourly, basis. Prediction of the level of risk of various H&H conditions should be assessed by council program leaders regularly (e.g., daily or possibly multiple times per day in especially warm or humid weather) during times of the year when adverse conditions may exist. If adverse H&H conditions exist, a plan should be in place to preemptively decrease health risk. The plan should include response to heat advisories issued by authorities, but should not rely solely on such advisories for activity planning.

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PROACTIVE ACTION SUGGESTED TO AVOID ADVERSE OUTCOMES

H&H Detection and Warning System

Council program and camp leaders should develop a specific, written plan including a detection, warning, and response system. This plan should be widely publicized. Once adverse H&H conditions are present, leaders should implement the plan. Plan components should include the following:

- Identification of a specific event program leader who is responsible for implementing the plan.
- A detection system for excess H&H. This detection can be predictive (with times of highest risk determined via a forecast from a recognized weather forecasting service—NOAA.gov, Weather.com, etc.) versus a concurrent detection plan (where risk is determined by actual onsite measurement of both heat and humidity in a frequent and repetitive fashion over the course of a day).
- The detection system should determine specific times when the H&H index is within “yellow,” “red,” or “black” ranges.
- A preemptive plan of hydration, sunscreen, and hat/head protection to be used at times when the H&H index is in the yellow (or higher) range.
- An event- or areawide notification plan to alert all program areas and all Scouts and Scouters that a “risk” situation exists.
- A warning system that is adequate, recognizable, and available to all program areas. For example, radio communication with all program leaders may suffice. Alternatively, a system of risk-coded colored flags (green, yellow, red, and black that correspond to the heat index table referenced above) might be in each program area to announce the relative H&H risk.
 - If early prediction of adverse H&H conditions is possible (e.g., the morning of the day when the afternoon temperature is predicted to be excessive), an announcement to leaders and Scouts should be made and plans to adjust activities put into place.
 - If adverse H&H conditions are anticipated, education of the Scouts and leaders about both the warning system and the necessary response is advised.
 - Care should be taken to ensure that remote or extreme program areas are notified and able to adequately respond as well.
- A response plan to adverse H&H conditions is essential. The response plan should at the least include the following:
 - Description of the warning system.
 - Guidelines as to the limitation of activity.
 - Hydration guidelines.
 - Discussion of leadership response to unplanned or non-program situations where Scouts might be at risk for adverse consequences of excess H&H conditions. Examples of this might include unscheduled and spontaneous games (for example, Frisbee), waiting lines for the Scout shop, etc.
 - Discussion of the potential for moving activities to an area where the conditions are less adverse (e.g., to the shade, to a covered or indoor area, or to an area where there is less risk, as in moving swimmers from the dock to the water).
 - Discussion of the termination of the dangerous H&H conditions.
- Camp and/or program staff should be educated on all facets of the plan.

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- Once such a plan is developed, unit leaders who will be coming to camp should be informed of the information related to the H&H plan and problem prevention.
- In areas where adverse H&H conditions occur predictably, leaders and Scouts should be informed of the upcoming risk on a regular basis. For example, breakfast and lunch meal formations or daily leadership meetings, etc.

Routine or Preventive Actions

These actions are ones that can be taught and used to prevent the development of poor outcomes. Examples of these preventive actions include:

- Assuring that program staff, unit leaders, and youth have current first-aid training that includes prevention, symptoms, and treatment for heat injury.
- Wearing light clothing and hats on days when risk is high (red or black level).
- Assuring the availability of water and regular program area reinforcement of water drinking.
- Personal urine checks to assure color, volume, and frequency are adequate. (See Appendix B or the website www.scouting.org/sitecore/content/home/healthandsafety/alerts/heat_index.aspx.)
- If unit leader meetings are a part of the camp/council's routine, then these actions should be reinforced regularly at these meetings.
- An education plan related to adverse situations should be developed and discussed at council camp, district, and training events during other (non-risk) times of the year.
- Consideration of sun protection/sunscreen use.

Specific Actions to Consider During Conditions of Highest Risk

- The program director should develop a plan for decreased or time-limited program activity or even program cessation in response to specific H&H conditions.
- The program director should develop and communicate a plan for enhanced water consumption and sun and heat protection. This plan should be part of the local educational programming/training for Scouts and leaders.
- The program director or designee should tour the camp during periods of highest risk to assure that Scouts between program areas and in unsupervised areas of the program area are aware of the risk and have access to water as well as protection from the heat/sun.

REPORTING AND REVIEW OF ADVERSE OUTCOMES

In conjunction with the BSA policy on incident reporting, any adverse heat reactions requiring medical intervention should be submitted as a reportable incident to the council leadership and from there to the BSA's national Health and Safety Support Committee. Life-threatening heat-related incidents or any clustering of more minor incidents should be reviewed as soon as possible to determine if any adjustments to the current H&H plan are needed to prevent similar occurrences.

Treatments for noncritical heat reactions logged in camp first-aid records should also be reviewed regularly during periods of highest risk, and if excess incidents occur, an acute intervention plan implemented. The council health and safety committee and/or the camp health officer may be a

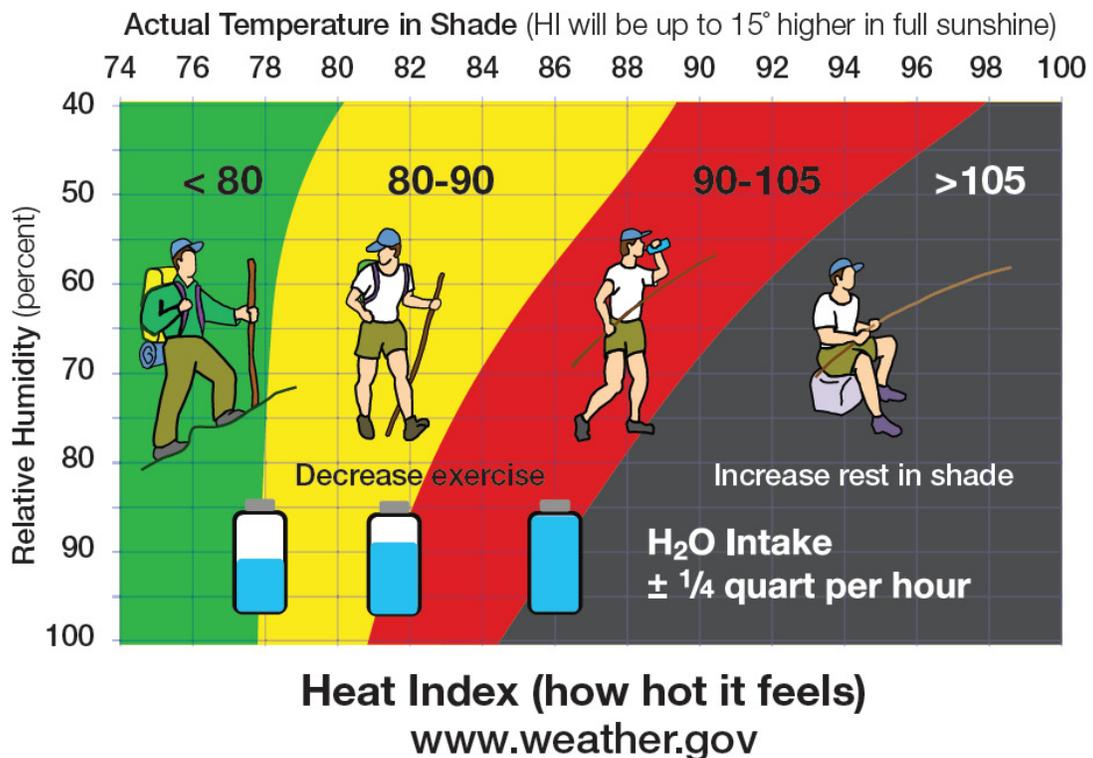
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resource for plan development and for adverse incident review. Generally, heat illness protocols should be available in the health lodge protocols of most camps.

REFERENCES

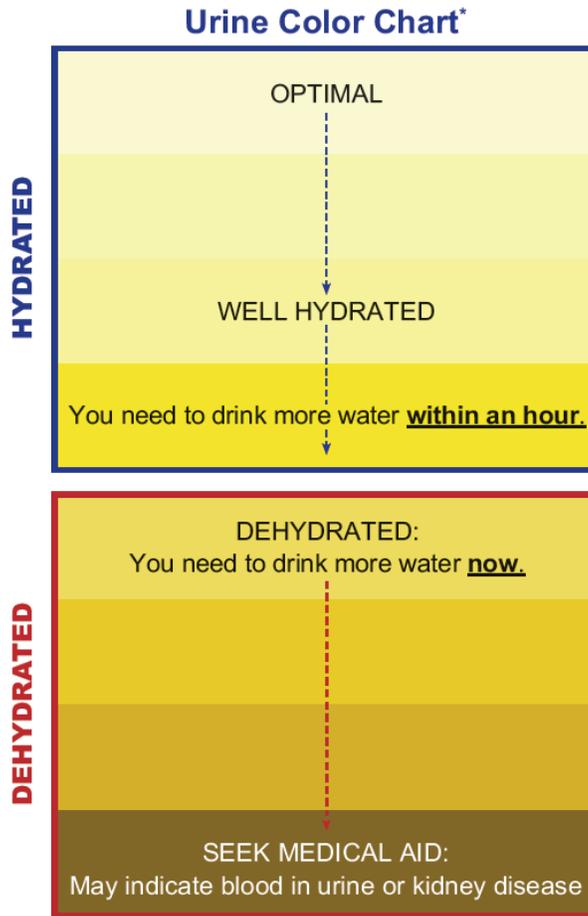
- Heat index:
 - www.weather.gov
 - www.scouting.org/filestore/pdf/680-022.pdf
 - www.scouting.org/sitecore/content/Home/HealthandSafety/Alerts/heat_index.aspx
- For urine color chart:
 - www.scouting.org/filestore/pdf/680-022.pdf
- For weather forecasting websites:
 - www.weather.gov
 - www.nws.noaa.gov/os/heat/index.shtml
- General information:
 - www.scouting.org/sitecore/content/Home/HealthandSafety.aspx

Appendix A: Heat and Humidity Chart



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Appendix B: Urine Color Chart



*This color chart is not for clinical use.

Appendix C: Best Practice Guide

- “Don’t be a hothead” project: Wear a wet cotton bandanna on your head during orange or red conditions.
- “Toasting” with mandatory water drinking as Scouts enter and leave program events.
- Bandannas and water bottles imprinted with the heat and humidity response graph for sale in the local Scout shop.
- Requirement that each Scout and leader have a water bottle visible at all program events.
- Water/ice available routinely at each program event area.