Medical Risk Factors for Your Participation in Scouting

Scouting can be physically and mentally demanding. Environmental, emotional, or physical demands may push the limits of one's ability to deal with problems. This can result in worsening of preexisting medical or mental health conditions. To help its members Be Prepared, the Boy Scouts of America recommends that everyone who participates in a Scouting activity have an annual medical evaluation by a certified and licensed health-care provider: a physician (MD or DO), nurse practitioner, or physician assistant. If you are on medications, these should be continued while you are at Scouting events. Be certain that the event leader knows about all of your current medications. Based on the vast experience of the medical community, the BSA has identified risk factors that could become issues during weekend camping, hikes, treks, tours, or other activities. If you have any of the risk factors on this list, it means that you may have an increased chance of having problems while at a Scouting event. Therefore, someone else, preferably the event leader, should know about your risk status. Completing the Annual Health and Medical Record (AHMR), having a discussion with your health-care provider regarding the types of activities you will be participating in, and sharing your current health information with adult leaders who will be joining you on these activities will help to keep you and everyone healthy and safe.

Become familiar with the following risk factors to ensure all Scouts and Scouters are prepared.

Excessive Body Weight (Obesity)

Excessive body weight increases the risk for numerous health problems. To ensure the best experience, Scouts and Scouters should be of proportional height and weight. One such measure is the Body Mass Index (BMI), which can be calculated using a tool from the Centers for Disease Control (Reference 1). Calculators for both adults and youth are available. Adults with a BMI of 30 or greater should consult with their health-care provider prior to participation in Scouting events. It is recommended that youth fall within the fifth and 85th percentiles. Those in the 85th percentile or above are at risk and should work to achieve a higher level of fitness.

Cardiac or Cardiovascular Disease

These include

- » Angina (chest pain caused by blocked blood vessels or supplying the heart)
- » Myocardial infarction (heart attack)
- » Heart surgery or heart catheterization (including angioplasty to treat blocked blood vessels, balloon dilation, or stents)
- » Stroke or transient ischemic attacks (TIAs)
- » Claudication (leg pain with exercise, caused by hardening of the arteries)
- » Family history of heart disease or a family member who died unexpectedly before age 50
- » Heart failure
- » Smoking

Youth who have congenital heart disease or acquired heart disease such as rheumatic fever, Kawasaki's disease, or mitral valve prolapse should undergo a thorough exam.

Hypertension (High Blood Pressure)

Scouts and Scouters should have a blood pressure lower than 130/85. Persons with significant hypertension (>140/90) should be under treatment, which often requires medication, and their condition should be under control. If participating in a Scouting event that is physically demanding, it is recommended that hypertension be under control in the six months prior to the date of the event. The goal of the treatment should be to lower blood pressure to normal levels (Reference 2). Those already on antihypertensive therapy with normal blood pressures should continue treatment and should not choose the time they are at any Scouting event to experiment with or change medications.

Diabetes

Any individual with insulin-dependent diabetes mellitus should be able to self-monitor blood glucose and know how to adjust insulin dose based on activity, meals, or other factors — or be accompanied by a guardian that is knowledgeable in these matters. The individual with diabetes and/or the guardian should also know how to administer a self-injection/injection and recognize signs of high and low blood sugar. If planning on participating in an overnight experience of any kind, bring enough medication, testing supplies, and equipment for the entire Scouting event. This includes batteries for pumps or blood glucose monitors (without the need for recharging) to be both brought to and taken away from the event (remember Leave No Trace guidelines). With change in exertion levels and diet while camping, hiking, or involvement in other strenuous activities, glucose levels may need to be checked more frequently.

An insulin-dependent individual who desires to participate in a physically demanding Scouting event should reconsider participation if they have been newly diagnosed (within six months of the fitness examination) or undergone a change in their insulin delivery system (e.g., an insulin pump) in the same period. This also applies to an individual who has been hospitalized for treatment of diabetes or has had problems with low blood sugar in the last year.

All individuals with diabetes, including non-insulin-dependent diabetics, may be susceptible to foot problems because of poor circulation and/or nerve problems causing decreased sensation in the feet. When camping, it is particularly important that well-fitting boots or shoes be worn; socks be clean and changed daily; and feet be examined at least daily — if not more often — for blisters, sores, bruises, and foreign bodies such as thorns (Reference 3, 4).

Seizures (Epilepsy)

Seizure disorder or epilepsy should be well-controlled by medications if an individual desires to participate in a physically demanding Scouting event. A minimum of six seizure-free months prior to the fitness examination is considered under control. Participants with a history of seizures need to limit high-adventure activities (e.g., climbing, rappelling, and scuba diving).

Asthma

Acute or severe bronchial asthma under treatment anytime during the past 24 months should be well-controlled before participating in physically demanding Scouting events. Key indicators of well-controlled are:

- » The use of a rescue inhaler no more than twice a week.
- » No need for nighttime treatment with a rescue inhaler.

Well-controlled asthma may include the use of long-acting bronchodilators, inhaled steroids, or oral medications such as Singulair. If the Scouting event is physically demanding, individuals with the following asthma conditions should reconsider participation:

- » Exercise asthma is not controlled by medication.
- » Participant has been hospitalized, or has gone to the emergency room, for asthma treatment in the six months prior to the Scouting activity.
- » Participant has received treatment that required oral steroids (prednisone) in the six months before the Scouting activity.

When participating in any overnight Scouting event, participants must bring an adequate supply of medications, along with a backup supply and spare rescue inhalers. Ensure all medications and inhalers are not expired. Participants must carry a rescue inhaler at all times during any Scouting event.

Sleep Apnea

Scouts and Scouters with sleeping disorders may experience health risks due to long days and short nights for many Scouting events. Individuals with sleep apnea should consult with their health-care provider about the use of their CPAP equipment at a Scouting event. For individuals with sleep apnea, it is suggested that all equipment (e.g., CPAP machine) be brought by the Scout or Scouter for overnight Scouting events. This may include batteries (with or without the need for recharging) to be both brought to and taken away from the Scouting event (remember Leave No Trace guidelines).

Allergies or Anaphylaxis

Scouting events may present several risks (e.g., nuts, pollens, wasps, hornets, and other stinging insects) that could trigger anaphylactic reactions in individuals prone to these reactions. It is recommended that Scouts and Scouters who have had an anaphylactic reaction from any cause contact the appropriate medical personnel of the Scouting event to confirm participation eligibility before arrival, especially if the event includes an overnight experience. Participants will be required to have appropriate treatment (e.g., an EpiPen) with them at all times.

For longer Scouting events such as summer camp, jamborees, and high-adventure programs, allergy shots required for maintenance doses may be acceptable for persons who have not had an anaphylactic reaction. Contact the appropriate medical personnel for the event for confirmation.

Ingrown Toenails, Recent Musculoskeletal Injuries, and Orthopedic Surgery

Many Scouting events put a great deal of strain on feet, ankles, and knees. If the Scouting event is physically demanding, ingrown toenails should be treated at least a month prior to the event. Scouts and Scouters who have had orthopedic surgery, including arthroscopic surgery, or significant musculoskeletal injuries, including back problems, should have a release from the surgeon or treating physician to participate in Scouting events.

Psychiatric/Psychological and Emotional Difficulties

Psychiatric/psychological and emotional disorders do not necessarily exclude an individual from Scouting events. Parents and advisers should be aware that most Scouting events are not designed to assist in overcoming psychological or emotional problems. Experience demonstrates that these problems frequently are magnified, not lessened, when participants are subjected to the physical and mental challenges of many Scouting activities.

Any condition must be well-controlled without the services of a mental health practitioner. Under no circumstances should a participant choose to stop their medication on their own for any of these issues before or during a Scouting activity. If the Scouting event is an overnight experience, Scouts and Scouters are required to bring an appropriate supply of medication for the duration of the event, including travel to and from the event.

Immunodeficiency

Immune deficiency, also known as immune compromise, is when the body's immune system is unable to normally fight infections. Immune deficiency can exist due to some diseases such as HIV or cancer, certain genetic diseases, or malnutrition. It can also be a side effect of steroid medication or medications given for cancer, autoimmune disease, or after-organ transplantation. Camping, particularly wilderness and/or long-term camping, may expose the individual to increased infection risks. The individual should discuss with their health-care provider as to whether their level of immune deficiency requires special precautions or if they should avoid the planned activity altogether (Reference 5).

COVID-19

After initial infection, COVID-19 might cause long-lasting symptoms. Whether initial infection was mild or severe, affected adults and youth might not be able to participate in strenuous activities. Further harm or even risk of death could occur. Participation in strenuous activities should be evaluated in conjunction with a health care provider familiar with both the activity and the long-lasting symptoms of COVID-19. Some persistent symptoms of COVID-19 may include breathlessness, fatigue, trouble concentrating, headache, and muscle aches. If an individual has any of these symptoms following a COVID-19 infection, participation in a strenuous activity or event should be reconsidered.

Other Risk Factors

Sickle-cell anemia, hemophilia, leukemia, severe blood problems, and HIV infection — as well as the need for blood thinners (e.g., coumadin, Eliquis, Xarelto, or Plavix) — provide special challenges to Scouts and Scouters. To plan for, prepare for, and support those having these medical conditions, it is recommended that an individual evaluation of each situation be performed by the appropriate medical personnel.

There may be instances where proper medical support at the Scouting event is impossible. Under such circumstances, participation may be denied. This article is not meant to be comprehensive. For information on any other health issues, contact your personal health-care provider.

References:

- » Centers for Disease Control and Prevention, Body Mass Index: http://www.cdc.gov/nccdphp/dnpa/bmi/
- » Bearfoot Theory, 10 Tips for Hiking With Type 1 Diabetes: https://bearfoottheory.com/diabetes-hiking-tips
- » Healthline, Diabetes Foot Care: https://www.healthline.com/health/diabetes-foot-care
- » CDC Yellow Book 2020. Health Information for International Travel, Chapter 5—Travelers with Disabilities.