



# The Safety Chain

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Kentucky Wing CAP  
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You are the ground team leader and you find one of your members with the following symptoms: weak and unable to continue, increased sweating, a weak but fast pulse, nausea, pale, clammy skin. What heat condition produces these symptoms; heat stroke or heat exhaustion? If you selected heat exhaustion you are correct.

During mission safety briefings I always hear the reminder to stay hydrated. Drink plenty of water. And it is important to stay hydrated. If we prevent heat exhaustion then we can prevent the more serious condition known as heat stroke. But, there is more to preventing heat exhaustion than just staying hydrated. For example, another cause can be wearing tighter and heavier clothing. BDUs are heavier, and they are *not* tight fitting. Members working outside may need to remove their blouse to aid in cooling the body. Another potential cause is the consumption of alcoholic drinks. Well, no one should be on a mission after consuming alcohol. Let's just leave that one alone.

What I don't hear very much are the risk factors that can lead us to heat exhaustion. Does this imply that some people may be more prone to heat exhaustion than others? Yes. For example, how about prescription medications such as diuretics, gout medications, blood pressure med's, and other heart medications. Some blood pressure medications can cause fluid retention so the doctor may prescribe a diuretic which causes you to urinate more (loss of fluids here). This means that you need to drink more. This is only one example regarding medications. Bottom line, there are medications which can cause you to become dehydrated more quickly than normal. If you are unsure how your medication(s) affect the body's ability to regulate temperature be sure to discuss this with your doctor.

Another risk factor is age. Children and infants under four year of age and adults older than 65 can become dehydrated quicker because your body's inability to quickly regulate your body's temperature is more difficult at these ages.

Weight is another factor. People who are over-weight may find it more difficult to cool down. I am not suggesting that over-weight people purposely diet for this reason, but we do need to know your limitations.

Another risk factor is the heat index. Civil Air Patrol, at least in Kentucky and a few other wings, previously had a heat index policy. Heat index is a measurement that factors in humidity along with the outside temperature to determine how hot it feels to you and your body. If the humidity is high you may have a harder time cooling yourself down. If the heat index is greater than 91°F, you should focus on prevention methods. There are several good free apps which can be downloaded to your smart phone for calculating the heat index when given the current temperature and humidity.

Do I see myself in this picture? Yes. I have found myself not being able to tolerate the heat as I was able to some years ago. I am on medications that may be part of the problem. I am about 15 pounds or so over weight, and I am past the age of 65. Now I have a better understanding why and what I need to do to combat heat exhaustion. I recommend that you too make an assessment as I have to evaluate your heat exhaustion potential.

*Semper Vigilans*