The Heat Equation
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Farmers often take for granted the adverse health effects that stress from physical work in hot weather can produce. Continual exposure to high temperature and humidity can cause several specific heat related illnesses.

**Heat Exhaustion** results from prolonged exposure to heat combined with an inadequate intake of water and salt. Symptoms of heat exhaustion include: headaches, dizziness or light headedness, weakness, thirstiness, mood changes such as irritability, confusion or not being able to think straight, feeling sick to your stomach, vomiting, dark colored urine or decreased urine production, fainting and pale clammy skin.

**Heat Cramps** can occur when a large amount of water is consumed without replacing salts (sodium). Low sodium levels can change muscle reactions which can result in weakness or muscle spasms. Additional symptoms of heat cramps include: dizziness, tiredness and vomiting.

**Heat Stroke** is a life-threatening emergency in which an individual has a high body temperature along with the loss or strongly reduced capacity to sweat. Heat stroke typically results from heavy work in a hot environment when the individual is not able to adjust to the high temperatures. Symptoms include: dry pale skin (no sweating), hot red skin that looks like sunburn, mood changes such as irritability, confusion or not being able to make any sense, seizures and collapse or not being responsive.

With all heat related illnesses there are a number of things that should be done to treat an individual’s symptoms. Move the individual to a cool, shady area to rest. If the person is dizzy or light headed they should lie down on their back and elevate their feet. Clothing should be loosened and heavy clothing should be removed. The person needs to drink some cool water; a small cup every 15 minutes if they are alert enough and not feeling sick to their stomach. Individuals that are nauseous need to lie on their side. Attempts should be made to cool the person by fanning them or cooling the skin with a wet cloth or cool spray mist of water. For heat stroke victims if ice is available, ice packs should be placed under the arm pits and groin area. Call 911 for all heat stroke victims and when individuals with heat exhaustion or heat cramps do not begin to feel better after a few minutes of treatment.

It is best to prevent heat related illness by taking several steps to protect yourself as well as your co-workers. Become familiar with signs and symptoms of heat related illnesses as well as what to do to help someone. Perform the heaviest work chores in the coolest part of the day. Slowly build up tolerance to the heat and the work activity; this can take up to 2 weeks. Wear light, loose-fitting, breathable clothing such as cotton. Drink plenty of water, a small cup every 15 to 20 minutes. Remember to take short breaks in a cool shaded area on a frequent basis in order to give your body a chance to cool down. Avoid caffeine and alcoholic beverages while working as these beverages make the body lose water and can increase the risk of heat related illness. Eating large meals before working...
in a hot environment should also be avoided. In addition, some medications can affect you when working in a hot environment, be sure to check with your doctor to find out if you are taking any of these.

The key to maintaining your health starts with you; learn the signs and symptoms of heat related illnesses as well as how to prevent them from happening to you.

For more information about farm-related illnesses contact Arleen Clark at 800-343-7527 ext 229 or via email aclark@nycamh.com. Arleen is the Coordinator of Clinical Occupational Health Services at NYCAMH (the New York Center for Agricultural Medicine & Health).

For on-farm safety or youth farm safety services or information contact Sharon Scofield at 800-343-7527 ext 236 or via email sscofield@nycamh.com. A program of Bassett Healthcare Network, NYCAMH promotes safe and healthy farming.