Can I Get Sick from the Heat?

Lately, there have been a lot of stories in the news about farmworkers getting very sick because of the heat. Many farmworkers believe they cannot get sick from the heat, because they are used to working under the sun. The truth is that anyone can get heat illness, even on cloudy days. So, let us learn some important information that will keep you safe while you are at work.

First, let’s understand how the heat can hurt you.
When you are working hard and it is hot and humid outside, your body makes more heat than normal. Then your body temperature goes up. When this happens, your body can overheat. When your body overheats, it starts sweating. If you are sweating a lot, you must drink lots of water and take rest breaks. This will help your body go back down to its normal temperature. If you do not do these things, you can get sick from the heat.

How do you know if you are getting sick from the heat? What should you do if you get sick?
Here are signs and symptoms of heat illness and tips on what to do:

**CAUTION**
In the “Caution” stage you have a mild heat illness. You need to treat it right away so you can get better quickly.

You may feel these things:
✓ Thirsty
✓ Tired
✓ You can’t work as fast as you usually do.

Do these things:
✓ Rest in the shade.
✓ Drink a lot of water.
✓ Wait until you feel better to start working again.

**WARNING**
If you are in the “Warning” stage, you are really sick. If you treat the signs and symptoms and you do not feel better, you should go to the doctor right away.

You can feel these things:
✓ Dizzy
✓ Throwing up
✓ Headache
✓ Cramps in your stomach, legs, or arms
✓ Exhausted

Do these things:
✓ Tell your supervisor about your signs and symptoms.
✓ Rest in the shade.
✓ Drink a lot of water.
✓ If you do not feel better after a while, or if you feel worse, go to the doctor.

**DANGER**
If you are in the “Danger” stage, your body is in trouble. You might have the most serious type of heat illness which is Heat Stroke. Heat stroke is a medical emergency. If you do not treat it, you can die. You need to go to the emergency room right away. Remember to keep an eye out for your co-workers. Heat stroke can make you so sick that you cannot take care of yourself.
You might feel some of these things:
✓ Your skin might be hot and dry and turn red.
✓ Your heart might beat really fast.
✓ You might have trouble breathing.
✓ You might feel confused.
✓ You might pass out.

Do this for the person with heat stroke:
✓ Take them to the emergency room! or
✓ Ask your supervisor for help or call 911.
✓ While you wait for help, take the person inside or to rest in the shade.
✓ If the person is awake, give him/her water.
✓ If it is possible, pour cold water on his/her clothes and fan his/her body. If you do not feel better after a while, or if you feel worse, go to the doctor.

What Can You Do to Prevent Heat Illness?
✓ Drink a liter of water every hour, even if you are not thirsty.
✓ Do not drink alcoholic beverages, like beer, during work days.
✓ Do not drink beverages with sugar or caffeine, like soda and coffee, while working. They make your body lose water.
✓ Take short breaks after every hour that you work. Taking a 5 minute break helps, especially on very hot days.
✓ Take breaks under a nearby tree or a shaded area. The shade helps you cool off.
✓ Wear light colored, cotton clothing, a shirt with long sleeves, and a wide brimmed hat. These things will help keep your body cool and keep the sun off your skin.

Vocabulary & Definitions

Heat illness: A heat illness happens when the body’s temperature goes up and reaches a dangerous level and gets too hot. The body produces or absorbs more heat than it can get rid of. The body usually cools itself off by sweating, but sometimes sweating is not enough and heat illness can happen. A heat illness can be very mild, like a skin rash, or more serious, even heat stroke.

Heat stroke: It is the most dangerous form of heat illness. It happens when the temperature of your body rises above 106°F. It can lead to death, if the person does not get medical attention right away.

Cramps: It is a pain you feel when a muscle becomes very tight.

Overheat: When you become so hot that you get sick.
What is going on with Carlos?

One day, Carlos was picking tomatoes, and he felt a little tired. He thought it was because of the beers he drank at a cookout the day before. It was not too hot outside, but it was very humid and there was no breeze. He was sweating a lot. An hour later, Carlos felt very thirsty, but the water was too far away, so he decided not to get a drink and kept working. At lunch, Carlos just ate a little, drank a soda, and went back to work. Two hours later, he felt like throwing up. He felt dizzy and had a bad headache. He was exhausted. He wondered what was wrong with him.

1. Does Carlos have a heat Illness? What are some of his symptoms?

___________________________________________________
___________________________________________________
___________________________________________________
___________________________________________________

2. What are the things that Carlos should have done?

___________________________________________________
___________________________________________________
___________________________________________________
___________________________________________________

Do you know how to prevent heat illness?

Look at the pictures below and make a list of things you can do to prevent heat illness.

Example

1. Drink a liter of water every hour.

2. ________________

3. ________________

4. ________________

Fill in the Blank: Listen to your teacher carefully and fill in the blank with the right word.

1. Anyone can get sick from the _______, even if you have worked in the heat your whole life.

2. The most dangerous times to work outside are when it is _______ and humid, and there is no breeze. You can still get sick from the heat even if the sun is not out.

3. You can work for more hours and keep a faster pace if you give your body a chance to cool off in the _______ for five minutes each hour.

4. Clothes that are cotton, lightweight, and that fit loosely will keep your skin _______. Do not forget to protect your neck and face with a wide brimmed _______.

Developed by the National Center for Farmworker Health, Inc. - Buda, TX with funding from the Opportunities for Success for Out-of-School Youth (OSY) Migrant Education Program consortium grant.
Lesson Plan
Can I Get Sick from the Heat?

<table>
<thead>
<tr>
<th>Materials needed</th>
<th>Handouts</th>
<th>Estimated time</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dry erase board and dry erase markers</td>
<td>• “Can I Get Sick from the Heat?” Lesson</td>
<td>• 1 Hour</td>
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<tr>
<td>• Pencils</td>
<td>• “Listening Activity” Handout</td>
<td></td>
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<td></td>
<td>• Skills Practice Worksheet</td>
<td></td>
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<tr>
<td></td>
<td>• Pre-post Workshop Survey</td>
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</tbody>
</table>

**NOTE TO INSTRUCTOR:** To accommodate the literacy levels and educational experiences of the participants, oral and/or group activities may be substituted for reading, writing, skills practice, and survey activities.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Activities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>• Introduce the topic. Time: 5 minutes</td>
<td>1. Have you heard about Heat Illnesses?</td>
</tr>
<tr>
<td></td>
<td>• Conduct the Pre-Test Time: 5 minutes</td>
<td>2. How can you protect yourself from a Heat Illness?</td>
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<td></td>
<td>• Introduce the new vocabulary Time: 5 minutes</td>
<td>• Distribute Pre-Test, and ask students to turn it in when it is complete.</td>
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<td></td>
<td>• Write the vocabulary words on the board, and ask the students to read them aloud. Ask the students if they know what they mean. Provide students with the definitions. Use “Can I Get Sick from the Heat?” Lesson.</td>
</tr>
<tr>
<td>Instructions</td>
<td>• Read the lesson on “Can I Get Sick from the Heat?” Time: 10 minutes</td>
<td>• Instructor leads guided reading of topic.</td>
</tr>
<tr>
<td></td>
<td>• Identify the vocabulary words in the lesson Time: 5 minutes</td>
<td>• Students identify the vocabulary words by circling them in the lesson.</td>
</tr>
<tr>
<td></td>
<td>• Distribute and review the skills practice worksheet with the students, and ask them to complete it Time: 25 minutes</td>
<td>• <strong>Activity 1:</strong> Students have 10 minutes to complete this activity.</td>
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<td></td>
<td>• <strong>Activity 2:</strong> Ask students to look at the given pictures and the “Can I Get Sick from the Heat?” health lesson, in order to respond to this activity. Students have 5 minutes to complete this activity.</td>
</tr>
<tr>
<td>Concept Check</td>
<td>• Conduct Post Test Time: 5 minutes</td>
<td>• <strong>Activity 3:</strong> Use the “Listening Activity” Handout and follow the instructions specified. Students have 10 minutes to complete this activity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Students complete Post Test.</td>
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</tbody>
</table>
Fill in the Blank.

1. Anyone can get sick from the **HEAT**, even if you have worked in the heat your whole life.

2. The most dangerous times to work outside are when it is **HOT** and humid, and there is no breeze. You can still get sick from the heat even if the sun is not out.

3. You can work for more hours and keep a faster pace if you give your body a chance to cool off in the **SHADE** for five minutes each hour.

4. Clothes that are cotton are lightweight, and that fit loosely will keep your skin **COOL**. Do not forget to protect your neck and face with a wide brimmed **HAT**.
Can I get Sick from the Heat?

Post-Assessment

Circle the correct answer.

1. Can the heat make you sick?
   - Yes
   - No

2. Which of the following may be a warning sign that the heat has made you sick?
   - a. you are very thirsty
   - b. you are dizzy
   - c. you are confused
   - d. all of the above

3. What can you do to prevent heat illness?
   - drink a lot of water
   - rest in the sun

4. Heat stroke can make your body temperature rise to 106°F and lead to death.
   - True
   - False

5. Can you get heat illness even on cloudy days?
   - Yes
   - No

Total Correct: _______

How do you know if you are getting sick from the heat? (not scored)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Developed by the National Center for Farmworker Health, Inc. - Buda, TX with funding from the Strategies, Opportunities and Services to Out-of-School Youth (SOSOSY) Migrant Education Program Consortium Grant (2013)