Heat Illness and Burns

Mitch Ricketts, Ph.D., CSP
K-State Research & Extension

mrickett@ksu.edu

A 31-year-old male worked in the heat. When time allowed, he drank water and took breaks. Late in the afternoon, he complained that he was hot and feeling ill.

What might be wrong with this worker?

Is there anything he might have done differently to avoid this problem?

If you were his supervisor, what would you do now that he is feeling ill?

A 31-year-old male worked in the heat. When time allowed, he drank water and took breaks. Late in the afternoon, he complained that he was hot and feeling ill.

The foreman told him to rest, and the worker laid down in a cool area. Ten minutes later, the worker went back to his job, saying he felt alright.

What do you think of his sudden recovery?

As his supervisor, what would you do?

.

A 31-year-old male worked in the heat. When time allowed, he drank water and took breaks. Late in the afternoon, he complained that he was hot and feeling ill.

The foreman told him to rest, and the worker laid down in a cool area. Ten minutes later, the worker went back to his job, saying he felt alright.

Within a few minutes, the worker began to stagger. The foreman again told him to rest, but he just mumbled.

Are there signs that a serious problem has already developed?

Is telling him to rest an adequate response by the foreman?

A 31-year-old male worked in the heat. When time allowed, he drank water and took breaks. Late in the afternoon, he complained that he was hot and feeling ill.

The foreman told him to rest, and the worker laid down in a cool area. Ten minutes later, the worker went back to his job, saying he felt alright.

Within a few minutes, the worker began to stagger. The foreman again told him to rest, but he just mumbled.

The worker collapsed, and his buddies held him up and put ice on his neck. They called for help, and EMS arrived in five minutes.

What do you suppose is going to happen now?

A 31-year-old male worked in the heat. When time allowed, he drank water and took breaks. Late in the afternoon, he complained that he was hot and feeling ill.

The foreman told him to rest, and the worker laid down in a cool area. Ten minutes later, the worker went back to his job, saying he felt alright.

Within a few minutes, the worker began to stagger. The foreman again told him to rest, but he just mumbled.

The worker collapsed, and his buddies held him up and put ice on his neck. They called for help, and EMS arrived in five minutes.

Medics helped the worker to the ground and applied water and ice packs to his body, but he lost consciousness. They took him to a hospital where he died about an hour later.

It is a hot August day, and you will be in charge of a heat treatment at a flour mill.

---

1. **What instructions will you give your work crew to make sure they do not become overheated?**

2. **What signs of heat illness will you look for in your workers?**

3. **What actions will you take if a worker shows signs of heat exhaustion?**

4. **What actions will you take if a worker shows signs of heat stroke?**

True / False

Certain medications may make you more vulnerable to heat illness.

True / False

Certain medications may make you more vulnerable to heat illness.

Which of the following is the best practice to prevent heat illness?

---

a. **Drink plenty of soda, tea or coffee.**

b. **Eat large meals before working.**

c. **Drink at least a quart of water per hour.**

Which of the following is the best practice to prevent heat illness?

---

a. Drink plenty of soda, tea or coffee.

b. Eat large meals before working.

c. Drink at least a quart of water per hour.

True / False

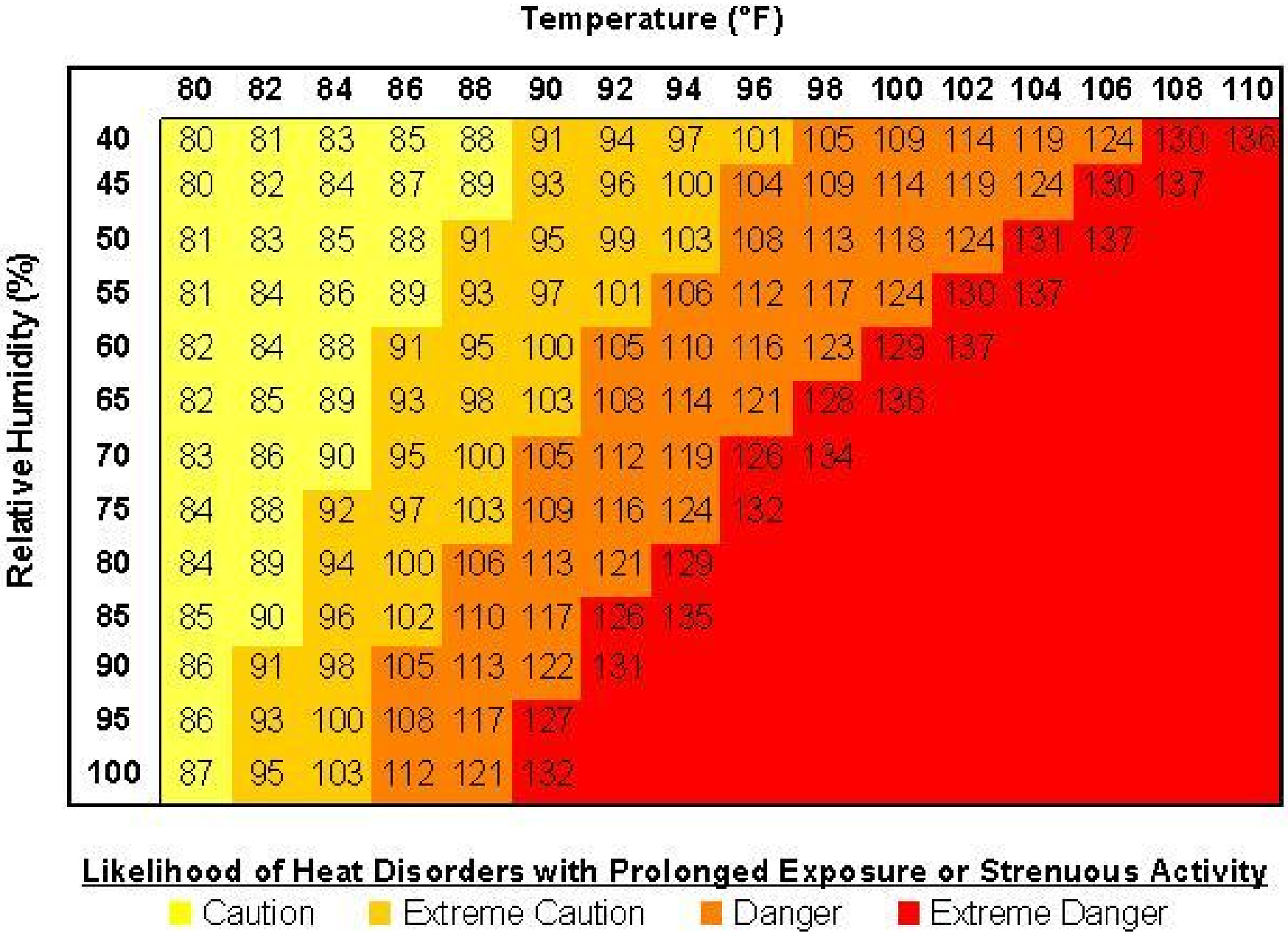
You are more likely to suffer from a heat-related illness on days with LOW humidity.

True / False

You are more likely to suffer from a heat-related illness on days with LOW humidity.

NOAA's National Weather Service Heat Index

http://www.nws.noaa.gov/om/heat/index.shtml



True / False

It may take a new worker anywhere from 5 days to 2 weeks to acclimate to working in the heat.

True / False

It may take a new worker anywhere from 5 days to 2 weeks to acclimate to working in the heat.

True / False

You are more vulnerable to heat illness if you have suffered it in the past.

True / False

You are more vulnerable to heat illness if you have suffered it in the past.

Treat a minor burn by:

---

a. placing the burn in cool water.

b. placing the burn in warm water.

c. breaking any blisters.

d. covering the burn with butter.

Treat a minor burn by:

---

a. placing the burn in cool water.

b. placing the burn in warm water.

c. breaking any blisters.

d. covering the burn with butter.

If the burn is severe and the skin is broken, you should:

---

a. **place the burn under cool water.**

b. **keep the burn dry and get medical attention immediately.**

c. **apply petroleum jelly to the burn.**

If the burn is severe and the skin is broken, you should:

---

a. place the burn under cool water.

b. keep the burn dry and get medical attention immediately.

c. apply petroleum jelly to the burn.

It is a hot day, and your co-worker becomes light headed, dizzy and has clammy, moist skin. How should you respond?

---

a. Move the person to a cool area and give fluids to drink.

b. Cover the person with a warm blanket.

c. Give the person salt tablets.

It is a hot day, and your co-worker becomes light headed, dizzy and has clammy, moist skin. How should you respond?

---

a. Move the person to a cool area and give fluids to drink.

b. Cover the person with a warm blanket.

c. Give the person salt tablets.

It is a hot day, and your co-worker becomes disoriented, confused, and has hot red skin. How should you respond?

---

a. Give the person a soda and wait for 30 minutes to see if s/he feels better.

b. Call 911 immediately and take steps to cool the person's body temperature.

c. Keep the person warm until help can arrive.

It is a hot day, and your co-worker becomes disoriented, confused, and has hot red skin. How should you respond?

---

a. Give the person a soda and wait for 30 minutes to see if s/he feels better.

b. Call 911 immediately and take steps to cool the person's body temperature.

c. Keep the person warm until help can arrive.

Heat Illness and Burns

Mitch Ricketts, Ph.D., CSP
K-State Research & Extension

mrickett@ksu.edu