

Heat Stress In Home Care Patients

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Faculty

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Program Objectives

- **Define extreme heat and who is at risk.**
- **Recognize symptoms of heat related illness.**
- **Describe the First Aid treatment for heat related illness.**

Program Objectives

- **Discuss protective measures to be taken before, during, and after extreme heat episodes.**
- **Assist patients with preparing a disaster plan and a disaster supply kit.**

Extreme Heat

- **Temperatures 10 degrees or more above the average high temperature for a region for several weeks.**
- **National Weather Service: period of high heat when heat index exceeds 105 degrees for 2 or more consecutive days.**

Facts About Extreme Heat

- **1979-2002, over 8900 deaths due to heat-related illness.**
- **These deaths exceeded deaths from hurricanes, lightning, tornadoes, and earthquakes combined.**
- **2001 - 300 deaths due to excessive heat.**

Facts About Extreme Heat

- **Heath waves caused:**
 - 1980, 1,700 deaths in the East and Midwest.
 - 1988, 454 deaths in the East and Midwest.
 - 1995, 716 deaths in Chicago, Philadelphia, Milwaukee, and St. Louis.
- **Extreme heat causes most summer blackouts.**

Who Is At Risk

- **Elderly**
- **Very young**
- **Persons with mental illness**
- **Persons with chronic disease**
- **Persons who are overweight**
- **Young and healthy individuals doing strenuous physical activity outdoors**
- **Individuals take psychotropic medications**
 - Haldol
 - Thorazine
 - Cogentin
 - Compazine

Heat Advisory

- **Notice from the National Weather Service for heat.**
- **Issued when the heat index will exceed 110 - 114 for two or more consecutive days and minimum temperature will not be below 75 degrees.**

Excessive Heat Warning

- **Issued by the National Weather Service when the heat index will exceed 115 degrees for two consecutive days and minimum temperature will not be below 75 degrees.**

Heat Wave

- **Extended period of time when uncomfortable hot and very humid weather is predicted for an area or region.**
- **Can be just one day but usually is several days to several weeks.**

Heat Index

- **Describes the combined effect of high air temperature.**
- **Is the "apparent temperature".**

Severe Sunburn

- Damage to skin from excessive sun exposure.
- Skin is red, hot, painful and has blisters.
- Can be associated with other heat problems.

Heat Cramps

- Muscle pains or spasms in the abdomen, arms or legs.
- Associated with strenuous activity and a lot of sweating.
- May be a symptom of heat exhaustion.

Heat Exhaustion

- Milder form of heat illness.
- Typically is seen after several days of being exposed to high temperatures and inadequate fluid replacement.

Heat Exhaustion

- Warning signs:
 - Heavy sweating
 - Paleness
 - Muscle cramps
 - Tiredness
 - Weakness
 - Dizziness
 - Headache

Heat Exhaustion

- Warning signs:
 - Nausea or vomiting
 - Fainting
 - Skin cool and moist
 - Weak and fast pulse
 - Fast and shallow breathing
 - May progress to heat stroke

Heat Stroke (Sun Stroke)

- Most serious heat-related illness.
- Happens when the body cannot control its temperature with a rapid rise in body temperature.
- Sweating mechanism fails.
- Body temperature can exceed 106 F within 10 minutes.
- Can cause death or permanent disability.

Heat Stroke (Sun Stroke)

- **Warning Signs:**
 - Extremely high body temperature (above 103 F)
 - Red, hot and dry skin
 - Rapid, strong pulse
 - Throbbing headache
 - Dizziness
 - Nausea
 - Confusion
 - Unconsciousness

Protective Measures

- **Before extreme heat.**
 - Be informed.
 - Monitor weather reports and predictions.
 - Be prepared.
 - Have disaster supply kit with 3 days of supplies.

Disaster Plan

- Plan to stay indoors as much as possible.
- If the home is not air conditioned, identify heat-relief shelters, such as libraries or malls, for several hours a day.
- Make sure someone can come by the home twice a day to check on any home bound person.

Disaster Plan

- Wear sunscreen if going outside, reapply as directed.
- Set up a buddy contact system.
- Do not leave any living person or animal in an enclosed car without the windows down or air conditioner going.
- Be prepared to go another cool location in case of a power blackout.

Disaster Plan

- Disaster supplies include temporary lighting, batteries, 3 days of nonperishable food and drinkable liquids.
- Have ready access to emergency contact numbers.
- Take medications with the person if they leave home for more than a day.

Disaster Supply Kit

- Adequate liquids
- Electric fans
- Sunscreen
- Ice
- Wide-brimmed hat
- Flashlights
- Extra batteries
- Nonperishable food
- Medications as needed

Prepare Your Home

- Have air conditioning system that works.
- Close blinds on western side of home during the day.
- Have working fans.

During a Heat Emergency

- Use air conditioning continuously; keep the home cool.
- Increase liquids (non alcoholic) unless fluid restricted.
- Stay in coolest place possible (may not be indoors).
- Go outside in early morning or late afternoon.
- Avoid caffeine, alcohol, and drinks with large amounts of sugar.

During a Heat Emergency

- Take cool showers or baths several times a day.
- Wear lightweight, light-colored, loose-fitting clothing.
- Reduce physical activity.
- Wear a hat with a wide brim outdoors.

Heat-Induced Illness First Aid

- Heat Rash
 - Contact the supervisor
 - Air conditioning
 - Avoid ointments or creams
 - Dusting powders may help

Heat-Induced Illness First Aid

- Sunburn
 - Contact the supervisor
 - Apply any recommended agents
 - May apply ice/cold cloths
 - Do not open blisters

Heat-Induced Illness First Aid

- Heat Cramps
 - Contact the supervisor
 - Increase liquids
 - Air conditioned environment

Heat-Induced Illness First Aid

- Heat Exhaustion
 - Contact the supervisor.
 - Air conditioning.
 - Seek medical attention if worsens or symptoms last longer than 1 hours.
 - Drink cool, nonalcoholic beverages.
 - Rest.
 - Cool shower, bath, or sponge bath.
 - Lightweight clothing.

Heat-Induced Illness First Aid

- Heat Stroke
 - Contact the supervisor / 911.
 - Medical assistance ASAP.
 - Get person to shady area.
 - Cool the person rapidly- put in cool water, shower, spray.
 - Monitor body temperature.
 - If paramedics are delayed, get further instructions from supervisor.
 - Do not give the person anything by mouth.

After Extreme Heat

- Be prepared for future episodes of extreme heat.
- See doctor if needed with problems related to extreme heat.
- Identify if anything needs to be changed or added for any further episodes of extreme heat.

For a complete list of upcoming programs,
go to the
Alabama Public Health Training Network
web site at
www.adph.org/alphtn

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