IN THE KNOW

...Developing top-notch CNAs, one inservice at a time

A Safety Module for Nurse Aides:

Summer Safety Tips

Inside This Inservice:

IN THE KNOW

Developing Top-Notch CNAs, One Inservice at a Time

A Safety Module:

Summer Safety Tips

IN THE GOOD OLE SUMMERTIME!

Do you have fond memories of summers when you were a kid? No school. Running around barefoot. Playing outside on sunny days. There's no doubt about it...summer can be a fun season. But, it can also be *deadly*. Consider this:

During the summer of 1995, more than 1,000 Americans died during a heat wave. *Half* of those deaths occurred in Chicago, during a few short days in July. The '95 Chicago Heat Wave, as it is called, was an extended period of high temperatures *above* 90° F. The temperature peaked on Thursday, July 13th, at 106° F.—the highest ever recorded in Chicago.

That may not sound so extreme for those of you who live in warm, dry climates like the southwestern U.S. You are used to the temperature topping 100° F. However, it wasn't just the temperature that was responsible for so many deaths in Chicago. The *humidity* soared to record levels at the same time. This caused mugginess and made the heat much worse. Just imagine day after day of unrelenting heat and high humidity!

To make matters worse, the urban area of Chicago...the buildings, asphalt, and sidewalks... absorb heat and radiate it during the night. So even when the temperature fell into the 70°s, people in the urban sprawl felt no relief.

525 people died during that scorching heat wave in Chicago, most of them elderly people living in the heart of the urban area. In many cases, these people did not have air conditioning or could not afford to use it. Other factors contributed as well, including power outages and a lack of public warning. (The warnings provided by the city did not express the seriousness of the situation.) Hospitals were overfilled and ambulances overtaxed. The fire department even began using fire engines as makeshift ambulances!

The '95 Heat Wave in Chicago is a prime example of how risk factors can combine to cause heat-related deaths. Depending on where you live, the clients in your care may be at risk. You may be their lifeline during the hot summer months. Keep reading to learn more about how to maintain client safety during the hot summer months.

SOME HOT TOPICS...

- In an *average* year, at least 200 people die from heat-related illness in the United States. Those most at risk are infants, the elderly, and people who are either overweight or sick. For example, in 2008, 8 of every 10 heat-related deaths were people over age 50.
- Sunburn can *decrease* the skin's ability to release excess heat, making illness more likely and more dangerous.
- The highest temperature ever recorded in the United States is 134° on July 10, 1913 in Death Valley, California. This is also the official highest temperature in the Western Hemisphere.
- In 2016, heat records across America were smashed, especially in June. The second and third hottest summers were recorded in 2015 and 2014.
- Of the U.S. cities with the hottest annual average temperature, seven of them are in Florida! Two are in Texas and one is in Arizona.
- Alcoholic beverages can also contribute to heat-related illnesses. In fact, people who drink alcohol regularly face increased dehydration and are 15 times more likely to suffer a heat stroke.

- Because men generally sweat more than women, they dehydrate more quickly than women. This makes them more susceptible to heat illness.

WHY ARE MY CLIENTS AT RISK?

As people age, their ability to sense heat lessens and the body has trouble regulating itself during changing temperatures. In addition, your elderly clients may be unable to get rid of excess heat as easily as when they were younger—due to poor circulation and a decreased ability to sweat. To top it off, senior citizens tend to lose their sense of thirst, putting them at risk for dehydration.

But a client's risk level comes from more than just the aging process. Your older and/or sick clients are at risk for heat-related illness if they:

- Lack access to air conditioning.
- Have impaired mobility, are confined to bed, or lack transportation to travel to a cooler location.
- Have a chronic disease, such as congestive heart failure, diabetes, or kidney disease.
- Suffer from any illness that causes general weakness or fever.
- Are substantially overweight *or* underweight.
- Take medications that might impair the body's ability to regulate its temperature. These include drugs such as Benadryl, some anti-anxiety and anti-psychotic medications and Parkinson's disease drugs.
- Take diuretics or other medications that lead to fluid loss (and potential dehydration).
- Overdress. (Some elderly people tend to overdress, especially when going outdoors.

WEATHER TERMS YOU SHOULD KNOW

During the summer, you may hear or read about these weather terms:

Excessive Heat Outlook:

The National Weather Service issues an excessive heat outlook when it seems likely that extremely hot weather is coming within the next three to seven days.

Excessive Heat Watch:

This announcement is given when there is risk of a heat wave within 48 hours.

Excessive Heat Advisory:

You'll hear this term used when a heat wave is coming within 36 hours and it is expected to cause significant *discomfort* and/or *inconvenience*.

Excessive Heat Warning:

The term "warning" is used when a heat wave is coming that could be *dangerous* or *life-threatening*. Generally, this is when the Heat Index (see table) will reach *at least* 105°F for several hours during the day.

What Exactly Is a Heat Wave?

The definition of a heat wave varies depending on where you live. For example, people in Maine may have a different idea of a heat wave than people in Arizona! However, in general, a heat wave is defined as a period of *two or more days* of excessively hot weather.

Heat Index	Air Temperature - (Degrees F)										
Relative Humidity	70	75	80	85	90	95	100	105	110	115	120
⬇	Apparent Temperatures										
0%	64	69	73	78	83	87	91	95	99	103	107
10%	65	70	75	80	85	90	95	100	105	111	116
20%	66	72	77	82	87	93	99	105	112	120	130
30%	67	73	78	84	90	96	104	113	123	135	148
40%	68	74	79	86	93	101	110	123	137	151	
50%	69	75	81	88	96	107	120	135	150		
60%	70	76	82	90	100	114	132	149			
70%	70	77	85	93	106	124	144				
80%	71	78	86	97	113	136	157				
90%	71	79	88	102	122	150	170				
100%	72	80	91	108	133	166					

What Is the Heat Index?

The heat index is a measurement of how hot it really feels when you add the humidity level to the outside temperature. For example, in the table above, if the actual temperature is 95° and the humidity level is 60%, it will feel like it's 114° outside!

Keep in mind that the table assumes you are in the shade and a light wind is blowing. If you are standing in direct sunlight, the heat index can increase by as much as 15°. Strong winds can also add to the danger level.

What Is a Drought?

Droughts occur when a long period passes without substantial rainfall. A heat wave *combined* with a drought is a very dangerous situation.

All areas in the United States are at risk of drought at any time of the year, but droughts are more common in the summer.

A prolonged drought can lead to an emergency water shortage. This can be devastating in large urban centers, especially for sick or elderly people.

WEATHER TERMS, CONTINUED

What Is the UV Index?

The UV index is a way of measuring the amount of ultra-violet (UV) radiation coming from the sun. For example, a UV index of **0** means it is nighttime. An index of **16** means you are in a tropical area at noon with a clear sky and little ozone protection.

UV radiation can be more damaging than just a sunburn. Over time, exposure to UV radiation can lead to skin cancer. It can also damage the eyes, increasing the risk for cataracts.

TIP: An easy way to tell how much UV exposure you are getting is to look for your shadow:

- If your shadow is taller than you are (in the early morning and late afternoon), your UV exposure is likely to be low.
- If your shadow is shorter than you are (around midday), you are being exposed to high levels of UV radiation. Seek shade and protect your skin and eyes.

Find the UV index for any zip code on any given day here:
https://www.epa.gov/sunsafety

Level of Danger	UV Index	Preventative Actions
Minimal	0, 1, 2	• Sunscreen with SPF 15
Low	3, 4	• Sunscreen with SPF 15 • Wear a hat
Medium	5, 6	• Sunscreen with SPF 30 • Wear protective clothing • Sun-glasses
High	7, 8, 9	• Sunscreen with SPF 45 • Wear protective clothing • Sun-glasses • Try to be sheltered (11am-4pm)
Very High	10+	• Sunscreen with SPF 60+ • Wear protective clothing • Sun-glasses • Avoid midday sun (11am-4pm)

The table above shows the appropriate preventative actions to take according to the UV Index. Taking these precautions help prevent sunburn and may delay or prevent heat illness.

Keeping your clients safe is part of your job. This includes making sure they are safe when outside, especially during hot summer weather. Always keep sunglasses and hats with you if you take a client outdoors, even if you are only getting some fresh air. Be sure you know your workplace policy about applying sunscreen on your client's skin. If you have questions, ask your supervisor.

HEAT-RELATED ILLNESSES

What makes heat so dangerous? When both heat and humidity rise, the body has to work harder to maintain a normal temperature of 98.6°. Usually, the body does this by sweating—water evaporates through the skin.

However, high humidity *slows* the evaporation rate (and therefore the cooling process). When sweating and heat loss are not enough to keep the body at 98.6°, or when the body becomes dehydrated from sweating and fluid loss, the "core temperature" rises, leading to heat illness or even death.

Here are the seven most common heat illnesses:

1. Sunburn

Most everyone has experienced sunburn at some point in their lives. It's that pain, redness and swelling that shows up within a few hours after sun exposure.

Sunburned skin feels warm (or even hot!) to the touch. You may see small fluid-filled blisters on the skin, some of which may break open. Anyone who is badly sunburned may also run a fever, have a headache and feel fatigued.

Did you know that…?

- Any part of the body, including the earlobes, scalp and lips, can burn. Even the eyes can burn, causing pain and a "gritty" feeling.
- You can get sunburn on hazy or cloudy days. As much as 90 percent of UV rays pass through clouds.
- While sunburn is most common in the summer months, people can get sunburned by UV rays reflecting off snow and ice, too.
- Sunburn increases the risk of certain complications and related skin diseases, including dry, wrinkled skin, liver spots and skin cancer, including melanoma.

Report it now! Your client may need medical attention if the sunburn:

- Blisters and covers a large portion of the body.
- Causes a high fever, extreme pain, confusion, nausea, or chills.

2. Heat Cramps

Have you ever been exercising or working in hot weather and felt brief, painful muscle cramps? These involuntary spasms are known as heat cramps.

Although heat cramps can affect any muscle, they most commonly involve the calves, arms, abdominal wall, and back. The muscles may cramp or "jerk" during exercise or the cramping may show up several hours later.

Did you know that…?

- People who sweat a lot during vigorous activity are prone to heat cramps. This is because sweating drains the body of salt and moisture. When the muscles are low in salt, they tend to cramp.
- Heat cramps are uncommon in the elderly because they tend to have a more sedentary lifestyle.

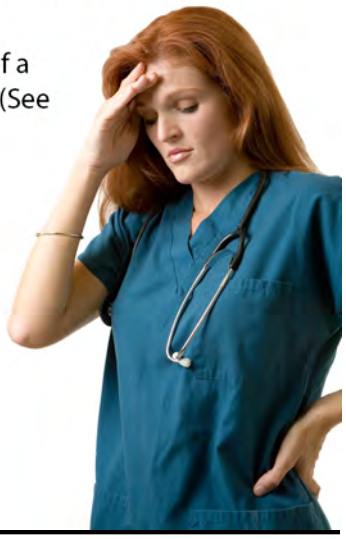
Fortunately, heat cramps tend to go away on their own. Here are some ways to help speed the process:

- Rest and help your clients cool down.
- Offer clear juice or a "sports" drink like Gatorade.
- Perform gentle range of motion exercises on the affected muscles.
- Encourage your clients to avoid strenuous activity for several hours after the cramps subside.

Report it now! Your client may need medical attention for heat cramps if:

- The cramps persist for more than one hour.
- The client *also* has signs of a more severe heat illness. (See page 7.)

You may work in hot conditions on a daily basis. Don't forget to see to your *own* salt and fluid needs!



HEAT-RELATED ILLNESSES, CONTINUED

3. Heat Rash (Prickly Heat)

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. It is also known as "prickly heat" because it leaves the skin prickly, burning, and intensely itchy.

Heat rash looks like small blisters or a cluster of red pimples. You are likely to see it on your client's neck, upper chest, in the groin, under the arms and the breasts, and in the elbow creases.

Heat rash is most common in:

- Infants.
- Overweight people.
- People who are dehydrated.
- Chronically ill people.
- Bed bound clients.
- People taking certain medications (including some drugs for mental illness and Parkinson's disease).

If your client has heat rash, you should:

- Prevent your client from getting overheated.
- Keep the affected area clean and dry. This is especially important with obese clients. Salt from sweat can lead to heat rash down in the folds of their skin.
- Ask your supervisor if it's okay to use talcum powder on your client's skin. But, avoid putting *creams* on the area as they keep the skin moist, providing a nice "home" for bacteria!
- If possible, uncover the affected skin to let it "breathe." If the rash is in an area that must be covered, make sure the client is dressed in dry, lightweight clothing.

Report it now! Your client may need medical attention for heat rash if:

- He or she scratches the rash repeatedly.
- The rash spreads or persists longer that four days.
- Your client develops a fever or other signs of a secondary infection such as redness, warmth or red streaks extending from the affected area. (Antibiotics may be necessary.)

4. Heat Edema

Heat edema is common in people who are not used to hot weather. You may notice your client begin to sweat profusely, get red in the face and have swelling in the lower legs, feet and hands.

Because these symptoms could signal something serious, you need to notify your supervisor right away. In addition, get your client out of the heat, raise his or her legs and offer a cool drink.

A diagnosis of heat edema is not serious by itself, but it can be a sign that your client is at risk for a more serious heat-related illness.

5. Heat Syncope

Have you ever been walking with a client on a warm summer day and the client started to faint? While there are many causes for this, it may have been heat syncope.

Heat syncope occurs when the body shifts blood flow to the skin in an effort to cool it off. This reduces the amount of blood available for the rest of the body, including the brain. If the blood flow to the brain is reduced too much, the person feels faint.

Your clients may be at risk for heat syncope if they:

- Have cardiovascular disease.
- Are dehydrated.
- Have diabetes.
- Are elderly.
- Have a history of seizures.
- Are obese.

Report it now! If your client becomes lightheaded in the heat, notify your supervisor and:

- Have the client lie down.
- Elevate the client's feet above the heart for 15 minutes.
- Loosen any tight clothing.
- Apply a cold compress to the forehead.
- Offer a cool drink.

HEAT-RELATED ILLNESSES, CONTINUED

6. Heat Exhaustion

Heat exhaustion is a heat-related illness that can develop after several days of exposure to extreme temperatures—or when the body becomes seriously dehydrated. It is a warning that the body is getting too hot! Heat exhaustion is most common among people who:

- Are elderly.
- Have high blood pressure.
- Exercise or work in a hot environment.

The warning signs of heat exhaustion include:

- Heavy sweating.
- Pale, cool, and moist skin.
- Muscle cramps.
- Fatigue.
- Weakness.
- Dizziness.
- Headache.
- Nausea or vomiting.
- Fainting.
- A rapid pulse.
- Rapid, shallow breathing.

Report it <u>now</u>! Untreated heat exhaustion can lead to heat stroke. Clients with heat exhaustion may need medical attention if:

- They have heart problems or hypertension.
- Their symptoms last longer than one hour.

If you think your client may have heat exhaustion, first report the problem and then:

- Give your client a cool shower, bath, or sponge bath.
- Dress the client in loose, lightweight clothing.
- Encourage the client to rest in an air conditioned environment.
- Offer sips of a cool beverage.

7. Heat Stroke

Heat stroke is the most serious heat-related illness. It occurs when the body can no longer control its own temperature. The person stops sweating and his/her temperature rises quickly to 106° or higher within just 10 to 15 minutes!

Heat stroke is life-threatening—and a true medical emergency. If the person survives, there can be permanent damage to the kidneys, heart, lungs, liver, brain, intestines, and muscles.

Symptoms of heat stroke include:

- High fever.
- Confusion.
- Bizarre behavior.
- Fainting.
- Staggering.
- A strong, rapid pulse.
- Dry, flushed skin that feels hot to the touch.
- A throbbing headache.
- Nausea.
- Lack of sweating.
- Coma.

Report it <u>now</u>! Heat stroke requires <u>emergency</u> medical treatment. Then, while you are waiting for help to arrive:

- Remove any blankets and/or clothing and cool the client as rapidly as possible. For example, put the client in a tub of cool water, a cool shower or sponge the person with cool water.
- You can also wrap the person in a cool, wet sheet or put ice packs in the armpit and groin areas.

HELPING CLIENTS DEAL WITH THE HEAT

- During extreme summer weather, stay informed by listening to the local weather report, checking the internet, or contacting the local health department for safety updates. Staying "in the know" will help protect both you and your clients.
- Remember that many elderly people have a reduced sense of thirst. So, don't wait for your older clients to ask for something to drink. When the weather is hot, offer them fluids frequently.
- Encourage your clients to drink plenty of fluids, *regardless of their activity level*. (If your client is on a fluid restriction, check with your supervisor about adjusting it based on the outside temperature.)
- Some people find that drinking extremely cold liquids causes cramps. So, if your clients want ice in their drinks, stick with just a couple of cubes.
- When it's hot outside, encourage your clients to avoid beverages that contain alcohol, caffeine and/or lots of sugar. These can actually cause the body to lose *more* fluid.
- Observe your clients for signs of dehydration including dizziness, headache, dark urine, inability to urinate, dry nose and mouth, weakness, and nausea.
- If your clients are elderly, they may be affected differently by dehydration. For them, confusion may be the first sign. You may also notice that their skin loses its elasticity. (If you pinch it gently, it stays in that pinched shape rather than returning to normal.)
- Your clients should wear light-colored, loose-fitting clothing. Light colors reflect heat and sunlight and loose clothing prevents the development of heat rash.

- Remember that clothing made from lightweight natural fibers (like cotton or linen) are the best for allowing sweat to evaporate. Leave the wool or polyester in the closet!
- When the outside temperature soars, keep your clients indoors in air conditioning as much as possible. Air conditioning is the number one protection against heat-related illness.
- Keep in mind that whenever the weather hits the high 90s, electric fans are not enough to prevent heat-related illnesses.
- Suggest a cool bath or shower for clients who live in hot environments. Or, simply soak your clients feet in a bucket of cold water.
- Your clients may be more comfortable if they consume a bit less protein on hot days. (Protein increases the body's internal heat.) That's why on a hot day, most people feel better if they stick to cool, light meals like a sandwich and some fruit.
- To keep your client's home cooler during a heat wave, try to serve foods that don't require turning on the stove or oven. Consider fresh or microwavable foods instead.
- If your home health client lives alone, arrange for a friend or relative to call the client once or twice a day during extremely hot weather.

Time for a Laugh!

You know it's hot when:

- You dig up the potatoes and they're already baked.
- The restaurant chefs are cooking on the sidewalk.
- The chickens are laying hardboiled eggs.
- You feel chilly when the temperature drops below 95°.
- Even the sun is looking for some shade!

ESPECIALLY FOR HOME HEALTH CLIENTS

If you live in an area where the summer heat can get pretty intense (and that seems to be *everywhere* these days), then it's important to plan ahead for possible heat emergencies. ***Here are some tips for helping your home health clients beat the heat:***

- Put up a sheet of paper in your client's home with emergency information for extreme heat. Include the phone numbers of neighbors, local emergency services offices, the American Red Cross, the power company, and hospitals.
- A prolonged heat wave and/or drought can have a serious impact on your client's neighborhood. Make a special effort to ensure that your client has a gallon or two of bottled water in case of community water restrictions or power outages.
- Check the client's doors to the outside for inadequate or missing weather stripping (usually a problem at the *bottom* of the door). If there is a gap where hot air can get in, consider "plugging" the space with a rolled up towel.
- Teach your clients to close their drapes and/or blinds during the hottest part of the day.
- There is another inexpensive way to reduce the amount of heat coming into a home. See if a family member can make homemade window reflectors. All it takes is some cardboard and aluminum foil. The cardboard is covered with the foil and then placed between the window and the drapes or blinds. The foil reflects the sunlight away from the house!
- If your client has air conditioning, check to see that it works *before* the hottest weather arrives.
- If a client has no air conditioning and you have permission to transport the client, consider taking your client to a shopping mall or fast food restaurant for a couple of hours. Getting to an air conditioned environment during the worst heat of the day may help your client avoid heat-related illnesses.
- If possible, help your clients arrange their homes so that, during a heat wave, they can live on the lowest floor of the house. Hot air rises, so the lower your clients are, the cooler they'll feel.

GET creative!

Tap into your experience on the job and come up with at least ONE creative solution to each of the three problems listed below:

When conducting a regular morning visit on a hot day, a client complains of cramps. Her apartment has no air conditioning: _____

_____

_____

Your client doesn't have a telephone and you don't have a cell phone. In an emergency, you would: _____

_____

_____

_____

Your client has no family to stay and care for her during a heat wave that will hit in two days: _____

_____

_____

_____

SUMMER CAR CARE

If you depend on your car to get to work, especially if you travel to clients' homes, it's important to keep it running smoothly all year long. Here are some tips for getting your car in tip top shape for the summer months.

- Check your tires. Are they inflated properly? Tire pressure changes when the outside temperature rises. Underinflated tires can lead to a blow out and use up to an extra gallon of gas per month! Overinflated tires can cause you to "hydroplane" when the roads are wet from a summer rain storm.

- How about your tire tread? Here's an easy way to see if your tires are up to snuff. Stick a penny between two treads on each tire. If Lincoln's head disappears between the treads, your tires are probably fine.

- In many parts of the country, summertime brings sudden, severe rainstorms. Don't be caught without wiper blades that work. If your wipers have cracks and tears in the rubber, consider replacing them.

- Sitting in traffic on a hot day is a quick way to overheat your car because no air flows across the engine to keep it cool. Remember that *antifreeze* can be used in the summer, too. It revs up your car's cooling system.

- Have you got one of those windshield sunshades? If not, you may want to consider purchasing one. A sunshade prevents heat from soaking into your dashboard and steering wheel. Hot steering wheels can cause burns and are unsafe because they keep people from gripping the wheel.

- Hot weather can shorten the life of your car's battery, so have yours tested if it's near the end of its warranty. Replacing a *dying* battery is a lot easier than finding your self on the side of the road with a *dead* one.

- Don't forget to keep up with regular oil changes. This is especially important in the summer because the engine requires extra lubrication during hot weather.

Would you be prepared if your car broke down during a heat wave? ***Here are some suggestions for what you should keep in your car:***

- One gallon of drinking water
- Another gallon of water for the engine...or a one gallon mixture of half coolant and half plain water
- One gallon of windshield washer fluid
- Two spare quarts of oil
- A good flashlight with spare batteries
- Sun block and insect repellent

Have you got some other ideas?

SUMMER DRIVING SAFETY

You may think that slippery roads covered with ice and snow make winter the most dangerous time to drive. Guess what? It's actually more dangerous to drive in the *summer* months.

Think about it. School's out. People take long weekends and hit the highway for their summer vacations. As a result, there are more people on the roads, leading to more accidents—and more fatalities.

Here are some tips for staying safe on summer roadways:

- Remember that July is the most dangerous month for driving—and, every year, the number of fatal accidents during July jumps by 20%!
- Road construction increases in the summer so plan your time accordingly and be patient with any construction delays. Remember that "road rage" doesn't get you where you're going any faster!
- Because summer means that more drivers are on the road, speeding and tailgating become even more dangerous. So, reduce your speed and keep plenty of space between you and the car in front of you. (Here's a tip: watch when the car in front of you passes a road sign. Then, count *"one-one thousand, two-one thousand, three one-thousand."* If your car passed the same sign before you finished counting, you are *too close* to the car ahead...so slow down.) And, if someone is tailgating *you*, pull over as soon as it is safe and let them pass.
- Having a cell phone with you when you're traveling to work or from client to client is a great idea. However, don't use it when you are driving. It's illegal in many states...and is a safety hazard no matter where you live!
- When you arrive at your destination, try to park in the shade. No shade available? Pick the best direction by checking out the location of the sun. Then, park in such a way that the sun will be shining on your *rear* window or the *passenger side* most of the time.
- If you transport clients, never leave them in a parked car during the summer heat, even with the windows cracked. In just 10 minutes, the temperature inside the car can jump by 20°F.

5 KEY points

1. In an average year, **at least 200 people die from a heat-related illness** in the United States alone. Infants and people who are elderly, sick and/or overweight are most at risk.
2. **Heat-related illnesses range from mild to severe.** They occur when the body has trouble keeping its temperature at approximately 98.6°F.
3. **Heat stroke is a true medical emergency** in which the body's core temperature can rise to 106° or higher in just 15 minutes!
4. Client safety is one of your main responsibilities. This includes doing all you can to **keep your clients safe from extreme heat**.
5. If you depend on your car to get to work, especially if you travel to clients' homes, **it's important to get your car in tip top shape for the summer months**. You don't want to find yourself stranded by the side of the road during a summer heat wave!

SUMMER FAQs

Q: I keep reading that sunshine is good for my elderly clients. Is that true?

A: It's true that exposure to the sun is one of the main sources of vitamin D...and many elderly people are deficient in that vitamin. Why? As people get older, their skin is less efficient at forming vitamin D. They may also spend less time outdoors and, when they are in the sun, they wear clothing that covers their arms and legs.

Researchers suggest that, if possible, people get from 5 to 30 minutes of sun exposure (without sunscreen) twice a week to "pump up" their vitamin D levels. However, before you encourage your older clients to "sunbathe"—even for a few minutes—check with your supervisor. Some medications cause sun sensitivity which can lead to a painful sunburn!

Q: Does "heat lightening" really have to do with warm temperatures? Is it ever dangerous?

A: Heat lightening is most often seen on warm, humid nights during July and August—which is how it got its name. But it doesn't really have anything to do with hot temperatures.

With heat lightening, you see the lightening flash but you don't hear any thunder. That's because the lightening is part of a thunderstorm that is too far away to be heard.

Typically, the sound of thunder only travels about 10 miles. But, the flash from lightening can be seen as far away as 100 miles, especially when the sky is hazy. So, because the storm producing the heat lightening is so distant, you have nothing to worry about. You cannot be struck by "heat" lightening.

Q: What's the deal with air quality...and why do we get air quality advisories during the summer?

A: The reason that air quality is a big deal in the summer is that heat and sunlight "cook" the air, including any toxic chemical elements contained in the air. This creates a chemical "soup" that turns into what most people call smog.

This summer smog makes breathing outdoors difficult for people who already have heart or respiratory conditions. It also causes healthy people to be more vulnerable to respiratory infections.

The U.S. government has developed an Air Quality Index (similar to the UV Index on page 4). The index measures the top five air pollutants and comes up with a daily report on the air quality in your area. You can check it out for yourself on the internet at www.airnow.gov.

Q: I'm confused by the SPF number on sunscreen labels. What do they really mean?

A: SPF stands for "Sun Protection Factor." The SPF numbers range from 2 to 50—the higher the number, the better the product can screen or block the harmful rays of the sun.

For example, if you apply a sunscreen with SPF 30, it means that you can safely be out in the sun for 30 times longer than if you went without sunscreen.

Everyone benefits from sunscreen, no matter their race, ethnicity or current level of tan. So, play it safe and use the appropriate SPF for you! But, don't forget to apply sunscreen 30 minutes *before* you go outside and reapply it at least every two hours.

EMPLOYEE NAME
(Please print):

_____

DATE: _____

- ***I understand the information presented in this inservice.***
- ***I have completed this inservice and answered at least eight of the test questions correctly.***

EMPLOYEE SIGNATURE:

_____

SUPERVISOR SIGNATURE:

_____

Inservice Credit:	
☐ Self Study	1 hour
☐ Group Study	1 hour

File completed test in employee's personnel file.

IN THE KNOW

Developing Top-Notch CNAs, One Inservice at a Time

A Safety Module:

Summer Safety Tips

Are you "In the Know" about summer safety? <u>Circle the best choice.</u>
<u>Then check your answers with your supervisor!</u>

1. **True or False**
As people age, their bodies become less efficient at regulating body temperature, putting them at risk for heat-related illnesses.

2. **True or False**
The Heat Index measures how hot it really feels when you add the wind speed to the outside temperature.

3. **True or False**
Ninety percent of UV rays pass through clouds making it possible for your client's skin to burn on a cloudy day.

4. **True or False**
People are more prone to heat cramps if they don't sweat very much.

5. **If your client has signs of heat exhaustion, you should:**
A. Call 911 immediately.
B. Report the problem to your supervisor; then, cool the client down.
C. Perform gentle range of motion exercises on the affected limbs.
D. Apply a cool compress to the client's forehead.

6. **True or False**
Heat rash can develop into a secondary infection that must be treated with antibiotics.

7. **Which heat-related illness is caused by reduced blood flow to the brain?**
A. Prickly heat.
B. Heat edema.
C. Heat stroke.
D. Heat syncope.

8. **True or False**
The number one protection against heat-related illness is sunscreen.

9. **True or False**
Driving during the summer months is much more dangerous than in winter.

10. **True or False**
Clients with heart disease and/or asthma should avoid the outdoors during an air quality advisory.