

## **UNDERSTANDING & ADJUSTING TO WEATHER IN USA**

Many international students and scholars come from areas with less variation of weather compared to the United States, so it may be necessary to adjust wardrobes for the changes in climate in many states all across America.

Efforts to introduce the Celsius scale in the U.S. have not been successful so temperatures are normally given in degrees Fahrenheit. The formula for converting a Fahrenheit temperature to Celsius is  $^{\circ}\text{C} = (\text{F}-32) \times 5/9$ . Today, the temperature conversion can be done quickly by using a smart phone app or doing a quick search on an Internet browser of your choice.

People living in many states are advised to check weather reports each day to get notice of expected conditions and changes. Visit local TV or radio station web sites/ phone apps for the most current weather updates or the local newspaper web site as many have a very thorough weather reporting as well. Severe weather in diverse forms--heavy snows, high winds, ice storms, thunderstorms, high heat and humidity, tornadoes, and on some sites even high allergy or pollution alerts--can come at various times of the year. Being prepared with appropriate clothing can reduce your discomfort and provide safety during harsh weather conditions.

**NOTE:** Many Universities/Colleges in America uses a campus-wide alert system- which in addition to reporting violent incidents includes severe weather warning. All students are highly encouraged to subscribe to this alert system which delivers text/SMS or email messages to you in case of a weather or other emergency on campus.

## **DRESSING FOR COLD WEATHER**

The cold weather during winter in America often comes as a shock to visitors from warmer climate countries. Low temperatures are made even more uncomfortable when the wind is blowing. During cold weather you will hear reports about the **wind chill factor**. The wind chill is the temperature of still air that would have the same effect on exposed skin as a given combination of wind speed and air temperature. The lower the air temperature and stronger the wind, the lower the wind chill factor.

Wind chill factors below  $-30^{\circ}\text{F}$  are relatively rare but they do occur. Radio and television reports warn listeners of dangerous wind chill conditions and when it is best not to go outside. Most of the time you can go outside if you dress appropriately. Here are some suggestions:

- *Wear several layers of lighter clothing* rather than one or two very heavy layers. Several lightweight, loose layers will keep you warmer than one heavy layer because air trapped between the layers will be heated by the body and serve as insulation. Clothes with a lining are warmer than unlined garments because of the additional layer. Another advantage to wearing several layers of clothing is that extra layers can be removed indoors, where rooms may be quite warm.
- *Choose warm fabrics.* The type of fabric used in a garment can also affect its warmth. More absorbent fabrics, which allow perspiration and body moisture to evaporate from the skin, keep you warmer. Natural fibers such as cotton and wool are the

most absorbent and therefore the warmest fibers. (The fiber content of a garment is printed on a label attached to each garment sold in the United States, so when you are buying clothes, you can see what they are made of.) The weight of a fabric is not necessarily related to its warmth, but its thickness is. Thickly constructed fabrics (knits; pile fabrics such as fake furs; quilted, laminated or bonded fabrics; and thick tweeds) provide greater insulation and thus keep you warmer. Jackets filled with goose down, originally worn mainly for winter camping and hunting, have become very popular in recent years. Although very lightweight, they provide more warmth than jackets made of heavier materials.

- *Select clothing designed for cold-weather use.* Garment design also affects insulation. Tight clothing does not keep you warmer. It actually inhibits blood circulation, so the body cannot warm itself as efficiently, and also provides less chance for warm air to be trapped in the clothing for insulation. However, garments should fit tightly at the wrists, ankles, neck, and waist to prevent warm air from escaping. Ribbed or buttoned cuffs are warmer than open sleeves; turtleneck collars are warmer than open collars; knee-high socks or tights are warmer than ankle-length socks; thick-soled boots are warmer than shoes; pants are warmer than skirts. A belt at the waist or a tucked-in blouse or shirt helps trap warm air at that area of the body.
- In general, it is prudent when you must be outside during very cold weather to *leave as few areas of the body exposed as possible*. On very windy winter days, it is advisable to wear slacks rather than skirts, a long coat rather than a short jacket, and gloves. It is essential to keep your head and ears covered and to wear a scarf covering your mouth and nose. Remember that ears are easily susceptible to frostbite (damage to skin tissue due to freezing).

## **COUNTERING DRY-SKIN PROBLEMS**

Many people suffer from (or are at least annoyed by) dry, possibly itchy skin during the winter, because they spend time in rooms filled with air that has been dried during the process of warming. In the dry air, the skin loses its natural moisture. To counteract the discomfort of dry skin, consider getting a humidifier, a device that puts moisture into the air in an enclosed space. Apply a moisturizing cream/ oil to your skin after bathing. Use a hand lotion several times daily. Some lotions contain medications such as dimethicone which help with itchy, dry skin. Aloe vera, shea butter or other natural ingredient-based ointments/ lotions can be very effective too.

## **WALKING ON ICE**

Walking on ice-covered surfaces is dangerous. It is common for people to slip on the ice and fall down. Broken wrists and ankles sometimes result. To minimize the chance that you will slip and fall on the ice, follow these suggestions from Dr. Nancy Hamilton, published in the University of Northern Iowa's "Words of Wellness" newsletter:

- Take shorter steps.
- Keep your body upright when you walk.
- Keep your weight centered over your feet.

- If your balance feels uncertain, bend your knees slightly.
- Choose your footwear carefully! Wear low, rough-soled shoes. Crepe shoes, waffle shoes, or ridged soles are some suggestions.
- Watch where you are walking. Areas that get a lot of morning shade tend to be icier than sunny areas. Also, watch for areas where ice is melting. The one thing more slippery than ice is ice with a thin coat of water on it.
- Avoid hard packed snow. Fresh snow acts like sand to increase friction.
- If you do start to fall, bend your knees fast and pull your arms in. You want to fall in a tucked position, like a ball, rather than all spread out like a board. Trying to stop your fall with your hands is one of the most common causes of broken wrists.
- Plan to take a little longer to get where you are going. Maintaining control of your body is easier at slow speeds.

## **TORNADOES**

Tornadoes are powerful, twisting, wind/ hail storms that can measure up to several hundred yards (or meters) in diameter and may produce winds of more than 300 m.p.h. (500 km/h). These storms usually occur **in the spring and early summer** and can be very destructive and dangerous. When the National Weather Service issues a **tornado "watch"** it means that weather conditions are reasonably likely to produce tornadoes. Tornado watches are broadcast on all radio and television stations (as suggested earlier). A **tornado "warning"** means that a tornado has actually been spotted/ seen or touched ground in the area. The sirens in your city Severe Weather Warning System will sound continuously for couple minutes following issuance of a tornado warning. Most cities across America test these systems for few seconds one particular day of the week each month. If you hear a tornado warning, immediately seek shelter as indicated.

## **SUMMER TIME AIR-CONDITIONING**

Using/ blowing cooler air during the hot and humid summer weather, typically after the outside temperatures reach at least 70°F and more, is very common in many parts of the United States. Many states across America are known for hot and humid summer days, and so many University campus buildings use automated air conditioning system. This is often controlled centrally, and many times may not be adjusted individually by individuals for a particular office area. Some apartment buildings in your city or older campus buildings use window air conditioning units which can be controlled. Air conditioning helps keep the humid air under control and from seeping into the offices. Since this air tends to be much cooler than the outside air temperature, the only solution for adjusting to it is to wear a warmer outer layer such as cardigan, light jacket or similar apparel.

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