Most people will feel comfortable at room temperature, colloquially a range of temperatures around 20 to 22 °C (68 to 72 °F), but this may vary greatly between individuals and depending on factors such as activity level, clothing, and humidity. Satisfaction with the thermal environment is important because thermal conditions are potentially life-threatening for humans if the core body temperature reaches conditions of hyperthermia, above 37.5–38.3 °C (99.5–100.9 °F), or hypothermia below 35.0 °C (95.0 °F).The recommended level of indoor humidity is in the range of 30-60% in air-conditioned buildings, but new standards such as the adaptive model allow lower and higher humidities, depending on the other factors involved in thermal comfort. Recently, the effects of low relative humidity and high air velocity were tested on humans after bathing. Researchers found that low relative humidity engendered thermal discomfort as well as the sensation of dryness and itching. It is recommended to keep relative humidity levels higher in a bathroom than other rooms in the house for optimal conditions. High humidity and low temperatures cause the air to feel chilly.

Cold air with high relative humidity "feels" colder than dry air of the same temperature because high humidity in cold weather increases the conduction of heat from the body. There has been controversy over why damp cold air feels colder than dry cold air. Some believe it is because when the humidity is high, our skin and clothing become moist and are better conductors of heat, so there is more cooling by conduction.

Energy Saving Strategy

* Set your thermostats at that desired high temperature.
* Once you and your family acclimate to the colder weather, lower the temperature in the home by one degree each week.
* This one-degree reduction - maintained for even eight hours - can reduce a home's energy bill by 1 percent, according to the U.S. Department of Energy.
* Lowering the temperature further and preserving these lower temperatures for longer periods of time increases those savings, and you'll probably never notice the difference with such a slow, gradual change.

Signs a room maybe need more energy to stay at the same temperature and measures to prevent this in the winter:

* Close doors, windows, and vents to unused rooms makes it easier for the home's furnace to deliver the desired temperature to occupied living spaces.
* Schedule an annual furnace maintenance and inspection.
* Seal cracks around the windows or door jambs.

Signs a room maybe need more energy to stay at the same temperature and measures to prevent this in the summer:

* Hang up window treatments that block sunlight and prevent heat from entering through your windows.
* Install fresh or replace old weatherstripping and caulk around doors and windows to keep your home sealed.
* Install ceiling fans to increase cooling efficiency.
* Replace cooling units with energy-efficient models.
* Close Windows

Chicago Temperature Recommendations (The U.S. Department of Energy)

Indoor Winter temperature when present is 72° F (22° C) with an aim of 68° F (20° C).

Indoor Winter temperature when no one is present is 62° F (17° C) with a compromise of 66° F (19 ° C).

According to the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), the preferred temperature range for occupants dressed in summer clothes is 73F to 79F. (The U.S. Department of Energy 78F)

Indoor Summer temperature when present is 73° F (26° C) with an aim of 79° F (26° C).

Indoor Summer temperature when not present is 89° F (32° C) with a compromise of 83° F (28 ° C).

When light is off this indicates not present and therefore will set it 10 degrees cooler in the winter and ten degrees warmer in the summer. It will revert to ideal once light on indication is sensed.

Keeping your house warmer while you are away can help you save even more money this summer. Turning your thermostat up seven to 10 degrees F (two to three degrees C) higher while you are away at work, or any time you're out of the house for more than two hours, can help you save as much as 10 percent in cooling costs.

Watch humidity as an 80F day feels like 80F when the relative humidity is 40 percent, but an 80F day with 90 percent humidity has a "heat index" of 86F, which means you need to take extra steps to cool down. Fortunately, air conditioners are extremely good at reducing the relative humidity, especially if your home is air sealed and has vapor barriers in the basement or crawlspaces.