What is frostbite?

Frostbite occurs when the skin, and sometimes tissue beneath the skin, freezes due to prolonged exposure to cold temperatures.

Frostbite is a skin burn from the cold. Just like a burn from heat, burns are rated by severity and have first, second and third degree forms.

Frostnip is the mildest form of frostbite.
While the temperature outside may be cold, you need to consider the wind chill factor. Wind chill is how the outside temperature and wind feel on your skin and can significantly lower the outside temperature depending on wind speed.

bundle up & protect your skin!
Frostbite risk increases as temperatures fall below 5°F

<table>
<thead>
<tr>
<th>Wind chill factor</th>
<th>Time for frostbite to occur</th>
</tr>
</thead>
<tbody>
<tr>
<td>-15°F</td>
<td>40 minutes</td>
</tr>
<tr>
<td>-20°F</td>
<td>30 minutes</td>
</tr>
<tr>
<td>-25°F</td>
<td>20 minutes</td>
</tr>
</tbody>
</table>
areas most affected by frostbite

ears  fingers
cheeks  toes
chin  nose

Frostbite causes a loss of feeling and color in the affected area. In severe cases, frostbite can lead to amputation.
tips to prevent frostbite

wear loose, light layers to trap warm air & keep clothing dry

layer 1
Wear a synthetic material that wicks moisture away from the body.

layer 2
The next layer should be wool or fleece which are good insulators.

outer layer
Top layer should be windproof and waterproof.
feet & toes
Choose waterproof & insulated boots or shoes.

head
Wear a hat. 40% of body heat can be lost from your head.
Face masks or scarves also help to protect your mouth & lungs from extreme cold.

hands
Generally mittens are warmer than gloves. Make sure they are snug at the wrist.
limit your time outside

Try to move into warm locations periodically and limit your outside time on extremely cold days. If you have to be outside, move around. Physical activity raises body temperature.
If you are touching wet snow, wear waterproof apparel from mittens to snow pants. Also make sure that coat sleeves and pants are tight at the wrist and ankles to keep the snow out.
Recognize symptoms

Skin numbness
Redness or pain
Affected skin looks white or grayish-yellow color
Skin may feel unusually firm or waxy

Many times the affected person is not aware until someone else points it out because the frozen tissue is numb.
What to do when frostbite strikes

Call the doctor/go to an emergency facility
Get to a warm place
Remove wet clothes
Don't rub/massage affected areas
Don't walk on feet if affected as it can increase damage

For mild cases:
Gently rewarm frostbitten areas by soaking in warm water for 15–20 minutes. Make sure the water is not hot! Avoid rewarming with direct heat like a stove or heating pad – this can cause burns.
Frostbite requires medical attention because it can damage skin, tissues, muscle and bone.

Severe frostbite can even cause infection and nerve damage. The mildest version of frostbite, called frostnip, can be treated through rewarming, but if you feel you or your child has frostbite call your doctor immediately or visit an immediate care facility.

For mild cases:
- Gently rewarm frostbitten areas by soaking in warm water for 15–20 minutes. Make sure the water is not hot!
- Avoid rewarming with direct heat like a stove or heating pad – this can cause burns.

Call the doctor/go to an emergency facility
Get to a warm place
Remove wet clothes
Don’t rub/massage affected areas
Don’t walk on feet if affected as it can increase damage