

# Dressing Children For Cold Weather

Choose outdoor clothing according to the temperature and the wind. Watch the thermometer and listen to the weather reports. It is almost as bad to wear too much clothing as too little clothing. Children are very active and overheat readily when dressed too warmly. Proper outdoor clothing is key to ensure your Alaskan winter is fun and safe!

## For Wet Cold

Down to 10 above, lightweight underwear, medium-weight pants, a long-sleeved shirt and socks, plus waterproof boots, are usually enough clothing. Add a warm, water-repellent coat, lightweight cap and warm mittens to keep the child warm and dry. Nylon mittens with flannel linings are a very poor choice because when the hands perspire, the nylon does not allow for evaporation and the hands become cold and



wet. In extreme cold, the nylon on these mittens tends to crack.

## For Dry Cold

Anywhere from 10 degrees above to 20 degrees below zero, add more clothing,

such as wool socks over cotton socks, snow pants over jeans, heavier mittens and warmer cap.

Footwear may be fur-lined, synthetic fleece-lined or wool-lined boots or mukluks, and should be removed in the house. Feet should not perspire or the socks get wet. Frosted feet easily develop in extreme cold with perspiration-soaked socks.



## For Extreme Cold

At 20 degrees below zero and colder, the same basic garments can be worn close to the body. Add lightweight long underwear for longer periods in the cold. Jeans as a single layer are not sufficient in extreme cold. They fit tightly and do not hold enough warm air. Fleece pants or other warm fabrics are preferred. Snow pants, a sweater and a parka are needed. Mittens should be used instead of gloves because they hold the fingers together and make for greater warmth. In extreme cold, a parka is preferred to a jacket or coat. Also add a neck warmer or a scarf to cover the nose and lower part of the face. A hat should be worn under the parka hood.

## Important

- Keep it Clean.** Clothing must be kept clean. Dirt clogs the air spaces in clothing and reduces the insulation.
- Avoid Overheating.** Do not overheat to the point of perspiration. Always remember that perspiration invites freezing.
- Wear Loose in Layers.** Several layers of medium weight clothing holds more still air and keeps the body warmer than one heavy garment of the same weight. Remember that weight doesn't mean warmth, but layers do.
- Keep it Dry.** Clothing must be kept dry from the outside. Keep snow from collecting on outer clothing. Body heat can melt snow, thus forming moisture that may penetrate through the fabric.

### *The feet are the hardest part of the body to keep warm and dry.*



Wear socks in graduated sizes. Do not wear sock combinations that restrict the blood circulation. When children wear the shoe and boot combination, remember that the cold comes up from the bottom of the boot. Therefore, some type of insulation should be inserted in the boot to form an

inner sole. This will form a "cold barrier" between the sole of the shoe and the bottom of the boot.

One type of outerwear that is considered ideal for children is the snowsuit. The snowsuit should be loose enough to permit an extra layer of clothing between regular clothing and the outer garment (for example, a sweater).

Ideal coats for children consist of a windproof shell with a fleece, pile or quilted lining and an attached hood. Ideal fabric for the shell is woven canvas or water-repellent cloth; rubberized or other vapor-proof cloth is not good. Two things to keep in mind: valuable body heat will escape from a bare head and the danger of frostbitten ears is increased. These problems can usually be eliminated with the hood. However, not all hoods fit snugly, so wear a hat that covers the forehead and ears. The head should be covered at all times in extreme cold weather.

## Remember

Frustrations that bring tears to the child and gray hairs to parents and teachers are:

1. Zippers that won't zip.
2. Lost buttons.
3. Lost mittens.
4. Pockets that aren't there or have a hole in the bottom.
5. Straps that won't lengthen or shorten.
6. Too little clothing.

Winter clothing should be kept in good condition, with tears mended, all buttons on and fasteners and zippers operating easily. A long cord or elastic extending from one mitten to the other through the sleeves and across

the shoulders of the jacket or top of coat will keep mittens from getting lost. A large pocket sewed to the lining of the child's jacket will hold a report card, school notices and lunch money safely. Clutched in a bulky, mittened hand, they may be lost.

Purchasing a snowsuit large enough to last the child more than one season may not be as wise as it sounds. Oversized pants and jackets may make the child fight against wearing them, with possible serious results. It may be better to get the proper size in a less expensive suit.

## More Things to Remember!

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Points to look for in outdoor garments are material, design, suitability for the purpose and, of course, cost. Materials for outdoor garments follow the design for home insulation. The theory is to trap air in dead air space between layers of fabric. There are two ways to do this. The first is to stitch fur, synthetic fiber insulation, fluffy wool or a down fill between two layers of fabric; the other is to keep the body warm with layers of warm clothing, such as two shirts, two sweaters, two pair of socks and so on.

To the active child, a two-piece snowsuit is more comfortable than a one-piece. A bib-style trouser gives an extra layer of warmth over the chest and stays on well. You want porous, absorbent nonshrinkable, mothproof and washable material. It should be cut to fit comfortably and to close snugly at all openings, but it should still allow the child to move.

A suitable garment for a child is one that he can help himself into and out of. It is also wise to appeal to a

child's taste in color and design. Your youngster might find it uncomfortable to wear something not acceptable to his age group.

There are many alternatives in clothing selection ranging widely in cost. Choose carefully, with attention to details such as the type and thickness of insulation and the durability of covering and fasteners. Generous hems and seam allowances with triple stitching will add to the wearing qualities of any coat or parka. Watch for coats that have an extra flap over or under the zipper. This prevents cold from leaking around or through the zippers.

## If You Want to be Thrifty

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When clothing is outgrown, exchange it with friends or neighbors for a garment of equal quality outgrown in their family.

Hand-me-downs are common in large families. Make over or add a touch of new trimming to help take the curse off an old garment.

Many mothers feel that they can save money by making parkas. When making a parka for a child, buy enough trim for the sleeves but add this the second season. The trim can be used to cover the crease line when you lengthen the sleeve.

If the parka has a fur ruff, remove it before the parka is dry cleaned because ordinary dry cleaning tends to dry out the hide of the fur and greatly shorten the life of the ruff. If the ruff is properly cared for, it will outwear the life of several parkas. If the fur ruff is matted,





brush briskly with a wire dog brush. The ruff can be made to look almost like new again.

Read and follow the directions for care and washing or cleaning.

Interline snowsuits with old sweaters or with flannel to extend their wear and to gain warmth as well.

Teach a child to take care of his clothes, e.g., hang them up, dry them properly and change them frequently.

## — THIS IS A SERIOUS PROBLEM! —

### Chilblains and Frostbite

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Chilblains are skin inflammations caused by exposure to cold, followed by a rapid change to room or normal skin temperature. In mild cases, the person affected may experience tingling and slight itching in the exposed area. That area may feel cold and clammy to the touch and appear somewhat bluish in color.

With advanced-stage chilblains, the skin will swell up and congest after rewarming. The condition may subside or be present for months. Once you have had chilblains, the affected part remains susceptible to cold and must be protected from further exposure.

Frostbite is worse than chilblains. Ice crystals actually form in the skin, or even in the underlying body tissues, and can cause permanent damage to the tissue itself.

Frostbite can lead to amputation, or it can be very painful for a long period, leaving the child hypersensitive to cold for the rest of his life. It is an ever-present danger when temperatures are below freezing. It can sneak up and grab you before you realize it.

**Watch for these symptoms:** The first sign of frostbite may be a prickly feeling or painful discomfort followed by numbness. The affected skin areas will be pale and glossy at first, becoming white or gray with continued exposure.

First-degree frostbite, like sunburn, is an injury to the surface skin. It will likely attack ears, toes, fingers, cheeks or nose — or any skin surface exposed to extreme cold.

Second-degree frostbite causes blistering, but no significant tissue loss. Third- and fourth-degree frostbite will cause serious loss of tissue. It is important that individuals are aware of the symptoms when exposed to severe weather conditions.

**First aid possibilities are limited:** Do not rub frostbitten areas with snow. Severe pain accompanying thawed-



out frostbitten areas may need to be controlled. Thaw the frostbitten tissue as soon as possible, but not until the part can be kept from refreezing.

Immerse the frozen part in warm water, 100 to 104 degrees. After the frostbitten part returns to normal temperature, discontinue heat. Watch for signs of other injury that may have occurred at the same time as the frostbite. Keep the frostbitten individual in bed. Rest and elevate affected parts.

The frostbitten part should be protected from further exposure to cold. Protect it from further injury from the weight of bedclothes, walking or weight bearing. Protect blisters from breaking and keep the frostbitten part clean by soaking it in water with antiseptic soap daily. All but the most superficial injuries should be seen by a physician.

## — THIS, TOO, IS SERIOUS! —

### Understanding Hypothermia

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Hypothermia is another condition brought about by exposure to cold temperature conditions, although it can occur in temperatures as high as 50 degrees above zero. Hypothermia is much more serious than chilblains and frostbite. Having hypothermia means that your body becomes chilled, causing rapid mental and physical collapse when the body no longer has energy enough to hold the body temperature normal.

Hypothermia is brought about most often because the body gets wet either from perspiration because a person is overdressed for the weather or because clothes get wet from rain or perhaps an unexpected dunk in the river or lake. The most dangerous part about hypothermia is that the person affected often may not know that he has it. Along with hypothermia can come a sense of euphoria (well-being) and even warmth, accompanied by a strong desire to sleep.

**Repeat: it can happen in temperatures of 30 to 50 degrees above zero. It can kill.**

### To Prevent Hypothermia

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1. **Keep dry!** Wet clothing loses a great deal of their insulating value. Wool and synthetic fleece lose



less. Cotton and down lose more. Clothes can become wet from exterior sources like rain, or from excessive sweating. Layer clothing, e.g., undershirt, shirt, sweater, jacket, etc., for easy removal if the child becomes too warm. If it's raining, wear rain gear — waterproof pants, jacket with hood and rubber boots.

2. **Beware of wind!** Wind will refrigerate wet clothes by evaporating moisture from the surface. It can drive cold air under and through the clothing to the body surface. Even a slight breeze will carry heat rapidly away from the body.

### Symptoms of Hypothermia

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1. Uncontrollable fit of shivering
2. Vague, slow, slurred speech
3. Memory lapses. Incoherence
4. Immobile, fumbling hands
5. Frequent stumbling or lurching gait
6. Drowsiness, apparent exhaustion, inability to get up after a rest

### Hypothermia is a Medical Emergency

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To find the equivalent wind chill factor expressed as a temperature, find the actual thermometer temperature at the top and follow down the column. Then read across from the actual or estimated wind speed. At the intersection of the two columns, read the equivalent wind chill factor expressed in degrees. For example, with a wind speed of 10 mph and a temperature of 10 below, the equivalent wind chill temperature is 28 below.

#### **ZONE 1 — Wet Cold** (chill factor above +10°F)

Dress with medium-weight, normal clothing. Add water repellent outer clothing. Hypothermia is the

greatest danger, and it may develop quickly if a person is wet.

**ZONE 2 — Dry Cold** (chill factor between +10°F and -20°F)

Children may play comfortably outside if clothed with two pairs of socks, snow pants, mittens, warm caps, lined footwear and warm coats. Frostbite may develop on exposed flesh in minutes to hours. Hypothermia may develop through perspiration or accidental wetting.

**ZONE 3 — Extreme Cold** (chill factor between -20°F and -70°F)

Children may be outdoors for short periods of time with long underwear, warm pants and sweaters, overpants, parka, scarf, mittens and mukluks. Frostbite may develop within minutes on exposed flesh. Adequate ventilation in clothing prevents perspiration and possible hypothermia over long periods.

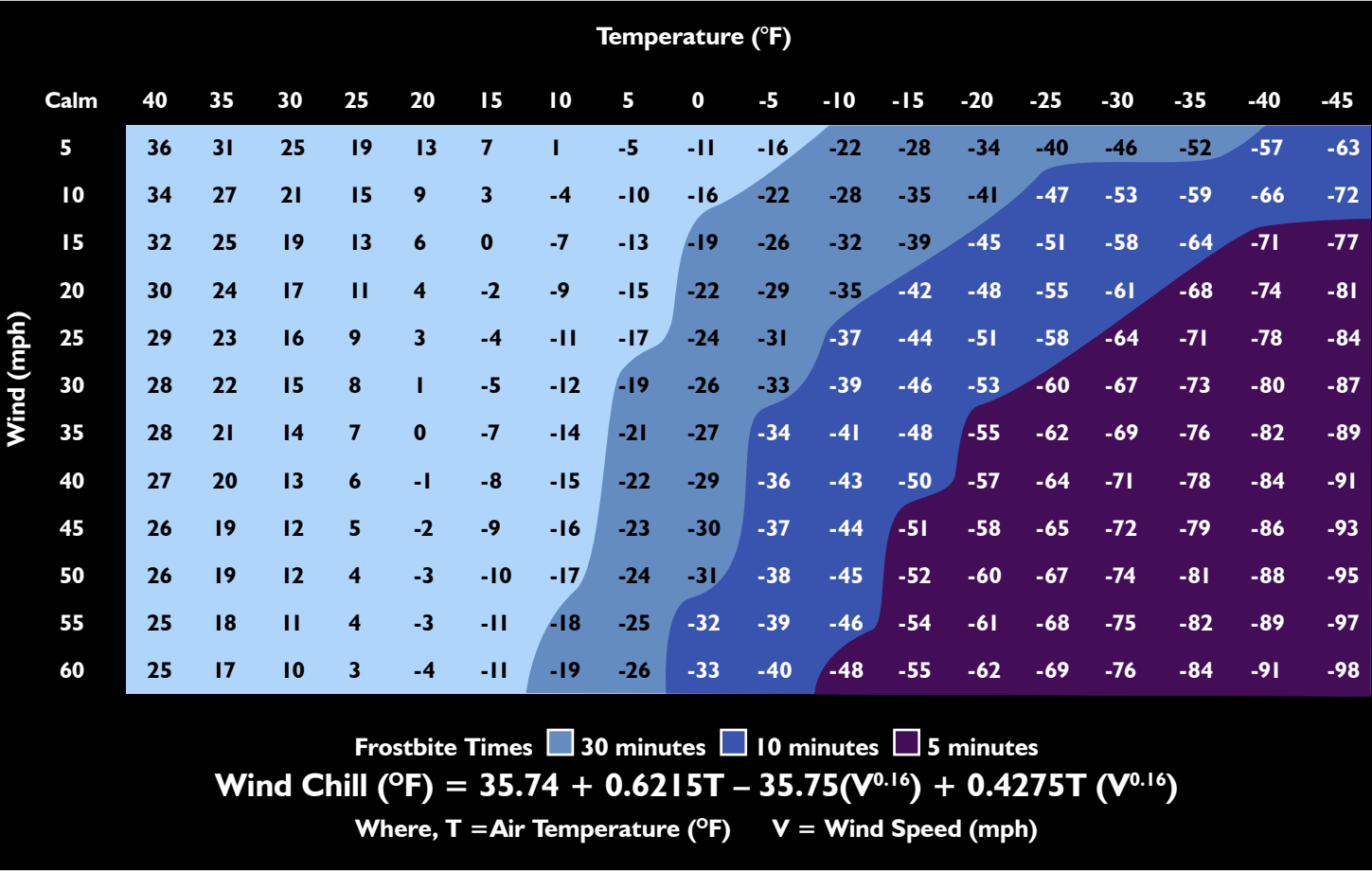
**ZONE 4 — Dangerous Cold** (chill factor below -70°F)  
Be outdoors only when absolutely necessary. Exposed flesh may freeze in seconds. Hypothermia is also a danger.

**Prevention is the Best Protection**

This means being properly dressed in warm clothing with waterproof boots and dry socks and good covering for the head and ears. Keep clothing dry from both perspiration and outside moisture. Avoid tight clothing that may restrict circulation.

In subzero temperatures there is the danger of the car stopping or stalling, so extra-heavy clothing (boots, snow pants, mittens and scarves) should be carried in the car, enough for each family member. This is needed in order to keep warm while waiting or walking for help — if not properly dressed, there is

**The National Weather Service Wind Chill Temperature index calculates the dangers from winter winds and freezing temperatures.**







## Safety Features

### Color

A child's outdoor clothing should show up against the background in which he is playing. Good attention-attracting colors are bright blue, bright green, red-purple, orange-red or yellow.

### Reflective Tape and Safety Lights

Cold weather time is also the darkest time in Alaska. Reflective tape stitched or ironed to the back, front and shoulders of the parka or coat can be readily seen by motorists. Reflective tape is available at fabric shops or can be purchased online. If reflective tape cannot be easily applied to the child's outerwear, reflective safety vests are another good option. While not a substitute for high visibility, reflective clothing, LED-lighted zipper pulls, belts or armbands can also increase safety. The risk of being struck by a motor vehicle during the dark, Alaska winter is proven reality and poor visibility is a primary contributor to these tragic events. **Reflective tape saves lives.**

a danger of frostbite when walking only a few blocks. Sleeping bags or blankets are good emergency gear to carry with you.

Hypothermia may be a problem after long periods of time or if you are wet even at relatively warm temperatures.



# Choosing Winter Gear

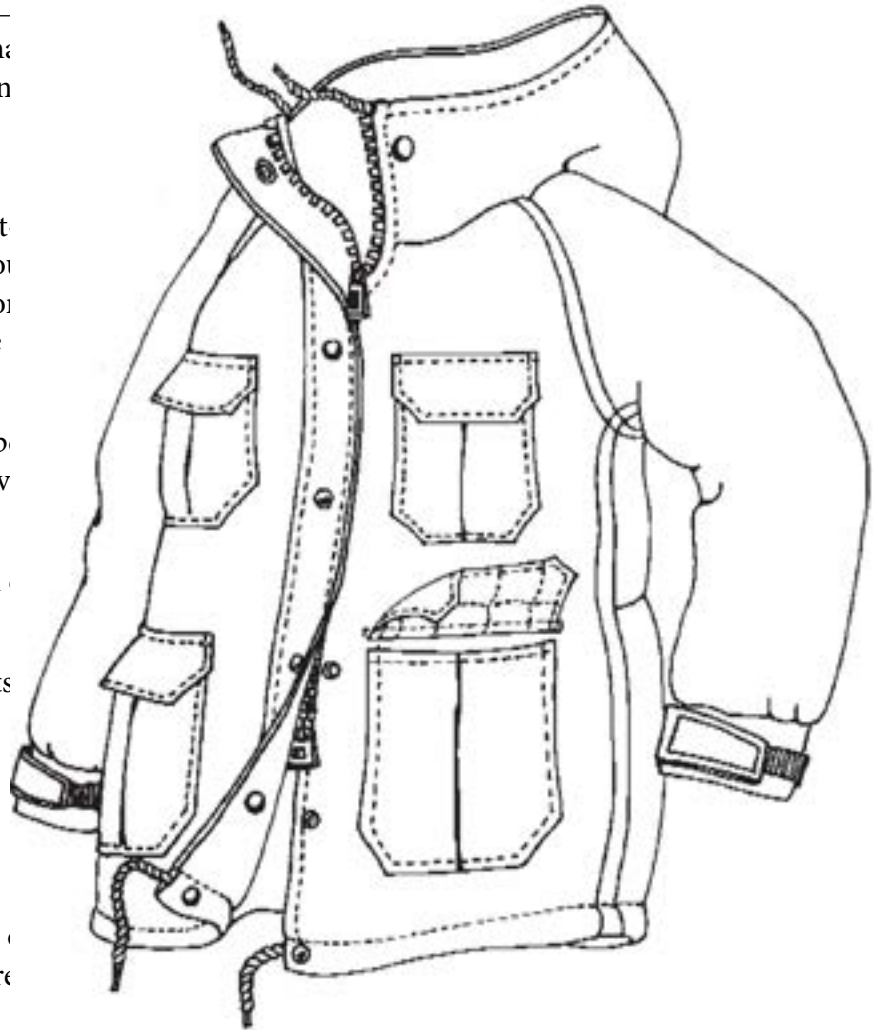
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## Design Features

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There are many different features on a garment that will keep you warm. Look for the following design features that will help insulate your body in cold weather:

- Zippers that open from both the top and bottom have great ventilating advantages. As you become warm, you can unzip from the top or bottom to let excess body heat and moisture evaporate.
- Storm flaps snap securely over or under zippers to keep wind or water from leaking in and provide extra warmth.
- Insulated pockets are an extra feature which make it easier to warm your hands.
- Adjustable cuffs aid in ventilation. The wrists are a good place to get rid of excess body heat. Adjustable cuffs can be loosened or opened when the wearer gets too warm. Cuffs with fasteners such as self-closing tape, snaps or buttons are a good choice.
- Drawstrings at the hood and waist will keep out cold air and allow for ventilation when desired.
- Consider neck bands or collars that can be turned up to keep out chilling winds.
- Raglan sleeves eliminate shoulder top seams that might collect snow or rain, or create a cold spot. They also allow for greater freedom of movement.
- Consider the length of a jacket. A hip length style will be warmer than a waist length style.
- A hood is important for maximum warmth. Much heat is lost through an uncovered head.



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1-71/JWW/06-19

Revised May 2019