

Cold Capping & Scalp Cooling Systems During Chemotherapy

Cold capping (also called **scalp cooling**) is a method used during chemotherapy to help reduce or prevent hair loss. Scalp cooling works by lowering the temperature of the hair follicles, which reduces the amount of chemotherapy medication that reaches the follicle.

There are two types of cold capping: **manual systems** and **automated systems**. At this time, **automated scalp cooling machines are not available in Alaska**, so this guide focuses on **manual cold capping**, specifically using **Penguin Cold Caps**, which is the system I used personally.

The decision to cold cap is very personal. You should consider factors such as whether you have the support to do manual cold capping (it can be done without a buddy/helper/professional assistant, but takes some work); whether you will have an IV or a port (an IV will make it a bit more difficult to cold cap without a helper); the expense of purchases or renting the cold caps; whether you have to travel out of town for your chemo infusions; etc. There are many reasons why women decide to cold cap—just a few are: to reduce the risk of permanent hair loss; to mitigate the effects that having mom lose her hair might have on their young children; to try and just feel better by keeping as much hair as they can.

For a general overview of scalp cooling, see:

<https://www.breastcancer.org/treatment-side-effects/hair-loss/cold-caps-scalp-cooling>

Types of Cold Capping

1. Manual Cold Capping

Manual systems involve a set of caps that are cooled on **dry ice** inside a cooler. Caps are changed every 20–30 minutes. You typically start capping an hour before infusion starts, during, and then for 4-5 hours after infusion ends. Some cold caps are rented and some you can buy.

Common manual systems include:

- **Penguin Cold Caps** (rental) – <https://penguincoldcaps.com/us/>
 - That is also the type of cold cap that one of our WL members used—her chemo drugs carried the risk of permanent hair loss. Although she still lost some of her hair (about 50%), it grew back and she was happy with the cold capping results.
- Other brands exist such as Arctic, and Polar, but Penguin is the system most commonly used in Alaska.

2. Automated Scalp Cooling Systems

Automated systems (such as **DigniCap** and **Paxman**) use a single silicone cooling cap connected to a computer-controlled refrigeration machine. The cap stays cold throughout the entire infusion, and no cap-swapping is required.

Important: These machines currently **do not exist in Alaska**, so local patients must use manual cold caps if they choose to scalp cool.

What You Need for Manual Cold Capping (not all inclusive)

1. A Portable Cooler

- A **wheeled cooler**, around **60-quart capacity**, works well.
- Some companies rent coolers, but it's usually easier and cheaper to buy one locally.
- If renting from Penguin, all equipment *except the cooler* fits into a USPS large Priority Mail box.

2. Dry Ice

- Anchorage source: **Alaska Ice**, 2400 Commercial Drive.
- I used **60 pounds** of **pellet-style** dry ice and picked it up the morning of each chemo session.
- Other local sources may exist. Pellet style makes packing and swapping caps easier.

3. Helpful Accessories

- **2.5-gallon Ziploc bags** to hold pellets (bags must remain unsealed because dry ice off-gasses).
- **Infrared digital thermometer** (~\$30 at Lowe's). More reliable than the thermometer provided by Penguin.
- **Cotton rounds** to protect ears from cold exposure.
- **Towels** for kneeling next to the cooler or wiping off condensation from caps.
- **Hand mirror**, especially helpful for at-home post-infusion capping if you are doing it yourself.
- **A reliable helper**—manual capping is much easier with another pair of hands.

Training & Learning Resources

- **Facebook Group:** *Chemo Cold Cappers Support Group* — extremely helpful, active community.
- **YouTube Videos:** Search for “**Penguin Cold Cap**” or “**cold capping**.”

Videos by **Scot Dietz** were especially helpful.

- **Note:** Penguin's own training videos were outdated when I used them, so supplement with newer online resources.

Insurance Coverage & Financial Assistance

Insurance:

Coverage for cold capping varies widely. Many insurance companies **do not cover it**, but this is quickly evolving. Always check with your insurer before starting.

Financial Assistance Options:

1. HairToStay

<https://hairtostay.org/>

- National organization offering **cold capping subsidies**.
- Important: Funding is **not retroactive**—apply *before* or *as soon as possible after* you begin.
- Standard income threshold is ~400% of FPL, *but* exceptions exist due to donor-specific funding. It's still worth applying even if you're over the guideline.
- I received a decision within a few days.
- Their website also includes excellent information about hair care during chemo.

Quick Notes for Alaska Patients

- Automated systems: **not currently available**.
- Dry ice is readily available in Anchorage.
- Shipping rental caps back and forth is straightforward but factor in the cost (note: when I returned my penguin caps/misc. items...they all fit inside a USPS priority box)