## "To Dip or Not to Dip?" That is the Question ("In Winter")! By Leo Timms

Barely into fall but a little snow, a few freezing temps, and some crazy wind chills have raised questions and concerns about winter teat problems! We're there again, and the same old question pops up: To dip or not to dip? If so, with what? And what else can we do to stop winter teat problems? Let's start with why dip?

The purpose of teat dipping is to provide a germicide that will kill mastitis germs and apply skin conditioners that keep teat skin and ends healthy. These are both essential to minimize mastitis risks! In winter, we want these same things but want to make sure that when we dip, we don't compromise one for another (frozen teats, more germs on teats). <u>So initially (not just winter) you</u> <u>need a dip that has a proven germicide and excellent</u> <u>skin conditioning.</u> We need to start and be here all the time. But now, winter is coming? Here's the choices!

- Use the same good germicide, skin conditioning dip you've been using!
  - Most days, it's not cold enough to freeze the drop on the teat end so tally ho!
  - In situations (cold wind chills and/or direct exposure post milking), dab or wick the drop off the end with a cloth towel. This takes very little time and effort. DO NOT DRY THE TEAT as it removes the dip / conditioners. This has been proven to work!
  - Never add extra conditioners to dip! It screws up the formulation!
- > What about barrier dips?
  - Not recommended in very cold weather and exposure situations since they take 20+ minutes to dry, thus increasing risks for teat end problems!
- What about the winter formulation dips? High emollients and/or powder dips?
  - Designed to be used only during cold weather and high risk situations where teats will freeze or dehydrate quickly (like your fingers cracking)!
  - Usually cost 2X your regular dip ( but evaluate potential returns, not just investment!)
  - High emollient dips: (usually > 50% skin conditioners): Minimizes initial freezing risk post milking due to slow evaporation; Make sure germicide is proven!; Teats stay wetter and oily longer so may increase risks with prolonged cold exposure or dirty conditions (sticky teats!)
  - **Powder based dips:** Function to keep teats dry (no liquid). New formulations have germicide and skin conditioners. Stalls, etc must be clean / dry, to avoid wicking on teats. Need to get adequate (full teat) coverage so dip properly!

- What about salves?
  - NOT THE BEST CHOICE! High risks unless germicide and skin conditioning are proven!
  - Most germicides can be overcome by contamination!
  - Greasy hands, greasy teats, greasy equipment! A mess and a great way to spread things!
  - Can coat / trap infections; grease attracts (dirt, etc.!).
  - Research shows minimal or no effect ( some detrimental) when more fluid salves are used.
  - If you decide to use, use sparingly (only on the risky area teat end!)
- What about quitting dipping /doing nothing else?
  POOR CHOICE OR NOT EVEN A CHOICE!
  - Teats are still wet after milking; teat skin conditioners milked off; increased dehydration and cracking risks; Plus no contagious mastitis germicides!

So there's the dip choices! It's a sure thing that winter will come, a sure thing that teat end problems will occur (none of the above can totally stop everything), and a sure thing that the best way to deal with it is manage the risks. Weigh out the options above and pick the one that you can manage the best. Couple this to other management strategies such as **minimizing direct wind exposure post milking, clean dry stalls** to prevent chilling and organism growth, and **excellent milking techniques and properly functioning milking equipment** that minimize other teat stressors.

(Below is a graph from one of our ISU trials evaluating winter teat dips with high emollients. The graph shows teat skin scores. There are 3 separate barns on the same facility (EW and WW are tie stall, FS = free stall). As can be seen, dips work differently depending on weather exposure, with a lot of fluctuation in skin condition even with these high emollient dips. They also work differently depending on barn and weather exposure.



## Combined Skin Data for 1% I2, 50% glycerin