Tips for Cold Weather Teat Dipping

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During the winter months, the questions often arise: “Should I continue to dip teats during severe cold weather?” or “Under what conditions should I stop teat dipping to avoid frozen teats?” For the most part, teats are not affected by the typical cold temperatures experienced in sheltered, cold, free stall housing if teats are completely dry. However, severe cold temperatures combined with wind chill can result in frostbite even when teats are dry. Therefore, any time cows exit a parlor into cold weather conditions in which the combination of cold and wind result in wind chills of -25°F, preventive steps need to be taken. Ample amounts of dry bedding material should be placed in free stalls, and construction of effective windbreaks around parlor exits and feed bunks located outside buildings minimizes the effect of the cold on teat skin surfaces. Note that at wind speeds of less than 5 mph, temperatures as low as -20°F can be tolerated; however, with extremely high winds (30 mph) and temperatures as high as 15°F, wind chill could be a problem.

Wet skin or skin surfaces that are frequently washed resulting in loss of some of the natural oils are more vulnerable to frostbite than skin that is kept dry. Thus, the question of how to manage teat disinfection during winter is a logical question. The most common solution is to stop teat dipping entirely. It could be reasoned that during severe cold weather, bacterial growth on teats and in the environment is much less; therefore, teat disinfection is not quite as crucial during those periods. However, in some regions of the northern United States the complete cessation of teat dipping during the cold winter months has allowed the spread of contagious mastitis pathogens. In addition, it should be pointed out that omitting teat dipping does not assure that teats are dry. In severe cold weather, even the thin milk film should be dried before the cow is turned out of the parlor.

A more preferable option is to teat dip every cow regardless of weather conditions, but under severe cold conditions, allow 30 seconds of contact time and then wipe or blot teats dry prior to the cow leaving the parlor. This procedure would add approximately 20 seconds per cow more time to each milking depending on the parlor design and milking routine. However, the consistently proven benefits of teat dipping in the reduction of intramammary infection should be realized.

Another option is to use a powdered disinfectant, which when applied immediately after milking, sticks to the moist teat. In theory, this idea has great appeal in solving the problem of teat dipping
during subzero temperatures, not only because of its disinfectant characteristics, but also because it serves to dry the teat. Also, there are liquid teat dips formulated to reduce the chances of frostbite during cold weather. Many current formulations have an adjusted concentration of the active ingredients to offset the possible negative effect that added emollients may have on the efficacy of the product. However, these teat dips, under extreme cold, will also freeze. Therefore, the safest course of action when using liquid teat dips is to dip the teat, allow a 30-second contact time, and then blot the teat dry before returning the cow to the cold housing area.