
MONTANA STATE UNIVERSITY EXTENSION

# Cow Sense Chronicle

## June 2015

### Injection Sites and Synchronization Protocols

How often have you seen the image below? The Beef Quality Assurance program has done a remarkable job of educating producers and consumers about best management practices, including proper injection sites. A Colorado State University study found that the incidence of injection site lesions in top sirloin butts decreased from 11.4% in 1995 to 2.1% in 2000, showcasing the impacts of BQA programming in changing producer practices. In the 2011 National Beef Quality Audit, 87% of survey respondents (beef cattle producers) preferred the neck for the administration of injectable animal health products.

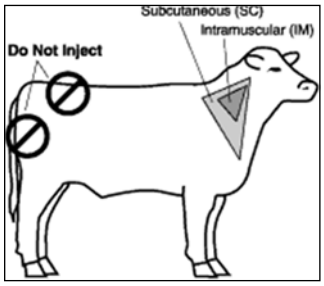


Diagram courtesy NDSU

You may have heard some folks recommending that hormones used for estrous synchronization should be given in the rump/hip due to closer proximity to the reproductive tract and perceived improvement in response to synchronization. Not only does this contradict the educational efforts of the BQA program, but it's also not accurate. Here's some data from North Carolina State University...studies were conducted over multiple years in two different locations with three different synchronization protocols to investigate the impact of giving prostaglandin in the neck or in the rump (between the hooks and pins). There were no differences in AI conception rates based on injection site. Cows at the North Carolina location had AI conception rates of 53% for neck injections and 54% for rump injections, while cows at the Ohio location had AI conception rates of 62% for neck injections and 61% for rump injections.

In a recent Ohio State Extension beef team newsletter, it was stated that each time an abscess in a beef round gets fluid in the cutting surface in a packing plant, it takes one minute to clean and sanitize the area. Stopping the line for that one minutes costs that particular plant $125.

A minute doesn't seem like a very long time, but consider this scenario. Say a truckload of 10-year-old cull cows are on the line at the packing plant. If they've received one or more shots of prostaglandin in the hip each year of their life, just how often would that packing plant encounter an injection site lesion that would cause the line to stop? That $125 a minute starts to add up pretty quick, impacting their bottom line as well as ours as beef cattle producers.

**Resources:**


· Montana Beef Quality Assurance: http://www.bqa.org/montana.aspx
· Roeber, D.L., R.C. Cannell, K.E. Belk, J.A. Scanga, G.L. Cowman and G.C. Smith. 2001. Incidence of injection-site lesions in top sirloin butts. J. Anim. Sci. 79:2615-2618
· Mabry, L. K. 2013. Comparison of estrous synchronization protocols in beef cattle. MS Thesis. North Carolina State University, Raleigh, NC. http://repository.lib.ncsu.edu/ir/bitstream/1840.16/9132/1/etd.pdf
· Ohio State Extension beef team newsletter: Issue #936, May 20, 2015: http://beef.osu.edu/beef/beefMay2015.html



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