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## PREVENTION

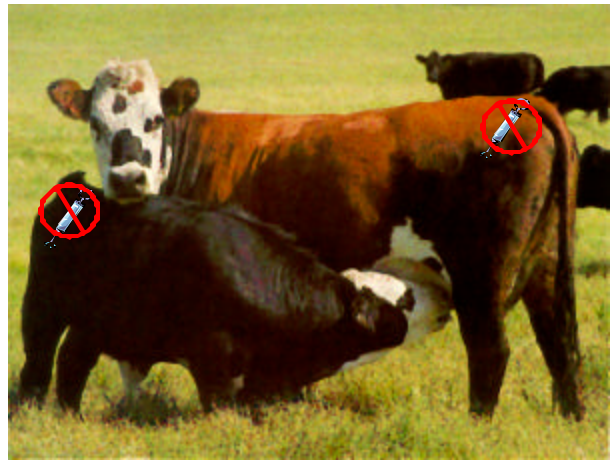
- ✓ **Try to use SC, pour-on or oral products, if possible.**
- ✓ **Give all IM and SC injections in the neck.** Alternate site for SC injections is over the ribs, behind the top of the shoulder blade.
- ✓ **Restrain animals properly before injection.**
- ✓ **Use and store products according to label directions.**
- ✓ Use the tented method when giving SC injections; and for IM injections, inject deep in the muscle at right angles.
- ✓ Use low volume products.
- ✓ Give no more than 10cc (ml) per injection site.
- ✓ Avoid off-label use of animal health products.
- ✓ Ensure injection site is clean.
- ✓ Change needles frequently; use clean needles.
- ✓ Never go back into the bottle with a used needle.
- ✓ Use transfer needles to reconstitute products.
- ✓ Space multiple injections several inches apart.
- ✓ Do not use outdated or contaminated products.
- ✓ Minimize use of invasive injection techniques that will result in muscle damage.

*produced by CCA; developed by Dr. Joyce Van Donkersgoed*

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## PREVENTION OF INJECTION SITE SCARS



**You can make a  
difference right now!**

**Canadian Cattlemen  
Quality Starts Here** ✓

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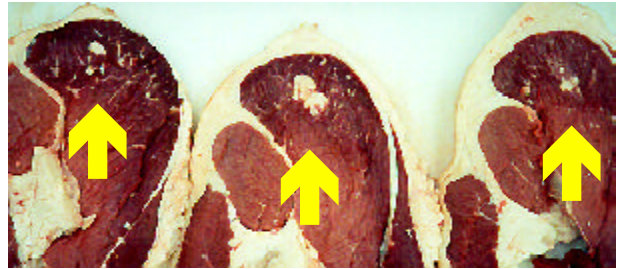
# Canadian Cattlemen Quality Starts Here ✓

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Injection site surveys have been conducted in Canada since 1996 to monitor the occurrence of lesions and to determine if improvements have been made by producers and veterinarians. To date, there has been only a slight reduction in scars found in top butts (sirloin steaks) in fed cattle. The prevalence has dropped from 22% to 14%. This prevalence is still too high. We should not be injecting in prime cuts of meat such as top sirloin butts (top hip) and rounds (thigh). This principle holds for cull cows and bulls as well.

When animal health products are injected into the muscle of cattle, they produce scar tissue that must be trimmed at processing. Injection site scars also create tough beef. In Canadian fed cattle (steers and heifers), the economic loss is estimated at \$ 7.15 to \$ 9.58 per head processed or \$ 13 to \$ 21 M annually.

This defect is preventable by proper injection site techniques.



Injection site scars in round steaks from an 8-way Clostridial bacterin given IM in the thigh at spring branding.



Proper SC techniques in the neck or rib area

