

Update on somatic cell counts

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Take home points

- **Clinical mastitis is the tip of the iceberg**
- **Proven control strategies**
- **Almost all SCC issues can be solved**
- **You cannot treat your way out of a problem**
- **Current WCVN research on controlling mastitis**

Why worry?

- \$300 - \$400 million in Canada
- Legal SCC limit: 400,000 cells/ml
- Decreased milk production
- Antibiotic use

Causes

- Primarily bacterial
- Contagious:
 - Live in udder
 - Transmitted during milking
 - *Staph. aureus*, *Strep. agalactiae*, *Mycoplasma*
- Environmental:
 - Transmitted between milkings
 - *E. coli*, *Strep. uberis*, *Pseudomonas*
- Opportunists:
 - *Strep. dysgalactiae*
 - CNS

Proven control measures

- **Correct milking order**
- **Milking time hygiene**
- **Good milking procedures**
- **Dry cow treatment**
- **Cull infected cows**
- **Keep stalls clean and dry**

Milking order

- **Separate high risk cows from healthy cows so milking machine not contaminated**
- **Can be limited by number of pens etc.**
- **Healthy cows**
- **Suspect cows (e.g. new arrival, fresh, after treatment)**
- **Chronic mastitis cows**
- **Contagious mastitis cows (i.e. Staph cows)**

Milking hygiene

- **Gloves can reduce transmission of bacteria by 50%**
- **Non-latex**
- **Frequent cleaning**
- **Only touch teats and milking machine**
- **Throw away after milking**
- **Predip: at least 30s**
- **Thoroughly dry teats with single use towel**
- **All dips over entire teat**
- **Dips give better coverage than sprays**
- **All dips must be approved by Health Canada and have a DIN number**

Other milking procedures

- **Check foremilk: always before wiping**
- **Stimulate milk letdown: 60-90s between stimulation and unit attachment**
- **Avoid overmilking: well adjusted take offs**
- **Milking system:**
 - Replace liners as recommended by manufacturer
 - Regular checks (1-2x per year) by an expert
 - Obtain written report
 - Make changes immediately, however minor

Dry cow treatment

- **Consult your veterinarian to establish details**
- **Use antibiotic labeled for dry treatment and follow withhold periods**
- **Internal teat sealant?**
- **Record treatments**
- **Follow first test SCC**

Further control measures

- **Culling problem cows:**
 - **Contagious/incurable bacteria**
 - **Chronic high SCC cows**
 - **Multiple clinical flareups**
- **Teamwork is crucial**
- **There is not a mastitis problem that is incurable!**
- **Clean environment and clean cows:**
 - **Frequent stall cleaning**
 - **Bedding management**



Mastitis research at WCV

- Coagulase-negative staphs
- More of a problem in herds with low SCC
- How much of a problem are they?
- How can they be controlled?
- If you are interested in participating, contact me or Colleen at WCV
- We will provide a mastitis consultation for participating herds including:
 - Herd cultures
 - Milking system
 - Environment

Acknowledgements

- **Canadian Bovine Mastitis Research Network:**
<http://medvet.umontreal.ca/rcrmb/en/index.php>
- **National Mastitis Council:**
<http://www.nmconline.org>