

PIONEER ANIMAL CLINIC

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Dear Producers and Buyers,

Greetings from the Torrington Livestock and Pioneer Clinic, I write you this letter as an update on Wyoming/Nebraska health regulations.

Brucellosis has long been the nemesis to free cattle movement from Wyoming to other states, with the creation of Designated Surveillance Area should allow for more free trade and less restrictions on movement. The revised chapter two rules did change some rules of female management. The new rule requires that all female bovine over twelve months have an official ID. This official ID can be an orange bangs clip, green Wyoming clip, silver USDA clip or a blue spay clip. This is to allow for better identification and trace of cattle moving into and out of the DSA and the state of Wyoming.

Enclosed is a hand out on trichomoniasis or trich in layman terms.

Trichomoniasis is a reproductive disease that causes early term abortions. Cows that are infected either are open at pregnancy check or are late bred. This decreases the number and weight of calves weaned, thus the dollar returned to the producer. With the increase in young open cows going back out into circulation to be bred this creates a high risk for spreading the disease. The hand out goes into greater detail on diagnosing the disease, if you think you may have this problem please contact your local veterinarian or ask Dr. Welsh or Dr. Skavdahl we would be happy to visit with you.

On the topic of trichomoniasis, Nebraska has adopted import rules pertaining to female bovine to prevent the spread of trichomoniasis. Cows and heifers can move to Nebraska for feeding only or must be accompanied by a trichomoniasis free statement, be virgin heifers that have not been exposed to bulls since calving, or be at least 120 days pregnant. This statement relies on both the producer and his veterinarian to comply.

Good luck in 2010 remember to continue to pre-condition your calves and breeding vaccinations for your cows. Remember that a happy buyer is a repeat buyer. If you ever have any health management questions feel free to ask anytime.

**Thank You
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Joseph T. Skavdahl D.V.M.**

Trichomoniasis: What producers should know!!

Robert Mortimer, MS, DVM, ACT

We know that Trichomoniasis is a sexually transmitted disease that has can have devastating effects on both the reproductive performance of a herd and the profitability of a beef cattle operation. A number of interacting factors related to the disease are not usually presented to producers.

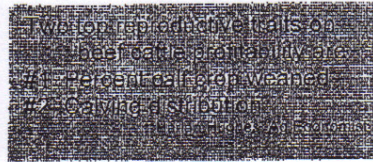
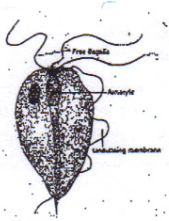


Figure 1. *Tritrichomonas fetus*



Trichomoniasis is caused by the protozoa organism, *Tritrichomonas fetus* (Figure 1). This organism has the following attributes 1) larger than bacteria, 2) slower rate of multiplication, and 3) incapable of surviving for long periods of time when directly exposed to the environment.

Bull factors

The bull plays a very important role in the disease even though the bull does not suffer from any clinical manifestations of the disease. As the bull gets older the penis and prepuce develop crypts (depressions) on the surface that allows the organism to be protected, multiply, and serve as a source of organisms to be transmitted during breeding.

Thus, **younger bulls are less likely to be permanent carriers of the disease.** The key words are **less likely** and **permanent**. Young bulls are **still** capable of mechanically transmitting the disease even though they are not permanent carriers. If a bull happens to breed a trichomoniasis infected cow, it is possible that he could mechanically transmit this to another susceptible female if breeding occurs in a short time.

This simply says that younger bulls tend to have smoother surfaces on their penis and prepuce and the organism is unlikely to find a place of protection and dies off. **This creates a diagnostic challenge** as well particularly with young bulls. Sexual rest is essential to ensure enough organisms are present on the surface of the penis to detect.

Figure 2. Dry pipette technique of obtaining preputial samples from bulls



In Table 1, we have the results of testing a large number of bulls from within an infected herd of known ages after different periods of sexual rest using the dry pipette technique as illustrated in Figure 2.

Table 1. Relationship between age of bull and period of sexual rest on ability to determine bull infection

Bull Age (Years)	Period of Sexual Rest (days)								Totals to get all (+) Samples Bulls
	0		20-25		85-90		100-105		
	(+)	Bulls	(+)	Bulls	(+)	Bulls	(+)	Bulls	
1 1/2	Not Tested		0	46	0	46	0	46	
% (+)									
2 1/2	1	39	2	42	8	43	0	35	
% (+)	2.5%		4.8%		18.6%				
3 1/2	6	22	1	16	3	15	0	12	
% (+)	27.3%		6.3%		20.0%				
4 1/2+	5	14	2	9	0	7	0	7	
% (+)	35.7%		22.2%						
Subtotal	12	75	5	113	11	111	0	100	
% (+)	16.0%		4.4%		9.9%				
% of (+)									

Implications

It is evident from the results that an effective period of sexual rest be recommended particularly in young bulls. **Only after a period of >30 days of sexual rest and with multiple testing were we able to pick up all of the infected bulls regardless of age.** The vast majority of bulls that are shipped around are less than 4 years of age. In addition, the period of sexual rest required by regulations in most instances is lacking or < 2 weeks. Both of these observations leaves me considerably unsettled in the ability to actually identify the infected bulls by simply following the protocol recommended within regulations. It is apparent that **the use of young bulls is advantageous in the control and prevention of Trichomoniasis.** However, the importation of bulls across state lines leaves a lot to be desired from the standpoint of sexual rest particularly if you are dealing with leased bull entities. It is my hope that this gives you a better understanding of the agent, bull, and diagnostic factors that pertain to Trichomoniasis. With this knowledge, you as a producer can better work with your veterinarian in putting in place proper **biosecurity** protocols that will help prevent and control this devastating disease.