The Fire Drill: A False Positive Test

By Kris Ringwall
Extension Beef Specialist
NDSU Extension Service

People have gradually shifted their thinking toward the concept of absolutes rather than variations within the world. This may not be a major discussion point, but certainly the recent events involving the inconclusive tests for BSE (mad cow disease) remind us that modern technology works. The process may or may not be as simple as everyone would like, but the process works.

A test where the results indicate a positive reading, but in reality the sample is really negative, is not a new phenomenon. False positive test results have been around for a long time.

As testing processes have been developed through the years, two potential errors have always existed, the false positive and the false negative. For a test to have the highest level of accuracy, any occurrence of false negatives, i.e. a sample that is really positive but is not picked up by the test, is totally unacceptable.

False positive results have not been as detrimental as false negatives, and have been allowed to exist, along with subsequent development of additional tests, to help further reduce the incidence of a false positive. The false positive is the process of calling or labeling a sample as positive when in reality the sample is negative.

Can the industry live with false positives? The answer is yes, but the consumer or affected party needs to better understand what test results really mean. In the case of the false positive test for BSE, there was no danger to the food supply and the general public remained safe.

A fire drill is a good analogy to explain a false positive test. Most people should be well versed in the functioning of a fire drill. From the first day of grade school, people are taught what a fire alarm is and what to do when one sounds.

Upon hearing the sound of the alarm, everyone must leave the building or premises. The logic is that the sooner all people leave the premises, the less likely anyone will be hurt in the event of a fire. The principle works and has saved many lives.

The general public has grown used to fire drills, i.e. false positive tests. In this case, the sounding of the alarm when, in reality, no fire exists.

There are some people that donít like fire drills. In fact, I had to smile the other day while reading memos attached to the bulletin board at the North Dakota Sate Capital. One memo was signed by the Governor indicating the consequences of employees failing to exit the Capitol when the fire alarm is activated.

A problem appeared to exist because some employees were ignoring the alarm. Such action not only jeopardizes the safety of the individual, but also places in danger those individuals called upon to save them in the event of an actual fire.

The same is true for BSE test results. No one really wants to be bogged down with additional testing requirements, and yet the general consensus is a resounding affirmation of the need for the tests. Beef producers and consumers stand in support. But just like fire drills, both groups need to understand the concept of preparation, false positive test results and the diligence required to assure absolute accuracy in the final report.

No one wants to re-enter a building following a fire drill, only to find out the building was actually on fire. So for now, the world does not stop for fire drills, and should not stop for false positive BSE test results. The two tests simply bring attention to the details needed to provide a safe haven in the world today, and life will go on.

May you find all your USAIP ear tags.

Your comments are always welcome at *www.BeefTalk.com*. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to *www.CHAPS2000.com* on the Internet. In correspondence about this column, refer to BT0203.


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Just another false positive fire drill.