Got Milk?™ No, I’ve Got BVD, Johne’s, Heel Warts, Mastitis.....

Yogi Berra is credited with saying, “If you don’t know where you’re going, when you get there you’ll be lost.” This dyslexic quote could easily apply to dairy production management. Said another way, “producers don’t plan to fail... they fail to plan.” I guarantee if you do not have a biosecurity plan in place, you will fail. You will suffer economic loss — the only question being what will be the extent of that loss!

Biosecurity is defined as the sum of the management practices in place to reduce risk by ensuring the absolute health of the livestock, therefore protecting the financial investment and increasing profitability for the producer and the quality of the milk and meat delivered to the consumer. As seen in previous articles in this series, most dairy producers do not have a complete biosecurity plan in place. In fact, most do not even quarantine and isolate new arrivals, test for carrier states of infectious diseases, control traffic in and out of the dairy, or even adequately vaccinate their herds. With so much at risk and so much to gain, it is confusing as to why most producers proceed half-heartedly. Examine the following list and see if any of these excuses sound familiar.

Reasons for not instituting a biosecurity plan:
(check all that apply to you)

- 1. We’ve always done it this way.
- 2. I’ve already had most everything on this dairy.
- 3. I do not have enough time to mess with this.
- 4. It’s too complicated.
- 5. It’s too expensive.
- 6. It won’t make any difference.
- 7. I don’t have the extra pens.
- 8. We vaccinate our cows.
- 9. We tested some cows once, but the vet didn’t find anything...just wasted our money!
- 10. We pretty much have a closed herd.

Finding value in biosecurity

If you find yourself checking off one or more of the boxes on the above list, then chances are good you have not seen the value in implementing a comprehensive biosecurity plan. Review the reasons for instituting a biosecurity plan.

Vaccination programs, no matter how strong, cannot be expected to be the sole source of herd protection.
Reasons for instituting a biosecurity plan:

1. Protection of the financial investment of the dairy.
2. Increasing current production and revenues.
3. Protection of the quality of the milk and meat going to the consumer.
4. Prevention of problems (risk avoidance) is cheaper than treatment.
5. Protecting the future assets of the dairy (calves & heifers).

As you can see, the primary reasons for instituting a biosecurity program are economic. How big are the risks? How big are the rewards – possibly huge?

Biosecurity: To plan or not to plan . . . that is the question.

Lack of biosecurity means huge profit losses

Consider the large Ohio dairy that during a period of change in management allowed a BVD problem to get established. The problem surfaced when an increase in abortions and open cows became apparent. On the surface it appeared that this was the extent of the losses until epidemiologists and ag economists from Ohio State conducted a detailed investigation to more completely understand the total economic impact of such disease problems. The results of their detailed study found that the abortions and open cows were just the tip of the iceberg. The real financial loss came in decreased milk production, in part from cows that did not necessarily show clinical signs of disease.

The resulting loss to this dairy of what was classified as a ‘moderate BVD outbreak’ was estimated to be in the range of $475 – $650 per lactating cow. Considering this was a 1000-cow dairy, a loss of approximately $500,000 was unnecessarily created. That’s a sizable price to pay for a problem that could have been avoided if a strong biosecurity plan had been in action. Due to the carrier state of BVD (Persistently Infected or PI cattle), a BVD outbreak is something that you cannot vaccinate your way out of after the fact. Prevention is the best treatment.

I recently visited a large western dairy where questions about the efficacy of certain vaccines became the topic of interest. It seems they had been undergoing a rapid expansion program and purchased a sizeable number (hundreds) of new cattle from various sources (sale barns included) over the last year. What had become apparent to them was that their abortion rate had progressively climbed from around 10 abortions per month to upwards of 50 per month. Their question to me was regarding the efficacy of certain vaccines and how long the vaccines were expected to last. My questions to them were:

- What had these new cattle been previously vaccinated for?
- What was the history of the farm of origin?
- Did you quarantine the new arrivals and blood test them before placing them into the resident herd?

After looking at me with a somewhat blank stare, I asked my next question, “so what’s the surprise?” Vaccination programs, no matter how strong, cannot be expected to be the sole source of herd protection. At the time of my visit, the veterinarian had not yet determined the cause of the abortions and the investigation was continuing. I suspect the losses are continuing and probably extend beyond the obvious reproductive losses.

Undoubtedly, the largest asset that dairy producers enjoy is their image with the consumer. Milk enjoys a great reputation as a healthy, good for you, complete source of nutrition. This reputation needs to be vigorously protected and the quality of the milk maintained. Just imagine the impact to the industry if Oprah had a guest, who, for whatever reason questioned the quality or safety of milk produced in the U.S. If Oprah then replied, “well, I’m not going to drink any more milk...” — the results would be devastating. This quality of milk issue is every dairyman’s responsibility. Biosecurity measures seek to control and/or eliminate the organisms and diseases that carry human and public health concerns, before issues are raised. Biosecurity helps secure the trust of the consumer.
Getting started

Table 1 gives a fairly concise overview of the cause and effect of health concerns common to dairies along with a relative cost per case basis (if known) from past economic evaluations.

As you can see, many problems can be introduced into a dairy with decreased milk production as the predictable outcome. In addition, many of these problems, once introduced, are difficult to eliminate and may have milk quality issues associated with them. The impact of most of these diseases can be greatly reduced or stopped before they gain entry to the dairy by a proper isolation/quarantine program combined with lab testing and reduction of outside traffic. This construction of a wall of protection around the resident dairy herd is the beginning step in implementing a biosecurity plan. It becomes futile to deal with problems already present in the dairy while allowing new problems or reinforcements for old ones to enter unchecked.

By deciding not to allow any new problems to gain entrance to your dairy, you have a large percentage of the program underway. The cost and commitment to getting a plan started and in place is small in light of the consequences of indifference and inactivity. Call your veterinarian and request a consultation regarding setting up a complete biosecurity program. You may also want to form a team in planning your specific program, including Extension and university experts, as well as your local veterinarian.

As we go to press, times are good in the dairy industry with milk prices at all-time highs and commodity prices at all-time lows. The mind set often is to take this prosperity and go get more cows so that theoretically more money can be made. Remember, expanding your herd is also a great opportunity to expand problems. Take this opportunity of economic prosperity and invest in securing the future to the best of your ability by getting a complete biosecurity plan in place.

Resources for biosecurity information

While biosecurity is not a new concept, it is becoming the current buzz word as the economic risks and rewards of aggressive herd health management become more evident. A wealth of information is available to the dairy manager.

* See recent back issues of Midwest Dairy Business.

This is the final article in a year-long comprehensive series on biosecurity.

- If you are comfortable with a computer, try searching the internet. There is lots of information available, much of it compiled by industry experts across the country. (Type in “biosecurity + dairy”)
- University and Extension personnel are an additional source of advice on general and specific aspects of health management.
- Employ the expertise of the staff (technical services/sales representatives) from the major animal health pharmaceutical manufacturers. They are experts on their specific products (vaccines, antibiotics, growth promotants, dewormers, etc.), and often have consultants on staff with experience in a variety of areas who can assist you in utilizing their products appropriately and effectively.

Remember Yogi’s quote. Know where you are going and plan accordingly. A lot is at stake.

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