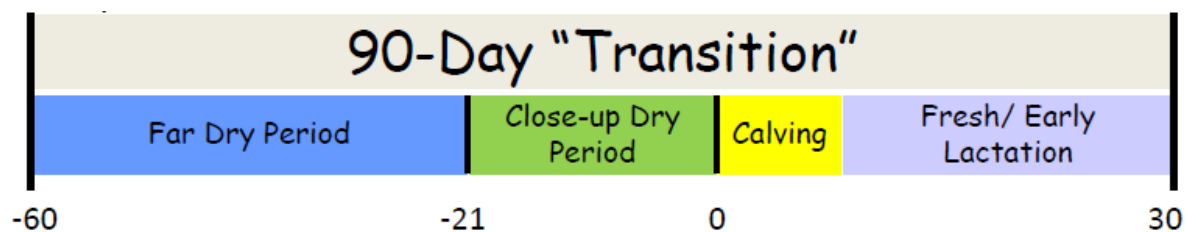


DAIRY NEWSLETTER

Monitoring Fresh Cow Disease on Your Farm

Monitoring involves the routine and systematic collection of data followed by an evaluation of that information. The purpose of monitoring fresh cow diseases is to detect changes occurring within the transition period and develop appropriate interventions to minimize disease. There are many fresh cows that slip through the cracks undetected if there is not a systematic monitoring program in place. You cannot manage what you do not measure!

Traditionally, the transition period has been considered 3 weeks prior to calving to 3 weeks post-calving. It is becoming apparent that the transition period actually starts at dry-off and extends at least one month after calving. At dry-off the cow goes through a multitude of changes including discomfort from cessation of milking, sudden dietary changes to a lower energy ration which the rumen must adapt to, as well as a social group change. At calving, the cow must adapt to the demands of lactation, while delivering a healthy calf and coping with reduced feed intake, negative energy balance and reduced immune function. All of these changes can have a significant impact on the incidence of disease during the fresh period. This is the 90-day period depicted below.



Disease during the transition period can have a large impact on a dairy's profitability. Studies have shown that 30-50% of transition cows get sick. Transition problems are part of a complex and interacting system where many factors affect the risk and severity of disease. The consequences of transition period disease include: less milk, poorer reproduction, less longevity, more culling, decreased welfare and extra time required to address sick cows. See the table below for an estimated economic impact of common transition cow diseases. The average cost/year has been calculated based on the mean disease incidence, average milk production, prolonged days open and standard treatment protocols for each disease.

Disease	Mean (%)	Range (%)	Goal (%)	Cost/Case	Avg Cost/Year on 100 cow Dairy
Clinical Mastitis	8	0-20	<5	\$377	\$3,019
Lameness	14	0-35	<10	\$415	\$5,809
Ketosis	20	11-37	<10	\$267	\$5,342
LDA	4	1-14	<3	\$680	\$2,379
RP/Metritis	10	2-36	<10	\$398	\$3,983
Milk Fever	5	1-44	<5	\$332	\$1,660
Dystocia	13	2-36	<8	\$261	\$3,393
Total Cost/Year on 100-cow Dairy					\$25,585

It should be clear now that transition diseases are complex and expensive. The next step is how to develop a monitoring program that works for you. It is critical to work with your herd veterinarian to develop clear case definitions for each disease you are going to monitor so that it is recorded based on consistent parameters each time. Once you have case definitions, set aside a period of time each day or week that you will collect data on fresh cows. Your monitoring program may be as simple as ketosis testing once/week all the way up to daily examination of fresh cows, taking temps and examining each animal individually. This is not about how much or how little you do, it is about setting up a routine and collecting the information in a systematic way.

There is a reluctance with many producers to record disease events occurring on their farm. Most excuses involve being too busy, not having an efficient method of recording in or believing the information doesn't matter. Often the only information that gets recorded is for the CQM program if the animal has a milk or meat withdrawal. However, this CQM data is often incomplete and difficult to retrieve and analyse over time. Fortunately, DHI has a system that records disease incidences; so even if you do not have Dairy Comp on-farm, your field representative can enter the data into DHIA free of charge! All you need to do is collect it and ask them to record it. Once entered, your veterinarian can access the data or you can have your field representative print out the data.

Overall, diseases in the transition period are complex and can have a significant economic impact on all farms. In order to properly manage these diseases, we need to record them over time and follow our progress as transition period changes are implemented.

Take-Home Messages

- If you aren't monitoring disease, you can't manage it!
- Transition period is entire dry period → 30 DIM
- Fresh cow diseases are expensive and have a direct impact on your farm's profitability
- Make defined disease outcomes and a weekly fresh cow monitoring routine
- Analyse the information to make informed management decisions