

## C3 – Dry cow and transition management

The following checklist will help you to evaluate the risk of mastitis in dairy cows related to transition management. 'Yes' answers are consistent with a lower risk of mastitis. Negative answers indicate increased mastitis risk. If the parameter is not measured it is recommended to enter a 'no' answer.

### A. Nutrition and feed delivery

- Cow condition at dry off
- Cow condition 3 weeks before calving
- Cow condition at calving
- Cow condition 12 weeks after calving



#### Note:

System differences (i.e.; total mixed ration (TMR) vs. pasture-based vs. a combination of the two) may make some questions irrelevant. Whether you are a producer or a veterinarian, completing this questionnaire will help reveal possible weak links in transition management that may increase the likelihood of mastitis. The outcome should lead to a more focused and measurable preventative management approach.

### The 3 chapters are:

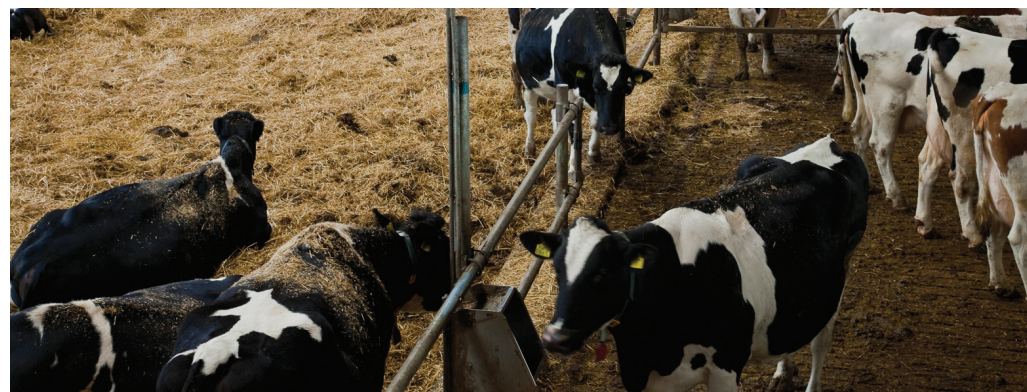
- Nutrition and feed delivery
- Facilities & cow comfort
- Grouping and pen movement

|                                                                                                                                              | Yes | No |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| I undertake Body Condition Scoring (BCS) of the dairy herd, including dry cows, at least 3-4 times a year (see Fact Sheet C1).               |     |    |
| At dry off (a) < 10% of cows have a BCS higher than 3.5 (on a 1-5 scale).                                                                    |     |    |
| Cow body condition remains constant between a, b and c.                                                                                      |     |    |
| Cow body condition between c and d did not drop by more than a 1.0 body condition point (on a 1-5 scale, see Fact Sheet C1).                 |     |    |
| By using the Penn State Box1 it is found that < 10% m/m of a representative TMR sample remains in the top tray.                              |     |    |
| Rumen fill score is regularly checked and is never < 4 (on a scale 1-5, see Fact Sheet C1).                                                  |     |    |
| The manure of dry and fresh cows is monitored by scoring for consistency on a score from 1-5 (see Fact Sheet C1).                            |     |    |
| The manure of dry and fresh cows is monitored for digestion; fiber length, grain and corn particles on a score from 1-5 (see Fact Sheet C1). |     |    |
| The manure score for dry cows is 4 or 5 for > 95% of animals.                                                                                |     |    |
| The manure score for fresh cows after week 1 after calving is 3-4 for the majority of animals.                                               |     |    |

### C3 – Dry cow and transition management

|                                                                                                                                                                              | Yes | No |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| Dry matter intake in the 3w pre-partum group is not lower than 1.8% of body mass.                                                                                            |     |    |
| Feeding space for cows is at least 75 cm per cow.                                                                                                                            |     |    |
| Moisture concentration of a TMR and silage or haylage used in its compilation is evaluated at least monthly and TMR amounts delivered to cow groups are adapted accordingly. |     |    |
| Feed delivery times are always the same on any day of the week – including weekends.                                                                                         |     |    |
| Feed bunks are never empty for longer than 30 minutes.                                                                                                                       |     |    |
| Feed bunks are cleaned daily for both dry and fresh cows.                                                                                                                    |     |    |
| The last Feed delivery of the day is a sufficient amount to last throughout the night until the next am feeding.                                                             |     |    |
| Primiparous cows (cows in their first lactation) are grouped (and fed) separately.                                                                                           |     |    |
| The dry cow ration mineral quantities are within limits to prevent the occurrence of milk fever (low calcium, low potassium, sufficient magnesium and phosphor).             |     |    |
| Adequate intake of an anionic salt supplement, if necessary, as part of a close-up diet during the 21 days before calving is constantly ensured.                             |     |    |

|                                                                                                                                                                                        | Yes | No |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| At least the close-up and fresh cow rations are fortified with adequate concentrations of vitamins A and E as well as zinc, copper and selenium, if necessary. (See Fact Sheet C2)     |     |    |
| Adequate eating time is always allowed for concentrate supplements - whether in-parlor (during milking times) or post-parlor feeding (after milking time(s) in a pasture based system. |     |    |
| Early lactation milk production as well as its fat and protein percentage are closely monitored for cows and/or groups of cows. (See Fact Sheet C1, page 1)                            |     |    |
| Is the fat % minus the protein % > 1.5% in > 20% of fresh cows (< 50 days in milk)?                                                                                                    |     |    |
| If > 20% has an excessive first test fat% (> 5.0 for Holsteins) further investigation is warranted.                                                                                    |     |    |
| Are cows increasing milk production after calving >10%/day for the first 14 days?                                                                                                      |     |    |



## C3 – Dry cow and transition management

### B. Facilities & cow comfort

This chapter is designed to check cow comfort in order to minimize excessive standing and walking.

|                                                                 | Yes | No |
|-----------------------------------------------------------------|-----|----|
| Do you never see any knee or hock skin damage or swelling?      |     |    |
| Does the slatted floor have a regular surface?                  |     |    |
| Do cows have a firm grip on the slatted floor?                  |     |    |
| Do the cows use all parts of the shed equally?                  |     |    |
| Is the number of cubicles at least equal to the number of cows? |     |    |
| Are there any spare cubicles?                                   |     |    |
| Is the lying surface soft (does it hurt your knees)?            |     |    |
| Is the lying surface non-irritant?                              |     |    |
| Is the lying surface clean?                                     |     |    |
| Is the lying dry?                                               |     |    |
| Are the cows clean? (see Fact Sheet A3)                         |     |    |

|                                                                                                          | Yes | No |
|----------------------------------------------------------------------------------------------------------|-----|----|
| Can all cows stand with all four feet in the cubicle?                                                    |     |    |
| Is the cow free from hitting any objects when lying down?                                                |     |    |
| Does the cubicle or surface allow the cow to rest comfortably?                                           |     |    |
| Does the lying surface give the cow enough grip to lie down and rise easily?                             |     |    |
| Are heifers entering into the dry cow group trained lying down in cubicles and/or eating at feed fences? |     |    |
| Is there enough space for all cows at the feed fence?                                                    |     |    |
| Is there enough space (4 metres) behind the feeding fence?                                               |     |    |
| Do the cows have enough space to allow for some exercise?                                                |     |    |
| Would you consider the stall climate as comfortable?                                                     |     |    |
| Have the NH <sub>3</sub> , CO <sub>2</sub> concentration and/or humidity of the air ever been measured?  |     |    |
| Has the airspeed ever been measured?                                                                     |     |    |
| Are there any facilities designed to abate heat-stress?                                                  |     |    |
| Are there at least 2 locations at each pen for cows to drink?                                            |     |    |
| Is there enough space around the water trough?                                                           |     |    |
| Is there at least 8-10 cm (3-4 inches) of water trough access per cow?                                   |     |    |

### C. Grouping and pen movement

Each pen move can result in stress and a drop in feed intake, both of which may negatively impact immune function and overall health. This section will help you to identify unnecessary pen changes. (See also Fact Sheet C4).

|                                                                                                       | Yes | No |
|-------------------------------------------------------------------------------------------------------|-----|----|
| Are cows moved less frequently than once a week?                                                      |     |    |
| Are cows < 3 weeks away from calving grouped separately (close-up)?                                   |     |    |
| Are heifers separated from the cows?                                                                  |     |    |
| Are you aware of twin-carrying cows?                                                                  |     |    |
| Do you move twin-carrying cows earlier (> 1 week) into the close up pen?                              |     |    |
| Do you move cows into the calving pen before feet or other obvious signs of active labor are showing? |     |    |
| Do animals spend less than 12 hours in a calving pen?                                                 |     |    |
| Does a calving cow have at least 10 m <sup>2</sup> of space?                                          |     |    |

