

# Are you doing routine ‘fresh cow’ reproductive exams at herd health?

Dr. Christian Heyerhoff

It is easy to think that the pregnancy exam is the most important reproductive check on the farm. We have ingrained over decades in dairy farmers that we need to get cows pregnant constantly and efficiently, and if you are doing so, that’s great! But is confirming a cow pregnant most important? I frequently have discussions with my clients about getting the most value from the time I spend on the farm during herd health. In my opinion, the most critical reproductive aspects of herd health and a veterinarian’s job while doing reproductive examinations are:

1. The ‘Fresh Check’ (occurring **28 – 42 days in milk (DIM)**): ensures cows are clean, cycling, and transitioning well so they are more likely to conceive in a timely manner.
2. To find and check ‘open’, non-bred cows so we can implement a plan to get them bred.
3. To find and check ‘open’, bred cows so a timely decision can be made to re-breed or to cull.

The ‘fresh check’ allows us to look at three main aspects of the cow’s health:

1. Uterine Environment, i.e., endometritis
2. Ovarian Function
3. Transition Health

Below, I will explain how we evaluate these aspects and cover the benefits of including the various components of the fresh check in your herd visits.

## Checking for Endometritis

### 1. Metricheck

The Metricheck tool (Figure 1) is used to check for endometritis and cervicitis (inflammation and infection of the uterus and cervix respectively). The procedure is performed by first wiping the external vulva clean, inserting the tool into the vagina and extending forward to the cervix. The device is removed at an upward 45-degree angle. The vaginal discharge is then observed and scored (Figure 2).



Figure 1: Metricheck Tool



Figure 2: Vaginal Discharge Scoring in Dairy Cows

### 2. Ultrasound Examination of the Uterus

The ultrasound allows for visualization of the uterus and its inner lining. We are looking for signs of infection/fluid in the uterus and its lining. For me, cows are scored 0 – 3, with zero being “clean” and 3 being very “dirty.”

Typically, when a veterinarian is performing a reproductive 'fresh check,' only an ultrasound exam is performed. My colleague, Dr. Brian Keith, has collected data on 8 farms from our clinic. His data showed that if only the ultrasound were used, we could be missing 25% percent of endometritis/cervicitis cases by not using the metricheck tool. The combined Metricheck and ultrasound are the gold standard at ensuring we find all cases of endometritis in the fresh period.

Cattle with an abnormal Metricheck or ultrasound and have a functional Corpus Luteum (CL) can be administered prostaglandin (to induce a heat) and/or a Metricure (an approved intrauterine anti-bacterial product) to help resolve the endometritis. These cows should be rechecked at the subsequent herd health to ensure they are cured. Avoiding or delaying a metricheck and/or ultrasound examination on cows 28 – 42 DIM can lead to a poorer first service conception rate and as a result delayed conception; which is very costly.

### **Checking for Ovarian Function**

Ultrasound examination of ovarian structures in the fresh period helps identify if cows are cycling normally early in lactation. Abnormalities include not finding a Corpus Luteum (CL) or finding a cyst on the ovary. These cows are classified as anovular, i.e. not cycling on the day of the reproductive examination. Cows that are transitioning well, healthy and are in a positive energy balance should be cycling by 28 DIM. If a significant proportion of cows are not, it is essential to review all aspects of the transition period (6 weeks pre-calving and 3 weeks post-calving), dry cow and fresh cow nutrition, and heifer rearing.

### **Overview of Transition Health**

Performing a 'fresh check' allows us to look internally at the uterus and ovaries. It is also the perfect time for an observant veterinarian to look at the external aspects of the cow and her environment. These include manure consistency, body condition score (BCS), lameness score, stall cleanliness, fresh cow stocking density, and feed availability for example.

A comprehensive fresh cow exam often leads to questions and comments on potential transition health problems. Two important fresh cow metabolic diseases are hypocalcemia (sub-clinical or clinical) and ketosis (sub-clinical or clinical). These two diseases are a sign of poor transition health and can often lead to poor immunity. As well, it is common to observe an increase in ovarian dysfunction and endometritis in cows affected by these two diseases.

In summary, the risk of waiting to perform reproductive examinations until the first pregnancy check is four-fold;

1. Less observation of fresh cows by a veterinarian
2. Lack of knowledge of uterine health and ovarian function in the fresh period
3. Less awareness of current transition health and;
4. Unrealized first service conception losses

If the 'fresh check' is of interest to you and your farm, please talk with your veterinarian to discuss possible implementation and the potential added value to your herd.