

Costs of mastitis and efficiency of management measures

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Introduction

To improve udder health, which is considered one of the most costly diseases in the dairy sector, farmers need to apply available knowledge. There are two main economic factors that motivate farmers to improve udder health, first a penalty- or bonus system and secondly insight in the costs and benefits of different management measures. The latter will be discussed here.

Economic losses

The economic damage of mastitis consists of several categories: milk production losses, drugs, discarded milk, veterinarian, labour, milk composition, culling, and increases susceptibility for other diseases. Milk production losses account for the biggest part in the financial losses of mastitis and occur in both, clinical and subclinical mastitis. In the past calculations for clinical mastitis have been made. These calculations, however, are very rough and thus not useful for farm specific calculations. New calculation-methods, including variation, were made. With this method, the economic losses of a clinical case of mastitis in a default situation were calculated at €210, varying from €164 to €235 depending on the month of lactation. The total economic losses of mastitis (subclinical and clinical) per cow present in a default situation varies between €65 and €182 per cow per year depending on BMSCC.

Estimations by farmers

Most farmers (72%) expected their economic losses to be lower than the costs calculated, using their farm-specific information. Underestimating the economic losses of mastitis can be regarded as a general problem in the dairy sector. The average economic losses assessed by the farmers were €78 per cow per year, with a large variation, €17 to €198 per cow per year. Although the average assessment of the farmers of the different cost factors is close to the default value, there is much variation. To improve the adoption rate of management practices to improve udder health, it is important to quantify the economic losses of mastitis.

Udder health management

Different management measures to improve udder health are available. Some of the most frequently recommended mastitis control practices are hygienic washing and drying of udders before milking, regular milking machine maintenance, teat dipping/spraying after milking, appropriate treatment of clinical cases, culling of cows with chronic mastitis and milking infected cows last. Every farmer has his own ideas about the different measures and because of the lack of information about the efficiency of the measures; decisions are often made intuitively. Behavior of the farmer is often not consequent with the economical advice. The valuing of money is not in every situation the same. When a farmer has a problem he wants to get rid off, most of the times he want to spend more money then when he can prevent the problem (stable vs. unstable situation). Another difference exists between the valuing of different kind of investments like long term expenses, short term expenses, labour, and changing of routines. Because of lack of knowledge on the efficiency of management measures, sometimes contradictory advices are given. Thus, the adoption rate and efficiency of implementation of advices given vary widely.

To our opinion it is necessary to develop a farm specific calculation-method of the different management measures, based on available knowledge on efficiency, costs and the farmers valuation. With such a tool, farmers can make well-funded decisions on udder health management.