COST Action CA17110 Standardizing output-based surveillance to control non-regulated diseases of cattle in the EU

WG2: Deliverable 2.1

Existence and quality of data about cattle demographics, risk factors for introduction and control programmes for endemic infectious cattle diseases in SOUND control member countries

This is an abstract that will be updated on a regular basis

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Abstract

COST Action (CA 17110), Standardizing OUtput-based surveillance to control Non-regulated Diseases in the EU (SOUND control), aims to develop a flexible output-based framework that could be used to estimate a probability of freedom from various endemic cattle infectious diseases in European countries that have heterogenous data of cattle sector and disease control programmes (CPs).

To support the development of an output-based framework an online data collection tool was created to assess the existence and quality of data in different countries. The tool consisted of four main sections: 1) General information, 2) Demographics, 3) Risk factors and 4) Disease control programmes and testing strategies. Data about three diseases were collected Johne's disease (JD), Infectious bovine rhinotracheitis (IBR) and Bovine viral diarrhea (BVD). In the tool, users were asked to: i) indicate data existence, ii) optionally submit quantitative data, iii) evaluate the quality of data and iiii) indicate the sources used to obtain or review existing data. The quality of data was assessed by the respondent, using a four criteria quality evaluation tool, that was previously designed as a part of this study. The four criteria used for data evaluation were accessibility, completeness, timeliness, accuracy, and the evaluated data was described as "good", "fair", or "poor". The aim of the current study was to assess the existence and quality of data that could be used for estimating freedom from disease in European countries. The online data collection tool was sent to 32 countries participating in the SOUND control COST Action and was fully completed by 23 countries. The results of this study showed that the quantity and quality of data about the cattle population and CPs are relatively similar in many Action countries. More than 60% of data about cattle demographics, CPs of IBR and BVD exist in more than half of the response countries. However, only around 30% of data describing risk factors and CP of JD was reported as existing in the same countries. The overall quality of data about demographics and CPs were evaluated as "good", but risk factors data was mostly evaluated as "fair". Approximately 30% of countries submitted the quantitative data that could already be used as good quality input in models for estimating freedom from disease. The outcome of this work provides an overview of the current situation in the European countries about data related to non-EU regulated cattle diseases and will further assist in the development and implementation of output-based standards.