

Production and Financial Losses Associated with Preweaning Disease in Beef Cattle

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Abstract

Year 2000 production and herd health records of 1470 crossbred beef calves at the USDA's Meat Animal Research Center were examined to determine long-term effects of calfhoo morbidity. Disease incidence was low in this herd with four cases of neo-natal diarrhea, five septicemias, eight umbilical infections, nine cases of pinkeye, 21 cases of footrot, and 83 cases of pneumonia. Only pneumonia had sufficient power to derive significant differences. Medium-weight calves had 44 occurrences of pneumonia with an average loss of 20.69 lb (9.4 kg) ($p = 0.023$) per affected calf at weaning. The

heavy weaning-weight group developed 36 cases of pneumonia with an average loss of 24.28 lb (11 kg) ($p = 0.016$) per calf at weaning.

Cost of preweaning pneumonia was calculated from the treatment cost (\$6.02), calf price (\$0.83/lb), morbidity rate (5.6 %), case fatality rate (6.0 %), and medium-weight calf loss (20.69 lbs-9.4 kg). Cost per case was \$6.02 (treatment), \$17.17 (weight loss) and \$27.27 (percentage death loss) for a total of \$50.46, not including labor. More importantly, this equates to a \$2.83 per-calf cost for pneumonia, which can be used to determine the value of a preventive health program.

A Productive Evaluation Program For Dairy Cattle

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Introduction

A two-year study of the entire reproductive cycle of the cow, heat detection to calving, in well-managed Pennsylvania dairy herds was just completed. Objectives of the study were to collect and store significant individual animal and herd information in order to evaluate and problem-solve the management, nutritional, genetic, and infectious influences on reproductive performance. Stored data was used to (1) define expected reproductive performance standards and goals for Pennsylvania dairy operations and (2) develop a multidisciplinary approach to reproductive problem

solving where performance does not measure up to these standards.

Materials and Methods

Data and information for the program was collected from two university-operated dairy herds, totaling about 500 lactating cows, because of their accessibility to the individuals conducting the study. A wide range of observations and test results, many of which are not routinely available, were gathered and stored on individual animal and herd-based computer records to permit in-depth analysis. Examples of information gathered by category include: