

IMPLEMENTATION OF AN ABATTOIR MONITORING SYSTEM FOR DIAGNOSIS OF TUBERCULOSIS IN CATTLE SLAUGHTERED FOR MEAT IN A NORTHERN REGION OF MEXICO

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INTRODUCTION

For several years, bovine tuberculosis (TB) has been an important animal health and public health issue in Mexico and USA. In 1994, the states of Texas, New Mexico, Arizona and California enacted regulations which require Mexican states to document progress in the control and eradication of TB, in order to preserve their cattle exporting position.

STUDY OBJECTIVE

In 1995-1996, a two-year pilot study was undertaken to implement a disease monitoring system in federal, municipal, and private abattoirs in Baja California, Mexico. The study was targeted on the histopathological and bacteriological diagnosis of TB in condemned cattle carcasses. The purpose of the study reported here was to estimate the prevalence of TB in dairy and beef cattle at slaughter. More than 200,000 cattle were annually examined during post mortem inspection by local meat inspectors.

PRELIMINARY RESULTS

Based on histopathological results, the prevalence of TB cases in cattle was 0.12% (95% CL= 0.10, 0.13%) in 1995 and 0.46% (0.43, 0.49%) in 1996. In dairy cattle, the prevalence was 2.0% (1.7, 2.2%) in the first year and 8.3% (7.8, 8.9%) in the second year. In beef cattle, it was 0.02% (0.01, 0.03%) and 0.05% (0.04, 0.06%) in both years, respectively. During the 24-month study period, monthly volumes of TB cases were linearly associated with monthly volumes of granuloma submissions per 1,000 slaughtered cattle ($R^2 = 88\%$, $P < 0.0001$). This paper will discuss study results, trade and public health implications of TB.

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