

## HUMANE AND BOVINE INFECTION BY *Mycobacterium* sp. IN SLAUGHTERHOUSES OF THE STATE OF ALAGOAS

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### Abstract:

Tuberculosis is an infecto-contagious disease of global range and, despite of being liable to treatment, it remains one current important public health problem. *Mycobacterium bovis*, the causative agent, is a pathogen that can cause severe infections in man and animal alike, being able to spread from subject to subject. The goal was to identify tuberculosis in humans that work in slaughterhouses and in slaughtered animals in this environment of the state of Alagoas. Lung fragments were taken from 90 bovines from the three main official slaughterhouses in Alagoas and 63 sputum samples from workers on these facilities. From the lung fragments taken from bovines, blade imprints were realized, and the secretions from human sputum were subjected to bacilloscopy. The biological material from both samples was affixed and coloured by Ziehl-Nielsen method, and examined under common microscopy. After microscopic reading, it was verified that 4,44% (4/90) of the bovine lung fragment samples presented suggestive presence of AFB (Acid-Fast Bacillus), displaying on the microscope stained red rods, placed in isolated form. After thorough analysis, the aforementioned samples were classified as positive (+), due to the presence of 10 to 99 AFB in 100 fields, duly noted in squared paper for microscopic reading. In relation to the human sputum bacilloscopy, 3,17% (2/63) of the samples presented suggestive presence of AFB, also distributed in isolated form. However, the classification for the human sputum samples was held as unreliable, since 1 to 4 AFB were found after 200 fields, being then necessary to process new samples. The conclusion was that the flaws in controlling tuberculosis in humans from Alagoas are derived from the lack of control of the disease in animals and from the inspection on the receiving of infected animals destined to slaughter and, despite the results being classified as unreliable concerning the human samples, it can be asserted that tuberculosis is a eminent risk to workers in the state of Alagoas' slaughterhouses, since the presence of AFB in the samples cannot be discarded.

**Keywords:** bacilloscopy, butchers, public health, tuberculosis.