

**Title: SALMONELLA ENTERICA IN WILD AND SYNANTHROPIC ANIMALS IN BRAZIL**

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**Abstract:**

*Salmonella* transmission is a particular concern for its worldwide distribution. With a variety of different host species, including production and domestic animals, but also in the wild and exotic wildlife, which can play an important role in the epidemiology of foodborne diseases. The aim of the present study was to evaluate the distribution of *Salmonella* in synanthropic and sylvatic animals in Brazil, from 2005 to 2014 using the database from Laboratory of Enterobacteria / IOC / FIOCRUZ, RJ. The total of 535 strains isolated from mammals (58 strains), birds (286), reptiles (189), and insects (2) were received for diagnostic characterization. All strains had their antigenic profile identified by rapid serum-agglutination technique with antisera, poly and monovalent, somatic and flagellar prepared in the LABENT. Overall, 35 serovars were identified in 394 strains. In addition, *Salmonella enterica* subsp. *enterica* (69 strains), *Salmonella enterica* subsp. *arizonae* (4 strains), *Salmonella enterica* subsp. *diarizonae* (62), *Salmonella enterica* subsp. *houtenae* (5) and *Salmonella enterica* subsp. *salamae* (11). The most prevalent serovars were Newport (126), Typhimurium (80), Schwarzengrund (21), Infantis (20), Panama (18), Oranienburg (14), Heidelberg, Mbandaka and Muenchen (11 strains each) and Anatum (9), corresponding to 60% of the isolates. Diversity of serotypes was observed in Columbiformes, Chelonia and Squamata. Among the total serovars identified *Salmonella* ser. Newport and S. Typhimurium were the prevalent represented the most disseminated and common identified serotypes in this study and it were documented in birds, mammalian and reptilian classes, while 98,4% of *S. enterica* subsp. *diarizonae* was identified in reptiles. It is also emphasizing the occurrence of *S. enterica* subsp. *houtenae*, *S. enterica* subsp. *salame* and *S. enterica* subsp. *arizonae* in this animal class. This study confirms the importance that wild animals play as zoonotic *Salmonella* carriers pointing the need for continuous surveillance in order to surprise the introduction of new serotypes and thus evaluating its potential role in transmission of infection, for both humans and animals.

**Keywords:** host species, *Salmonella*, wild animals