

## ***Toxoplasma gondii* infection in recyclable waste pickers in Natal, Rio Grande do Norte**

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Toxoplasmosis is a zoonotic disease with global geographic distribution, which affects humans and several species of mammals and birds. The transmission occurs through several channels, but the intake of the oocysts eliminated with feces of the definitive hosts, which are the Felidae, it is considered of great epidemiological importance. Thus, hygienic and sanitary conditions in living human populations are decisive factors for the infection prevalence. This study aims to evaluate the seropositivity for *Toxoplasma gondii* among waste pickers of COOPCICLA cooperative, located in Cidade Nova neighborhood, in west region of Natal, Rio Grande do Norte. The study was performed with active collectors of 2014, which included 25 women and 15 men in an age range from 18 to 60 years old. In order to detect anti-*T. gondii* antibody, 40 samples have been collected in vacuum blood tubes without anticoagulant. The serum obtained was aliquoted and frozen at -20 ° C. Then, the samples were evaluated by ELISA (Ag Toxoplasma, in house) method and the avidity of these antibodies was also analyzing by using 6M urea as a dissociating agent of antigen-antibody reaction. The results showed an infection seropositivity of 95.0% and the avidity varied in a range from 61.0 to 100.0%, indicating infection in chronic phase. In the group evaluated, the seropositivity was an independent factor of age and gender.

**Keywords:** Toxoplasmosis. Seropositivity. ELISA. Avidity antibodies. COOPCICLA.