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# ELIMINATION OF LYMPHATIC FILARIASIS AS PUBLIC HEALTH PROBLEM IN BAHIA STATE, NORTHEAST BRAZIL

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**Abstract**

**Objetive:** Salvador and Castro Alves were considered endemic foci of lymphatic filariasis (LF) in Bahia State, in the Northeast Region of Brazil, until the end of the 1960s decade. Since then, the cities have not been reassessed to attest the elimination of parasite transmission. To confirm the absence LF autochthonous cases and *Wuchereria bancrofti* transmission in those municipalities, blood and serological surveys, as well as xenomonitoring, were carried up. **Methods:** In the city of Salvador, thick blood smears from 11,324 night school students and 663 school employees were collected and examined to detect *Wuchereria bancrofti* microfilariae. In addition, blood samples were obtained from 510 children aged from six to ten years old to test for circulating *W. bancrofti* antigens using immunochromatographic test. Simultaneously, vector infection was evaluated by xenomonitoring, using the Polymerase Chain Reaction, with the collection of 23,580 female *Culex quinquefasciatus* mosquitoes that were found inside houses in former LF endemic area in Salvador. In the municipality of Castro Alves, 3,105 children and adolescents were examined for *W. bancrofti* antigenemia. **Results:** No cases of microfilaremia or antigenemia were detected in the samples collected in the cities of Salvador and Castro Alves, and no mosquitoes were found to be positive for *W. bancrofti* DNA. **Conclusions:** The results confirm that LF transmission has been interrupted in the former endemic areas of Salvador and Castro Alves in the Northeast region of Brazil. These data were important to certificate the elimination of LF transmission in Brazil by the World Health Organization.

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**Keywords:** *Wuchereria bancrofti*; lymphatic filariasis; elimination.