NATIONAL HEALTH SURVEILLANCE SECRETARY, BRAZILIAN

Probable areas of infection and ambience of occurrence of human leptospirosis in Brazil (2001-2003)

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SUMMARY

It was studied the probable location of infection (PLI/area) and ambience of occurrence of human *Leptospirosis* cases, confirmed by laboratory report in Brazil from 2001 to 2003. The disease had more connection to the urban and suburban areas, suggesting that the occurrence of the disease is related to the life conditions and housing sanitation.

Key words: Leptospirosis, ambience, PLI/area.

The Leptospirosis is one of the important zoonosis in our environment, bringing sanitary and economical problems to men.¹ The disease occurs on rural and urban ambiences. At the urban areas, the cases are more emphatic due to many factors as high density of low-income population, living in inhospitable condition concerning sanitation, occurrence of intense rain showers and high population of rodents.¹⁻⁵ From 2001 to 2003, there were 34.599 notified cases of Leptospirosis in Brazil from that amount, 7.818 was confirmed. Objective: Analyze the probable location of infection (PLI/area) and ambience of occurrence of human Leptospirosis cases, confirmed by lab report in Brazil from 2001 to 2003.

The data used was the ones from the Sistema Nacional de Notificação/SINAN (National System of Notification) from the years of 2001 to 2003.

During 2001 to 2003 from the total of 7.818 confirmed cases of the disease, 3.747 (48 %) that were confirmed by laboratory criteria and with determined PLI epidemiological investigation were investigated. After that, was observed that 2.687 cases (72 %) had occurred in urban/suburban areas. At those areas, 1.746 (65 %) had occurred in domicile ambience, 624 (23,2 %) in labor ambience and 317 (11,8 %) in leisure ambience. In rural areas, was observed 1.060 cases (28,2 % of the total), being 297 (28 %) in domicile ambience, 572 (54 %) in labor ambience.

Analyzing the ambience factor, were observed the domiciles ambience appeared in 2.043 cases (55 % of the total), labor ambience (32 %) and leisure ambience (13 % of the total).

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After these results, one can conclude that during the analyzed period the disease had more connection to the urban and suburban areas, and the domicile ambience was more frequent than the others, suggesting that the occurrence of the disease is related to the life conditions and housing sanitation. The importance of a program to make the ambiences inappropriate to the installation and procreation of rodents, allied to an improvement of the sanitary infrastructure are essentials at the control the disease in Brazil.

Áreas probables de infección y ambiente de ocurrencia de leptospirosis humana en Brasil (2001-2003)

RESUMEN

Se estudió la ubicación probable de la infección (PLI/área) y ambiente de ocurrencia de casos de leptospirosis en humanos confirmados mediante informe de laboratorio en Brasil de 2001 a 2003. La enfermedad estaba más relacionada con las áreas urbanas y suburbanas, lo que sugiere que la ocurrencia de la enfermedad está vinculada con las condiciones de vida y la higiene de la vivienda.

Palabras clave: Leptospirosis, ambiente, PLI/área.

REFERENCES

- Faine S. Leptospira and Leptospirosis. Boca Ratón: CRC Press; 1994.
- WHO. Human leptospirosis: guidance for diagnosis, surveillance and control. Malta, 2003.
- Brasil. Manual de leptospirose. 4 ed. Brasília: Ministério da Saúde, Fundação Nacional de Saúde, 1999.
- Brasil. Manual de controle de roedores. Brasília: Ministério da Saúde, Fundação Nacional de Saúde, 2002.
- Brasil. Leptospirose. In: Guia de vigilância epidemiológica.
 ed. Brasília: Ministério da Saúde, Fundação Nacional de Saúde, 2002.

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