

National Forum of Leptospirosis of Nicaragua



Socioeconomic factors and vulnerability to leptospirosis outbreaks in Nicaragua

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Presented by Dr. Cristina Schneider

Dr. Schneider explained that for this part of the study only three regions were included: León, Chinandega and Managua, because they contributed 50% of the cases. These regions are located in the Pacific region of Nicaragua, sharing epidemiologic and geographic risk factors, and Managua, as the capital, has the highest population density. She presented the methodology employed to build a Vulnerability Index; rates were managed logarithmically to avoid asymmetries in the distribution and three groups of rates were defined: low, medium and high. She emphasized the importance of unmet basic needs, physical condition of households, extreme poverty and basic sanitation in homes. She mentioned that basic services were a protective factor. The results showed that municipalities with the highest rates of leptospirosis are those with the lower socioeconomic status, therefore reinforcing the distinction between environmental risk factors and vulnerability to risk given by socioeconomic factors. Lastly, she suggested using the Vulnerability Index in order to target available resources to specific areas, as well as utilizing this tool for other diseases.