INTERNATIONAL LEPTOSPIROSIS SOCIETY SCIENTIFIC MEETING 2026

27 – 29 OCTOBER 2026
MARRIOTT HOTEL, PUTRAJAYA

Instructions for Abstract Preparation

Title: (≤20 words)

Authors:
Full names of all authors, with affiliations and corresponding author indicated with an asterisk (*)

Affiliation(s):
Institution, department, city, and country.

Structured Abstract (≤300 words)

Background:
Briefly describe the scientific background and rationale of the study — what problem or question does it address?

Objectives:
Clearly state the aim(s) or hypothesis of the study.

Methods:
Summarize key methods, study design, sample type/size, and analytical techniques used.

Results:
Highlight the major findings — include important data, trends, or significant statistical outcomes (no raw data tables).

Conclusion:
Summarize the implications or importance of your findings and potential applications.

Keywords:
3–5 keywords, separated by commas.

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Title: Spatial Study on Potential Contributors of Leptospirosis in Selangor State of Malaysia

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Background: Leptospirosis is a globally significant zoonotic disease caused by pathogenic *Leptospira* species. It spreads through direct contact with infected reservoir animals or indirectly via environments contaminated with their urine. The disease is endemic in tropical and subtropical regions and is commonly linked to poor sanitation, crowded living conditions, occupational exposure, and recreational activities involving rodent-infested areas. In Malaysia, leptospirosis remains endemic with periodic outbreaks, especially after floods, and is frequently reported in Selangor districts with popular recreational forests.

Objectives: This study aims to determine the spatial distribution and hot spots of leptospirosis and its association with potential drivers such as population, animals, and recreational areas in Selangor districts.

Methods: The disease records for 2011–2021 cases of Leptospirosis were used in the study. Spatial patterns were determined by geographic information systems (GIS). The data on population, animal reservoirs and the recreational areas were obtained from the respective departments.

Results: Spatial heterogeneity was found across the districts, with some displaying greater clusters than others. Kuala Selangor and Kuala Langat exhibited higher rates (4.48 and 4.13 per 100,000 population), whereas Klang district had the lowest (1.03). Hulu Langat, Gombak, and Petaling districts, which have higher population densities, more build-up areas, recreational areas, and more associated with reservoir animals, exhibited higher clusters of leptospirosis. Higher distributions of cases and hot spots were found around Gombak, Hulu Langat, and Petaling, with Sabak Bernam and Sepang areas being dispersed.

Conclusion: This study identified population density, recreational areas, and livestock presence as key risk factors for leptospirosis. Targeting these factors can help optimise interventions and strengthen disease control and prevention efforts.

Keywords: Leptospirosis, Malaysia, Selangor, zoonotic, spatial