



Nithikathkul, C.,

Tropical Health Innovation Research Unit Faculty of Medicine, MSU

Chatchanayeunyong, R., Thanasai, J., Sujayanont, P.,
Amornmahaphun, S. Chamchong R., Chomphuwiset, P.
Chantachon, P., Sorncharoen, P., Watanawong O., Wongsaroj,
T. Ribas, A., Hassan, R., Hong SJ., Krates, J and Kittpati R.



หน่วยวิจัย

Tropical diseases and parasitic infectious diseases are considered important diseases and are now public health concerns. of Thailand and in other countries around the world.

Therefore, in order to achieve coverage in the prevention and control of effective tropical diseases establishing a network of research units and creating cooperation in research work between agencies both inside and outside the country.

Research and Development Unit in Tropical Health and Innovation.

This will be a way to effectively prevent the disease of the people with effectiveness and sustainability

Research papers



One Health 14 (2022) 100399



Contents lists available at ScienceDirect

One Health

journal homepage: www.elsevier.com/locate/onehl



Factors affecting preventive behavior against leptospirosis among the population at risk in Si Sa Ket, Thailand

Thawatchai Toemjai^a, Pramote Thongkrajai^b, Choosak Nithikathkul^{b,*}

^a Faculty of Medicine, Mahasarakham University, Mahasarakham, Thailand

^b Tropical and Parasitic Diseases Research Unit, Faculty of Medicine, Mahasarakham University, Mahasarakham, Thailand

ARTICLE INFO

Keywords:

Factors affecting
Preventive behavior
Leptospirosis

ABSTRACT

Leptospirosis is a major public health problem in Si Sa Ket, Thailand. Humans can become infected via direct contact with the urine of infected animal reservoir hosts or by indirect contact with contaminated soil and water in the environment. This study examined the factors affecting preventive behavior against leptospirosis among the population at risk in Si Sa Ket, Thailand. A cross-sectional questionnaire was conducted by a representative population survey using a four-stage stratified random sampling to select 350 respondents aged 18–65 years from the fifth districts with the highest morbidity rate in 2010–2019. Data were analyzed by descriptive statistics and stepwise multiple regression. The majority of the respondents were male (53.40%), aged 46–55 years (31.20%), and agricultural workers (76.00%). Their knowledge ($M = 10.78$, $SD = 1.60$), perceived severity ($M = 2.91$, $SD = 0.60$), perceived probability ($M = 2.98$, $SD = 0.64$), self-efficacy expectations ($M = 3.18$, $SD = 0.63$), responses-efficacy expectations ($M = 3.16$, $SD = 0.71$), social support ($M = 3.19$, $SD = 0.52$), and preventive behavior against leptospirosis ($M = 3.29$, $SD = 0.49$) were at moderate level. Significant factors affecting leptospirosis preventive behaviors were history of leptospirosis illness ($\beta = 0.312$), social support ($\beta = 0.240$), perceived probability ($\beta = 0.238$), household members with a history of leptospirosis illness ($\beta = 0.158$), perceived severity ($\beta = 0.114$), self-efficacy expectations ($\beta = 0.094$) and knowledge ($\beta = 0.088$) regarding leptospirosis. All of these factors could together predict the preventive behavior against leptospirosis up to 42.8% (Adjusted $R^2 = 0.428$). Public health interventions should be strengthening people's perception and awareness regarding leptospirosis and the promotion of preventive health behavior to prevent potential outbreaks.

Research papers



RESEARCH ARTICLE



Model-based spatial-temporal mapping of opisthorchiasis in endemic countries of Southeast Asia

Ting-Ting Zhao¹, Yi-Jing Feng¹, Pham Ngoc Doanh², Somphou Sayasone³, Virak Khieu⁴, Choosak Nithikathkul⁵, Men-Bao Qian^{6,7}, Yuan-Tao Hao^{1,8}, Ying-Si Lai^{1,8*}

¹Department of Medical Statistics, School of Public Health, Sun Yat-sen University, Guangzhou, China; ²Department of Parasitology, Institute of Ecology and Biological Resources, Graduate University of Science and Technology, Vietnam Academy of Sciences and Technology, Cau Giay, Hanoi, Viet Nam; ³Lao Tropical and Public Health Institute, Ministry of Health, Vientiane, Lao People's Democratic Republic; ⁴National Center for Parasitology, Entomology and Malaria Control, Ministry of Health, Phnom Penh, Cambodia; ⁵Tropical and Parasitic Diseases Research Unit, Faculty of Medicine, Mahasarakham University, Mahasarakham, Thailand; ⁶National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention, Shanghai, China; ⁷WHO Collaborating Centre for Tropical Diseases, Key Laboratory of Parasite and Vector Biology, Ministry of Health, Shanghai, China; ⁸Sun Yat-sen Global Health Institute, Sun Yat-sen University, Guangzhou, China

Abstract Opisthorchiasis is an overlooked danger to Southeast Asia. High-resolution disease risk maps are critical but have not been available for Southeast Asia. Georeferenced disease data and potential influencing factor data were collected through a systematic review of literatures and open-access databases, respectively. Bayesian spatial-temporal joint models were developed to analyze both point- and area-level disease data, within a logit regression in combination of potential influencing factors and spatial-temporal random effects. The model-based risk mapping identified areas of low, moderate, and high prevalence across the study region. Even though the overall population-adjusted estimated prevalence presented a trend down, a total of 12.39 million (95% Bayesian credible intervals [BCI]: 10.10–15.06) people were estimated to be infected with *O. viverrini* in 2018 in four major endemic countries (i.e., Thailand, Laos, Cambodia, and Vietnam), highlighting the public health importance of the disease in the study region. The high-resolution risk maps provide valuable information for spatial targeting of opisthorchiasis control interventions.

*For correspondence:
laiys3@mail.sysu.edu.cn

Competing interests: The authors declare that no competing interests exist.

Funding: See page 17

Received: 07 June 2020
Accepted: 11 January 2021
Published: 12 January 2021



Research papers

Acta Tropica 223 (2021) 106082



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Acta Tropica

journal homepage: www.elsevier.com/locate/actatropica



Research Paper

Current status of helminthiases in Thailand: A cross-sectional, nationwide survey, 2019



Oranard Wattanawong^a, Sopon Iamsirithaworn^a, Thongroo Kophachon^a, Worayuth Nak-ai^b, Ampas Wisetmora^a, Thitima Wongsaroj^{a,c}, Paron Dekumyoy^c, Choosak Nithikathkul^{d,e}, Apiporn T. Suwannatrai^e, Banchob Sripan^{f,g}

^a Division of General Communicable Diseases, Department of Disease Control, Ministry of Public Health, Nonthaburi, Thailand

^b Sirindhorn College of Public Health Chonburi, Praboromrajchanok Institute, Chonburi, Thailand

^c Department of Helminthology, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

^d Faculty of Medicine, Mahasarakham University, Mahasarakham, Thailand

^e Department of Parasitology, Faculty of Medicine, Khon Kaen University, Thailand

^f WHO Collaborating Centre for Research and Control of Opisthorchiasis (Southeast Asian Liver Fluke Disease), Tropical Disease Research Laboratory, Department of Pathology, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

Conferences



"THE 20TH INTERNATIONAL CONGRESS FOR TROPICAL MEDICINE AND MALARIA" 2020
 Bangkok, Thailand
24-28 OCTOBER 2022
 BANGKOK INTERNATIONAL TRADE & EXHIBITION CENTRE (BITEC)

HOSTED BY:
 1. FACULTY OF TROPICAL MEDICINE, MAHIDOL UNIVERSITY
 2. PARASITOLOGY AND TROPICAL MEDICINE ASSOCIATION OF THAILAND
 3. INTERNATIONAL FEDERATION FOR TROPICAL MEDICINE

EXTRACTION AND CONTROLLING ECONOMIC HERBS QUALITY FOR THE COMMERCIAL USAGE.

AT CENTER FOR MORALITY PROMOTION (CMP) (PUBLIC ORGANIZATION),
 COLLEGE OF MANAGEMENT (CMMU) MAHIDOL UNIVERSITY, BANGKOK.
 [ON-SITE AND ONLINE TRAINING]

**ประชุมสัมมนาวิชาการ
 วันสถาปนาคณะแพทยศาสตร์
 ครบรอบ 18 ปี**

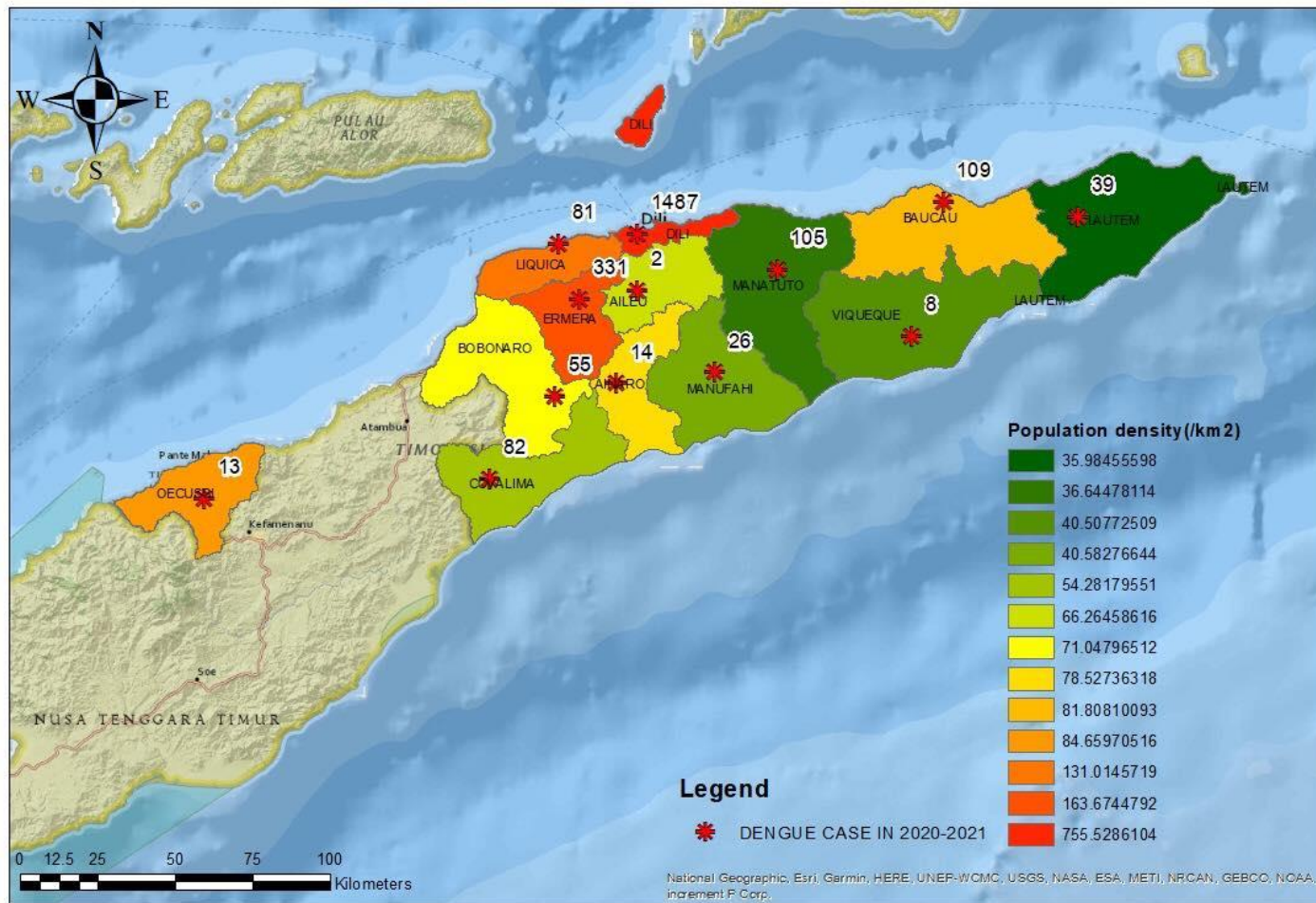
คณะแพทยศาสตร์ มหาวิทยาลัยมหาสารคาม
Faculty of Medicine Mahasarakham University

รายงานสืบเนื่องจากงานประชุมวิชาการ
 ระดับชาติในทรรือसान ครั้งที่ 10 ประจำปี 2565
Proceeding 2022

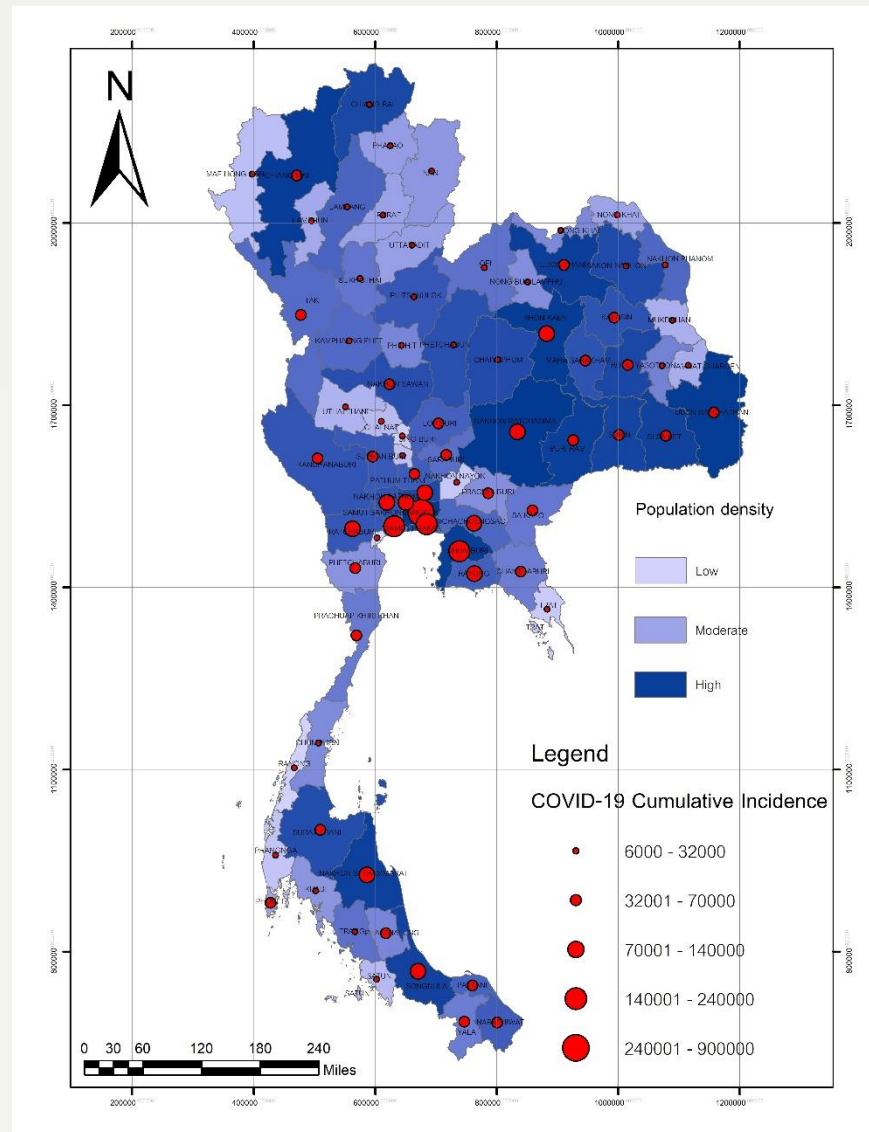
3RD ANNOUNCEMENT
The 2nd ITTP-COVID19 2022
 INTERNATIONAL TELECONFERENCE ON TECHNOLOGY AND POLICY IN SUPPORTING
 IMPLEMENTATION OF COVID-19 RECOVERY PLAN IN SOUTHEAST ASIA
"Post COVID19 Pandemic: Healthier, Smarter, and Resilient ASEAN Community"
6 - 8 AUGUST 2022

CO-ORGANIZERS & PARTNER UNIVERSITIES:

Ongoing



Ongoing



Future plans

Health Informatics model

$$Y1 = 3.028 + 0.020 \text{ ELE} - 2.098 \text{ Land}_2$$

$$Y2 = -1.559 + 0.005 \text{ Rainfall} + 0.004 \text{ ELE} - 2.198 \text{ Land}_2$$

$$\text{OV} = 3.097 + 0.016 \text{ ELE} - 2.505 \text{ L2}$$

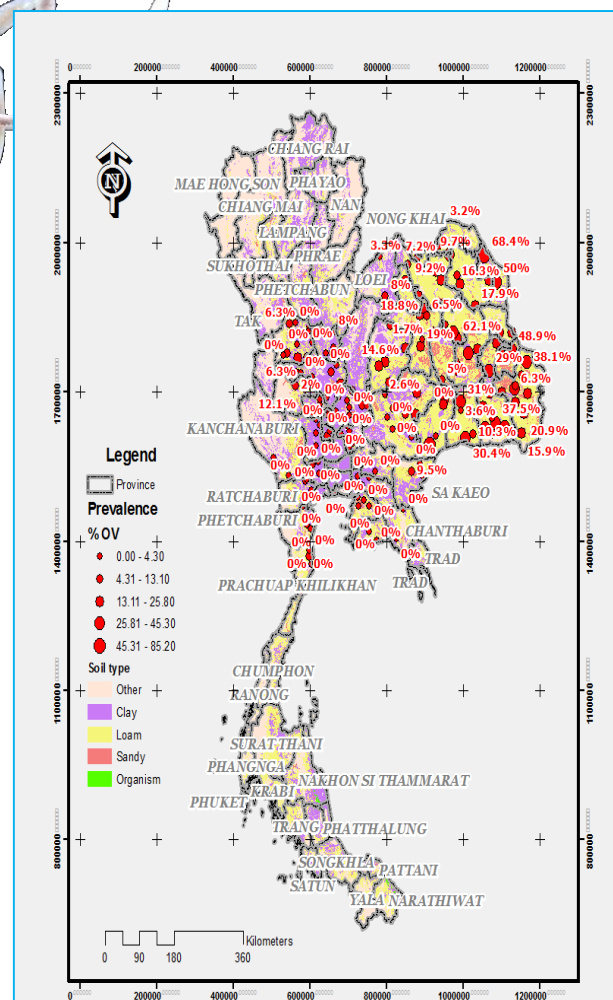
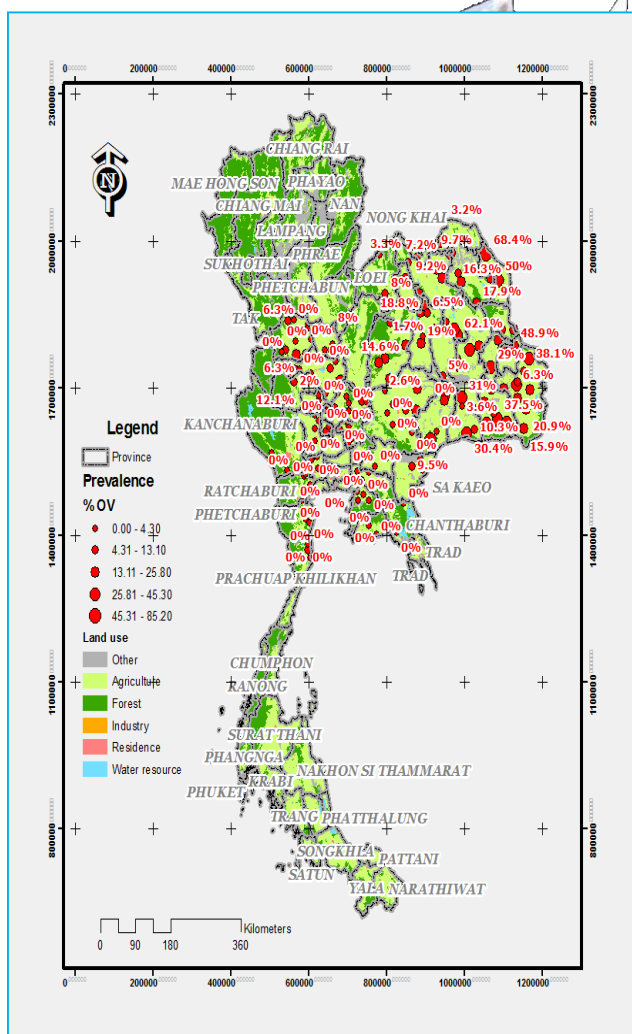
$$\text{HW} = -0.905 + 0.003 \text{ Rainfall} - 1.558 \text{ L2}$$

Y1 : Fishborne (amount of Ov and Int_F)

Y2 : Soil_transmitted (amount of Hw, AL, Tt, Ev and Ss)

Health GIS in 2009

The study showed a prevalence of hookworm infections associated with GIS with sea level, land use and soil types.



Geographic Information of Health Informatics

- Tropical health
- Traditional Herbs
- Application

International Training, Colloquium
and Conference

Previous activity



Activities



Activities



Activities



Activities



ยิ่งใหญ่ ถิ่นทหลาน คึกคัก

ชื่นชม เชิดชู... คนที่ “ใช่”
รางวัลแก่คนช่างฝัน
คนขยัน คนทำงาน



ข่าวสด ภาพเกิด ทุกช่วงสถานการณ์

ทีมงานประชาสัมพันธ์ วิชาการกระทรวงสาธารณสุข
รายงานด้วยความยินดี !!! ช่วงบ่าย 14 ก.ย. 65

Acknowledgements



Acknowledgement



Tropical Health Innovation Research Unit Faculty of Medicine, MSU



THANK YOU

Any Question?