

Swiss TPH Winter Symposium 2017

**Helminth Infection – from Transmission to Control**

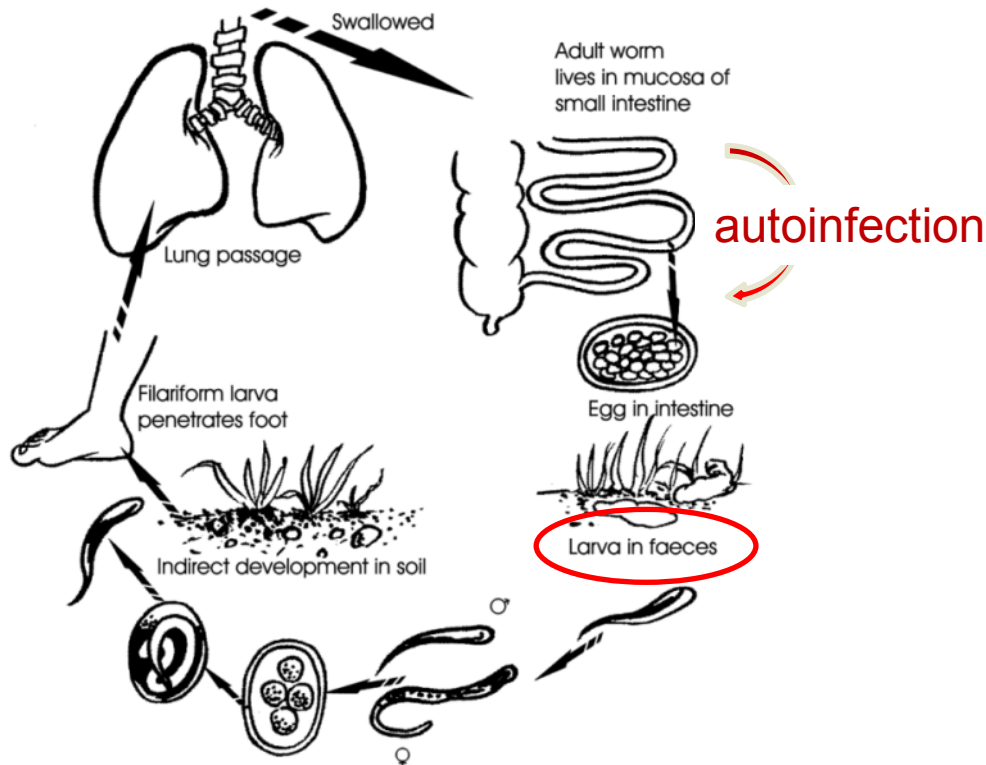
# Helminthiasis Mapping and Prediction in Southeast Asia

**Peter Odermatt**



***Strongyloides stercoralis***

## ***Strongyloides stercoralis*... “same same but different”**



⇒ under-reported

⇒ neglected

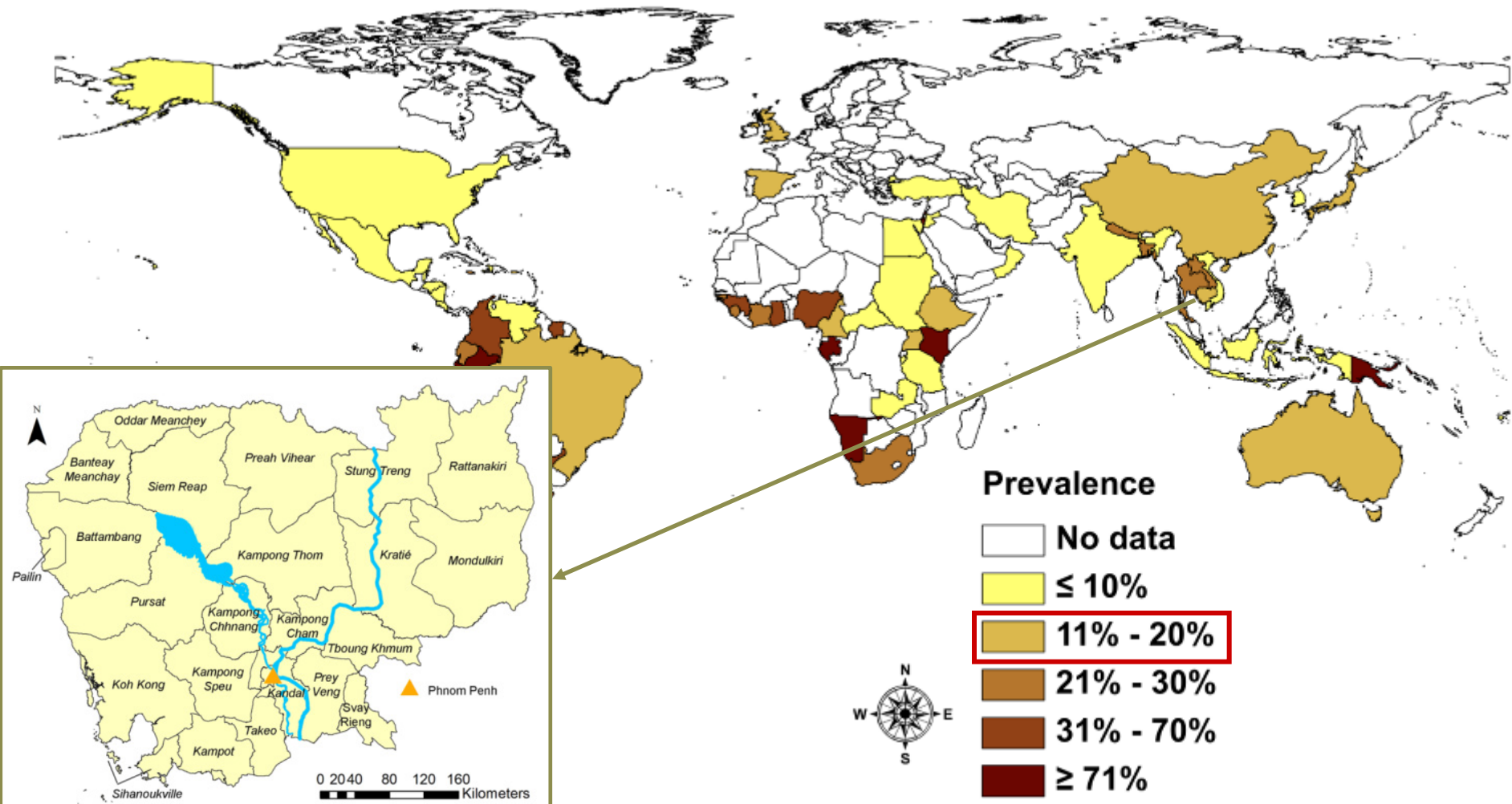
⇒ life-long infections

⇒ potentially fatal

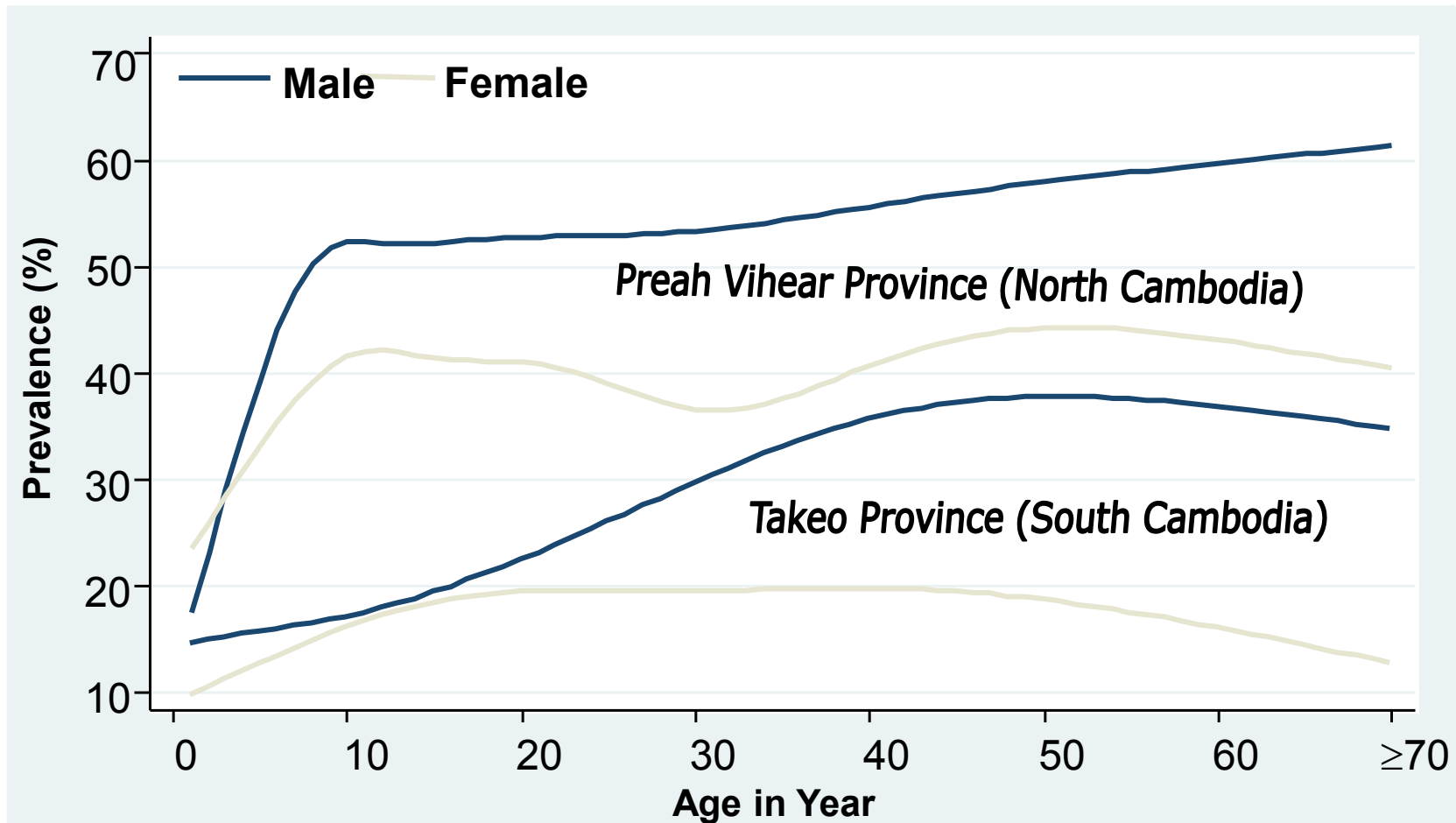
⇒ not addressed by  
ongoing STH control

Include *S. stercoralis* in STH Preventive Chemotherapy!

## Global prevalence of *Strongyloides stercoralis* (community-based studies)



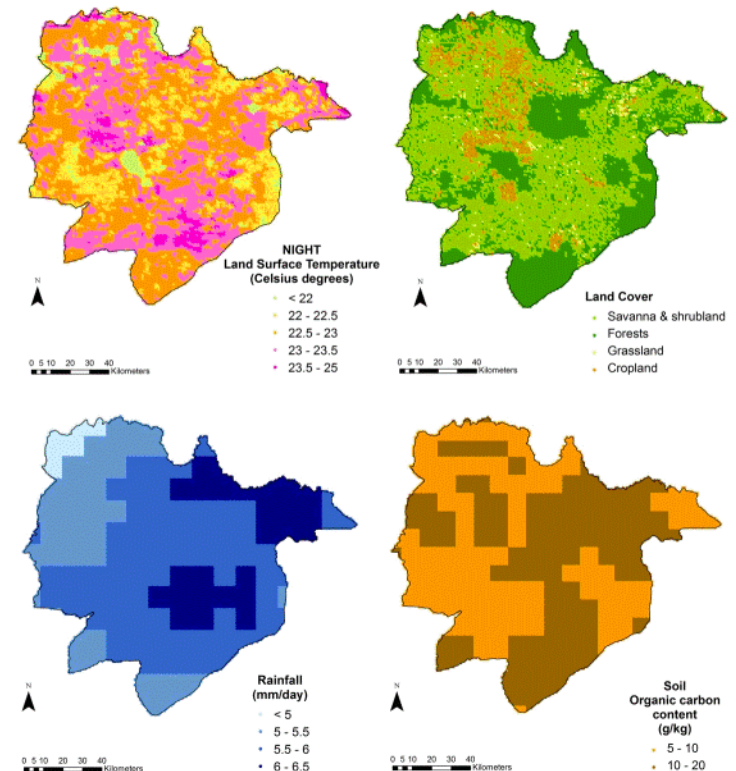
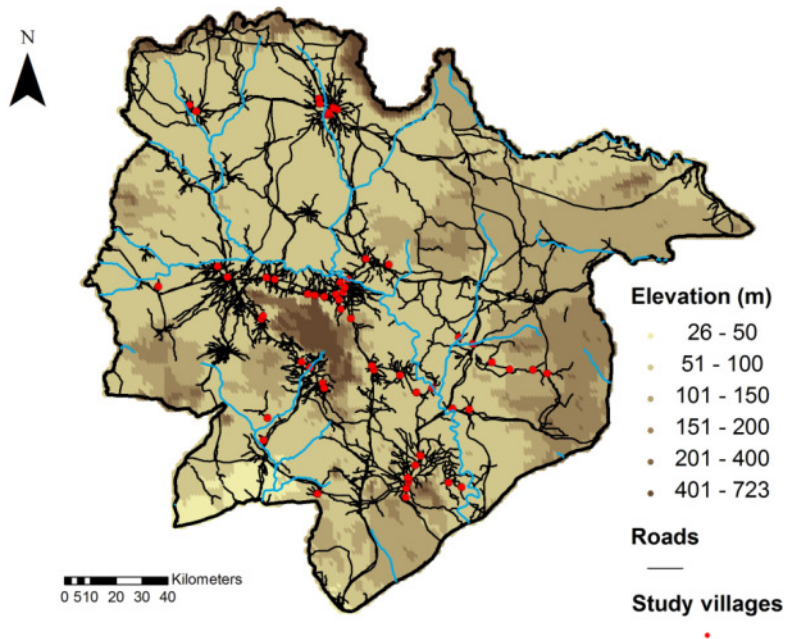
## *S. stercoralis* in Cambodia: Preah Vihear & Takeo Provinces



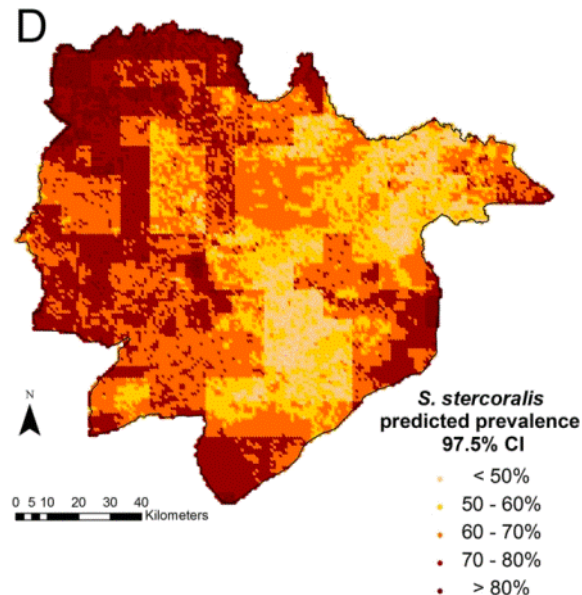
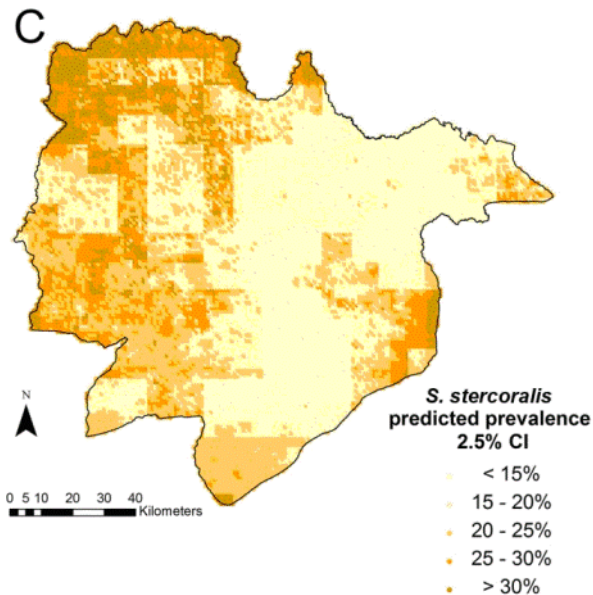
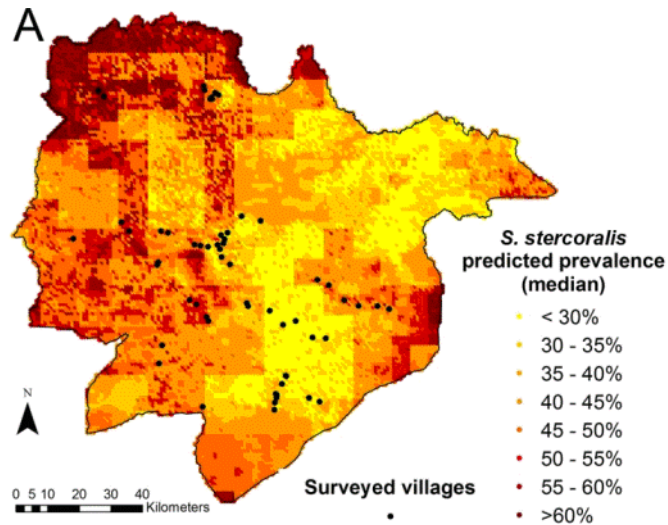


# Preah Vihear province, Cambodia

Preah Vihear Province

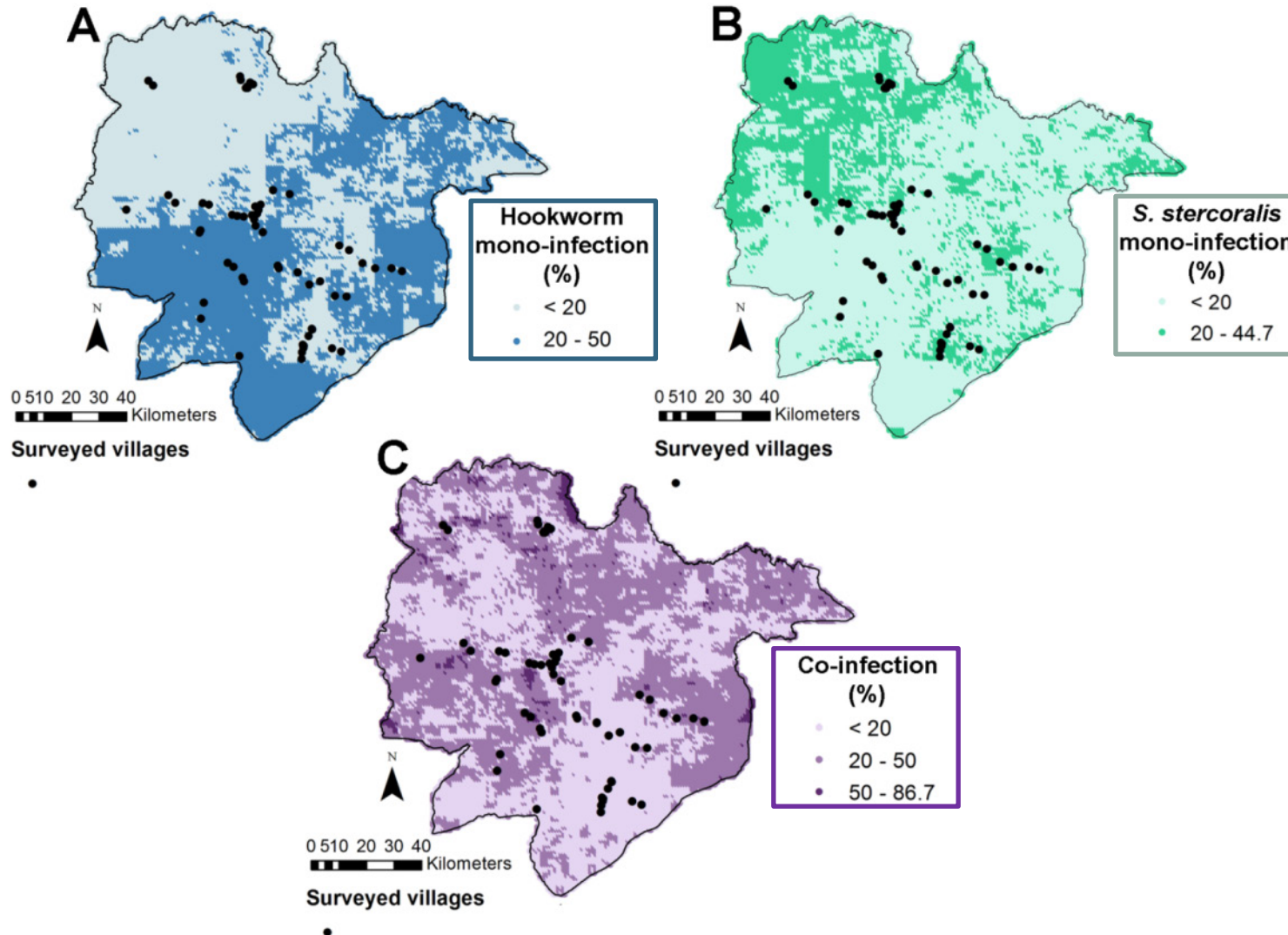


# Preah Vihear province, Cambodia



# Preah Vihear province, Cambodia

## Co-infection with hookworm





## Severe strongyloidiasis

Farmer, 43 years

400-900 *S. stercoralis*  
larvae (Baermann test)  
and hookworm

Symptoms: abdominal  
pain, diarrhea, nausea,  
vomiting, fever, and

Pronounced, persistent  
skin rash, episodes of  
extensive itching (> 2  
years)

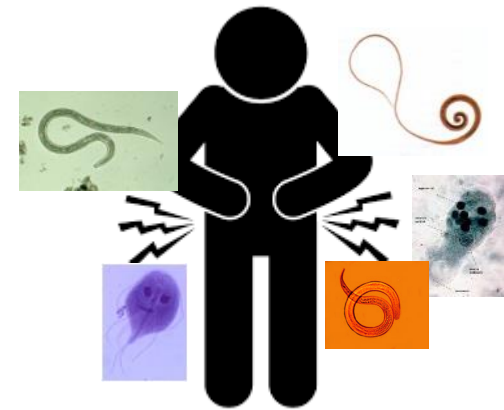
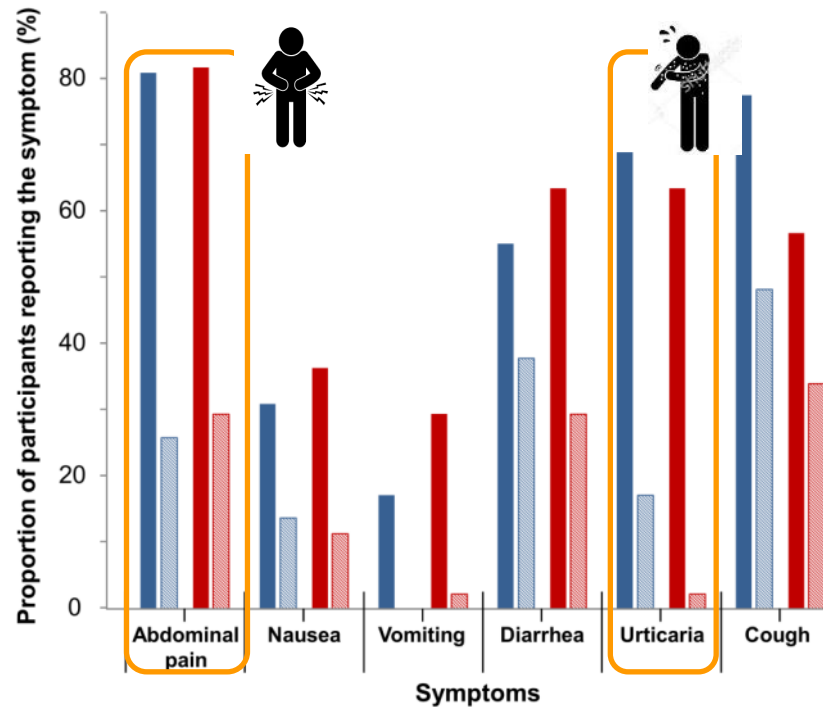
Ivermectin (200µg/kg,  
single oral)



## Findings *S. stercoralis* morbidity



**Assessment on 103 *S. stercoralis* mono-infections (out of 208 *S. stercoralis* cases)**



# Community-effectiveness

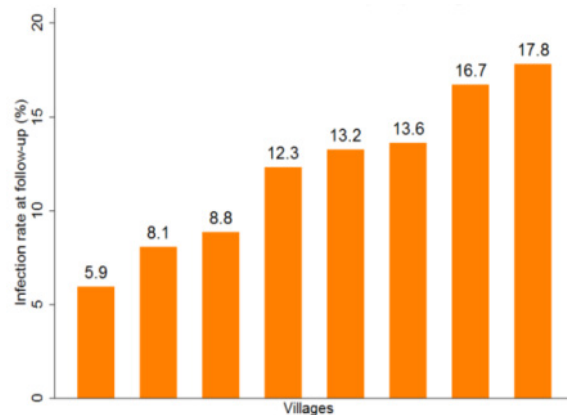
- Baseline: N = 3,697; Prevalence: 33.1% (31.5 – 34.8)
- Cohort: N = 1,269

## Cure rate of Ivermectin: 96.6%

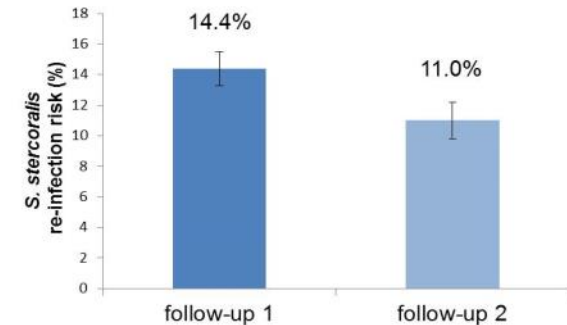


(Assessment on 205 patients ,  
21 days post-treatment)

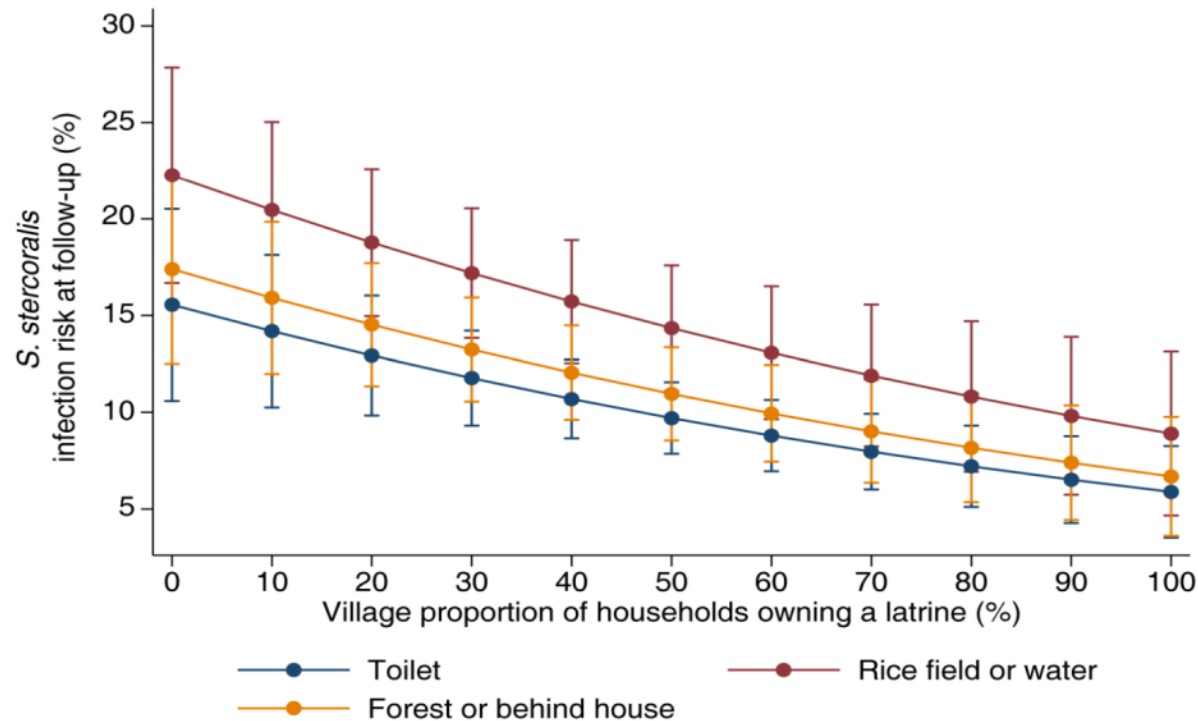
## Infection risk at follow-up by village



## Re-infection risk



# Community-effectiveness



Risk decreases with increasing sanitation coverage





**Thank you for your attention**

