



wellcome trust

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MORU

WELLCOME TRUST - MAHIDOL UNIVERSITY - OXFORD  
TROPICAL MEDICINE RESEARCH PROGRAMME

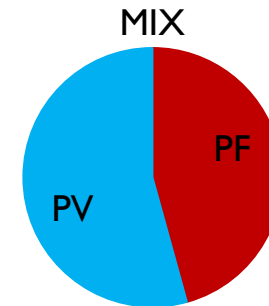
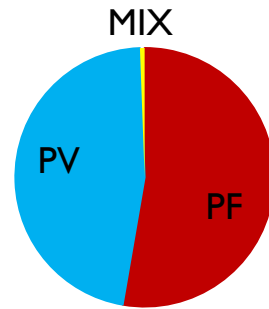
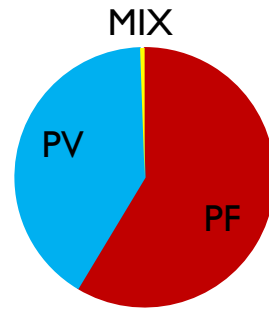


Myanmar

Thailand

# Malaria epidemiology along the Thai-Myanmar border

SMRU Border Meeting, May 2013



## 10 provinces along T-M border

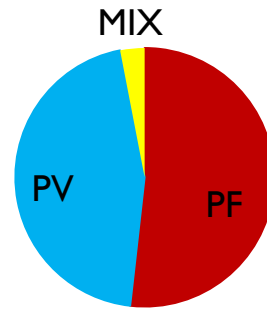
Thai malaria cases in **2000**  
47,837  
(7.5 cases/1,000 population)

Thai malaria cases in **2006**  
16,679  
(2.5 cases/1,000 population)

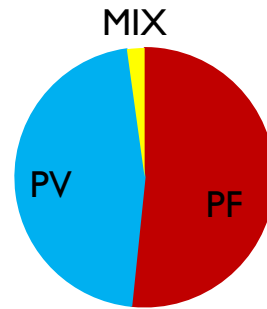
Thai malaria cases in **2012**  
~ 7,000  
(~1.0 case/1,000 population)



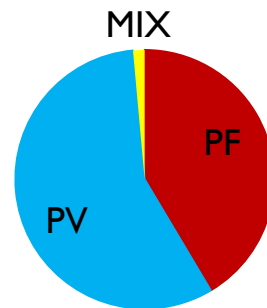
## Camps along T-M border



Camps malaria cases in **2000**  
 9,534  
 (89.6 cases/1,000 population)



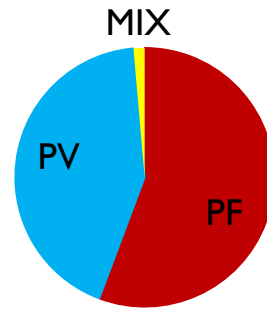
Camps malaria cases in **2006**  
 14,954  
 (100.8 cases/1,000 population)



Camps malaria cases in **2012**  
 5,983  
 (45.2 cases/1,000 population)



## 10 provinces along T-M border

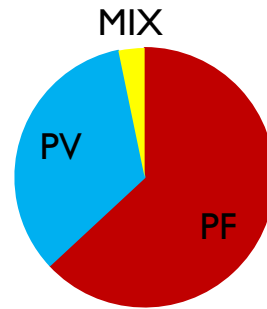


Non-Thai malaria cases in **2000**

VBDO: 48,836

Mae Tao: 4,083      63,844

SMRU: 10,925

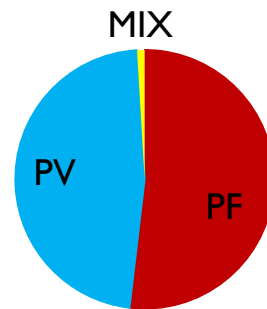


Non-Thai malaria cases in **2006**

VBDO: 32,566

Mae Tao: 8,415      65,157

SMRU: 24,176



Non-Thai malaria cases in **2012**

VBDO: ~10,000

Mae Tao: 1,010      22,417

SMRU: 11,407

# Malaria burden and artemisinin resistance in the mobile and migrant population on the Thai-Myanmar border, 1999 –2011: An observational study

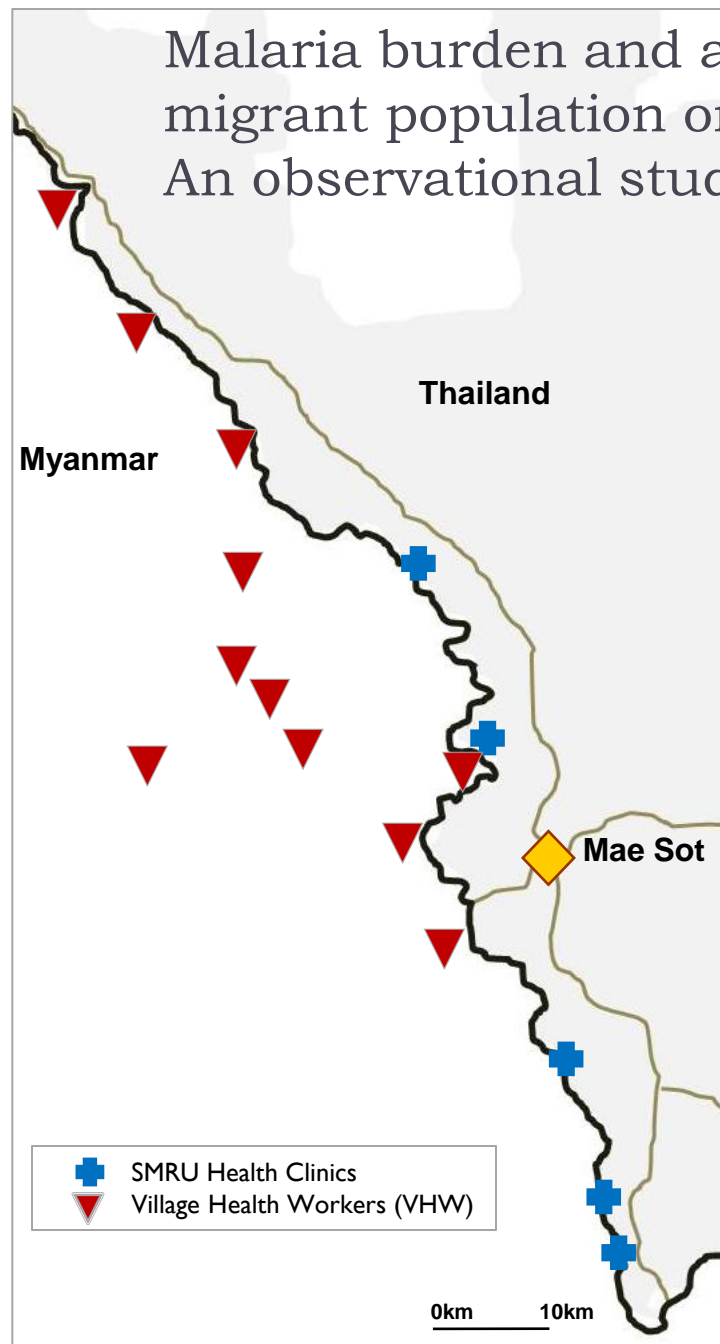
PLoS Med 10(3): e1001398, 2013

Between October 1999 - September 2011  
SMRU increased cross border health facilities  
from 2 to 11

Changes in number of malaria consultations  
from OPD services

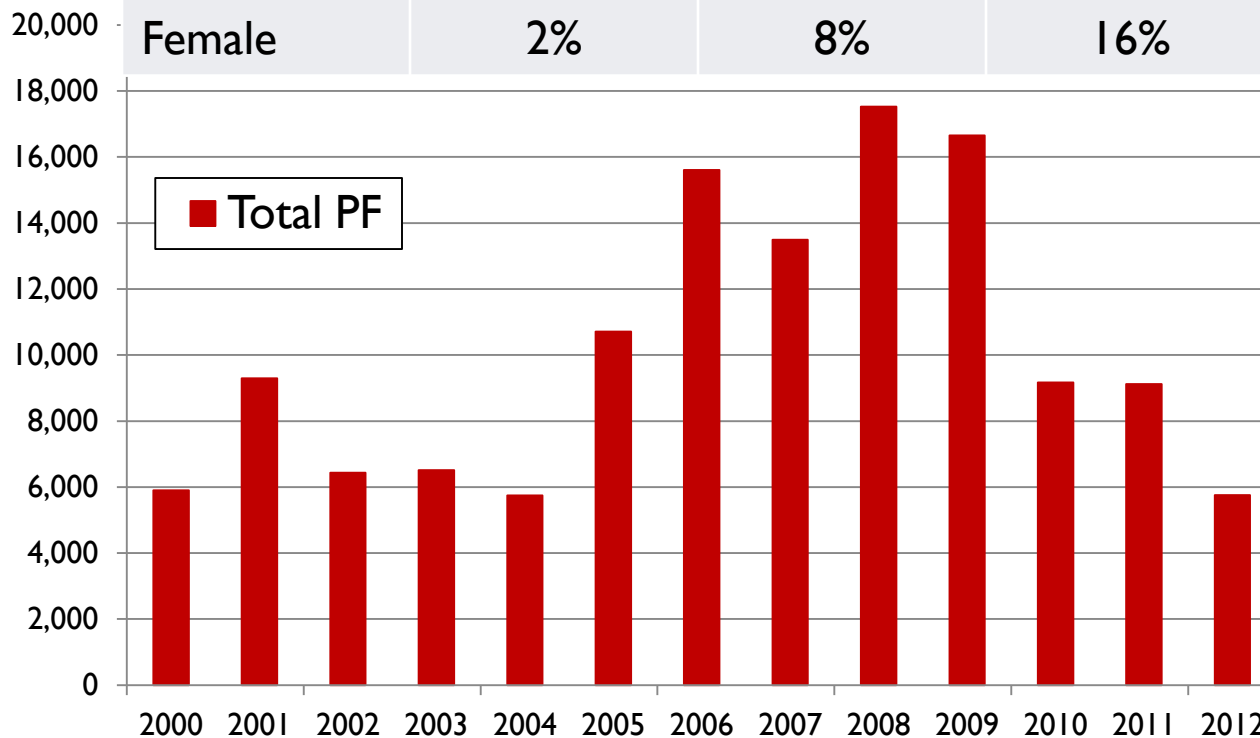
Changes in malaria incidence from a cohort of  
pregnant women

Changes in prevalence from cross-sectional  
surveys.



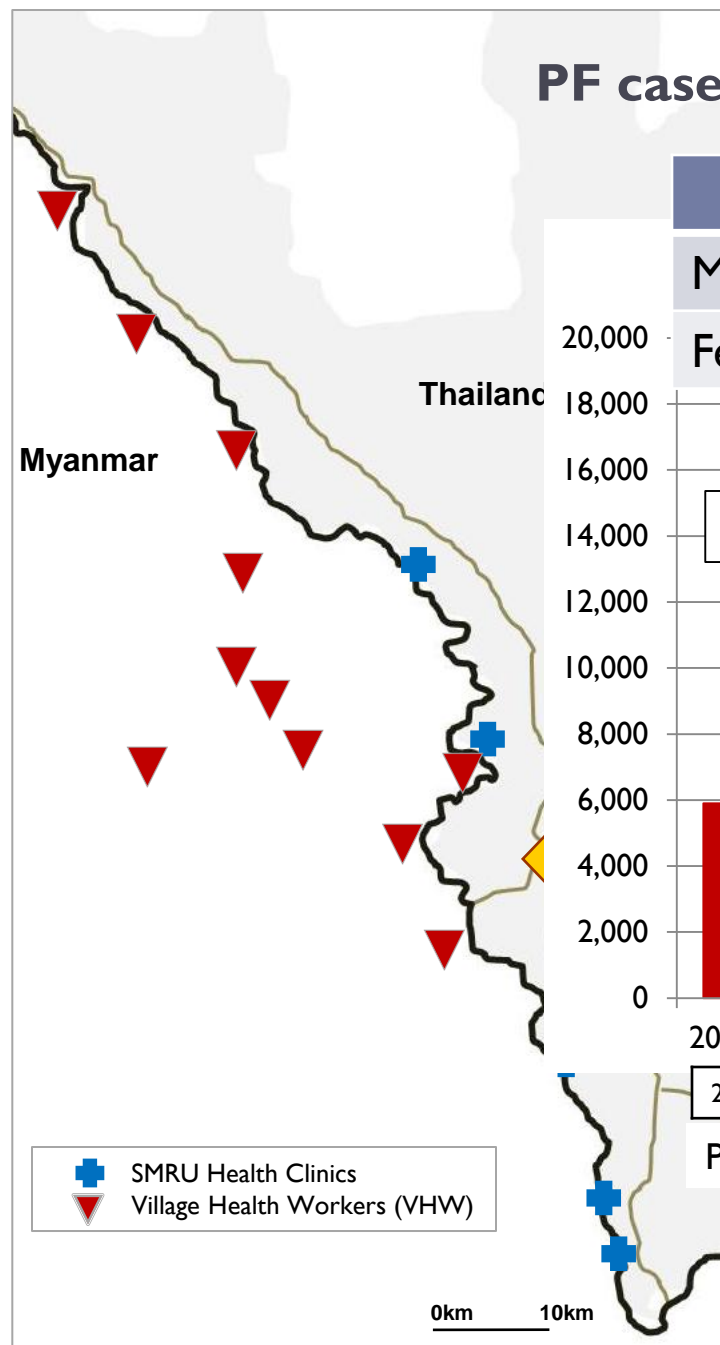
# PF cases in SMRU clinics + cross-border health posts

	< 5 yrs	5-15 years	> 15 years
Male	3%	14%	<b>57%</b>
Female	2%	8%	16%



23%	34%	21%	25%	20%	25%	26%	21%	23%	19%	12%	13%	11%
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PF cases in percentage of total consultations



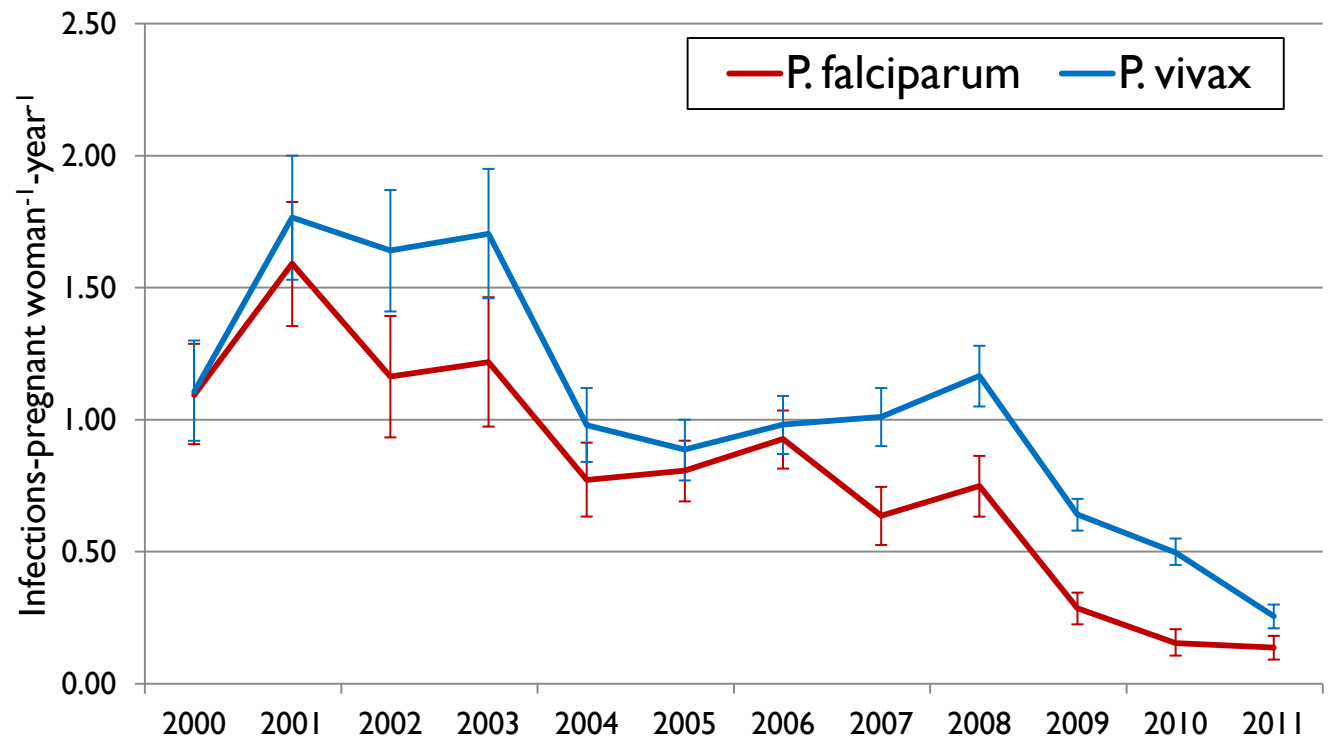
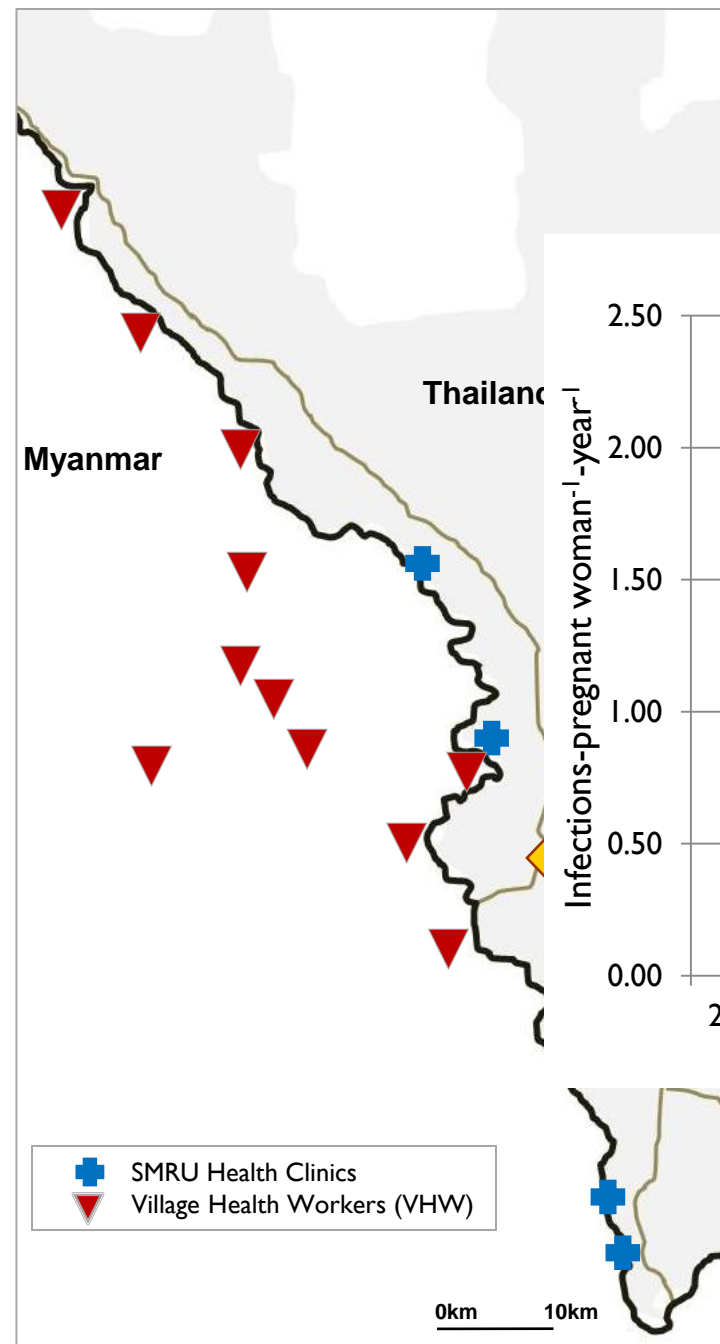
# Hospitalizations and deaths due to PF

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	2003	2004	2005	2006	2007	2008	2009	2010	2011
IPD	174	185	185	342	586	576	564	232	178
% Total PF cases	4.1%	4.7%	2.1%	2.5%	4.7%	4.3%	5.6%	4.9%	5.1%
Deaths	1	1	6	11	5	7	1	5	2
CRF	0.02%	0.03%	0.07%	0.08%	0.04%	0.05%	0.01%	0.11%	0.06%

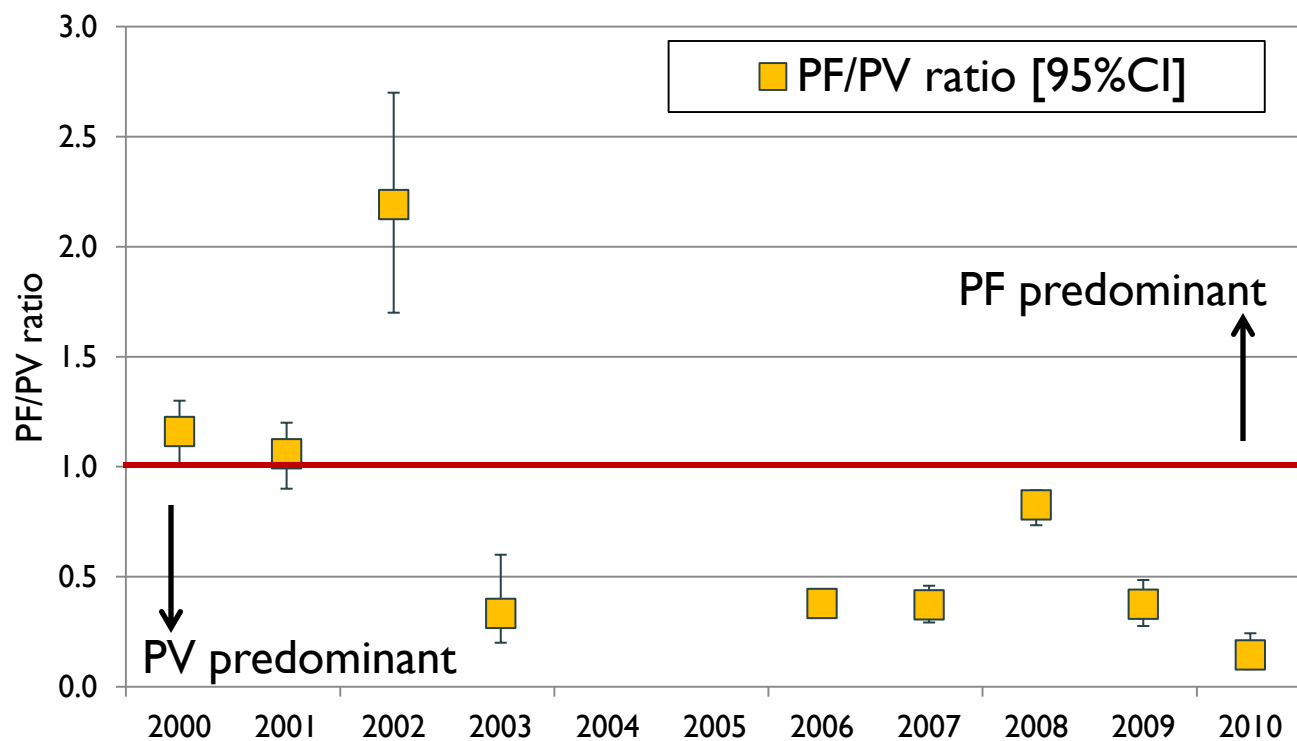
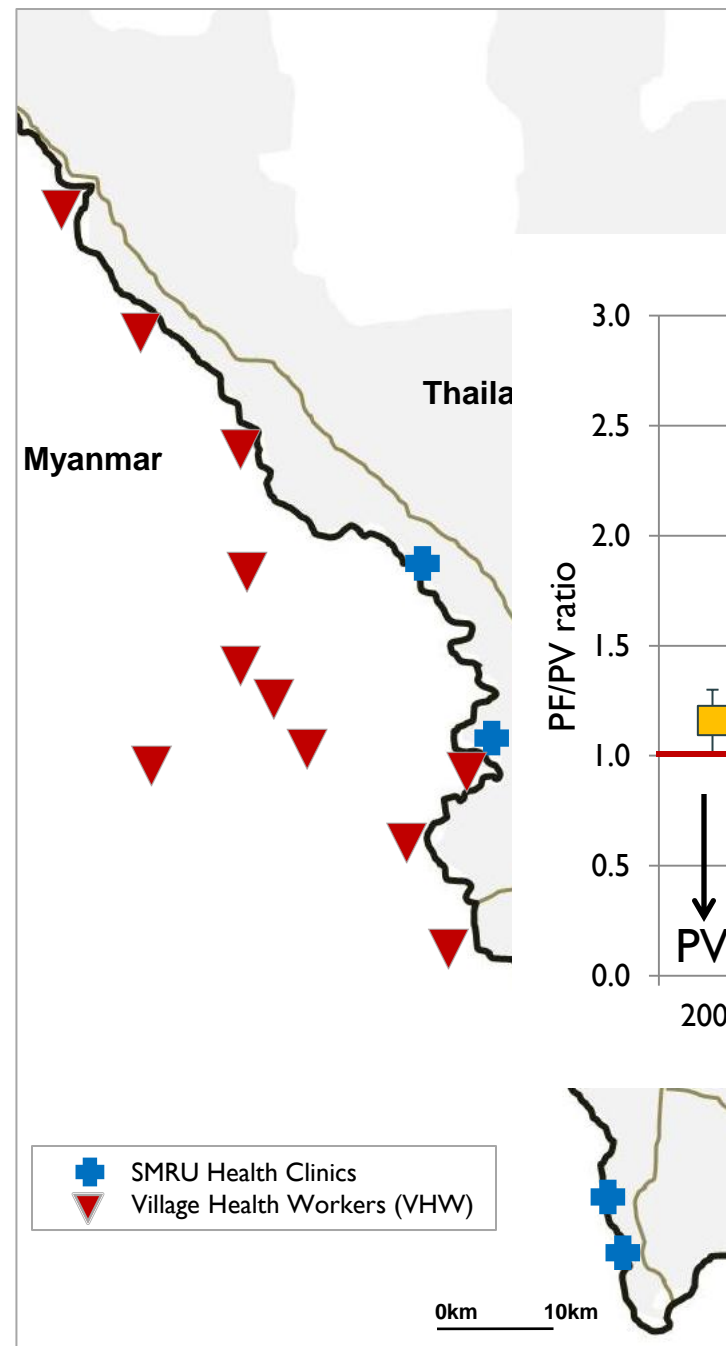


# PF and PV incidence in pregnancy





# Village prevalence surveys on Burmese side



# Conclusions

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- ▶ Malaria is decreasing
- ▶ Expanding number of villages with access to early diagnosis and adequate treatment is effective and should be continued

