

# EPIDEMIOLOGY SUMMARY

Volume 17  
January–March 2022



## 2022 GMS DATA AT A GLANCE (JAN-MAR)\*



17 695  
cases



1 247 153  
tests  
conducted

1%

tests compared  
to the same  
period in 2021

75%

cases compared  
to the same  
period in 2021



39%

*P. falciparum* +  
mixed cases  
compared to the  
same period in 2021

84%

*P. vivax* cases  
compared to the  
same period in  
2021

## 2022 QUARTER 1 OVERVIEW

In Jan-Mar 2022, Greater Mekong subregion (GMS) countries reported **17 695** malaria cases.

### Cambodia

Cambodia reported 790 cases, a 38% decrease compared to the same time period in 2021. *P. falciparum* + mixed cases and *P. vivax* constituted 9% and 90% of cases, respectively.

### China (Yunnan Province)

Yunnan reported 11 *P. vivax* cases and 0 *P. falciparum* + mixed cases. Among those, no indigenous cases were reported.

### Lao People's Democratic Republic

Lao People's Democratic Republic reported 523 cases, a 15% decrease compared to the same time period in 2021. *P. falciparum* + mixed cases and *P. vivax* constituted 17% and 83% of cases respectively.

### Myanmar

Myanmar reported 15569 cases of which 17% were *P. falciparum* + mixed cases and 83% were *P. vivax*. It should be noted that only partial data was available for Myanmar during this period.

### Thailand

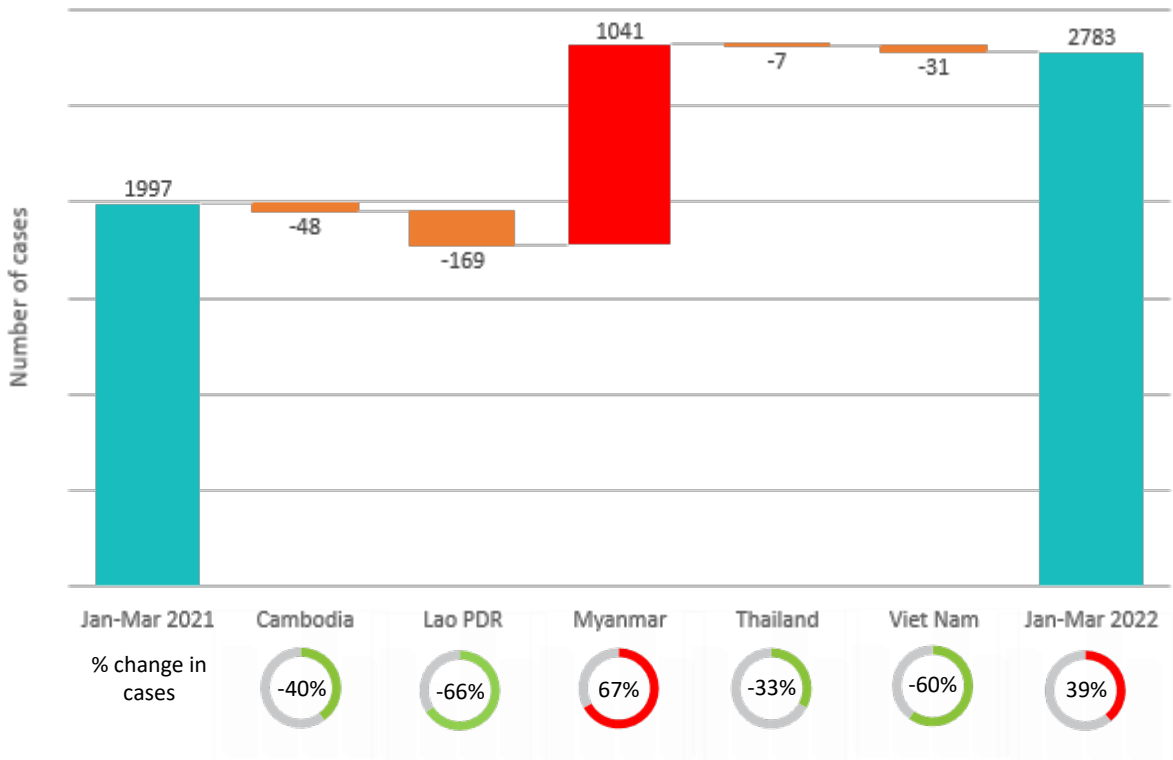
Thailand reported 747 cases, a 84% increase compared to the same time period in 2021. *P. falciparum* + mixed cases and *P. vivax* constituted 2% and 89% of cases, respectively.

### Viet Nam

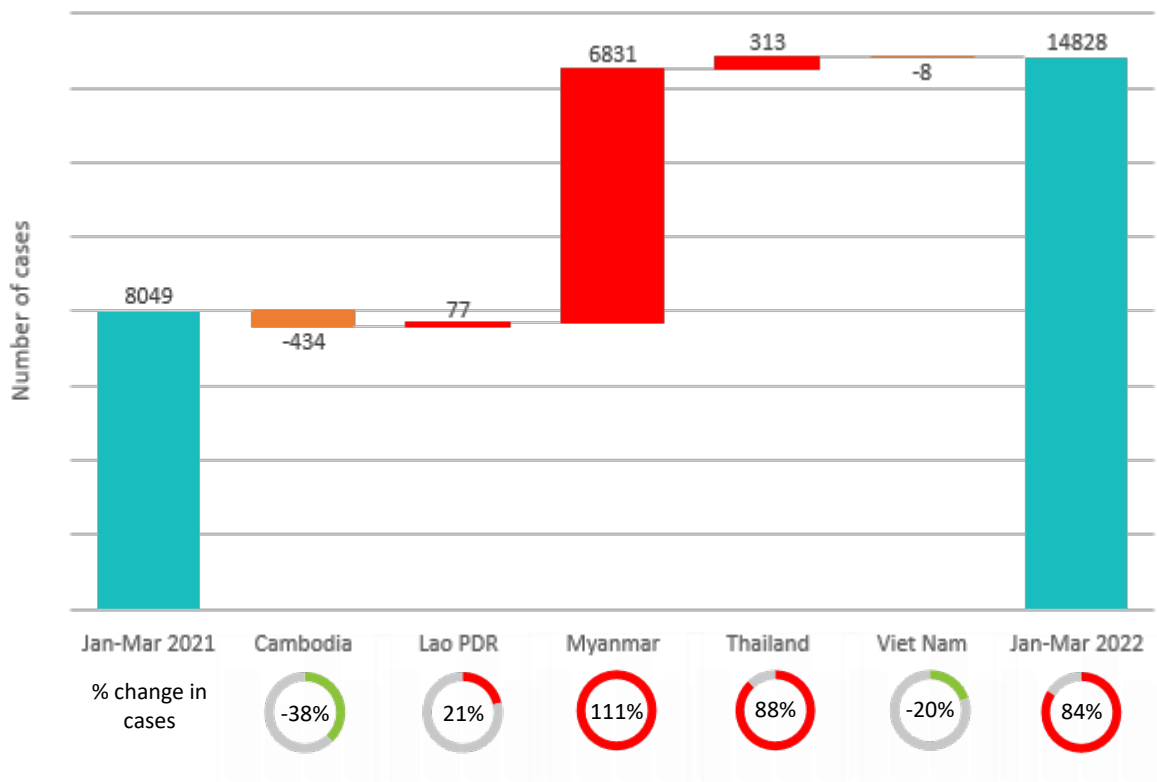
Viet Nam reported 55 cases, a 41% decrease compared to the same time period in 2021. *P. falciparum* + mixed cases and *P. vivax* constituted 38% and 60% of cases, respectively.

\*only partial data was available for Myanmar during this period of 2021-2022.

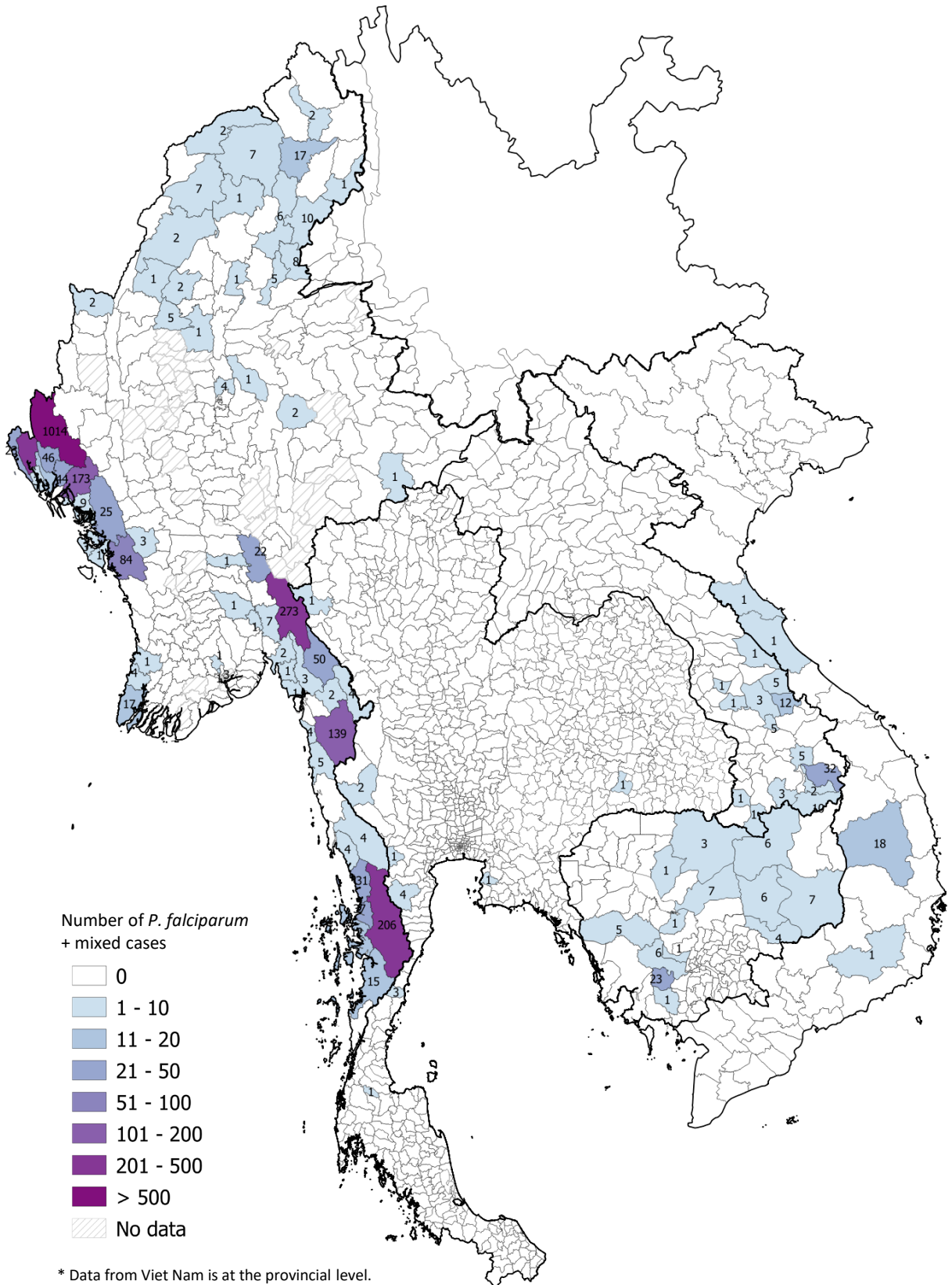
## CHANGES IN P. FALCIPARUM + MIXED CASES IN THE GMS FROM JAN-MAR 2021 COMPARED TO JAN-MAR 2022



## CHANGES IN P. VIVAX CASES IN THE GMS FROM JAN-MAR 2021 COMPARED TO JAN-MAR 2022

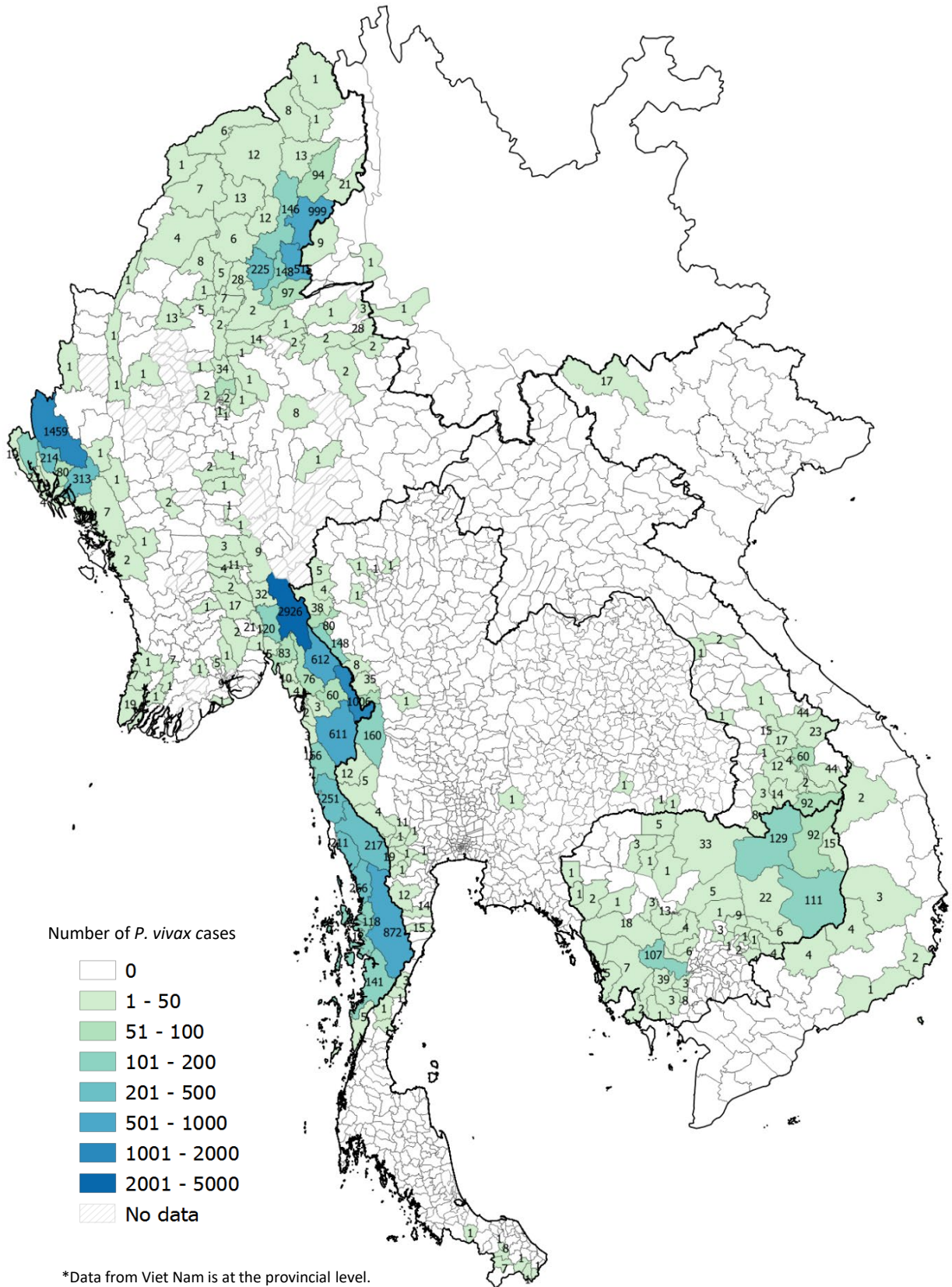


# REGIONAL MAP OF *P. FALCIPARUM* + MIXED CASES BY DISTRICT (JAN-MAR 2022)\*



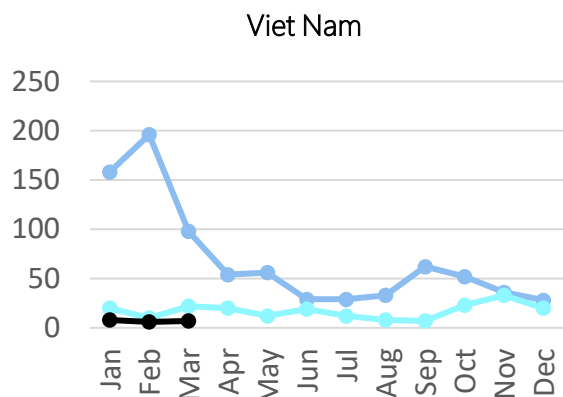
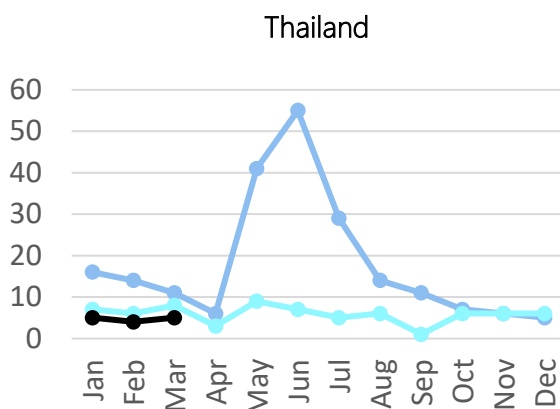
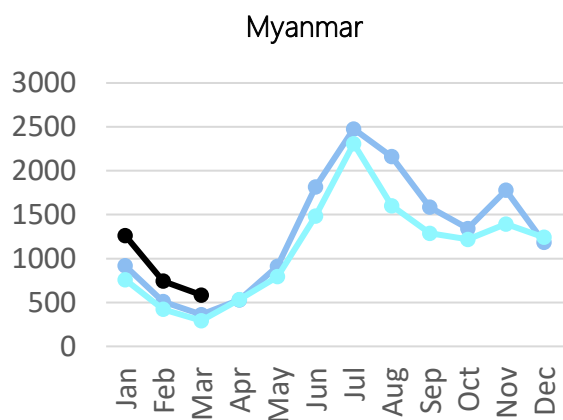
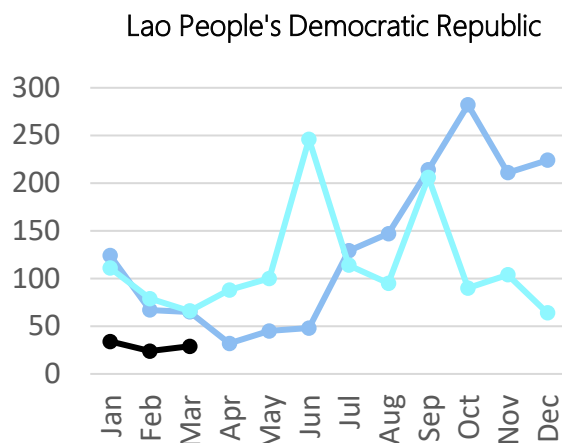
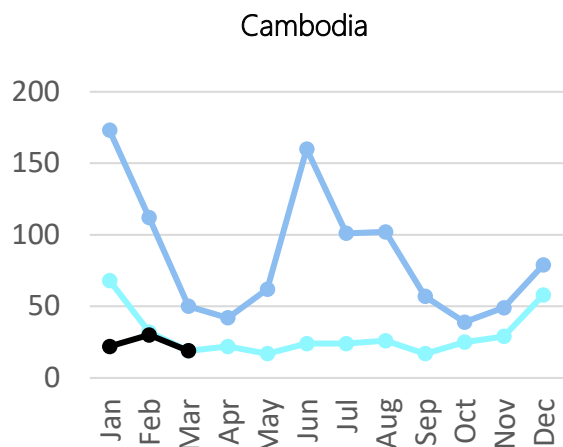
The boundaries, names shown, and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

# REGIONAL MAP OF P. VIVAX CASES BY DISTRICT (JAN-MAR 2022)\*



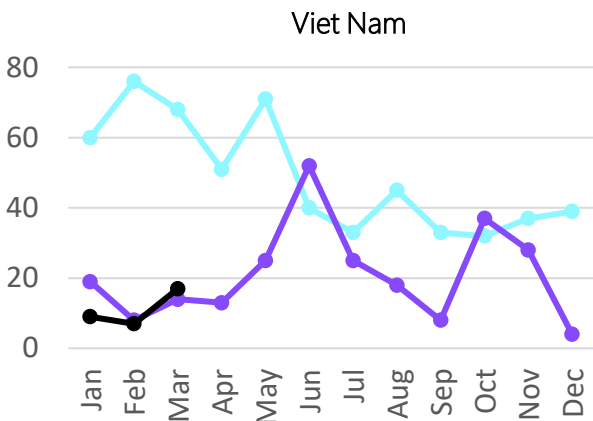
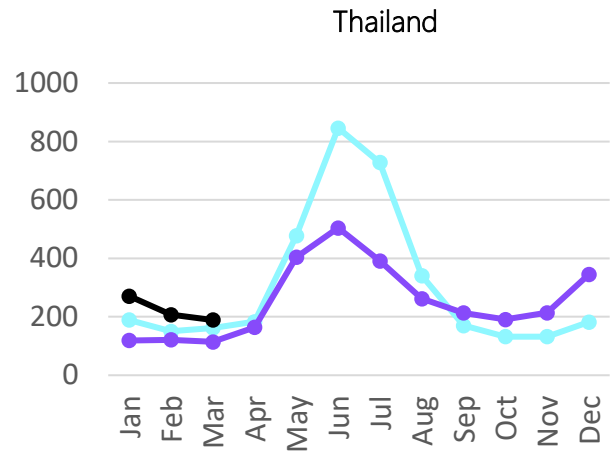
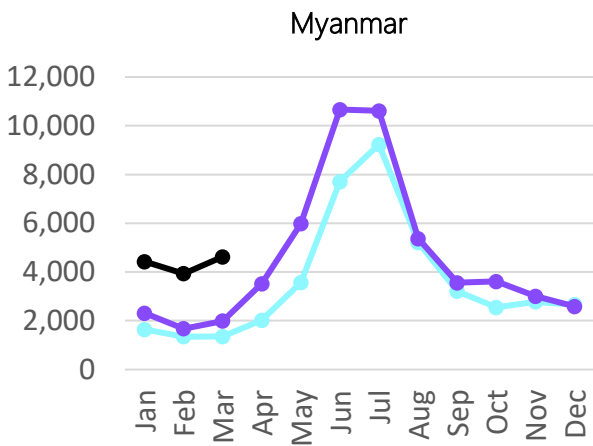
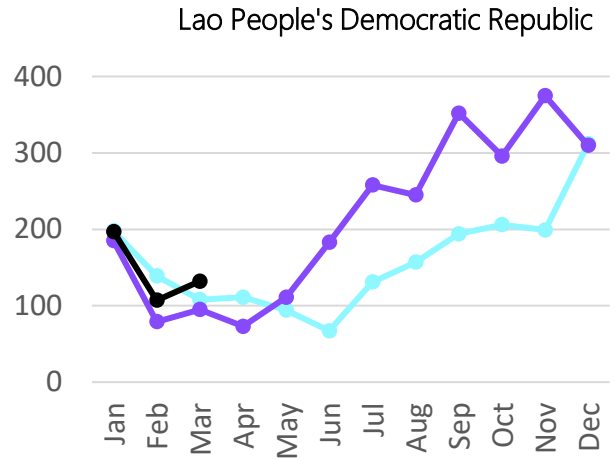
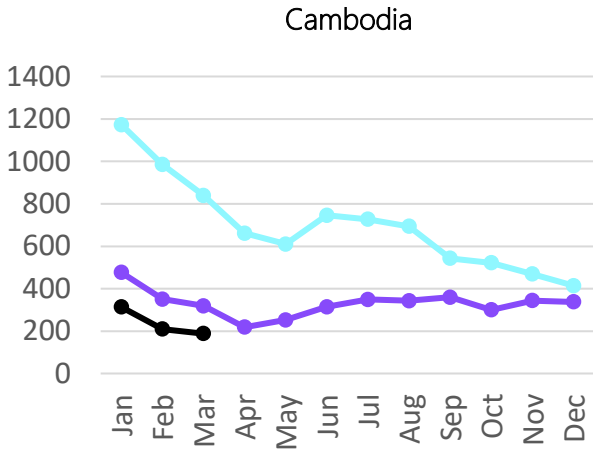
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## NUMBER OF P. FALCIPARUM + MIXED CASES BY MONTH AND COUNTRY (2020–2022)\*



\*Data from 2022 - covers January - March

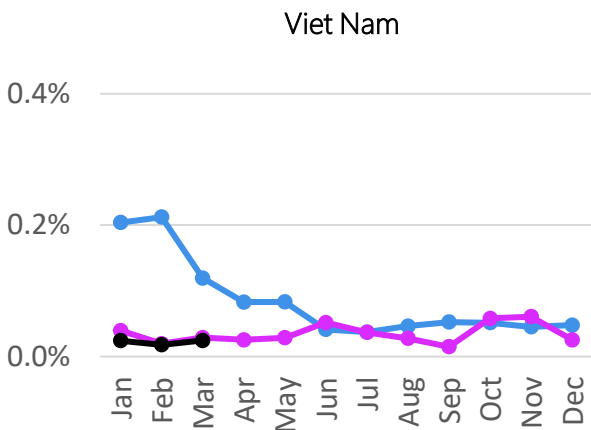
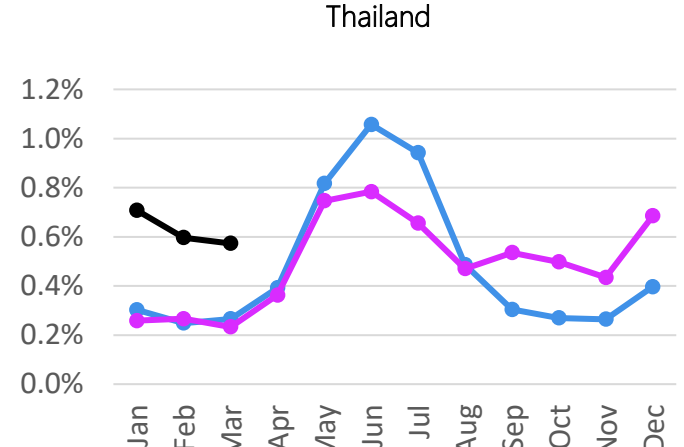
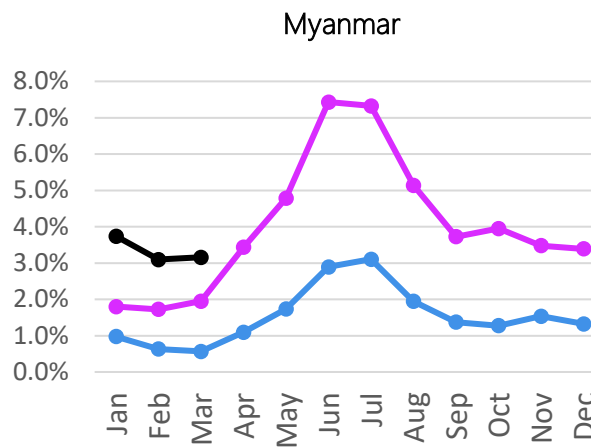
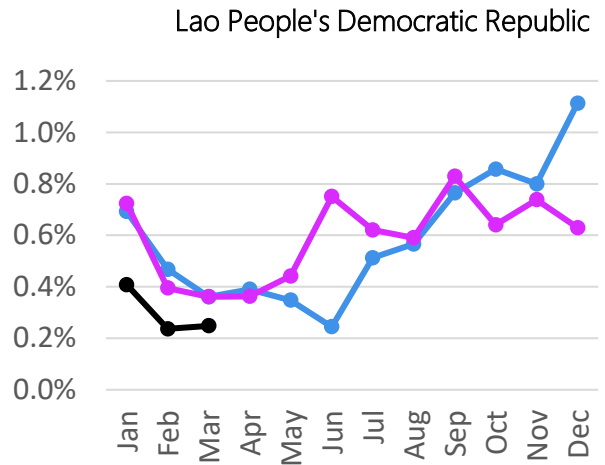
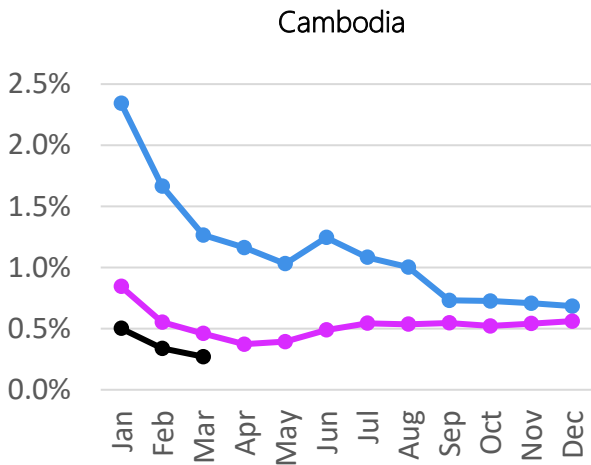
## NUMBER OF P. VIVAX CASES BY MONTH BY COUNTRY\* (2020–2022)



\*Data from 2022 covers January - March



## MONTHLY TEST POSITIVITY RATE (TPR) BY COUNTRY\* (2020–2022)



\*TPR is calculated as number of confirmed cases divided by number of tested cases (including rapid diagnostic tests and microscopy) per month per country.

\*Data from 2022 covers January - March

## MONTHLY MALARIA CASES AND DEATHS BY COUNTRY IN 2021 (JAN–DEC)

Country	Surveillance indicator <sup>1</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Cambodia <sup>2</sup>	Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
	Suspected cases tested	64 563	69 240	73 576	64 730	68 611	69 433	68 631	68 928	68 963	62 412	68 951	70 691	<b>818 729</b>
	Confirmed cases	545	383	338	241	270	339	373	369	377	325	373	396	<b>4 329</b>
	<i>P. falciparum</i> cases	68	30	19	7	16	22	24	26	17	25	29	58	<b>341</b>
	<i>P. vivax</i> cases	477	351	319	219	253	315	349	343	360	300	344	338	<b>3 968</b>
	Mixed cases	0	2	0	15	1	2	0	0	0	0	0	0	<b>20</b>
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
	Imported cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
China <sup>3</sup>	Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
	Suspected cases tested	6 366	6 752	7 044	7 697	8 994	11 001	10 178	9 451	10 769	10 524	6 593	8 631	<b>104 000</b>
	Confirmed cases	4	3	8	10	12	25	30	8	4	7	4	3	<b>118</b>
	<i>P. falciparum</i> cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
	<i>P. vivax</i> cases	4	3	8	10	12	25	30	8	4	7	4	3	<b>118</b>
	Mixed cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
	Imported cases	3	3	5	9	11	25	30	7	4	7	4	3	<b>111</b>
Lao People's Democratic Republic	Deaths	0	0	0	0	0	0	0	0	1	0	0	0	1
	Suspected cases tested	40 893	40 013	44 544	44 390	47 777	57 134	59 933	57 608	67 299	60 269	64 881	59 398	<b>644 139</b>
	Confirmed cases	296	158	161	161	211	429	372	340	558	386	479	374	<b>3 925</b>
	<i>P. falciparum</i> cases	110	78	63	87	98	246	112	89	206	90	101	59	<b>1 339</b>
	<i>P. vivax</i> cases	185	79	95	73	111	183	258	245	352	296	375	310	<b>2 562</b>
	Mixed cases	1	1	3	1	2	0	2	6	0	0	3	5	<b>24</b>
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
	Imported cases	1	4	2	7	2	12	7	1	2	1	3	7	<b>49</b>
Myanmar	Deaths	0	0	0	0	0	2	4	2	0	0	0	0	8
	Suspected cases tested	170 823	121 850	116 932	118 377	142 385	164 914	177 511	136 681	130 998	123 050	127 666	113 919	<b>1645 106</b>
	Confirmed cases	3 197	2 171	2 329	4 119	6 944	12 579	13 393	7 354	5 153	5 063	4 760	4 118	<b>71 180</b>
	<i>P. falciparum</i> cases	773	430	284	522	828	1 617	2 428	1 712	1 405	1 300	1 534	1 299	<b>14 132</b>
	<i>P. vivax</i> cases	2 398	1 721	2 029	3 558	6 090	10 931	10 896	5 585	3 709	3 726	3 170	2 763	<b>56 576</b>
	Mixed cases	26	20	16	39	26	31	69	57	39	37	56	56	<b>472</b>
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Thailand	Deaths	Data not available <sup>4</sup>												
	Suspected cases tested	51 072	49 972	60 443	49 339	56 010	66 982	61 924	57 638	41 628	40 594	51 569	52 817	<b>639 988</b>
	Confirmed cases	132	133	141	179	418	525	406	271	223	202	224	362	<b>3 216</b>
	<i>P. falciparum</i> cases	5	4	8	3	8	7	2	5	1	6	6	6	<b>61</b>
	<i>P. vivax</i> cases	119	121	114	164	404	504	391	262	213	191	214	345	<b>3 042</b>
	Mixed cases	2	2	0	0	1	0	3	1	0	0	0	0	<b>9</b>
	Other cases	6	6	19	13	5	14	10	3	9	5	4	11	<b>104</b>
	Imported cases	9	13	23	17	79	106	142	76	64	62	83	128	<b>802</b>
Viet Nam	Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
	Suspected cases tested	98 937	92 798	125 048	130 068	129 902	137 760	100 607	94 499	101 726	107 008	100 678	94 617	<b>1 313 648</b>
	Confirmed cases	39	18	36	33	37	71	37	26	15	62	61	24	<b>459</b>
	<i>P. falciparum</i> cases	19	10	22	20	12	19	12	8	7	23	33	20	<b>205</b>
	<i>P. vivax</i> cases	19	8	14	13	25	52	25	18	8	37	28	4	<b>251</b>
	Mixed cases	1	0	0	0	0	0	0	0	0	0	0	0	<b>1</b>
	Other cases	0	0	0	0	0	0	0	0	0	2	0	0	<b>2</b>
Imported cases	5	6	7	7	6	3	3	3	0	0	5	7	<b>52</b>	

<sup>1</sup> Mixed cases include cases identified with more than one *Plasmodium* species. Other cases refer to *P. malariae*, *P. ovale*, *P. knowlesi* and unknown cases. Data in the table includes microscopy and rapid diagnostic tests (RDTs).

<sup>2</sup> Numbers of cases includes data from two systems: the malaria information system (MIS) and the health information system (HIS).

<sup>3</sup> Numbers of cases for China refers to imported and relapse cases in 19 border counties of Yunnan Province. No indigenous cases were reported in 2020.

<sup>4</sup> Malaria deaths from Thailand are officially reported annually.



## MONTHLY MALARIA CASES AND DEATHS BY COUNTRY IN 2022 (JAN–DEC)

Country	Surveillance indicator <sup>1</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Cambodia <sup>2</sup>	Deaths	0	0	0										0	
	Suspected cases tested	67 383	71 600	77 900										216 883	
	Confirmed cases	338	242	210										790	
	<i>P. falciparum</i> cases	22	30	18										70	
	<i>P. vivax</i> cases	314	210	189										713	
	Mixed cases	0	0	1										1	
	Other cases	2	2	2										6	
	Imported cases	1	0	0										1	
China <sup>3</sup>	Deaths	0	0	0										0	
	Suspected cases tested	7 239	5 670	5 931										18 840	
	Confirmed cases	2	4	5										11	
	<i>P. falciparum</i> cases	0	0	0										0	
	<i>P. vivax</i> cases	2	4	5										11	
	Mixed cases	0	0	0										0	
	Other cases	0	0	0										0	
	Imported cases	2	3	5										10	
Lao People's Democratic Republic	Deaths	0	1	0										1	
	Suspected cases tested	56 646	55 375	64 827										176 848	
	Confirmed cases	231	131	161										523	
	<i>P. falciparum</i> cases	34	22	28										84	
	<i>P. vivax</i> cases	197	107	132										436	
	Mixed cases	0	2	1										3	
	Other cases	0	0	0										0	
	Imported cases	0	0	0										0	
Myanmar <sup>4</sup>	Deaths	1	1	0										2	
	Suspected cases tested	152 156	150 929	164 798										467 883	
	Confirmed cases	5 690	4 673	5 206										15 569	
	<i>P. falciparum</i> cases	1 214	714	552										2 480	
	<i>P. vivax</i> cases	4 427	3 930	4 622										12 979	
	Mixed cases	49	29	32										110	
	Other cases	0	0	0										0	
Thailand		Data not available <sup>5</sup>													
	Suspected cases tested	42 806	37 722	38 214											118 742
	Confirmed cases	303	225	219											747
	<i>P. falciparum</i> cases	5	4	5											14
	<i>P. vivax</i> cases	271	207	189											667
	Mixed cases	0	0	0											0
	Other cases	27	14	25											66
	Imported cases	117	74	73											264
Viet Nam	Deaths	0	0	0										0	
	Suspected cases tested	70 290	79 193	98 474										247 957	
	Confirmed cases	17	14	24										55	
	<i>P. falciparum</i> cases	8	6	7										21	
	<i>P. vivax</i> cases	9	7	17										33	
	Mixed cases	0	0	0										0	
	Other cases	0	1	0										1	
	Imported cases	4	3	4										11	

<sup>1</sup> Mixed cases include cases identified with more than one *Plasmodium* species. Other cases refer to *P. malariae*, *P. ovale*, *P. knowlesi* and unknown cases. Data in the table includes microscopy and rapid diagnostic tests (RDTs).

<sup>2</sup> Numbers of cases includes data from two systems: the malaria information system (MIS) and the health information system (HIS).

<sup>3</sup> Numbers of cases for China refers to imported and relapse cases in 19 border counties of Yunnan Province. No indigenous cases were reported in 2021.

<sup>4</sup> The monthly data for 2021 reported under Myanmar is not final and may be subject to change. Data on imported cases is currently not available for Myanmar

<sup>5</sup> Malaria deaths from Thailand are officially reported annually.

## NOTES

Data sources: Reported cases include cases reported from all sources of public health facilities, community health workers and the private sector.

Disclaimer: The Mekong Malaria Elimination (MME) programme is an initiative aimed at supporting the countries in the Greater Mekong subregion towards the goal of malaria elimination by 2030. The World Health Organization (WHO) has compiled data for this publication based on reports from the countries in the Greater Mekong subregion. The data presented in this publication are based on available data as of August 2022. The designations employed and the presentation of the material in this summary do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. WHO does not warrant that the information contained in this summary is complete and correct and shall not be liable for any damages incurred as a result of its use. This summary may not be reviewed, abstracted, quoted, reproduced, transmitted, distributed, translated or adapted, in part or in whole, in any form or by any means without the prior written consent of WHO.

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