

MEKONG MALARIA ELIMINATION PROGRAMME

EPIDEMIOLOGY SUMMARY

Volume 13
Quarter 1 2021



2021 GMS DATA AT A GLANCE (JAN-MAR)*



6382
cases



1 083 943
tests
conducted

-39%

tests compared
to the same
period in 2020

-44%

cases compared
to the same
period in 2020



-66%

P. falciparum +
mixed cases
compared to the
same period in 2020

-37%

P. vivax cases
compared to the
same period in
2020

2021 QUARTER 1 OVERVIEW

From January to March 2021, Greater Mekong subregion (GMS) countries reported **6382** malaria cases.

Cambodia

Cambodia reported 1131 cases, a 66% decrease compared to the same time period in 2020. *P. falciparum* + mixed cases and *P. vivax* constituted 9% and 91% of cases, respectively.

China (Yunnan Province)

Yunnan reported 15 *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 (PDR) reported 596 cases, a 15% decrease compared to the same time period in 2020. *P. falciparum* + mixed cases and *P. vivax* constituted 42% and 58% of cases respectively.

Myanmar

Myanmar reported 4148 cases of which 13% were *P. falciparum* + mixed cases and 87% were *P. vivax*. It should be noted that only partial data was available for Myanmar during this period.

Thailand

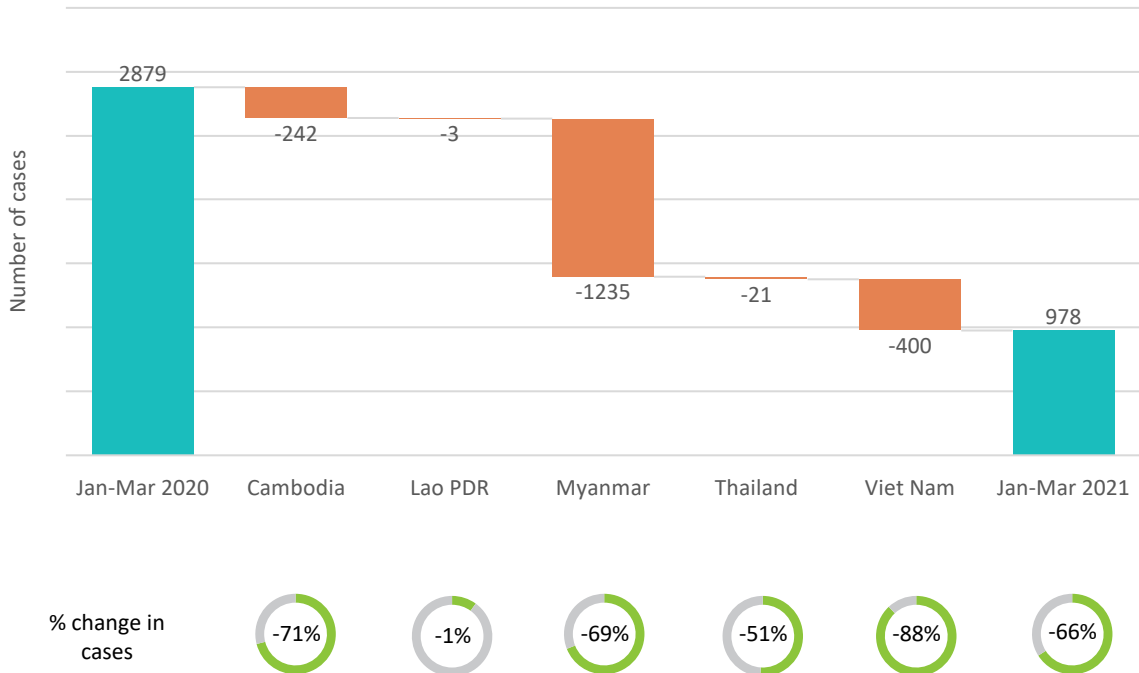
Thailand reported 399 cases, a 29% decrease compared to the same time period in 2020. *P. falciparum* + mixed cases and *P. vivax* constituted 5% and 88% of cases, respectively.

Viet Nam

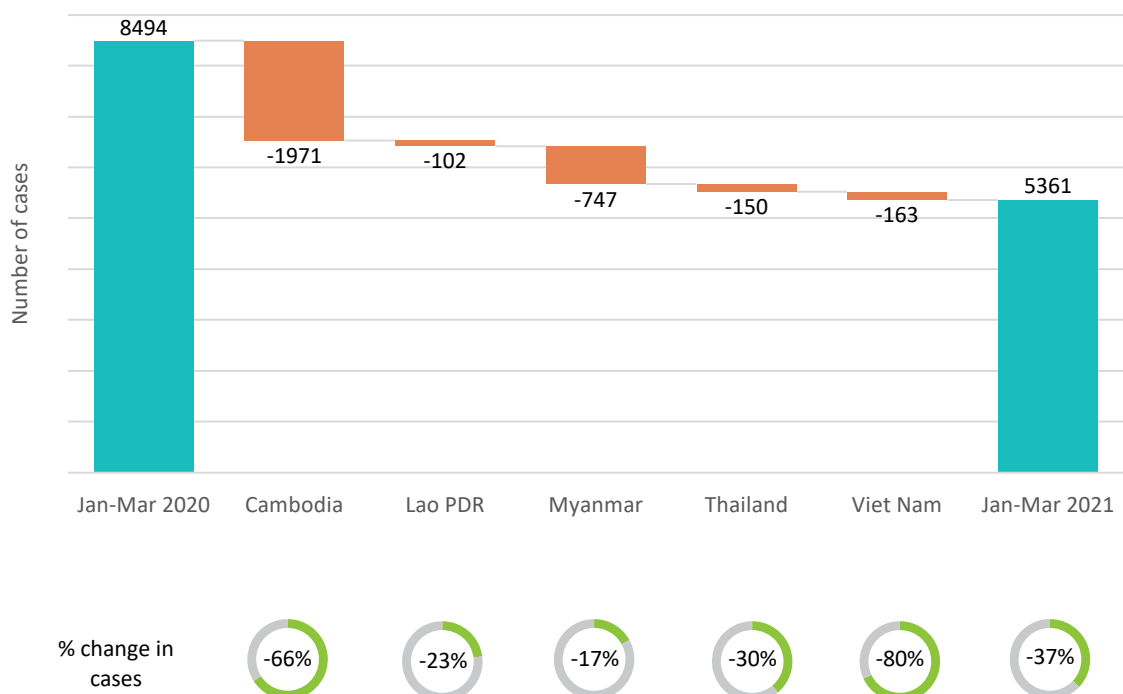
Viet Nam reported 93 cases, a 86% decrease compared to the same time period in 2020. *P. falciparum* + mixed cases and *P. vivax* constituted 56% and 44% of cases, respectively.

*Only partial data was available for Myanmar during this period of 2021.

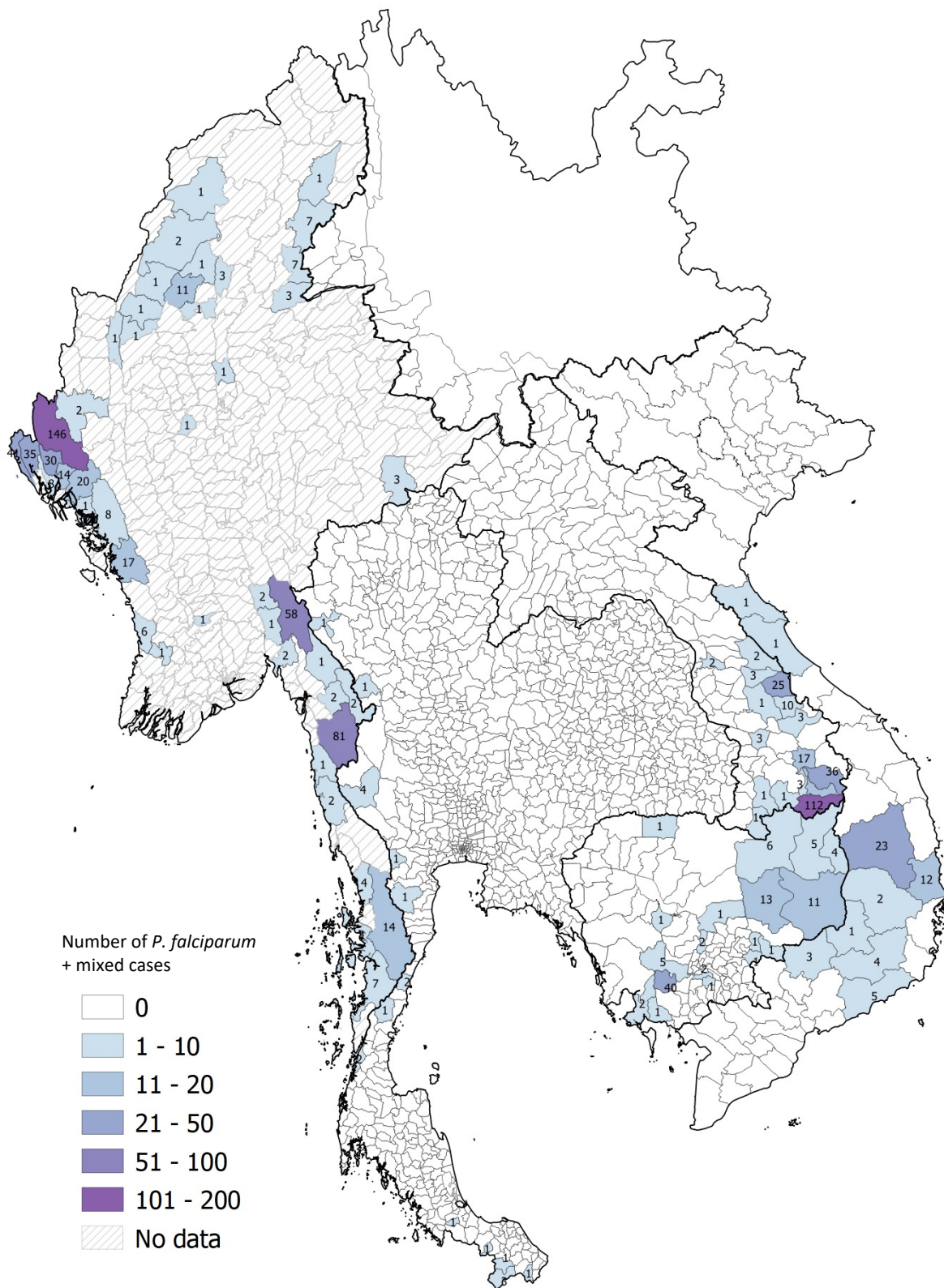
CHANGES IN *P. FALCIPARUM* + MIXED CASES IN THE GMS FROM JAN-MAR 2020 COMPARED TO JAN-MAR 2021



CHANGES IN *P. VIVAX* CASES IN THE GMS FROM JAN-MAR 2020 COMPARED TO JAN-MAR 2021



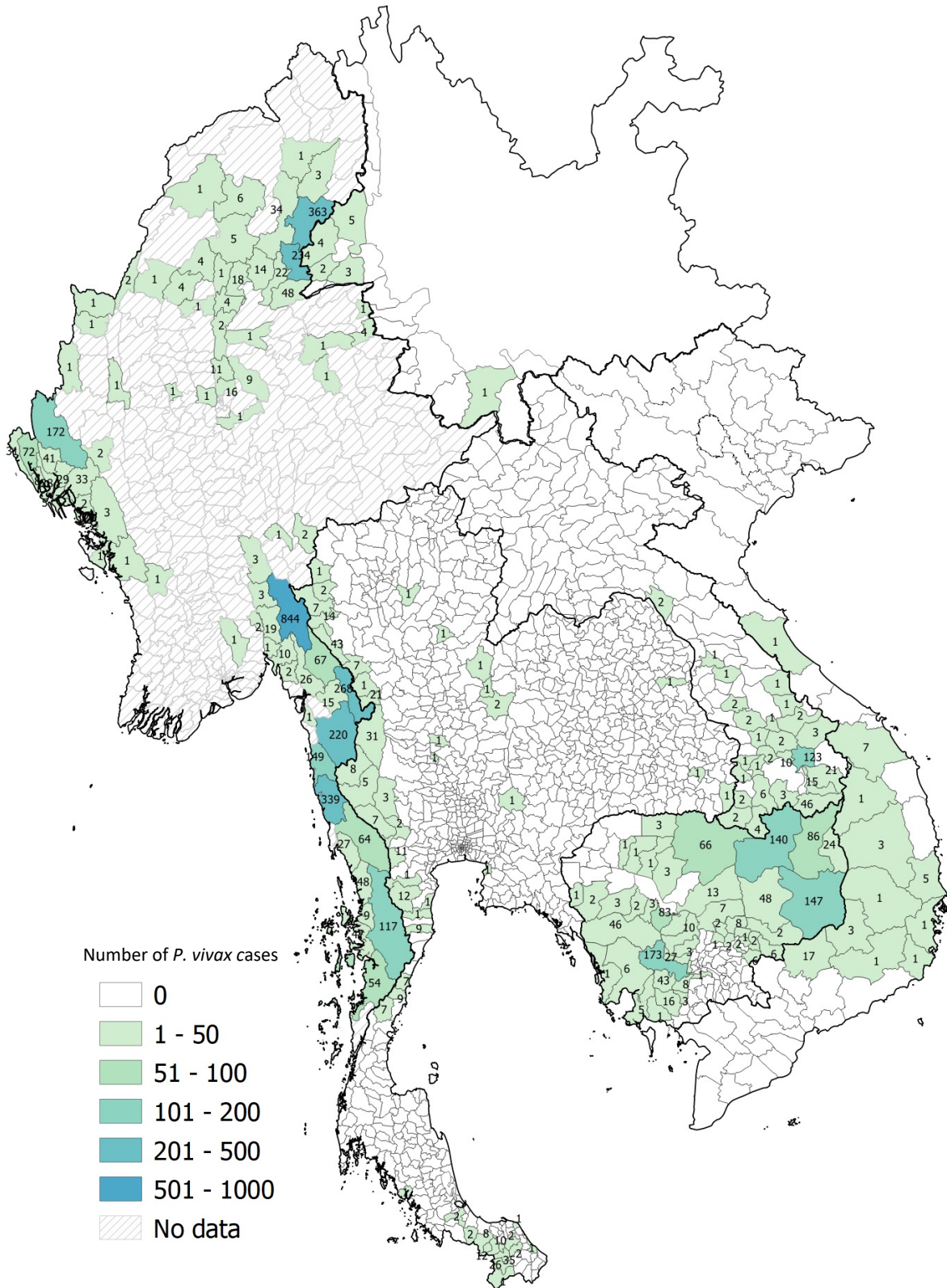
REGIONAL MAP OF *P. FALCIPARUM* + MIXED CASES BY DISTRICT (JAN-MAR 2021)*



* Data from Viet Nam is at the provincial level.

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.

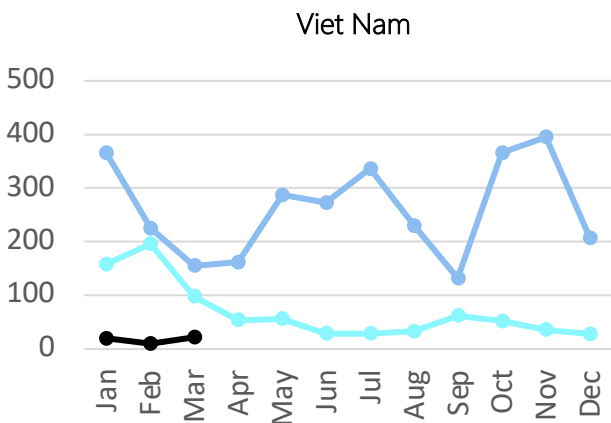
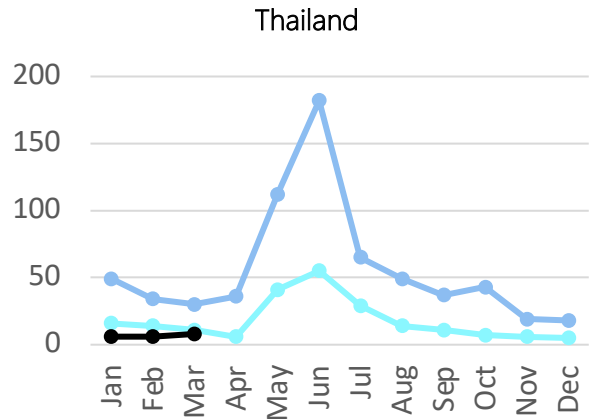
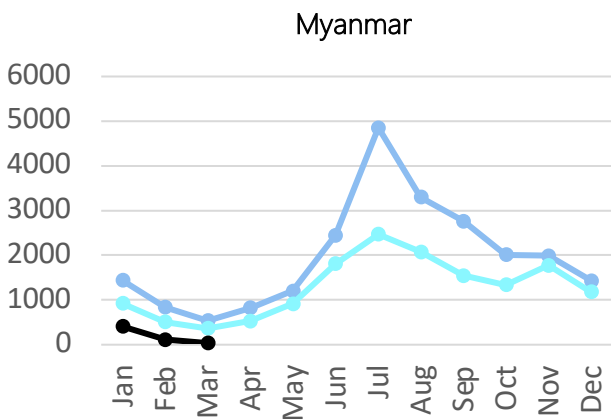
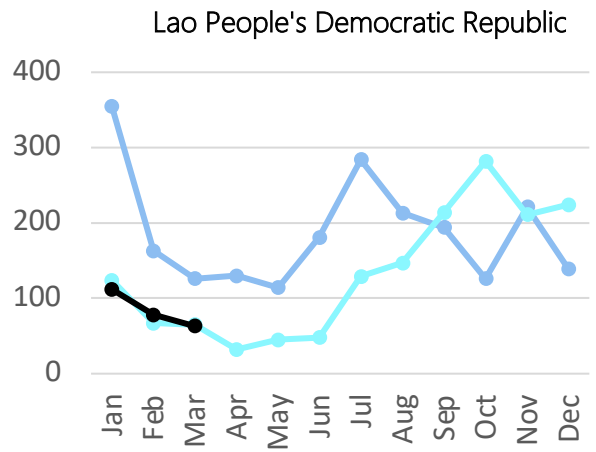
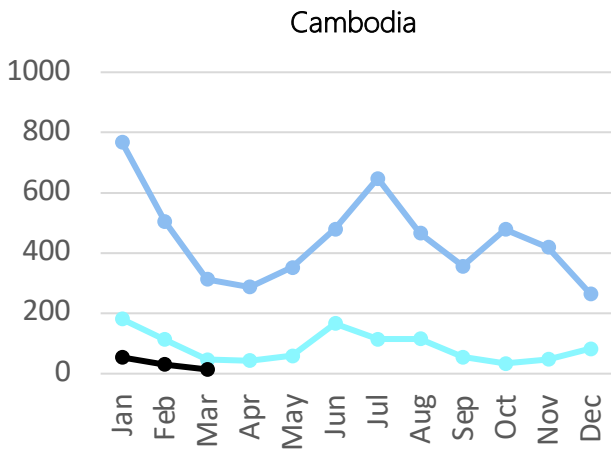
REGIONAL MAP OF *P. VIVAX* CASES BY DISTRICT (JAN-MAR 2021)*



*Data from Viet Nam is at the provincial level.

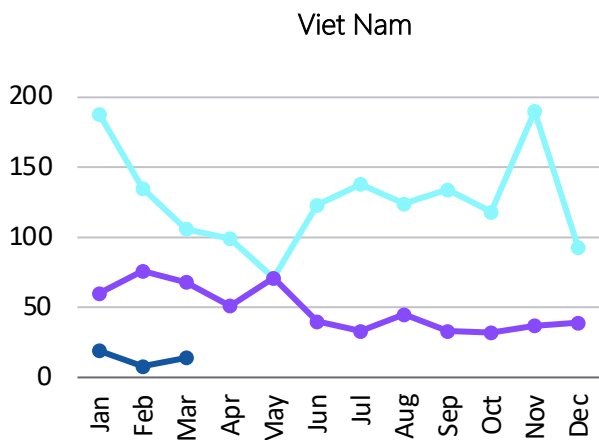
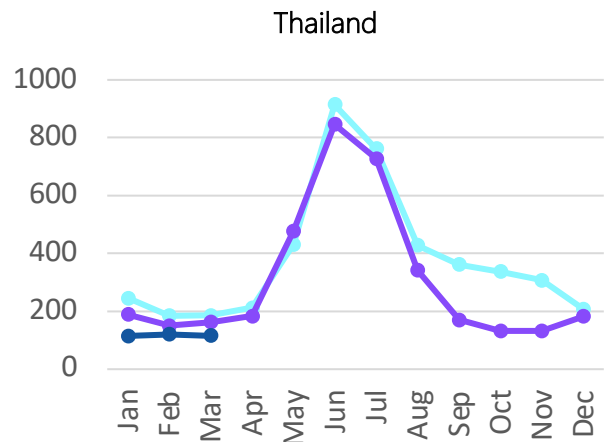
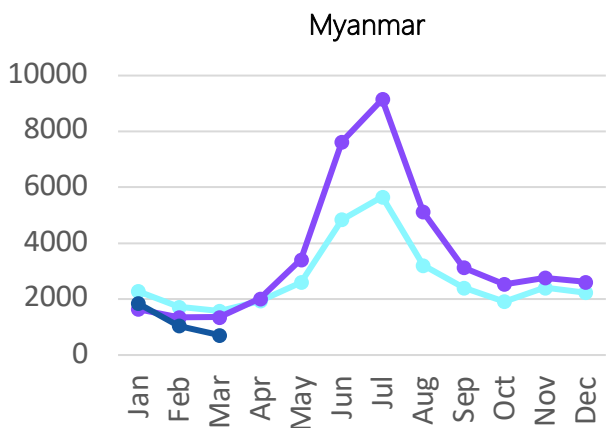
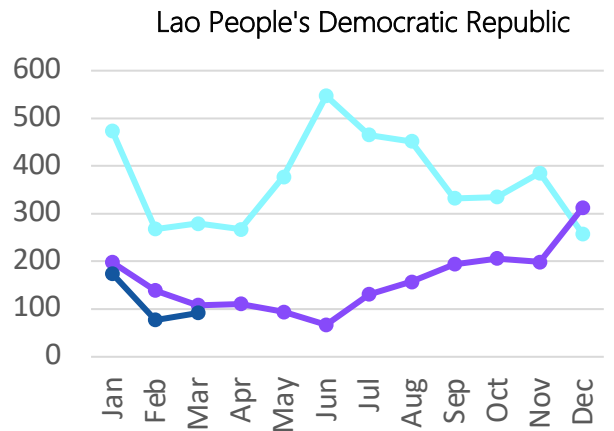
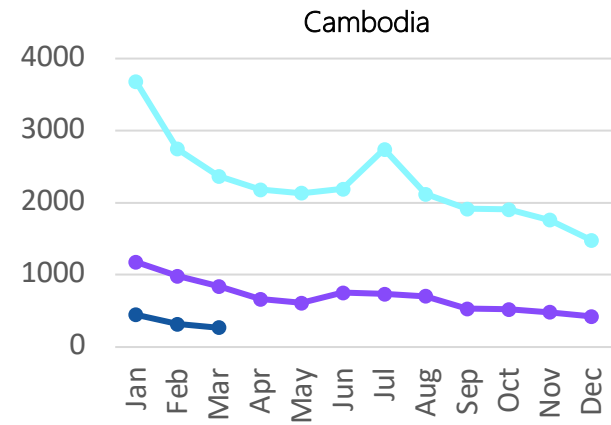
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**NUMBER OF *P. FALCIPARUM* + MIXED CASES
BY MONTH AND COUNTRY (2019–2021)***



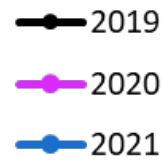
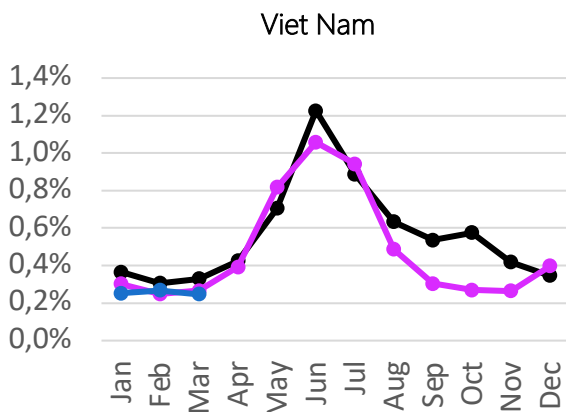
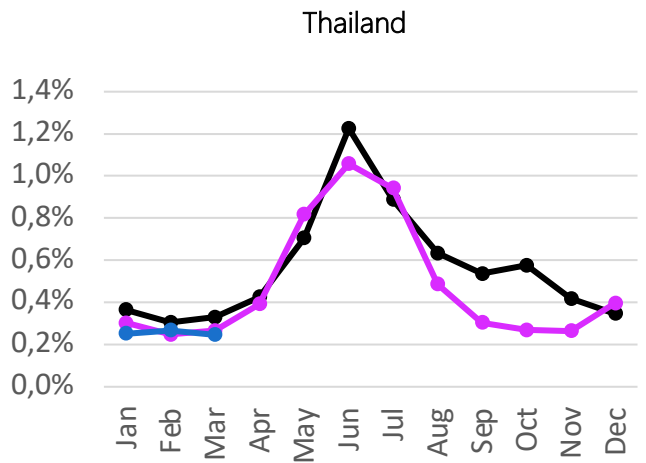
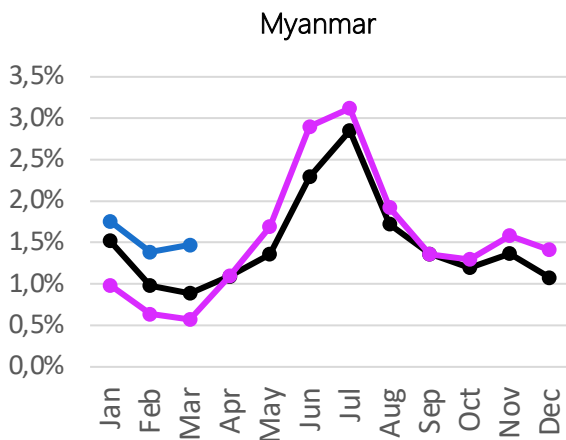
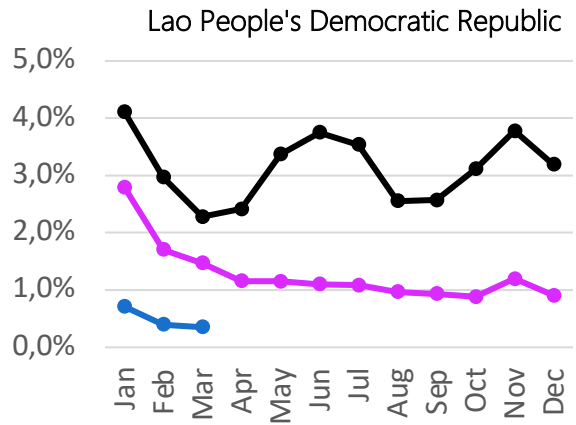
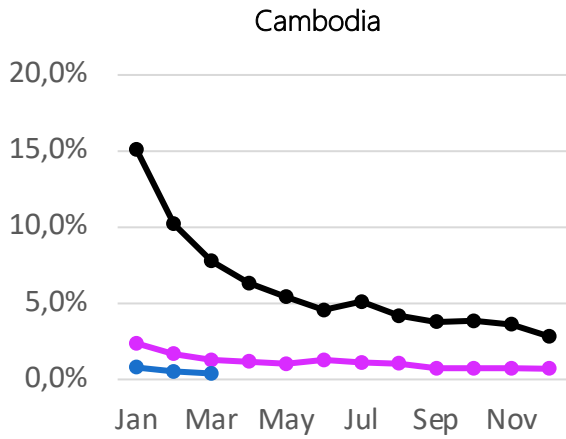
*Data from 2021 covers January to March.

NUMBER OF *P. VIVAX* CASES BY MONTH BY COUNTRY* (2019–2021)



*Data from 2021 covers January to March.

MONTHLY TEST POSITIVITY RATE (TPR) BY COUNTRY* (2019–2021)



*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 2021 covers January to March.

MONTHLY MALARIA CASES AND DEATHS BY COUNTRY IN 2020 (JAN–DEC)

Country	Surveillance indicator ¹	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Cambodia ²	Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
	Suspected cases tested	57 370	65 816	69 868	60 348	65 063	72 663	76 507	79 384	81 672	76 985	72 487	72 642	850 805
	Confirmed cases	1 361	1 096	887	708	669	920	851	819	586	557	528	508	9 490
	<i>P. falciparum</i> cases	174	102	44	41	55	162	104	113	53	32	47	63	990
	<i>P. vivax</i> cases	1 180	983	840	665	610	754	737	704	531	523	480	425	8 432
	Mixed cases	7	11	3	2	4	4	10	2	2	2	1	20	68
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	0
	Imported cases	0	0	0	0	0	0	0	0	0	0	0	0	0
China ³	Deaths	1	0	0	0	0	0	0	0	0	0	0	0	1
	Suspected cases tested	7 350	6 639	7 074	8 286	9 411	10 846	11 904	10 643	11 211	10 717	9 548	9 616	113 245
	Confirmed cases	7	6	7	8	17	39	22	6	8	10	2	5	137
	<i>P. falciparum</i> cases	2	0	0	0	0	0	0	0	0	0	0	0	2
	<i>P. vivax</i> cases	5	6	7	8	17	39	22	6	8	10	2	5	135
	Mixed cases	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	0
	Imported cases	7	6	7	8	15	38	22	6	7	9	2	3	130
Lao People's Democratic Republic	Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
	Suspected cases tested	46 534	44 059	47 927	36 677	39 958	47 092	50 721	53 728	53 373	57 038	51 249	48 147	576 503
	Confirmed cases	322	206	173	143	139	115	260	304	408	489	410	536	3 505
	<i>P. falciparum</i> cases	118	62	63	32	44	48	126	147	212	280	201	218	1 551
	<i>P. vivax</i> cases	198	139	108	111	94	67	131	157	194	206	199	312	1 916
	Mixed cases	6	5	2	0	1	0	3	0	2	2	10	6	37
	Other cases	0	0	0	0	0	0	0	0	0	1	0	0	1
	Imported cases	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	Deaths	1	0	0	1	1	0	4	0	1	1	1	0	10
	Suspected cases tested	260 415	291 356	300 912	232 859	255 938	325 075	372 332	374 653	344 459	298 889	286 585	268 341	3 611 814
	Confirmed cases	2 559	1 854	1 717	2 551	4 330	9 432	11 617	7 201	4 674	3 873	4 534	3 790	58 132
	<i>P. falciparum</i> cases	889	500	348	517	901	1 756	2 400	2 025	1 516	1 304	1 722	1 133	15 011
	<i>P. vivax</i> cases	1 641	1 345	1 355	2 020	3 418	7 623	9 148	5 126	3 133	2 533	2 761	2 614	42 717
	Mixed cases	29	9	14	14	11	53	69	50	25	36	51	43	404
	Other cases	0	0	0	0	0	0	0	0	0	0	0	0	0
Thailand	Deaths	Data not available ⁴												
	Suspected cases tested	69 090	68 858	67 471	50 500	64 390	86 543	81 946	75 482	61 149	53 810	54 102	48 636	781 977
	Confirmed cases	209	171	179	198	526	915	772	367	186	145	143	193	4 004
	<i>P. falciparum</i> cases	14	12	10	6	39	50	25	13	11	6	3	5	194
	<i>P. vivax</i> cases	189	150	162	183	477	846	728	341	170	132	132	182	3 692
	Mixed cases	2	2	1	0	2	5	4	1	0	1	3	0	21
	Other cases	2	5	5	8	6	10	10	2	1	2	4	5	60
	Imported cases	38	39	34	25	53	173	183	93	34	12	11	20	715
Viet Nam	Deaths	0	0	0	1	0	0	0	0	0	0	0	0	1
	Suspected cases tested	107 335	128 121	139 800	128 144	153 905	170 206	167 131	168 788	181 778	163 644	162 321	140 214	1 811 387
	Confirmed cases	219	272	167	106	128	70	62	78	95	84	73	67	1 421
	<i>P. falciparum</i> cases	155	192	97	54	55	29	29	33	61	52	36	27	820
	<i>P. vivax</i> cases	60	76	68	51	71	40	33	45	33	32	37	39	585
	Mixed cases	3	4	1	0	1	0	0	0	1	0	0	1	11
	Other cases	1	0	1	1	1	1	0	0	0	0	0	0	5
Imported cases	0	64	52	27	34	27	18	29	14	21	8	9	303	

¹ 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).

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

³ Numbers of cases in China refers to imported and relapsed cases in the 19 border counties of Yunnan Province. No indigenous cases were reported in 2020.

⁴ Malaria deaths from Thailand are officially reported annually.

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

Country	Surveillance indicator ¹	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Cambodia ²	Deaths	0	0	0										0	
	Suspected cases tested	64 178	68 811	72 088										205 077	
	Confirmed cases	502	348	281										1 131	
	<i>P. falciparum</i> cases	54	30	14										98	
	<i>P. vivax</i> cases	448	317	267										1 032	
	Mixed cases	0	1	0										1	
	Other cases	0	0	0										0	
	Imported cases	0	0	0										0	
China ³	Deaths	0	0	0										0	
	Suspected cases tested	6 366	6 752	7 044										20 162	
	Confirmed cases	4	3	8										15	
	<i>P. falciparum</i> cases	0	0	0										0	
	<i>P. vivax</i> cases	4	3	8										15	
	Mixed cases	0	0	0										0	
	Other cases	0	0	0										0	
	Imported cases	3	3	5										11	
Lao People's Democratic Republic	Deaths	0	0	0										0	
	Suspected cases tested	40 325	39 029	44 207										123 561	
	Confirmed cases	286	155	155										596	
	<i>P. falciparum</i> cases	111	77	60										248	
	<i>P. vivax</i> cases	174	77	92										343	
	Mixed cases	1	1	3										5	
	Other cases	0	0	0										0	
	Imported cases	0	0	0										0	
Myanmar ⁴	Deaths	0	0	0										0	
	Suspected cases tested	127 822	83 315	50 681										261 818	
	Confirmed cases	2 247	1 155	746										4 148	
	<i>P. falciparum</i> cases	391	110	33										534	
	<i>P. vivax</i> cases	1 840	1 043	711										3 594	
	Mixed cases	16	2	2										20	
	Other cases	0	0	0										0	
Thailand	Deaths	Data not available ⁵													
	Suspected cases tested	50 217	49 479	56 846											156 542
	Confirmed cases	127	132	140										399	
	<i>P. falciparum</i> cases	4	4	8										16	
	<i>P. vivax</i> cases	115	120	116										351	
	Mixed cases	2	2	0										4	
	Other cases	6	6	16										28	
	Imported cases	8	13	22										43	
Viet Nam	Deaths	0	0	0										0	
	Suspected cases tested	98 937	92 798	125 048										316 783	
	Confirmed cases	39	18	36										93	
	<i>P. falciparum</i> cases	19	10	22										51	
	<i>P. vivax</i> cases	19	8	14										41	
	Mixed cases	1	0	0										1	
	Other cases	0	0	0										0	
	Imported cases	5	6	7										18	

¹ 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).

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

³ Numbers of cases in China refers to imported and relapsed cases in the 19 border counties of Yunnan Province. No indigenous cases were reported in 2021.

⁴ 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.

⁵ 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 May 2021. 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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