

Commentary

World Malaria Day 2026: Driven to End Malaria

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On April 25, 2026, the world observes World Malaria Day under the theme “Driven to End Malaria: Now We Can. Now We Must.” Established by the World Health Organization (WHO) member states in 2007, this annual event rallies global consensus in the fight against malaria, one of the most devastating mosquito-borne infectious diseases (1). Between 2000 and 2024, malaria control interventions averted an estimated 2.3 billion cases and 14 million deaths worldwide. Effective tools — including insecticide-treated nets (ITNs), seasonal malaria chemoprevention (SMC), and malaria vaccines — have driven these gains (2). Already, 25 countries are deploying malaria vaccines to protect 10 million children annually, next-generation mosquito nets account for 84% of all newly distributed nets, and approximately 37 countries reported fewer than 1,000 cases in 2024. Momentum continues: Georgia, Suriname, and Timor-Leste achieved malaria-free certification in 2025, bringing the global total to 47 countries and one territory. Yet the resurgence of malaria in Cabo Verde following certification underscores the fragility of these achievements (2). For China, which received WHO malaria-free certification in 2021 (3), the current priority is consolidating elimination gains and preventing the re-establishment of local transmission through imported cases. Drawing on the evolution of World Malaria Day and the 2026 theme, this article analyzes technical bottlenecks in global malaria control, examines the impact of the persisting global epidemic on China's elimination achievements, and proposes a dual-track strategy combining strengthened domestic vigilance with active participation in global governance.

Current Global Malaria Status and Major Technical Challenges

Despite millennia of efforts to combat malaria, the disease remains a formidable threat to global public health. The World Malaria Report 2025 reveals that the global burden continues to grow: an estimated 282 million cases and 610,000 deaths occurred in 2024, representing increases of 3% (approximately 9 million

cases) and 2% (approximately 12,000 deaths) compared with 2023 (2). After declining by 25.6% between 2000 and 2015, case incidence rose by 8.5% from 2015 to 2024, while the mortality rate held steady at 13.8 per 100,000 population at risk. Progress toward the Global Technical Strategy (GTS) 2025 targets has fallen significantly off track — the 2024 incidence stands at 3.5 times the target, and the mortality rate at three times the target (2). Sub-Saharan Africa bears the overwhelming burden, accounting for approximately 94% of all cases (265 million) and 95% of all deaths (579,000) in 2024. Five countries alone — Nigeria, the Democratic Republic of the Congo, Uganda, Ethiopia, and Mozambique — contributed nearly half of all global cases, underscoring the extreme geographic concentration of the disease (2).

Three interconnected categories of factors drive this rising burden. First, biological challenges have intensified: antimalarial drug resistance continues to spread (e.g., artemisinin partial resistance confirmed in Eritrea, Rwanda, Uganda, and the United Republic of Tanzania) (2,4), *pfhrp2/3* gene deletions increasingly compromise diagnostic accuracy (5–6), and insecticide resistance among vector mosquitoes has become widespread (7–8). Second, systemic and operational weaknesses persist, including suboptimal intervention delivery, limited access to quality healthcare, surveillance gaps, and frequent stock-outs of essential commodities (2,9). Third, external disruptions compound these challenges — notably armed conflict and insecurity (e.g., in Ethiopia, Sudan, and Yemen), climate-related events (e.g., in Madagascar), and significant reductions in international development assistance (2).

Underlying this heavy disease burden are critical technological bottlenecks and external challenges. First, biological resistance poses an escalating threat to future malaria epidemiology. *Plasmodium falciparum* resistance to artemisinin-based combination therapies (ACTs) — the cornerstone of current treatment — has emerged in parts of the Greater Mekong Subregion and several African regions, directly jeopardizing

frontline therapeutic strategies (10–12). Simultaneously, *Anopheles* spp. mosquitoes are rapidly developing resistance to mainstream insecticides such as pyrethroids, substantially eroding the protective efficacy of insecticide-treated bed nets and other conventional vector control tools (7,13). Second, a significant gap persists in the development and deployment of innovative tools. Although World Malaria Day themes in 2022 and 2023 highlighted "innovation" and "investment, innovation, implementation," respectively, vaccine development remains insufficient. Beyond the recent pilot rollout of RTS, S and R21 vaccines in Africa, the field still lacks highly effective, affordable, and broadly applicable vaccines suited to diverse epidemiological settings (14–15). Furthermore, climate change is altering temperature and precipitation patterns, reshaping mosquito vector habitats and exposing previously non-endemic areas to new transmission risks, thereby compounding the technical challenges of global control (16). Arguably the most significant factor, however, is the weakening of intervention capacity during the post-pandemic period, driven by the worldwide economic downturn.

Impact and Challenges of Rising Global Epidemic on China's Consolidation of Elimination Achievements

China officially received WHO certification for malaria-free status in 2021, marking a milestone in the nation's public health history (3). However, the 2026 World Malaria Day theme — "Driven to End Malaria: Now We Can. Now We Must" — underscores that the global epidemic has not yet reached a turning point and that concerted international action remains essential to achieve worldwide elimination. This landscape of high external risk and low internal transmission poses severe challenges to China's efforts to consolidate its elimination achievements.

First, imported cases continue to exert persistent pressure, and the challenge of preventing re-transmission remains acute, particularly in border areas such as Yunnan Province (17). China maintains extensive economic, trade, and personnel ties with highly endemic regions in Southeast Asia and Africa. Between 2017 and 2024, China reported 16,571 imported cases, with the annual number rebounding steadily since 2021 to reach 3,155 in 2024 (18) — predominantly from high-burden countries including Nigeria, the Democratic Republic of the Congo, and

Myanmar. In Myanmar's border areas adjacent to Yunnan, malaria cases surged from just 2,583 in 2019 to 34,171 in 2024, while imported cases in Yunnan rose to 564 in the same year (19). Frequent cross-border movement and shared ecological landscapes sustain vector mosquito populations, including *Anopheles minimus*, along these borders. Without prompt detection and containment of imported cases, secondary local transmission can readily occur, creating a high risk of resurgence (20). The WHO's data confirming a global rebound in malaria incidence further intensifies the pressure on China's port quarantine and disease control systems (2).

Second, the risk of post-elimination complacency and eroding technical capacity looms large. As indigenous cases disappear, malaria prevention and control efforts become increasingly invisible and susceptible to neglect. In primary healthcare facilities, younger clinicians lack firsthand diagnostic experience with malaria's hallmark symptoms — periodic chills and high fever — elevating the risks of misdiagnosis and delayed treatment (21). The 2017 World Malaria Day theme, "Malaria Elimination: Let's Bridge the Gap," carries renewed significance for China today: if post-elimination surveillance systems lose their sensitivity and gaps emerge in the specialized workforce, the country's malaria-free achievement will become increasingly vulnerable (22).

China's Path to Consolidating Elimination Achievements and Deepening Global Cooperation

Confronting the current stalemate in global malaria control, China should seize the momentum of World Malaria Day 2026 and embrace the spirit of "Driven to End Malaria: Now We Can. Now We Must" by pursuing a dual-track strategy: strengthening domestic defenses against importation while actively contributing to global efforts. In doing so, China can share its expertise toward building a global community of shared health.

Strengthening Internal Defenses: Precise Measures to Prevent Re-Transmission of Imported Malaria

The core of domestic prevention lies in maintaining a robust surveillance and response system alongside strong clinical treatment capabilities.

First, China must reinforce implementation of the

"1-3-7" surveillance and response approach (23). This pioneering framework — case reporting within 1 day, investigation within 3 days, and focus response within 7 days — has been formally incorporated into WHO technical guidelines (24). With thousands of imported cases arriving annually, rigorous enforcement is essential, particularly through precise management of border areas and migrant worker populations, to ensure timely, standardized handling of every focus and decisively interrupt potential transmission chains.

Second, primary healthcare capacity and public awareness must be strengthened. Because most imported cases involve *Plasmodium falciparum* — which carries a high risk of progressing to severe disease — targeted training for medical staff in key areas should enhance microscopy skills and ensure standardized use of antimalarial drugs (25). Alongside World Malaria Day campaigns, efforts should promote self-protection awareness among outbound workers and border residents. Concurrently, county-level risk maps for malaria transmission re-establishment should be updated annually.

Finally, vector surveillance and environmental management must be strengthened. Ongoing monitoring of mosquito density and insecticide resistance, combined with elimination of breeding sites through patriotic health campaigns and a One Health approach, will reduce transmission risk at its source (26). Expanding the establishment of mosquito risk-free communities will further help interrupt potential malaria transmission.

Deepening Global Participation: Implementing Partnerships to Promote the Achievement of SDGs

A central goal of World Malaria Day 2026 is to advance the United Nations Sustainable Development Goals (SDGs), particularly SDG 17 (Partnerships) (27). As a responsible major country, China should actively contribute to global malaria control, thereby reducing the worldwide burden and indirectly alleviating import pressure at home. On one hand, China can share proven solutions and technical expertise. The "1-3-7" surveillance and response approach, antimalarial drug research and development — spanning discovery, clinical trials, regulatory approval, and public health deployment — and vector control technologies all offer valuable models for African and Southeast Asian countries. Through South-South cooperation mechanisms, China should

support health system capacity-building in high-burden nations by providing technical training, material assistance, and on-site guidance (28). On the other hand, China must strengthen international cooperation in research and innovation. Responding to the calls for innovation issued on World Malaria Day in 2022 and 2023, Chinese research institutions and enterprises should deepen collaboration with the WHO and relevant international organizations, focusing on critical global challenges such as drug resistance, vaccine development, and novel vector control tools. Chinese scientists, in particular, can play a distinctive role in monitoring and addressing artemisinin resistance, contributing vital scientific and technological support to global malaria control and elimination efforts.

CONCLUSION

On World Malaria Day 2026, the World Health Organization and its partners launch the campaign “Driven to End Malaria: Now We Can. Now We Must,” a rallying cry for global public health and a resolute response to the complex realities of worldwide malaria transmission. The staggering burden of hundreds of millions of cases each year reminds us that malaria remains an ever-present threat. For China, elimination is not the finish line but the start of a new chapter. The nation must remain vigilant in preventing re-transmission from the thousands of imported cases arriving annually, while also looking outward — actively advancing SDG 3’s goal of “good health and well-being” by sharing experience, providing technical assistance, and strengthening scientific cooperation with high-burden countries. Only by uniting globally, closing persistent gaps, and driving innovation can we transform the vision of a malaria-free world into reality.

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REFERENCES

- World Health Organization. WHA60.18: malaria including proposal for establishment of World Malaria Day. Geneva: World Health Organization; 2007. <https://www.afro.who.int/publications/wha6018-malaria-including-proposal-establishment-world-malaria-day>.
- World Health Organization. World malaria report 2025. Geneva: World Health Organization; 2025. <https://www.who.int/publications/i/item/9789240117822>.
- World Health Organization. World malaria report 2021. Geneva: World Health Organization; 2021. <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>.
- Rosenthal PJ, Asua V, Bailey JA, Conrad MD, Ishengoma DS, Kanya MR, et al. The emergence of artemisinin partial resistance in Africa: how do we respond?. *Lancet Infect Dis* 2024;24(9):e591 – 600. [https://doi.org/10.1016/S1473-3099\(24\)00141-5](https://doi.org/10.1016/S1473-3099(24)00141-5).
- Molina-de la Fuente I, Pastor A, Herrador Z, Benito A, Berzosa P. Impact of *Plasmodium falciparum* *pfhrp2* and *pfhrp3* gene deletions on malaria control worldwide: a systematic review and meta-analysis. *Malar J* 2021;20(1):276. <https://doi.org/10.1186/s12936-021-03812-0>.
- Watson OJ, Tran TNA, Zupko RJ, Symons T, Thomson R, Visser T, et al. Global risk of selection and spread of *Plasmodium falciparum* histidine-rich protein 2 and 3 gene deletions. *Nat Med* 2025;31(10):3372 – 9. <https://doi.org/10.1038/s41591-025-03974-3>.
- Pelloquin B, Agossa F, Acford-Palmer H, Clark T, Ogoma SB, Williams M, et al. Novel insecticide resistance mutations associated with variable PBO synergy in *Anopheles gambiae* s. l. from the Democratic Republic of Congo. *Sci Rep* 2025;15(1):27618. <https://doi.org/10.1038/s41598-025-09016-9>.
- Ondeto BM, Nyundo C, Kamau L, Muriu SM, Mwangangi JM, Njagi K, et al. Current status of insecticide resistance among malaria vectors in Kenya. *Parasit Vectors* 2017;10(1):429. <https://doi.org/10.1186/s13071-017-2361-8>.
- Huang SK, Khan J, Lokang F, Ayuiel AR, Baker K, Julla A, et al. Development of a new wealth index for South Sudan: association between household wealth and malaria prevention practices in the context of seasonal malaria chemoprevention in northern Bahr el Ghazal, South Sudan. *Infect Dis Poverty* 2025;14(1):57. <https://doi.org/10.1186/s40249-025-01327-3>.
- Uwimana A, Umulisa N, Venkatesan M, Svigel SS, Zhou ZY, Munyaneza T, et al. Association of *Plasmodium falciparum* kelch13 R561H genotypes with delayed parasite clearance in Rwanda: an open-label, single-arm, multicentre, therapeutic efficacy study. *Lancet Infect Dis* 2021;21(8):1120 – 8. [https://doi.org/10.1016/S1473-3099\(21\)00142-0](https://doi.org/10.1016/S1473-3099(21)00142-0).
- Dhorda M, Amaratunga C, Dondorp AM. Artemisinin and multidrug-resistant *Plasmodium falciparum* – a threat for malaria control and elimination. *Curr Opin Infect Dis* 2021;34(5):432 – 9. <https://doi.org/10.1097/QCO.0000000000000766>.
- Ndwiga L, Kimenyi KM, Wamae K, Osoti V, Akinyi M, Omedo I, et al. A review of the frequencies of *Plasmodium falciparum* Kelch 13 artemisinin resistance mutations in Africa. *Int J Parasitol Drugs Drug Resist* 2021;16:155 – 61. <https://doi.org/10.1016/j.ijpddr.2021.06.001>.
- Julius N, Diane BI. Investigating the resurgence of malaria in Rwanda: factors contributing to rising cases amidst near-eradication success and strategies for sustained control. *Ann Med Surg* 2025;87(11):7363 – 8. <https://doi.org/10.1097/MS9.0000000000003912>.
- Macià D, Pons-Salort M, Moncunill G, Dobaño C. The effect of disease transmission on time-aggregated treatment efficacy estimates: a critical analysis of factors influencing the RTS,S and R21 malaria vaccine phase 3 trials. *Lancet Infect Dis* 2025;25(9):e516 – 26. [https://doi.org/10.1016/S1473-3099\(25\)00090-8](https://doi.org/10.1016/S1473-3099(25)00090-8).
- Datoo MS, Natama MH, Somé A, Traoré O, Rouamba T, Bellamy D, et al. Efficacy of a low-dose candidate malaria vaccine, R21 in adjuvant Matrix-M, with seasonal administration to children in Burkina Faso: a randomised controlled trial. *Lancet* 2021;397(10287):1809 – 18. [https://doi.org/10.1016/S0140-6736\(21\)00943-0](https://doi.org/10.1016/S0140-6736(21)00943-0).
- Mordecai EA, Ryan SJ, Caldwell JM, Shah MM, LaBeaud AD. Climate change could shift disease burden from malaria to arboviruses in Africa. *Lancet Planet Health* 2020;4(9):e416 – 23. [https://doi.org/10.1016/S2542-5196\(20\)30178-9](https://doi.org/10.1016/S2542-5196(20)30178-9).
- Zheng DS, Tian P, Yan GY, Lin ZR, Zhou HN, Liu XB, et al. Stratified vector control and proactive cross border collaboration for sustaining malaria elimination in Yunnan, China. *BMJ* 2025;389:e082300. <https://doi.org/10.1136/bmj-2024-082300>.
- Zhang L, Xia ZG, Li SZ. Epidemiological characteristics of malaria in China, 2024. *Chin J Parasitol Parasit Dis* 2025;43(2):162-6. <http://dx.doi.org/10.12140/j.issn.1000-7423.2025.02.002>. (In Chinese).
- Lin ZR, Shao ZT, Xia ZG. Achievements, experience and challenges in preventing importation and re-transmission of malaria in the China-Myanmar border area of Yunnan Province. *China Trop Med* 2026;26(1):41 – 4. <https://doi.org/10.13604/j.cnki.46-1064/r.2025-1460>.
- Liu BW, Zhang T, Wang DQ, Xia S, Li WD, Zhang XX, et al. Profile and determinants for complications of imported malaria in 5 Chinese provinces from 2014 to 2021: retrospective analysis. *JMIR Public Health Surveill* 2024;10:e52089. <https://doi.org/10.2196/52089>.
- Atobatele S, Mpimbaza A, Ngufor C, Yavo W, Konate-Toure A, Ahogni I, et al. Characteristics of healthcare workers and health facilities associated with inaccurate recording of malaria rapid diagnostic test results: a multi-country study. *Malar J* 2025;25(1):4. <https://doi.org/10.1186/s12936-025-05674-2>.
- World Health Organization. World Malaria Day 2017-malaria prevention: let's close the gap. Geneva: World Health Organization; 2017. <https://www.who.int/news-room/events/detail/2017/04/25/default-calendar/world-malaria-day-2017>.
- Zhou SS, Zhang SS, Zhang L, Rietveld AEC, Ramsay AR, Zachariah R, et al. China's 1-3-7 surveillance and response strategy for malaria elimination: is case reporting, investigation and foci response happening according to plan?. *Infect Dis Poverty* 2015;4(1):55. <https://doi.org/10.1186/s40249-015-0089-2>.
- World Health Organization. A framework for malaria elimination. Geneva: World Health Organization; 2017. <https://www.who.int/publications/i/item/9789241511988>.
- Rotejanaprasert C, Malaphone V, Mayxay M, Chindavongsa K, Banouvong V, Khamlome B, et al. Malaria epidemiology, surveillance and response for elimination in Lao PDR. *Infect Dis Poverty* 2024;13(1):35. <https://doi.org/10.1186/s40249-024-01202-7>.
- Zhang XX, Guo XK, Zhou XN. One Health: a key element in the WHO Pandemic Agreement. *Lancet* 2025;405(10496):2197 – 8. [https://doi.org/10.1016/S0140-6736\(25\)01118-3](https://doi.org/10.1016/S0140-6736(25)01118-3).
- Nikolaou CK. Editorial: nutrition and sustainable development goal 17: partnerships for the goals. *Front Nutr* 2024;11:1480618. <https://doi.org/10.3389/fnut.2024.1480618>.
- Li HM, Arthur Djibougou D, Lu SN, Lv S, Zongo D, Wang DQ, et al. Strengthening capacity-building in malaria and schistosomiasis control under China-Africa cooperation: assessing a case study of Burkina Faso. *Sci One Health* 2022;1:100009. <https://doi.org/10.1016/j.soh.2023.100009>.