



# UHAS MALARIA NEWS

From the Centre for Malaria Research (CMR, IHR-UHAS) and Ghana Health Service (GHS)

27 April 2021

## MESSAGE FROM THE DIRECTOR Centre for Malaria Research, IHR-UHAS

Dear Readers,

Welcome to the maiden issue of **UHAS Malaria News**, a collaborative effort between the Centre for Malaria Research (CMR) at the Institute of Health Research, University of Health and Allied Sciences, Ho, and the National Malaria Control Programme (NMCP), Ghana Health Service.

The Newsletter aims to fulfill one of the key strategic objectives of CMR, which is to make available to the UHAS community, other training institutions and health providers involved in the control and elimination of malaria, the most current information on malaria policy and practice.

This edition of **UHAS Malaria News** highlights ongoing malaria projects by UHAS faculty and shines a spotlight on a new approach being implemented by NMCP to accelerate Ghana's progress towards malaria elimination with the support of the Global Malaria Programme of WHO. It brings you up to speed with global malaria news and upcoming conferences with malaria themes, provides links to sources of current information on malaria, and brings you "Voices from the field" as it showcases innovative efforts by frontline health workers to reduce the burden of malaria.



This could not have been possible without the hardworking staff of CMR, NMCP, and the Volta Regional Health Directorate, who pulled together the articles and resources. Ayekoo!!! The support of the staff of IHR and the Directorate of Public Affairs, UHAS has been invaluable.

I do hope you will enjoy reading this maiden issue. Look out for the next issue!!

~ Professor Evelyn Korkor Ansah

### EDITORIAL TEAM

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## HIGHLIGHTS

### Ongoing malaria projects in UHAS

#### Institute of Health Research

**Title of Project:** The dynamics of healthcare utilization in the context of RTS,S/AS01 vaccine implementation in Ghana

**Principal Investigator:** Margaret Gyapong

**Co-Investigators:** Evelyn K. Ansah, Seth Owusu-Agyei, Ellis Owusu Dabo (KNUST), Kofi Awusabo-Asare (UCC)

**Project Duration:** February 2019 to July 2021

**Funding Source:** PATH

#### School of Basic and Biomedical Sciences

**Title of Project:** Characterization of anti-malaria drug resistant genes in Plasmodium falciparum infections in Ghanaian blood donors

**Principal Investigator:** Enoch Aninagyei

**Co-Investigators:** Desmond Omane Acheampong

**Project Duration:** March 2020 to February 2021

**Funding Source:** Not Stated

**Title of Project:** Efficacy of artemether lumefantrine of various strains of P. falciparum in Ghana

**Principal Investigator:** Enoch Aninagyei

**Co-Investigators:** Desmond Omane Acheampong

**Project Duration:** March 2020 to February 2021

**Funding Source:** Malaria Genome Laboratory, Hinxton, UK.

#### School of Medicine

**Title of Project:** Parasitic infections during pregnancy in Ghana: Burden, potential effects and prospects for community intervention programmes (MARCAD)

**Principal Investigator:** Harry Tagbor

**Co-Investigators:** Gifty Ampofo, Matilda Aberese-Ako, Bismark Dinko, Emmanuel Morhe, Evelyn Ansah, Gordon Awandare

**Project Duration:** June 2016 to May 2021

**Funding Source:** DELTAS Africa Initiative with funding from Wellcome Trust.

#### School of Pharmacy

**Title of project:** Assessing the reconstitution, administration, and storage of antibiotic and anti-malarial suspensions for children in Ho

**Principal Investigator:** Yussif Saaka

**Co-Investigators:** Hilda Amekyeh and Adelaide Mensah

**Project Duration:** November 2019 to October 2021

**Funding Source:** Self-funded

**Title of Project:** Anti-plasmodial properties of a Ghanaian polyherbal anti-malarial formulation

**Principal Investigator:** Jonathan Jato

**Co-Investigators:** Bismarck Dinko and Adelaide Mensah

**Project Duration:** August 2019 to July 2020

**Funding Source:** UHAS Research Fund

#### School of Public Health

**Title of Project:** Reproductive-age women's knowledge and care seeking for malaria prevention and control in Ghana: Analysis of the 2016 Malaria Indicator Survey

**Principal Investigator:** Martin Ayanore

**Co-Investigators:** John Tetteh, Asiwome Ameko, Wisdom Axame, Robert Kaba Alhassan, Augustine Adoliba Ayanore, Victor Mogre, Seth Owusu-Agyei

**Project Duration:** June 2018 to May 2019

**Funding Source:** Self-funded

## VOICES FROM THE FIELD

Innovations from frontline workers to accelerate progress towards malaria elimination

By Rowland Glover and Senanu Djokoto

### Driving increased IPTp-SP uptake to protect pregnant women from risk of malaria in the Volta Region

Malaria infection during pregnancy is a major global public health problem, with high risk for the mother, her fetus and the newborn. Ghana, a malaria endemic country, implemented the World Health Organization’s (WHO) recommended Intermittent Preventive Treatment of Malaria in Pregnancy (IPTp) using an anti-malarial drug Sulphadoxine-Pyrimethamine (SP) given at monthly intervals along with the use of long-lasting insecticide treated bed nets and the testing and treating of malaria in pregnancy. However, there are still implementation challenges such as limited access to ANC (IPTp-SP) in some parts of the country including the Volta Region. Hence, the region has strategized to prioritize IPTp-SP in various sites especially with the scale-up and strengthening of the CHPS Level IPTp-SP services, which involves midwives working with community health officers (CHOs). The steps taken to improve access to IPTp-SP services at the CHPS level in the Volta Region include:

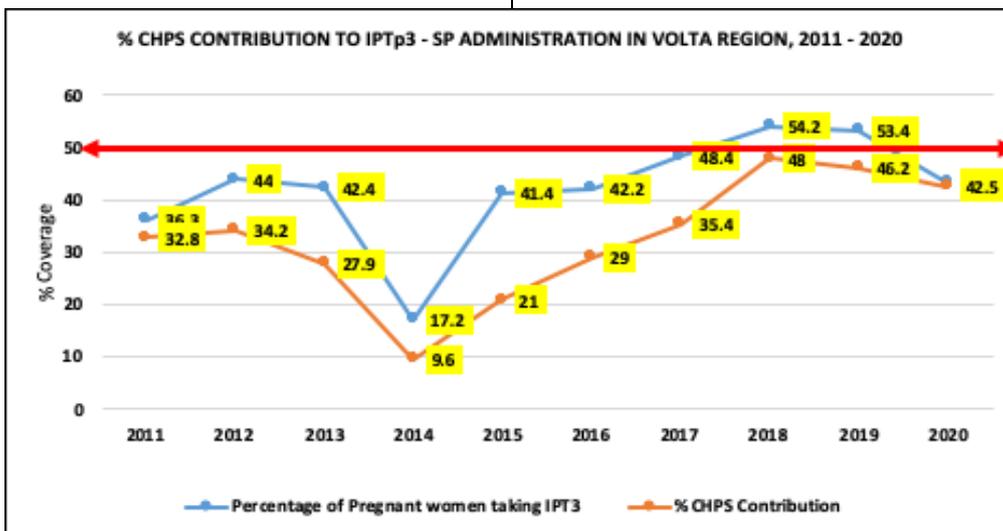
- Capacity building for community health officers and other cadre in malaria in pregnancy
- Deployment of midwives to the CHPS zone level
- Community-based implementation of IPTp-SP (ANC outreach, home visit, defaulter tracing and follow up)
- Shared learning sessions for CHPS zone staff



Shared Learning among lower level staff led to improved results of IPTp-SP at the CHPS Zone level.



Trend of IPTp3-SP performance at the CHPS level as compared to the overall performance by all facilities in the Volta region.



The intervention resulted in an increase in the coverage of dose 3 of IPTp in the region with significant contribution from the CHPS Zone level.

## SPOTLIGHT

### Key malaria policy and practice from the National Malaria Control Programme (NMCP)

By Phyllis Owusu-Achau and Keziah Malm

#### Stratification — The implementation of appropriate, context-specific interventions to maximise impact

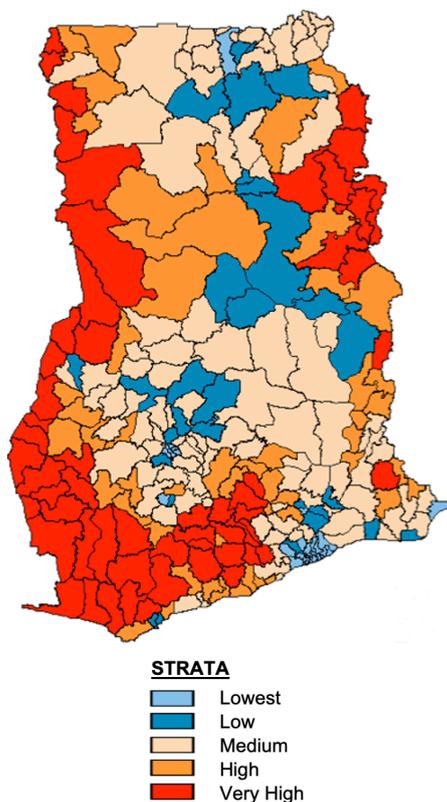
As part of efforts to intensify the prevention of malaria globally, the World Health Organization (WHO) outdoored the High Burden to High Impact initiative (HBHI). The initiative is a country-led response, catalyzed by WHO and the RBM Partnership, to reignite the pace of progress in the global malaria fight. This initiative focuses on 11 countries, including Ghana, that contribute 70% of the world’s malaria burden. As Ghana plans to move from malaria **control** to **pre-elimination** and ultimately **elimination**, the country is capitalizing on WHO’s efforts to reduce the burden of malaria with the HBHI approach.

The HBHI approach involves four key response elements as follows:

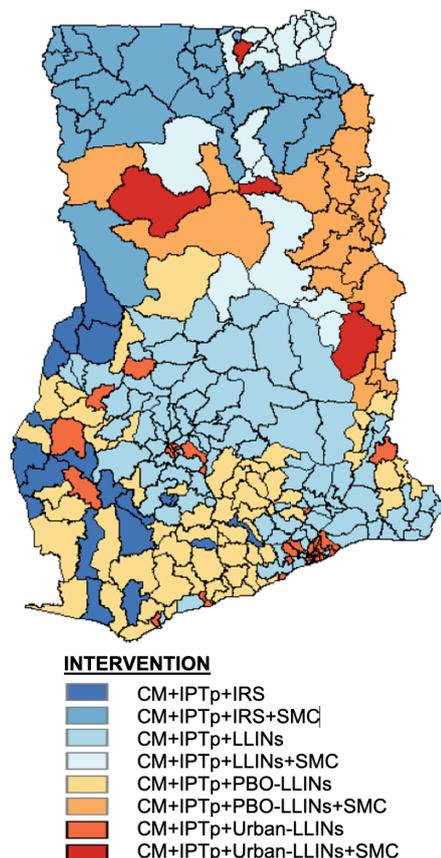
- Political will to reduce malaria deaths
- Strategic information to drive impact
- Better guidance policies and strategies; and
- Coordinated national malaria response.

As part of the second pillar — use of strategic information to drive impact — WHO worked with countries including Ghana, to stratify their malaria burden with the aim of targeting malaria interventions to accelerate the fight against malaria. Stratification, which estimates the malaria burden at district and regional levels, essentially allows districts, regions and the national malaria program to achieve the maximum level of impact with the resources available through using a package of interventions that is appropriate based on the epidemiology of the area.

**Fig 1: Combination of Indicators – Risk strata from incidence, prevalence and all-cause under five mortality rate**



**Fig 2: Stratification Intervention Mix (2020) – The stratification formed the basis for targeting interventions across the country**



Hence, based on the stratification, there is a proposed expansion of three main interventions:

- Indoor residual spraying (IRS)
- Seasonal malaria chemoprevention (SMC) and
- Larval source management (LSM)

and continuation of existing interventions in some areas where they continue to be effective.

	Interventions	Current target areas
1	Indoor residual spraying (IRS)	All districts in UWR, <b>3 districts in UER</b> (Builsa North, Builsa South and Kassena Nankana West), <b>9 districts in NR</b> (Gushiegu, Karaga, Kumbungu, Tatale Sanguli, Bunkpurugu, Nakpanduri, East Mamprusi, Mamprugu, Moagduri, West Mamprusi Municipal, Yunyoo-Nasuan) and <b>2 districts in AR</b> (Obuasi East, Obuasi Municipal). There is a planned expansion to 18 districts largely in the western part of the country.
2	Seasonal malaria chemoprevention (SMC)	All districts of the UER, UWR, SR, NER, and NR, Oti, & 5 districts in Bono East region
3	Larval source management (LSM)	37 districts identified
4	LLIN mass campaigns	All districts in the country except of IRS-implementing districts
5	Routine distribution of LLINs through ANC and EPI	All districts

Estimates from preliminary impact analysis show that with **high coverage** of the proposed interventions, parasite prevalence in **175 districts** in the country will fall **below 10%**. Another **76 districts** will see prevalence reduction to **10-25%**, with only **9 districts** showing prevalence **above 25%** by year **2025**. These marked reductions enhance efforts **towards pre-elimination** and it is therefore imperative that the needed resources and partnership is garnered to achieve a Ghana where malaria no longer warrants public health concern.

District managers will need to appreciate the interventions specific to their districts and ensure a successful roll out. Health workers need to put in their very best to ensure people receive the much-needed lifesaving commodities and health care. NGOs and other stakeholders must promote the appropriate use of the lifesaving malaria interventions. Community members must accept the interventions such as ITNs, IRS, IPT and LSM to prevent them and their households from getting malaria. If they happen to feel unwell and suspect malaria, they should get tested promptly and ensure they complete their full dose of malaria medications if they are confirmed to have malaria. The National Malaria Control Programme/Ghana Health Service together with its partners will continue to provide guidance to ensure that activities are implemented as per this stratification and targeting of interventions.

Only then can we reap the expected benefits of this stratification exercise and move Ghana towards elimination of malaria.



*Distribution of long-lasting insecticidal nets to schoolchildren.*



*Larval source management exercise.*

## GLOBAL NEWS ON MALARIA

### Rethinking malaria strategy in the context of COVID-19

Progress in reducing malaria burden in the world has plateaued in the last few years, after fifteen years of progressive reductions, which resulted in an overall 50% reduction in burden and in deaths. The ongoing COVID-19 pandemic has further threatened the bold ambition of the World Health Organization (WHO) Global Technical Strategy for Malaria 2016-2030.

There is therefore a need for a global effort to rethink malaria that takes into account the perspectives of those at the front line. The goal of “Rethinking malaria strategy in the context of COVID-19” is to identify novel ‘game-changing’ approaches to the malaria crisis. The Global Malaria Program is collaborating with Harvard University in leading the process of re-thinking malaria.

### UHAS contributes to evaluation of phased implementation of RTS,S malaria vaccine

Ghana, Malawi and Kenya have introduced the RTS,S malaria vaccine into routine immunization through a phased implementation with support from WHO and PATH. Ghana introduced the vaccine on 1 May 2019 in the Volta, Oti, Bono, Bono East, Ahafo and Central Regions.

The objective of the phased implementation programme is to generate evidence on the operational feasibility of administering the 4-dose schedule RTS,S malaria vaccine and further characterize the vaccine safety in the context of routine immunization. The programme will also evaluate the impact of the vaccine on malaria outcomes. The critical information generated from the programme will inform WHO policy on potential wider scale use of the RTS,S malaria vaccine. The Institute of Health Research, University of Health & Allied Sciences in collaboration with the University of Cape Coast and the Kwame Nkrumah University of Science & Technology is carrying out the Qualitative Evaluation in Ghana.

### EI Salvador certified as malaria-free by WHO

“EI Salvador are living proof and inspiration for all countries that we can dare to dream of a malaria-free future.” ~ Dr. Tedros Adhanom Ghebreyesus, WHO Director-General.

EI Salvador became the first country in Central America to be awarded a certification of malaria elimination by the World Health Organization (WHO) on 25 February 2021. The certification follows more than 50 years of commitment by the Salvadoran government and people to ending malaria in a country with dense population and conducive environment for malaria. [EI Salvador certified as malaria-free by WHO](#)

### WHO launches consolidated guidelines for malaria

As part of efforts to support malaria endemic countries to combat malaria and possibly end it, the WHO has introduced its most up-to-date recommendation on an on-line platform [WHO launches consolidated guidelines for malaria](#). Through the new platform known as MAGICapp, [MAGICapp - Making GRADE the irresistible choice - Guidelines and evidence summaries](#), users will find information on official recommendations for Malaria prevention and case management. Other resources that can be found include guidance on the strategic use of information to drive impact; surveillance, monitoring and evaluation; operational manuals, handbooks, and frameworks; and a glossary of key terms and definitions. Also, users can help identify recommendations that may need an update, or seek clarification and inputs from stakeholders by sending information or questions to: [gmpfeedback@who.int](mailto:gmpfeedback@who.int)

### Tailoring malaria interventions in the COVID-19 response

The WHO has provided guidance to Member States on how to ensure the maintenance of malaria services as part of the essential health package in the country while working to control COVID-19: [Tailoring malaria interventions in the COVID-19 response \(who.int\)](#). Crucial areas include: Guidelines on how country governments, their local and global partners can ensure flexible and rapid response to client care; and how national and local programmes can ensure continued core preventive and case management interventions for malaria, among others.

## **SOURCES OF CURRENT INFORMATION ON MALARIA**

- **Malaria Policy Advisory Group (MPAG) of the World Health Organization**  
<https://www.who.int/groups/malaria-policy-advisory-group/about>
- **Malaria Policy Advisory Committee (MPAC) of the World Health Organization**  
<https://www.who.int/malaria/mpac/en/>
- **Global Malaria Programme of the World Health Organization (WHO)**  
<https://www.who.int/teams/global-malaria-programme>
- **World Malaria Report 2020**  
<https://www.who.int/publications/i/item/9789240015791>
- **“Rethinking malaria strategy in the context of COVID-19” – Harvard University in partnership with the World Health Organization**  
<https://www.defeatingmalaria.harvard.edu/rethinking-Malaria/>
- **Global Fund to Fight AIDS, Tuberculosis and Malaria**  
<https://www.theglobalfund.org/en/>
- **The Technical Evaluation Reference Group of the Global Fund to Fight AIDS, Tuberculosis and Malaria**  
<https://www.theglobalfund.org/en/technical-evaluation-reference-group/>
- **Technical Review Panel of the Global Fund to Fight AIDS, Tuberculosis and Malaria**  
<https://www.theglobalfund.org/en/technical-review-panel/>
- **The Malaria Atlas Project (MAP)**  
<https://malariaatlas.org/>
- **Mapping Malaria Risk in Africa (MARA)**  
<http://ghdx.healthdata.org/organizations/mapping-malaria-risk-africa-mara>
- **Centers for Diseases Control (CDC)**  
<https://www.cdc.gov/>
- **UN President’s Malaria Initiative (PMI)**  
<https://www.pmi.gov/>
- **Medicines for Malaria Venture (MMV)**  
<https://www.mmv.org/>
- **Malaria World**  
<https://malariaworld.org/aggregator/>
- **Malaria Consortium**  
<https://www.malariaconsortium.org/>
- **Malaria Eradication Scientific Alliance**  
<https://www.isglobal.org/en/-/malaria-eradication-scientific-alliance-mesa>
- **National Malaria Control Programme, Ghana Health Service**  
<https://www.ccmghana.net/index.php/2018-2020/malaria/national-malaria-control-programme>
- **Centre for Malaria Research (CMR, IHR-UHAS)**  
<http://ihr.uhas.edu.gh/en/ihr-centers/centre-for-malaria-research-cmr.html>

## UPCOMING CONFERENCES

with Malaria Themes – 2021

### World Malaria Day 2021



**Centre for Malaria Research**  
(CMR, IHR-UHAS)



*Centre for Malaria Research, IHR, in collaboration with the National Malaria Control Programme and the Volta Regional Health Directorate*

**WORLD MALARIA DAY 2021**  
*Theme: Zero Malaria – Draw the Line Against Malaria*

**Date: Tuesday 27 April 2021**  
**Time: 2:00 p.m. (GMT)**

Zoom Webinar Meeting ID: 636 6756 8901 Password: 557310

**ZOOM WEBINAR**

**- Chair**

- **PROF. SETH OWUSU-AGYEI**, Pro-Vice Chancellor, UHAS

**- Speakers**

- **PROF. EVELYN ANSAH**, Director, Centre for Malaria Research, IHR-UHAS
- **DR. KEZIAH MALM**, Programme Manager, National Malaria Control Programme, GHS
- **DR. SENANU DJOKOTO**, Deputy Director, Public Health, VRHD-GHS

**LAUNCH OF NEWSLETTER**

- **PROF. JOHN O. GYAPONG**, Vice Chancellor, University of Health and Allied Sciences  
**Launch of Maiden UHAS-GHS Malaria Newsletter “UHAS Malaria News”**

**OTHER ACTIVITIES**

- Junior High School Symposium in Adaklu District
- Media Engagement in collaboration with Volta Regional Health Directorate

### Other Conferences

Dates 2021	Conference title and web address	Organizers	Abstract submission deadline
28 September to 1 October	12th European Congress on Tropical Medicine and International Health <a href="https://ectmih2021.no/">https://ectmih2021.no/</a>	Federation of European Societies for Tropical Medicine and Hygiene	15 March 2021
17 November to 21 November	70th American Society of Tropical Medicine and Hygiene Annual Meeting <a href="https://www.astmh.org/annual-meeting">https://www.astmh.org/annual-meeting</a>	American Society of Tropical Medicine and Hygiene	21 April 2021

### Contact

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