

CRSPC Sub-Regional National Malaria Programs and Partners Annual Meetings, Kampala, Uganda.

Malaria situation and progress, Yemen

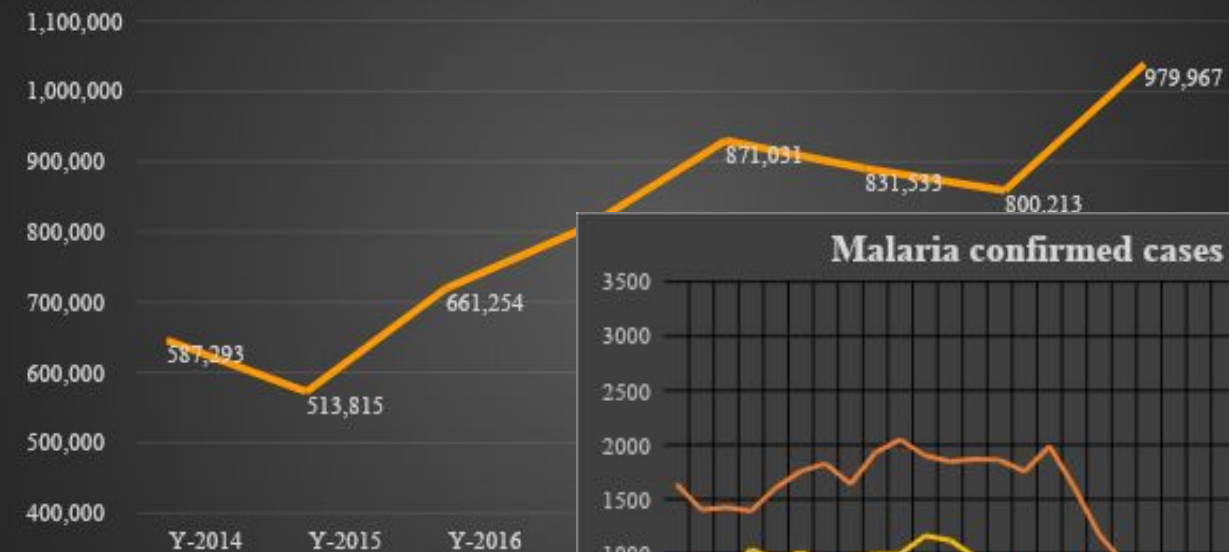
3-6 October, 2023

Dr. Methaq Assada

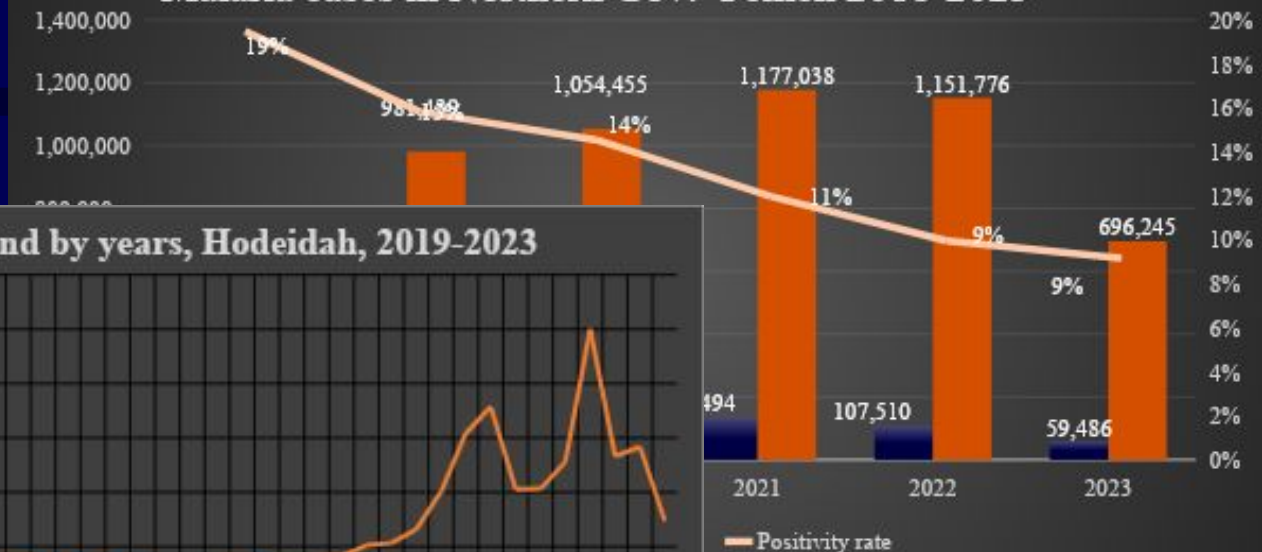
NMCP HQ

Malaria epidemiology

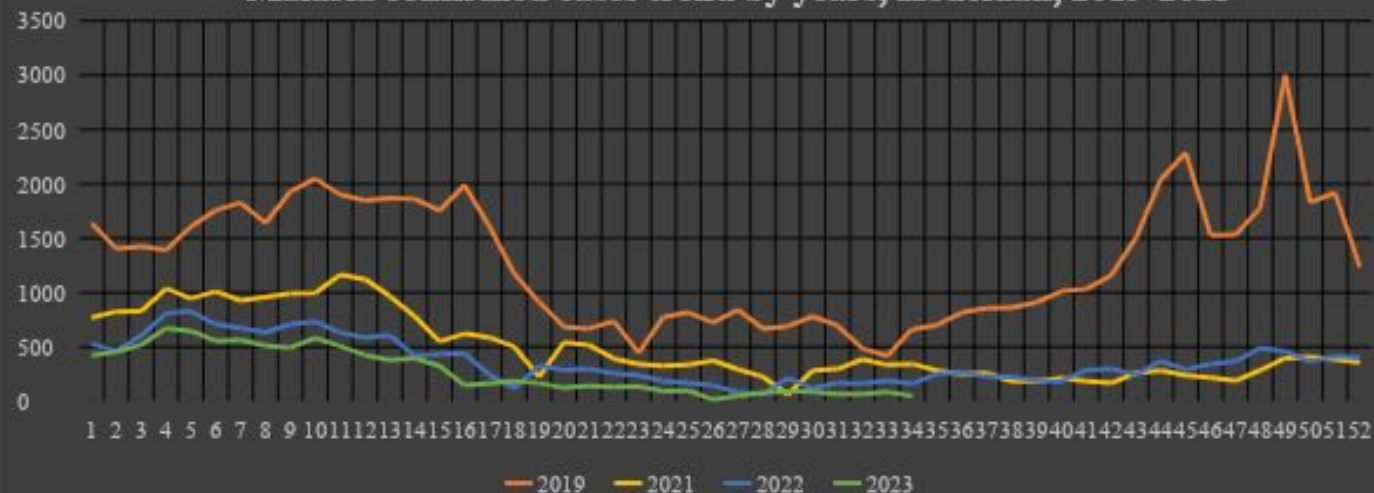
Estimated malaria cases in Yemen, WHO 2014-2021



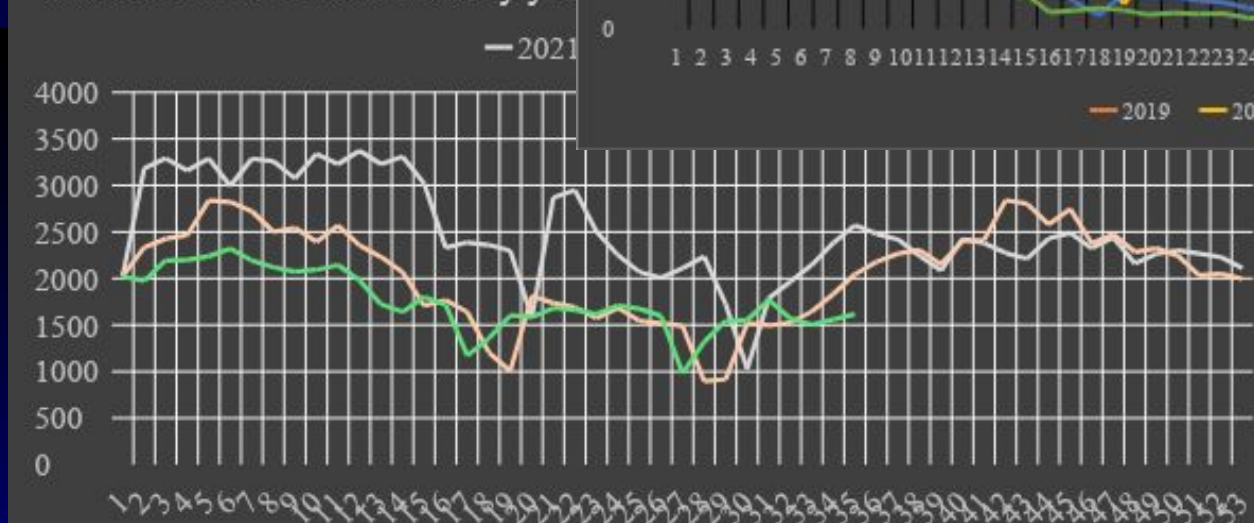
Malaria cases in Northern Gov.-Yemen 2018-2023



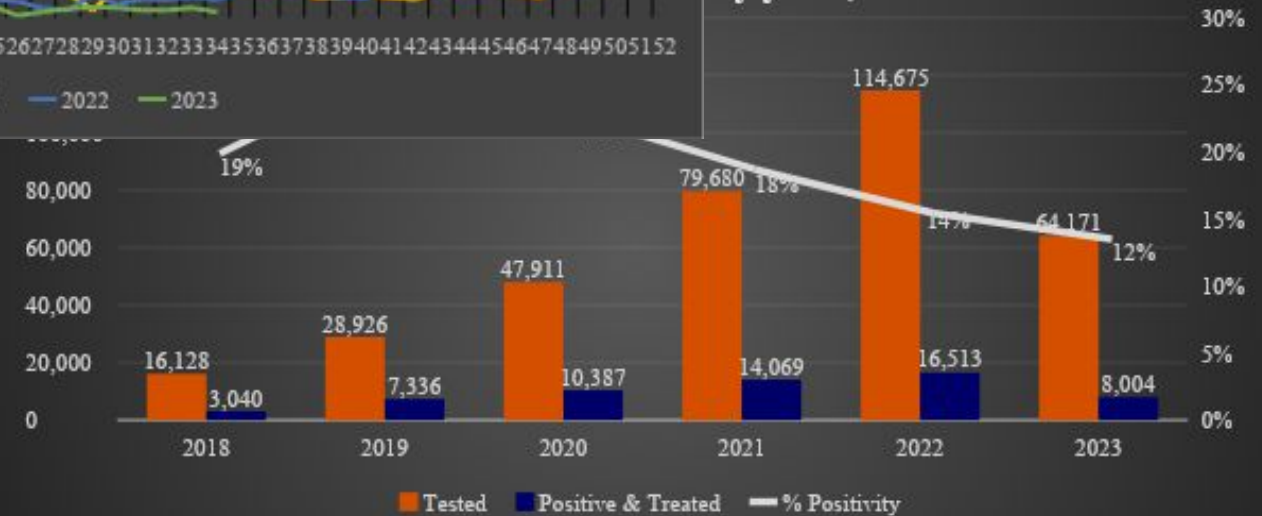
Malaria confirmed cases trend by years, Hodeidah, 2019-2023



Malaria confirm Cases trend by year

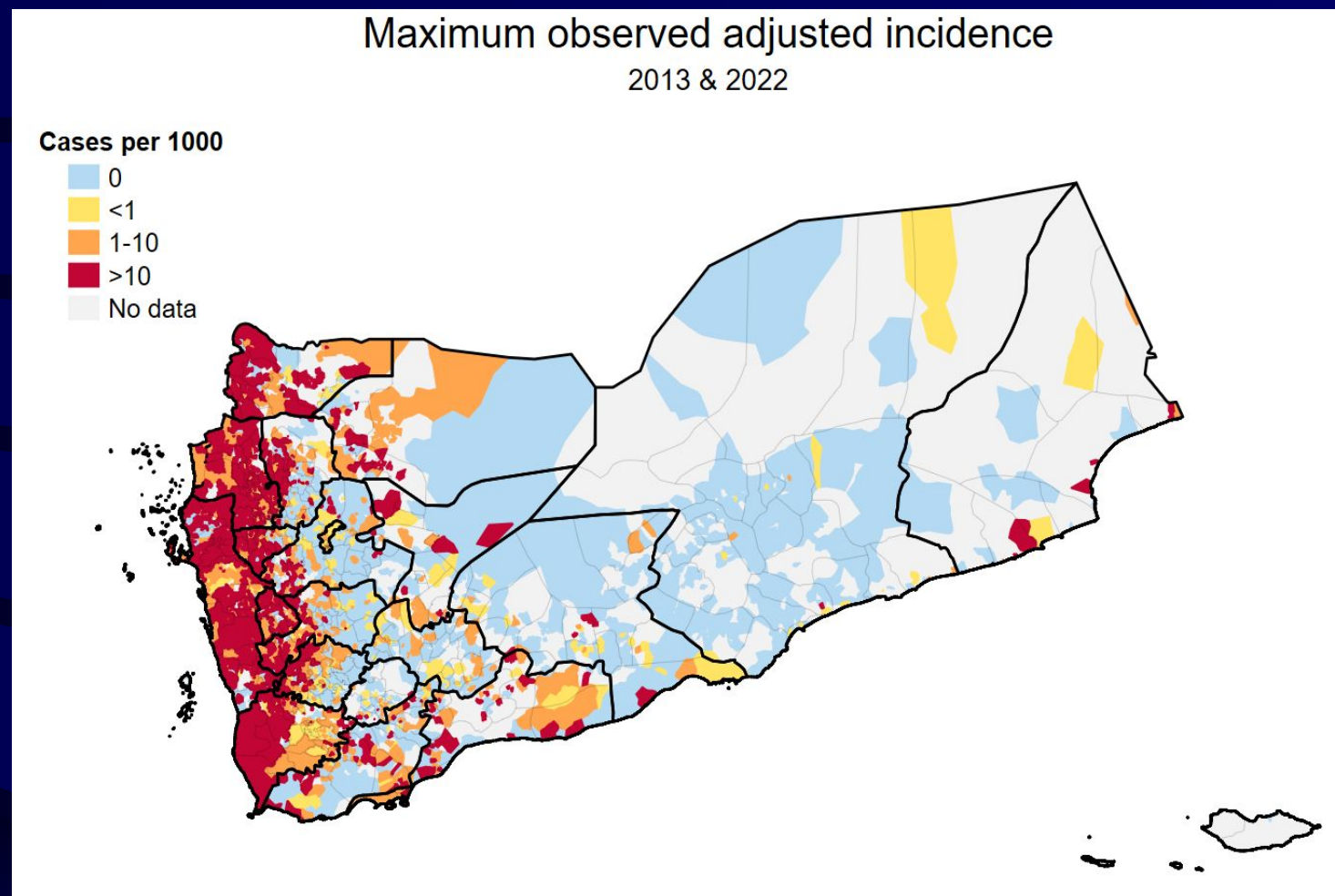


by years, 2018-2023



Achievements

- **Update** Malaria **risk map & SNT** of intervention in Yemen in collaboration with GMP & EMRO, 2023.
- Deploying **the digital technology** in all malaria activities, including **reporting, analyses, and dissemination** through interface dashboards since 2018, and the enhancement over years.
- **Transform** malaria **surveillance** into core **intervention** approach to **accelerate steps** towards elimination through **activation** the roles of **MUs** control intervention, following the tracking of the **clustering increase** of the cases.
- **A total of 784 HF**s were visited by **MUs medical** teams during **August- December 2022**, and a total of **2,639 HP**s were trained on NAMDP, and **1,405** Lab technicians on malaria diagnoses.
- **Strengthening** the integration with **eIDEWS program** through an **expansion** in the reporting sites (**389 HF**s) in 2020 and currently in additional new 100 HF's, and through the mutual **outbreak response** with RRTs.
- **Strengthening** the integration with **malnutrition** program through training of **the CHVs** on malaria diagnoses and treatment (**ICCM**).



Achievements

- **Strengthening** the **partnership** with the NGOs in **malaria/dengue** control interventions (Yaman foundation & Bonian).
- **Completing TES** to mentor the **resistance** of malaria parasites (PF) to the AL that used as the 1st line in malaria treatment in accordance to the **NAMDP**.
- **Completing** the assessment of the **presence of Pfhrp2/3 gene deletion**. A total of **590 positive** cases by microscopy out of **4,183** suspected and tested cases, and **31 (5%) discordant** cases (SDPF negative). The **molecular confirmation** is ongoing.
- **Vector control need assessment (VCNA) 2023** is completed.
- **Malaria Program Review (MPR)** is ongoing.
- **Updating and printing** all SOPs related to NMCP malaria control components.
- Starting **mosquitos sporozoite rate** detections by Elisa, and more than 300 mosquitoes samples has been tested so far.
- **Rehabilitation** of Tehama malaria regional office building and warehouse is ongoing, after being affected by **war aggression**.
- **Reactivation** of national vector control **steering committee**.
- **An. Stephensi** detection in more than **300 sites** in Tehama.



Vector Control

- **IRS and LLINs** are the two core vector control interventions implemented in Yemen, in addition to the **larvaciding and breeding source reduction**.
- **Fogging spray, awareness raising & community mobilization** and engagement are additional interventions in **dengue control** and response.

IRS:

- **A total of 100,050 and 122,294** houses were sprayed and about 1.37 million peoples were protected in the 1st and 2nd phases (**Nov 2022 and Jan 2023**) respectively.

ITNs distribution:

- A total of **1,236,501 and 892,666, and 170,000** ITNs were distributed in 2021 & 2022, and 2023 respectively, protecting **4,770,274** of population.
- **A total of 1,575,000 ITNs** arrived in November, suspended for distribution by the **GF** until completing **SNT malaria interventions** exercise. The distribution is expected to be completed within the upcoming months.

LSM

- **In October 2022**, a campaign was conducted in Tehama, and a total of 29 districts were covered and **2,383 sites** treated.
- The NMCP and MUs have responded to more 100 & 40 reported malaria/dengue foci increase in 2022 & 2023 respectively.



Bottlenecks & Challenges

01

Climate Changes, including temperature increase as well as population movement increase the geographic spread of where vectors can survive and breed. *Aedes Egypti* was found in Saada and Amanat Alassima (altitude more than 2000 MLS).

02

- **An. Stephensi** detection in Tehama increased the risk of malaria spreading to urban areas.
- **Increase resistance to pyrethroids insecticides**

03

The potential presence of hrp2/3 gene deletion and its effect to malaria diagnoses by RDTs. And poor microscopy testing practice.

04

Small quantity of reported tested by RDTs and treated compared to the actual RDTs and AMDs distributed to HF.

05

Suspension of the ITNs available quantity (1.5 M) delayed the time of replacement making the targeted population unprotected.

06

Irregular IRS campaigns implementation due to the absence of sustainable funding.
No fund to conduct the Bio-assay efficacy testing to mentor the residual efficacy for the Clothianidin (IRS).

Best practices

1. Cost effectiveness & time saving through the activation of 10 Malaria Units to conduct various of NMCP tasks at peripheral levels (districts), including:

Entomological teams

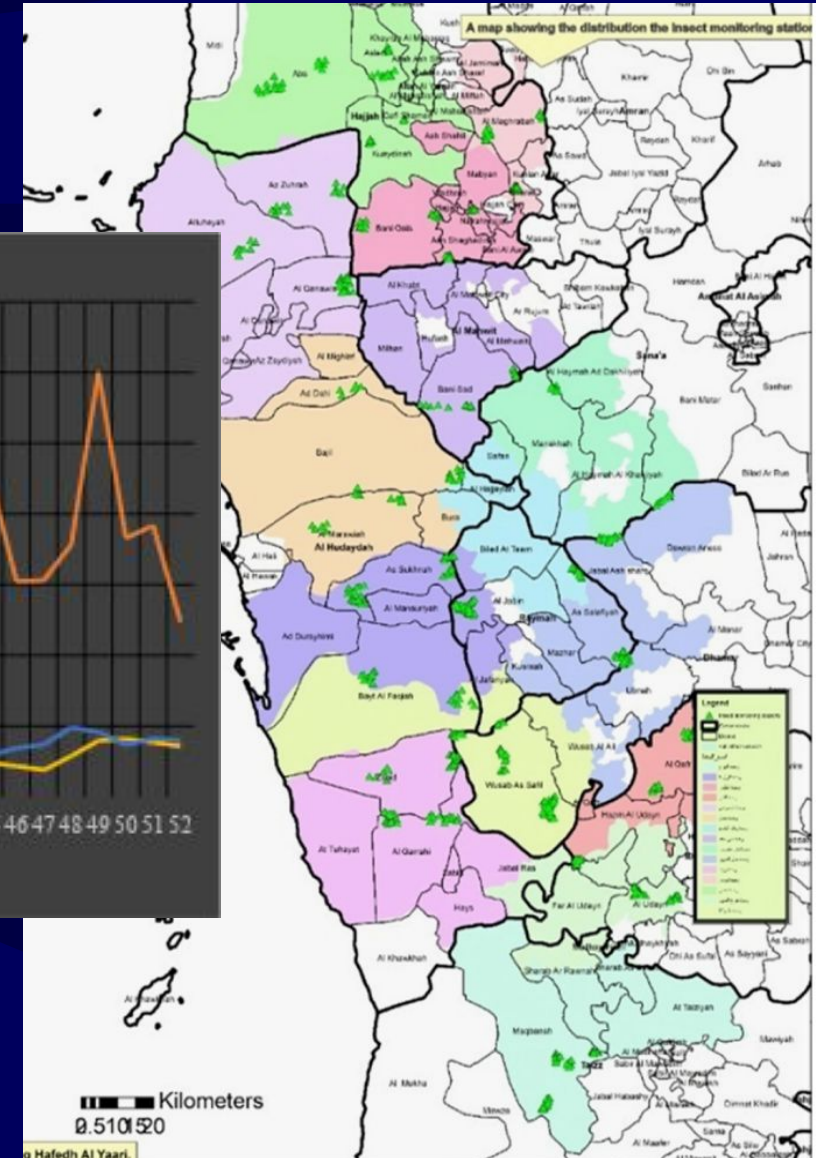
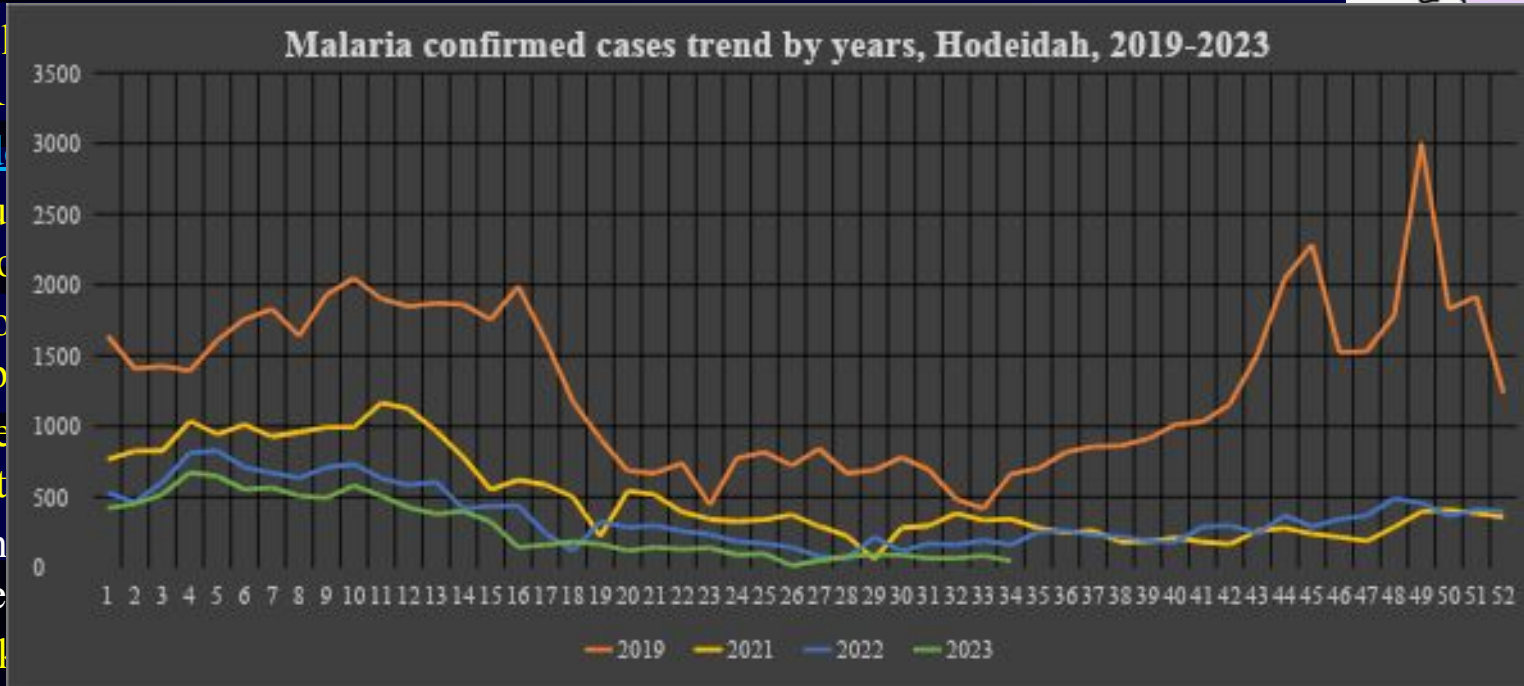
- ✓ Routine ent. Surveillance and VC activities in their catchment areas.
- ✓ Tracking the cl...
- ✓ larviciding, IR

Medical teams (d

- ✓ HF's routine su...
- ✓ NAMDP, perfor...
- ✓ Verify the repo...
- ✓ consumption p...
- ✓ Along with the...
- ✓ detection and t...

2. Strong commitm...
- the best example

- ✓ One team work...
- and 4 MUs), and with the aim of fighting malaria/dengue, they performing the daily reported data, reviewing, verifying, investigating, and responding.
- ✓ Resource mobilization and coordination between the working NGOs redirecting resources to support the priorities in malaria/ dengue control.



Best practices

1. ICCM CHVs contribution in various malaria/ dengue control activities.

ITNs, IRS, LSM

- ✓ CHVs engagement in the NMCP different campaigns to verify the numbers of individuals of the family before ITNs distribution, prepare HHs for IRS spray teams
- ✓ Education sessions for family members and school students, including the importance of ITNs & proper use, messages about malaria/dengue causes, mode of infection and prevention.
- ✓ Lead their communities in regular control interventions in particular LSM.

Engagement in outbreak investigation and response

#	Item	No of sessions	No of Beneficiaries
1	ITNs proper use	30,630	187,686
2	Breeding sites prevention and control	26,273	164,504
3	Malaria transmission and prevention	27,148	171,585
	Total	84,051	523,775



Financial gap 2024

- The 2024 is the 3rd and last year in the MER3 GF grant, following by the 1st year of next MER4 grant.
- The following are most important activities that are still gap:

Vector control

- ✓ The IRS funding gap for at least 230k HHs in the high priority areas with a total cost of \$ 2.3 M including the insecticides & running costs.
- ✓ The ITNs gap of 1,172,973 for the current and next year. About a half may be covered through the GF MER3 grant.
- ✓ Financial gap for procurement of other insecticides Deltamethrin, Temephos, and growth regulators.

Case management

- ✓ MRDTs procurement gap for 2024 and part of 2025 with a total cost of about 0.5 M USD.
- ✓ All activities under ICCM component are gap in 2024 including CHVs annual meetings and supportive field supervision visits to CHVs. With a total cost about 0.7 M USD.

Malaria units

- ✓ Despite the proven roles in malaria control, all MUs' activities are not funded in 2024 (0.32 M USD).



Thank you for attention