

Annual meeting with National Malaria Programmes for countries in the Eastern and Southern Africa subregion

3-6 October 2023

Organized by: RBM/CRSPC

Updates: Yemen-Aden

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NMCP Manager**

Program Implementation Status

Strategic plans: At least two Strategic plans were adopted since 2014: the first one 2014-2018 and the recent plan is for the period 2020-2024

During this periods; the epidemiological situation in Yemen is dramatically affected by the war and the emergency crises:

**Yemen facing complex emergencies: worst humanitarian crises
armed conflicts, political instability, economic deterioration,
climate changes and health system fragmentation and COVID-19
Pandemic**

But at the same time, a lot of achievements and a lot of challenges were shape the status of malaria program implementations

Outcome indicators compared to Objectives

2020-2024 plan objectives

- Reduce malaria case incidence and morbidity by at least 50.0% in highly endemic areas, particularly in Tehama region, compared with 2018 by the end of 2024.
- Reduce malaria-associated mortality to near zero.
- Sustain malaria reduction in Hadhramout region by less than 1% and prevent the reintroduction of malaria to Socotra to remain free of malaria.
- Prevent malaria outbreaks in IDP-hosting areas and epidemic-prone districts

Outcome Indicators

- The total estimated malaria cases in 2021 were 979,967 cases. (WHO-WMR 2021)
- Data of Malaria deaths was not well documented
- **Malaria case incidence was higher in 2021 than in 2015, (Yemen was not on track for the GTS milestone)**



GLOBAL TECHNICAL STRATEGY FOR MALARIA 2016–2030



Trends of Malaria Epidemiology Indicators of Yemen (2015-2021)

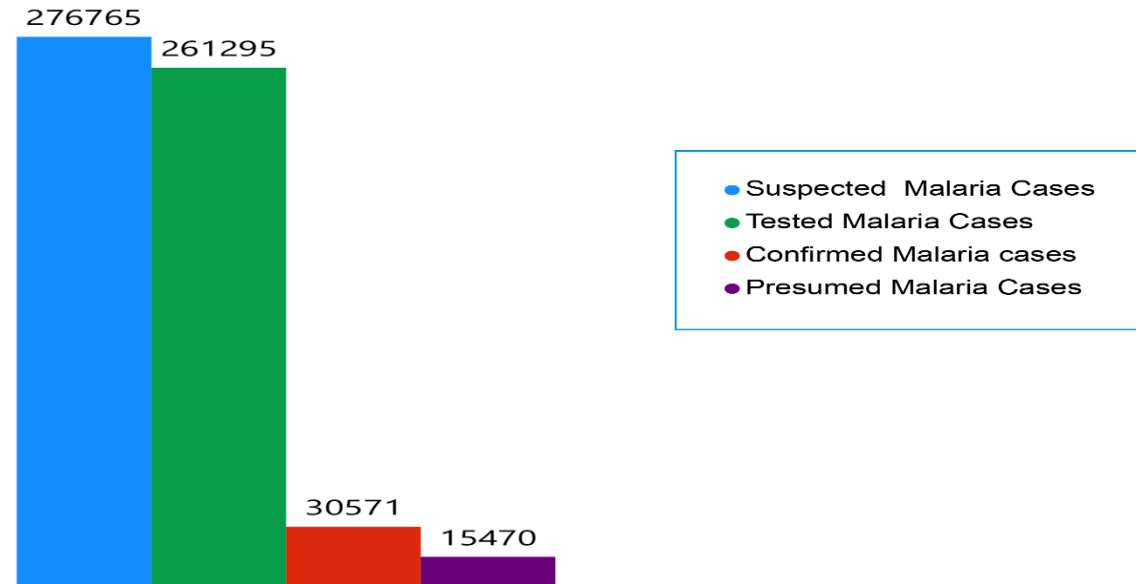
(WORLD MALARIA REPORT 2022)

ANNEX 4 – F. POPULATION DENOMINATOR FOR CASE INCIDENCE AND MORTALITY RATE, AND ESTIMATED MALARIA CASES AND DEATHS, 2000–2021

WHO region Country/area	Year	Population denominator for incidence and mortality rate	Cases			Deaths		
			Lower	Point	Upper	Lower	Point	Upper
EASTERN MEDITERRANEAN								
Yemen	2000	12 010 295	453 000	1 061 470	4 602 000	800	2 656	12 100
	2001	12 342 168	526 000	1 182 990	5 327 000	930	2 961	14 100
	2002	12 675 615	628 000	1 307 377	6 120 000	1 080	3 283	15 500
	2003	13 016 123	500 000	1 188 478	5 500 000	890	2 964	15 200
	2004	13 367 241	441 000	956 179	4 233 000	780	2 391	11 600
	2005	13 745 863	441 000	1 002 795	4 657 000	800	2 495	12 100
	2006	14 162 111	546 000	1 201 845	5 711 000	970	3 027	15 100
	2007	14 597 452	431 000	852 425	1 854 000	730	2 117	5 340
	2008	15 040 675	279 000	539 905	1 223 000	490	1 361	3 570
	2009	15 492 355	358 000	702 010	1 641 000	630	1 779	4 930
	2010	15 952 916	642 000	1 131 912	2 166 000	1 080	2 866	6 460
	2011	16 424 635	492 000	792 771	1 319 000	800	2 015	4 090
	2012	16 906 745	575 000	860 962	1 313 000	900	2 197	4 240
	2013	17 397 125	491 000	700 432	1 014 000	750	1 786	3 290
	2014	17 893 110	412 000	587 292	851 000	620	1 498	2 760
	2015	18 385 186	361 000	513 816	743 000	550	1 309	2 430
	2016	18 873 534	468 000	661 252	951 000	710	1 681	3 180
	2017	19 363 770	528 000	747 173	1 068 000	810	1 886	3 480
	2018	19 851 258	603 000	871 031	1 264 000	930	2 211	4 200
	2019	20 338 783	582 000	831 533	1 200 000	900	2 108	3 900
	2020	20 814 170	562 000	800 213	1 154 000	850	2 030	3 750
	2021	21 263 922	690 000	979 967	1 420 000	1 030	2 455	4 550

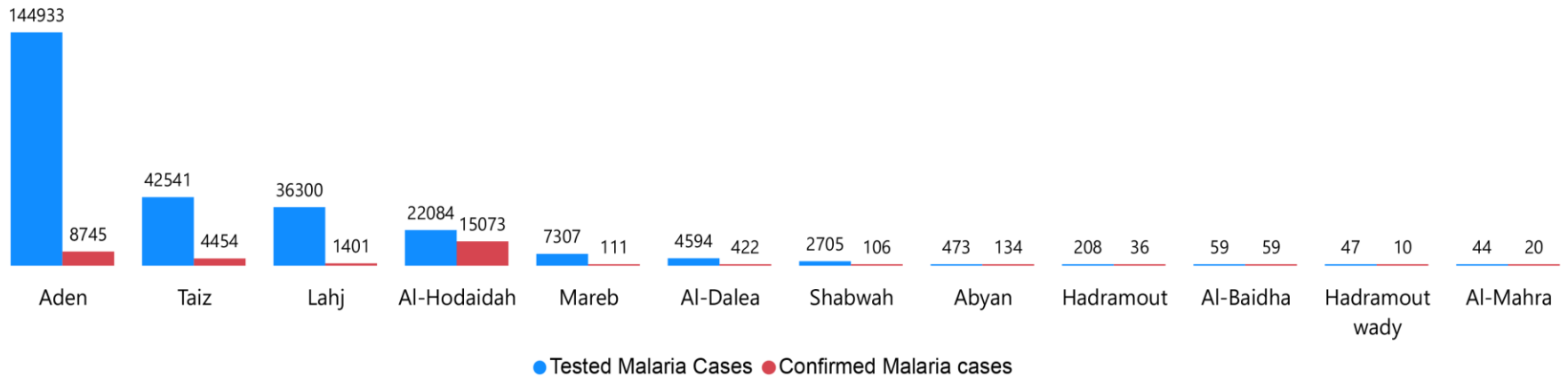
Malaria Data in 2022

- In 2022 there is a total of 276,765 suspected cases of malaria through eIDEWs system.
- 261,295 cases were tested either by microscope or RDTs and 30,571 were confirmed as positive cases.
- Out of these 261,295 investigated cases, there are 166,547 cases were tested by microscope where there are 22,987 diagnosed as positive while there are 94,748 were tested by microscope and 7584 were diagnosed as positive.
- Another 15,470 cases were reported as probable cases through eIDEWs system
- There are 18,965 cases were tested by CHVs of ICCM and 840 cases are positive by RDTs.
- Also there are 180 cases were investigated through the ACD in the pre elimination areas and 42 cases were positive.

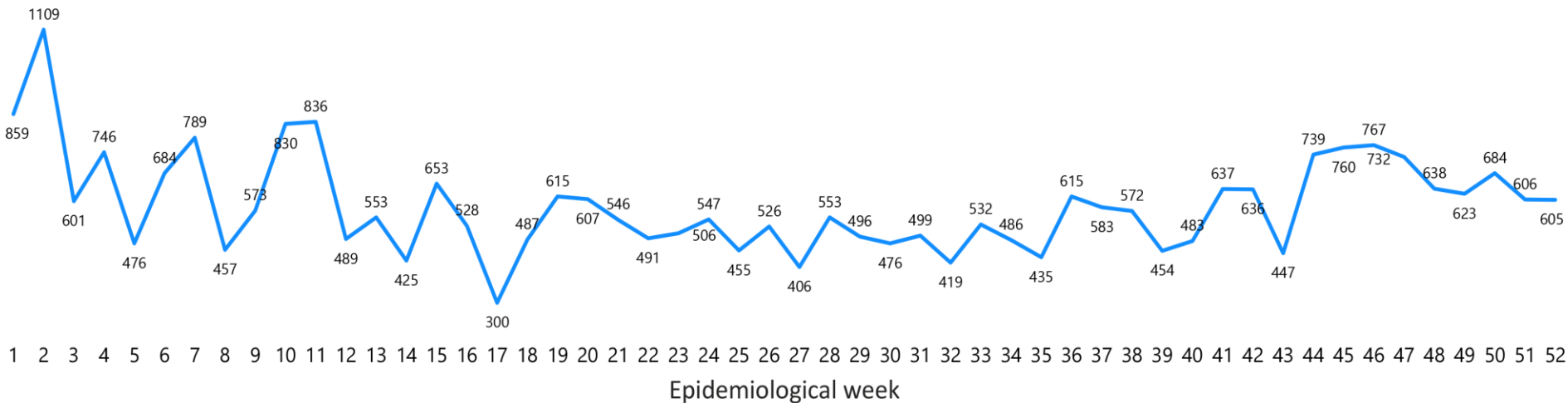


Malaria Data in 2022

Malaria Tested and confirmed cases by Governorate (1 - 52 w) 2022



Malaria Postive cases by Epidemiological week (1 - 52 w) 2022



Main Achievements

- Improvement of case management through scale-up use of RDTs and antimalarial drugs.
- Distribution of LLINs to cover all the population at risk.
- Implementation of IRS campaigns in the targeted districts
- Training of physicians and HWs on malaria and dengue case management
Training of 4 NMCP staff for entomological surveillance in Ethiopia and Djibouti
- Training 425 CHVs for ICCM in the targeted districts with implementation of bi annual meetings and quarterly visit to asses and follow up their work.
- Training of eIDEWS focal points at all the HFs about the correct insertion of malaria data in the system.
- Implementation of active case surveillance in the pre elimination areas
- Implementation of the routine entomological surveillance in the sentinel sites.
- Develop the MPS 2020-2024 and starting the MPR to update the strategy.
- Conduct operational researches
- Partnership with GF, WHO, IOM, KSR, WB and other local NGOs



BEDMI NOTE 8 PRO
AI QUAD CAMERA

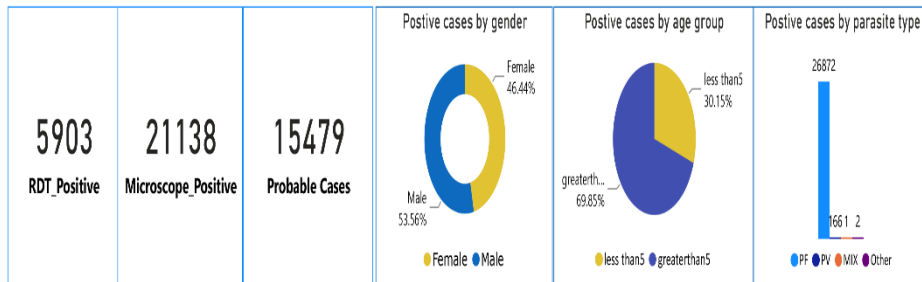


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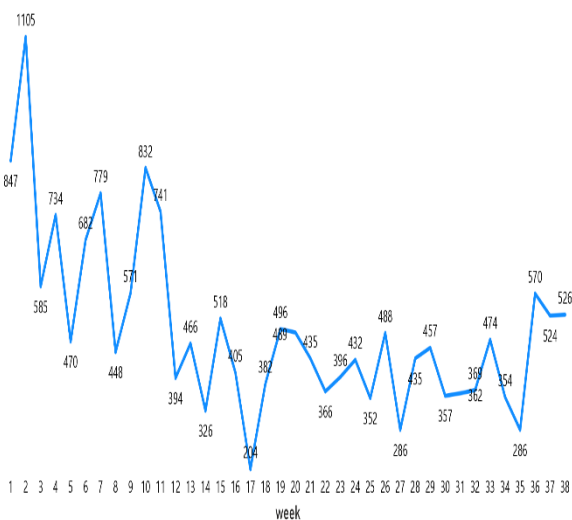
Best Practices

1-Coordination with eIDEWS for Surveillance and Malaria data Reporting:

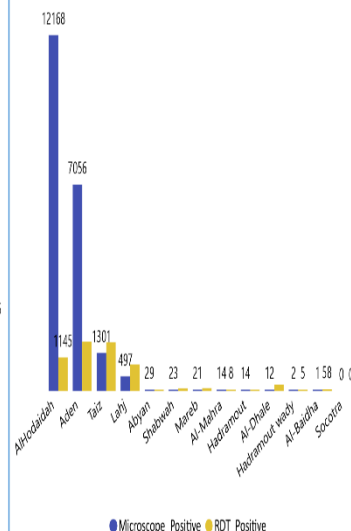
Malaria Data Reporting in free areas in Yemen (1-52 w) 2022



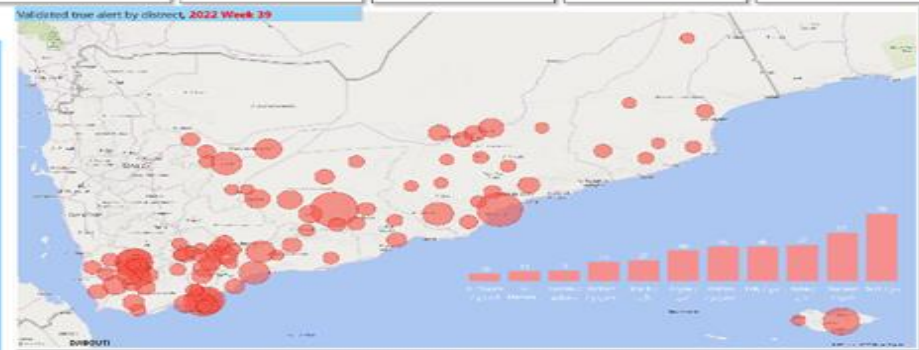
Malaria positive cases by week number (1-52) 2022



Positive cases by Governorate



Weekly Bulletin in free areas in Yemen, Week 39, 2022



Highlights:

- During week no 39 in 2022, 95.30% (752 No. of reported health facility belonging to EIDEWS from 789 total health facility number) and 29 other reported health facility, 781 total for all in 13 governorates provided valid surveillance data.
- The total of consultation reported during the week 39 in 13 governorates was 122275 compared to 127084 the previous reporting week 38
- The top five diseases were leading cause of mortality in this week with list of diseases:
 - Upper Respiratory Tract Infections: 35006
 - Other Acute Diarrhea: 10519
 - Lower Respiratory Tract Infections: 5559
 - Malaria: 1728
 - Typhoid/Paratyphoid Fever: 858

Distribution of reporting number and rates for LOUWS HF by governorates, 2022 Week 39

Top 5 weeks of reporting rates for RDTWV HF in governorates, 2022 Week 39

Proportional morbidity of leading priority diseases, 2022 Week 39

Leading causes of morbidity mortality in Epi-Week 39, 2022

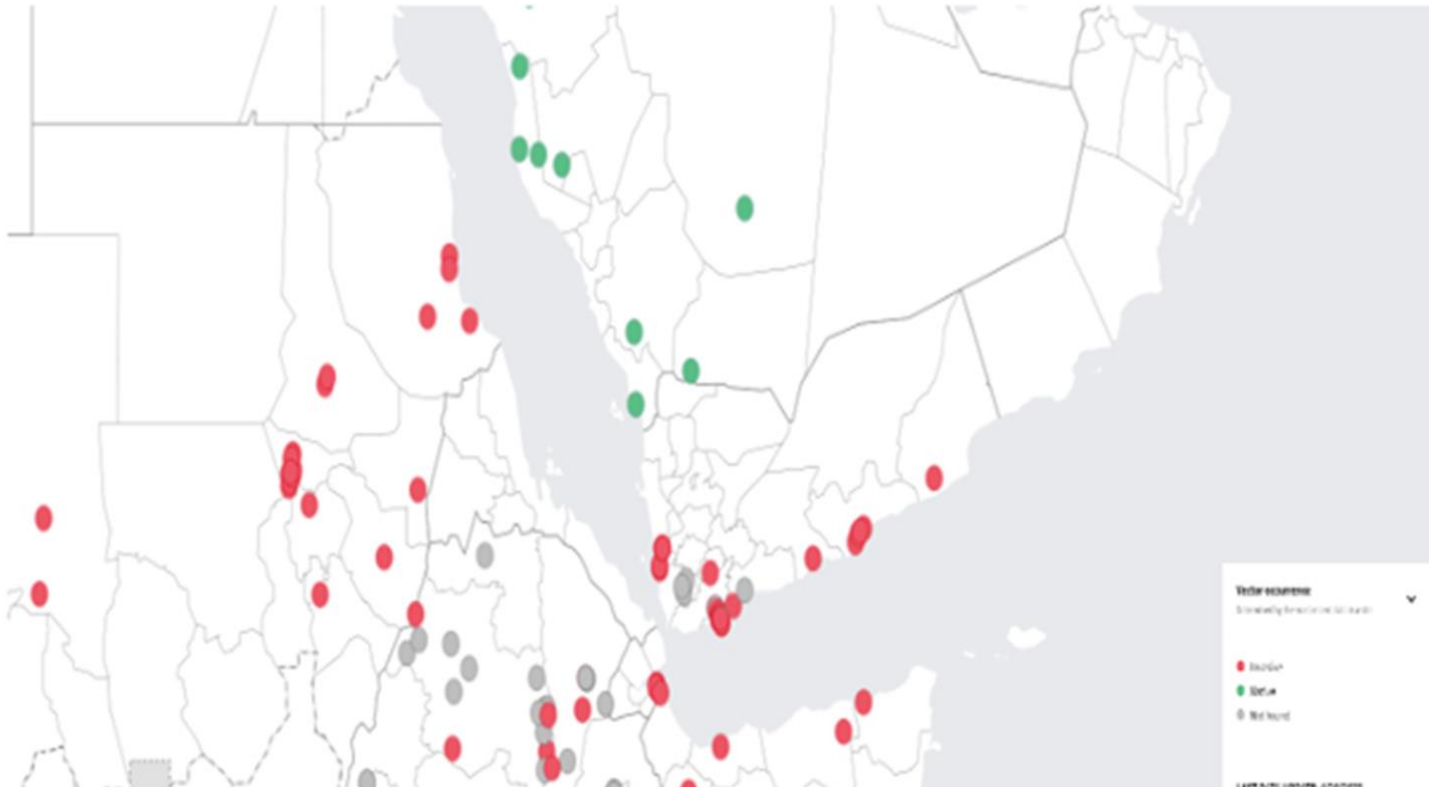
- Upper Respiratory Tract Infections 54.46%, Other Acute Diarrhea 22.93%, Lower Respiratory Tract Infections 12.10% and suspected Malaria 8.70% remain the leading causes of morbidity representing a total of 98.19%.
- Acute viral hepatitis, acute watery diarrhea and Schistosomiasis represented less than 1% of total morbidity in reporting period Bloody diarrhea represented 0.58% of this morbidity.
- All Respiratory Diseases comprised 0.17%, all Gastrointestinal Diseases 0.09 % Vaccine Preventable Diseases 0.79% and OTHER COMMUNICABLE DISEASES 1.82% in pilot Governorates this week.

Best Practices...

2-Operational research and Entomological Surveillance for the new vector (Anopheles Stephensi):



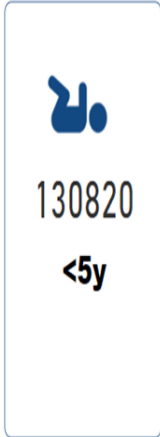
Vector occurrence



Best Practices...

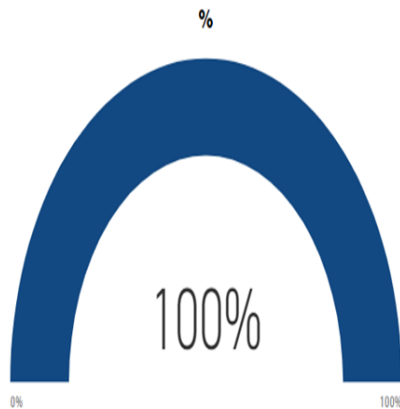
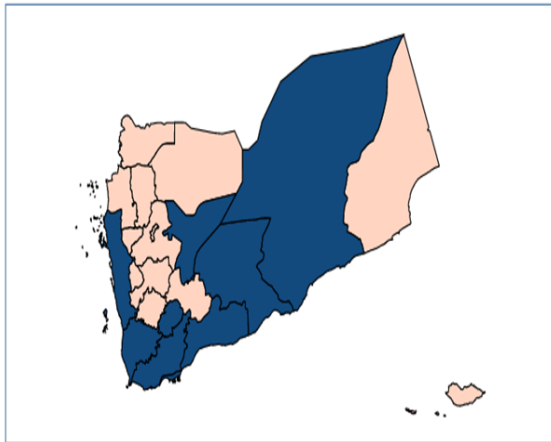
3-Distribution of LLINs in IDPs camps:

Total



The figures shown are according to the available data from the field teams

Some teams are in areas out of services and couldn't send their data till now

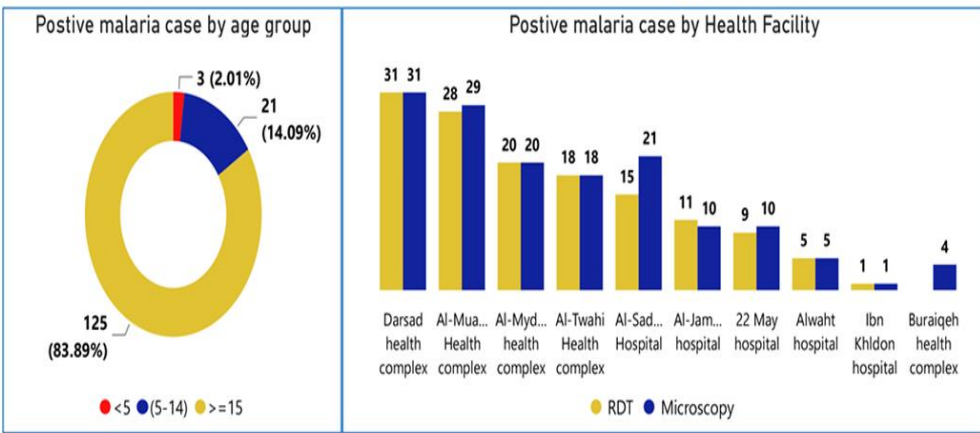
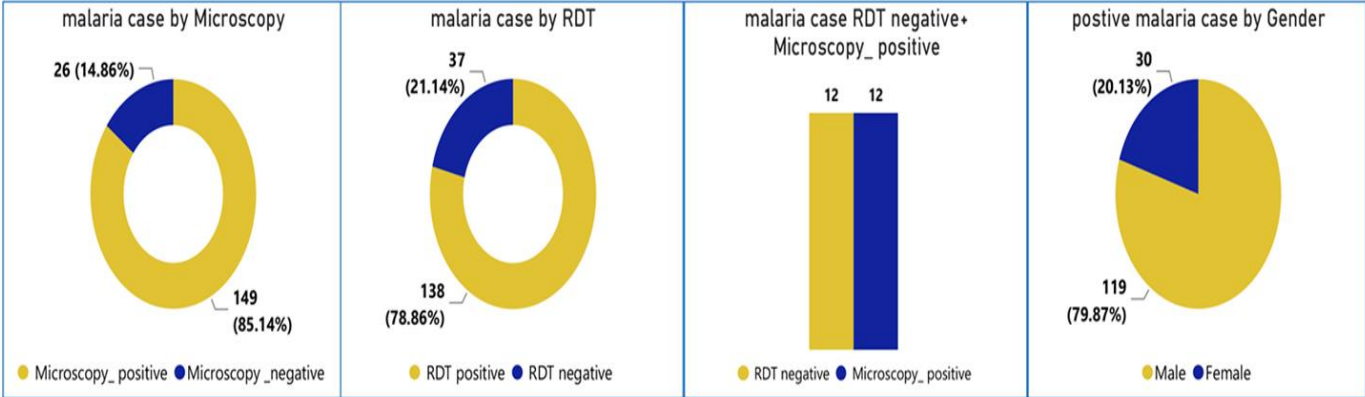


Best Practices...

4-Conduct the Pf HRP2 gene deletion study:



Surveillance of *Plasmodium falciparum* histidine-rich protein2 gene deletions among parasite isolates from symptomatic patients in Aden and Lahj Yemen (Lab technician)



Best Practices...

5-Use of online daily electronic data report for the activities:



LLINs Distribution Campaign in Abyan , Shabwa,Lahj, Taizz and Hodidah Governorates



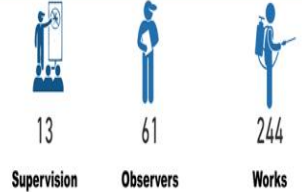
- The figures shown are according to the available data from the field teams

-Some teams are in areas out of services and couldn't send their data till now

Total



IRS Campaign in Hadramaut , Shabwah , and Al Maharah

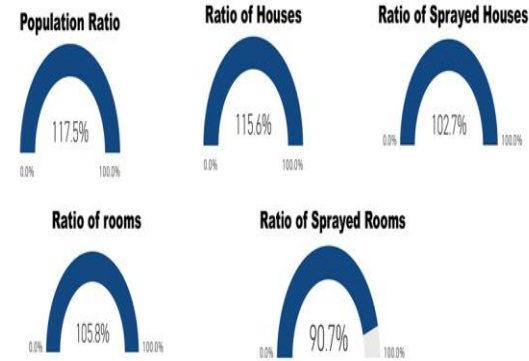
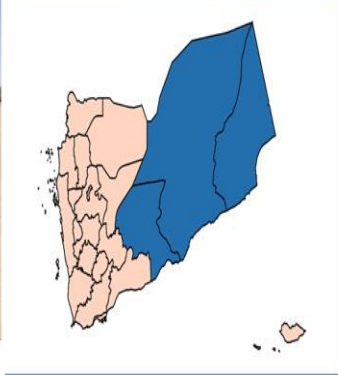
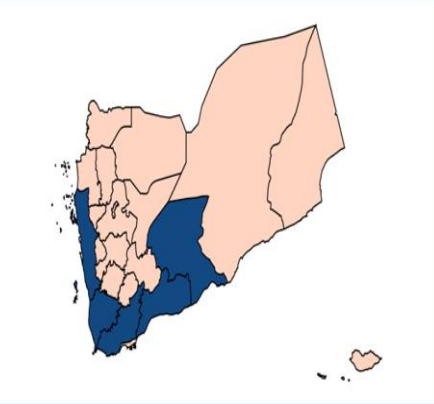


Al Maharah Hadramaut Shabwah

6506	175	398	1277	500	6 Days
Villages	Supervisors	Teams	Workers	Vehicles	
380922	3950	1992002	279894	47726	940415
Res.HH	IDPs.HH	Population	<5y	Pregnant	LLINs Distributed



136	74133	10462	9294	1168	61662	52879	10241
Village	population	Reached Houses	Sprayed Houses	Not Sprayed Houses	Reached Rooms	Sprayed Rooms	Insecticide Quantity(Sack)



Best Practices...

6-Workshop for the IVM Steering Committee and conduct of TOT Entomological Surveillance Training Courses:



Main challenges

- Security and political instability
- Program fragmentation
- IDPs and refugees
- Climate changes, cyclones
- Identification of the new invasive vector for malaria (*Anopheles Stephensi*)
- Capacity Building, staff and infrastructure, GIS, Entomologist
- No plan or fund for the Epidemic Preparedness and response
- Anti malaria drug resistance was not properly studied
- Wide area with population dispersion
- Burden of the other VBDs mainly dengue fever and Chikungunya
- Quality of data and untrained EIDEWS focal points for malaria reporting.
- Limited budget for malaria control and prevention

Gap analysis 2024

Item	NEED	FINANCED	GAPS
LLINs (# number of commodities)	848,516	0	848,516
IRS US\$	1,084,856	440,000	644,856
ACTs (# number of commodities)	143,321	89,130	54,191
RDTs (# number of commodities)	247,250	247,250	0
Total US\$ need essential services	49,512,457	15,006,212	34,506,245
ICCM training	150 CHV	60 CHV	90 CHV
Surveillance training	791 focal point	54 focal point	737 focal point
Total US\$ need malaria strategic plan	34,000,000		-

Gap analysis 2025


Item	NEED	FINANCED	GAPS
LLINs (# number of commodities)	781,082	0	781,082
IRS US\$	1,427,787	0	1,427,787
ACTs (# number of commodities)	157,653	0	0
RDTs (# number of commodities)	247,750	0	0
ICCM training	150 CHV	0 CHV	150CHV
Lab technicians training	425	0	425

Gap analysis 2026

Item	NEED	FINANCED	GAPS
LLINs (# number of commodities)	868,004	0	868,004
IRS US\$	1,472,048	0	1,472,048
ACTs (# number of commodities)	173,417	173,417	0
RDTs (# number of commodities)	272,525	272,525	0
ICCM training	90 CHV	0 CHV	90 CHV

2023 Implementation Support (TA) /Anticipated TA requirements for 2024

Activity	Support type (TA or financial)	Period
An. Stephensi surveillance	TA/Financial	2024-226
Capacity building of the surveillance staff, DHIS2	TA/Financial	2024
Establishment of the active case surveillance unit, training, infrastructure, reporting forms	TA/Financial	2024
Malaria / surveillance coordination meetings	Financial	2024-2026
GIS staff Training	TA/Financial	2024
IRS	Financial	2024-2026
Lab technician training	Financial	2024-2026
ICCM training	Financial	2024-2026
Other VBDs control interventions	TA/Financial	2024-2026
Epidemic preparedness	TA/Financial	2024-2026
Operational researches	TA/ Financial	2024-2026

A photograph of a river with a digital overlay of a pen writing 'Thank you' on the water. The river is calm and reflects the surrounding greenery. The sky is overcast. The text 'Thank you' is written in a cursive font, and a purple pen is shown writing the final letter 'u'.

Thank you