

# Involvement of ASHAs in Active Case Surveillance in Malaria Elimination Program at Govindagarh CHC, Jaipur Rajasthan

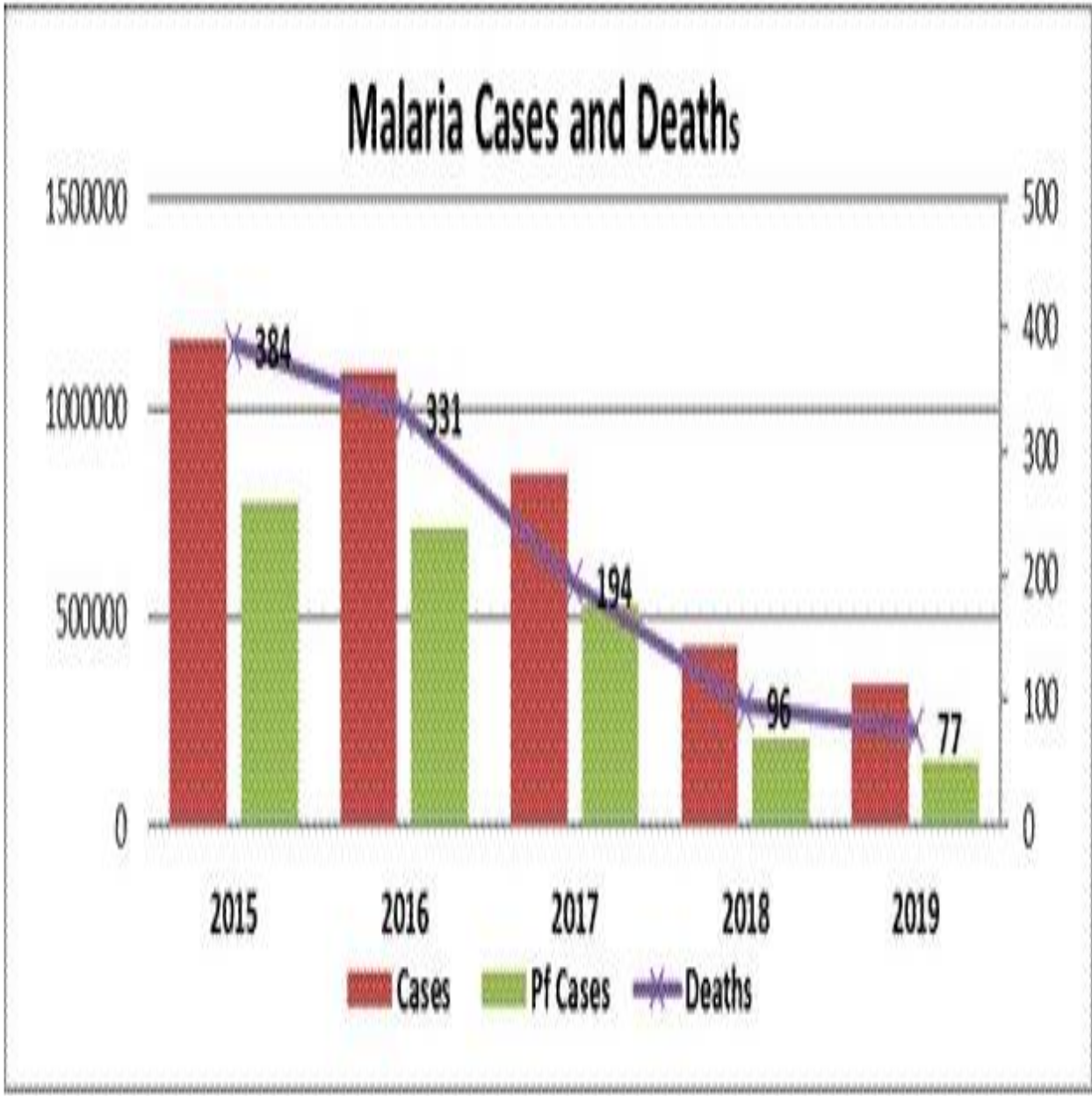
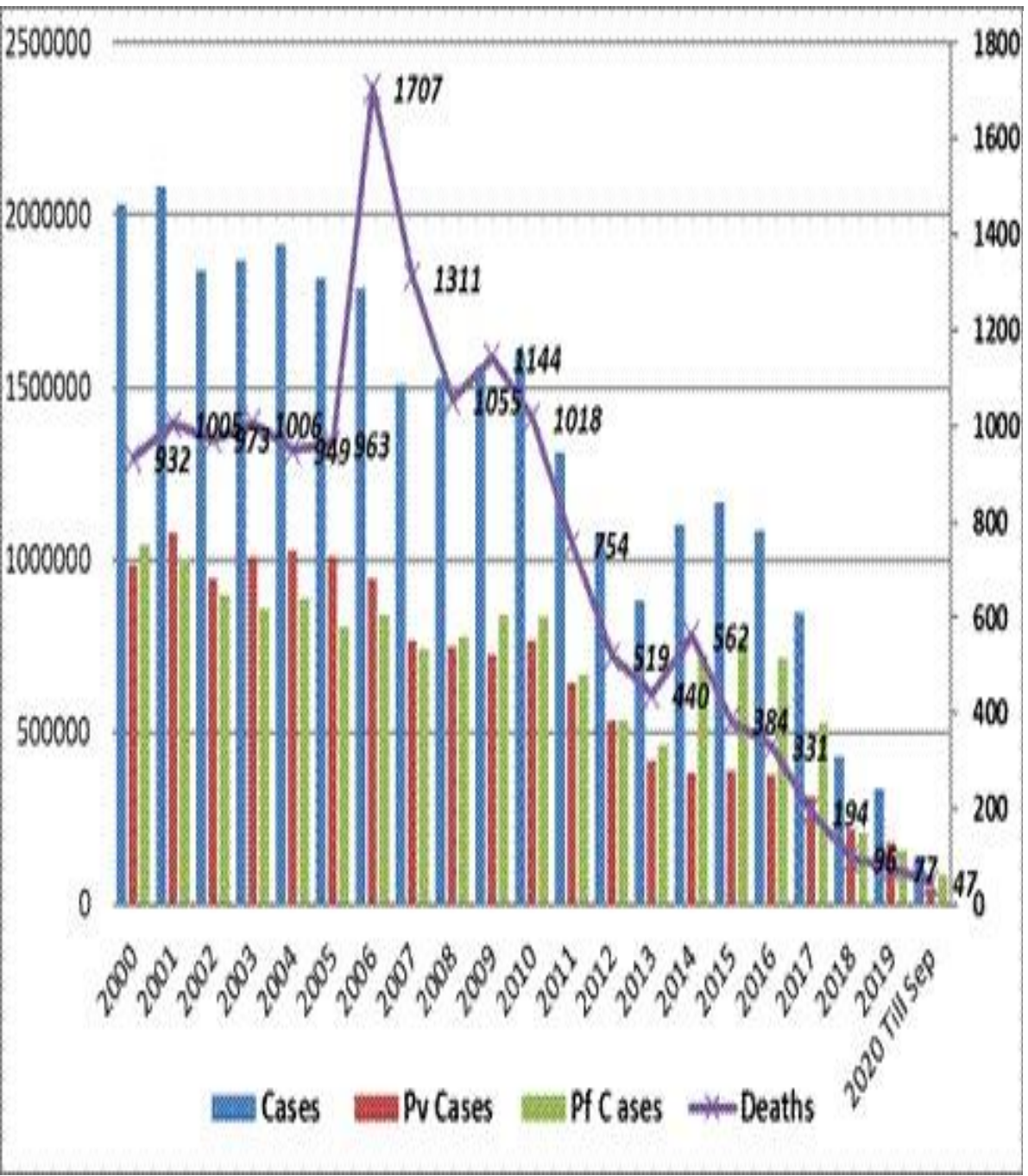
Ganga Marasini  
MPH IS



# Background:

- Malaria is a major public health problem, yet it is preventable and treatable
- In the South-East Asia Region, India contributes
  - 70% of malaria cases
  - and 69% of deaths due to malaria
- India has made significant progress towards lowering malaria load
- India achieved a reduction of 83.34% in malaria morbidity and 92% in malaria mortality between the year 2000 and 2019 (3,38,494 cases, 77 deaths)
- India achieved Goal 6 of the Millennium Development Goals (50-75% decrease in case incidence between 2000 and 2019).
- Sustained Annual Parasitic Incidence (API) of less than one since 2012





# National Framework for Malaria Elimination (NFME) (2016-2030)

- Malaria Elimination efforts were initiated in India in 2015.
- National Framework for Malaria Elimination (NFME) in 2016
- Malaria Elimination efforts were intensified

## Vision:

- Eliminate malaria nationally and contribute to improved health, quality of life and alleviation of poverty.

## Goals

- The goals of the National Framework for Malaria Elimination in India 2016–2030 are:
  - Eliminate malaria (zero indigenous cases) throughout the entire country by 2030; and
  - Maintain malaria-free status in areas where malaria transmission has been interrupted and prevent re-introduction of malaria.

# Objectives:

## **The Framework has four objectives:**

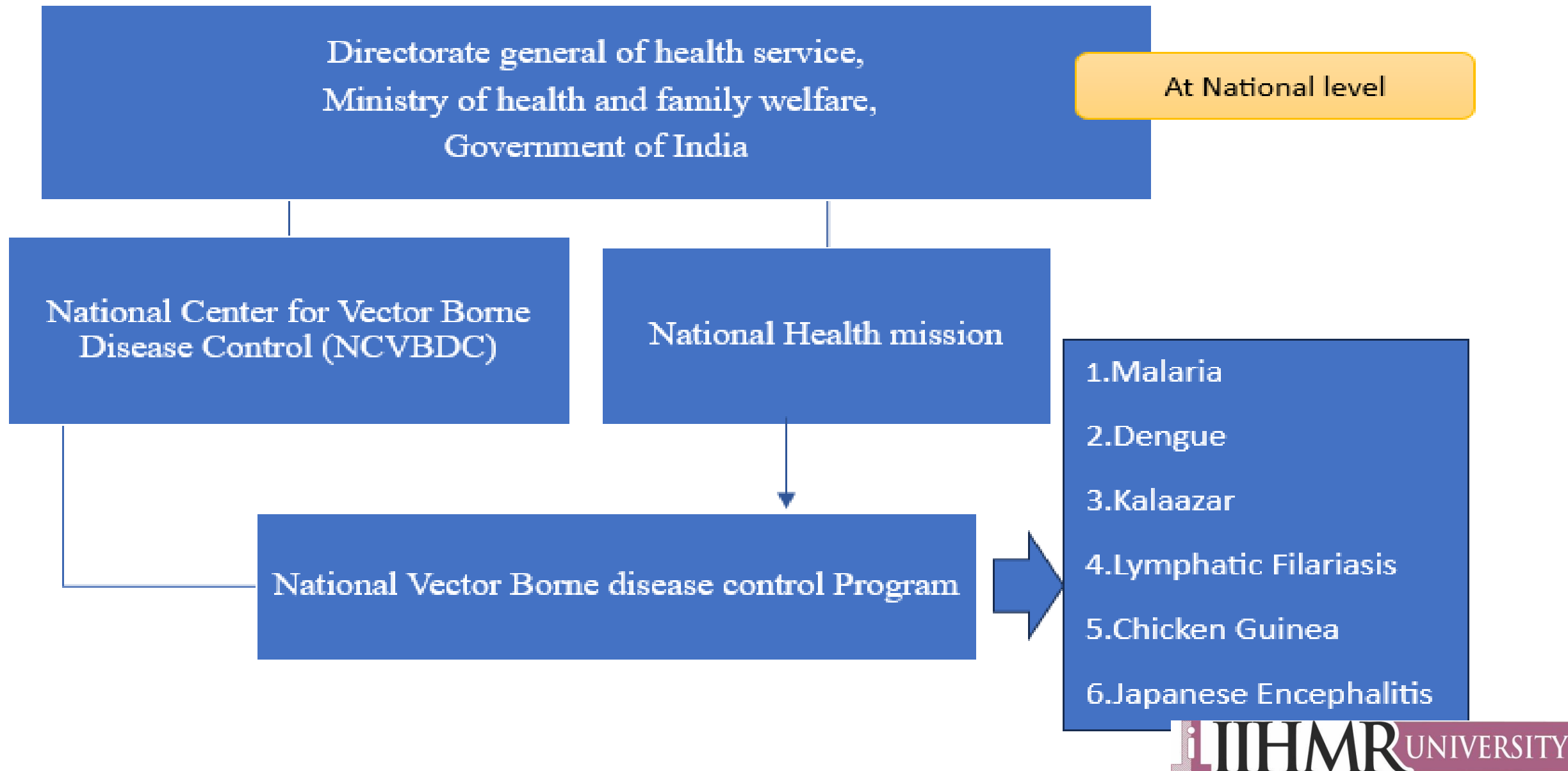
- Eliminate malaria from all 26 low (Category 1) and moderate (Category 2) transmission states/union territories (UTs) by 2022;
- Reduce the incidence of malaria to less than 1 case per 1000 population per year in all states and UTs and their districts by 2024;
- Interrupt indigenous transmission of malaria throughout the entire country, including all high transmission states and union territories (UTs) (Category 3) by 2027; and
- Prevent the re-establishment of local transmission of malaria in areas where it has been eliminated and maintain national malaria-free status by 2030 and beyond

## **Strategic Approach :**

The four strategic approaches of NFME 2016-2030 include:

- (i) Program phasing,
- (ii) District as the unit of planning and implementation,
- (iii) Focus on high transmission areas, and
- (iv) Special Strategy for *Plasmodium vivax* elimination

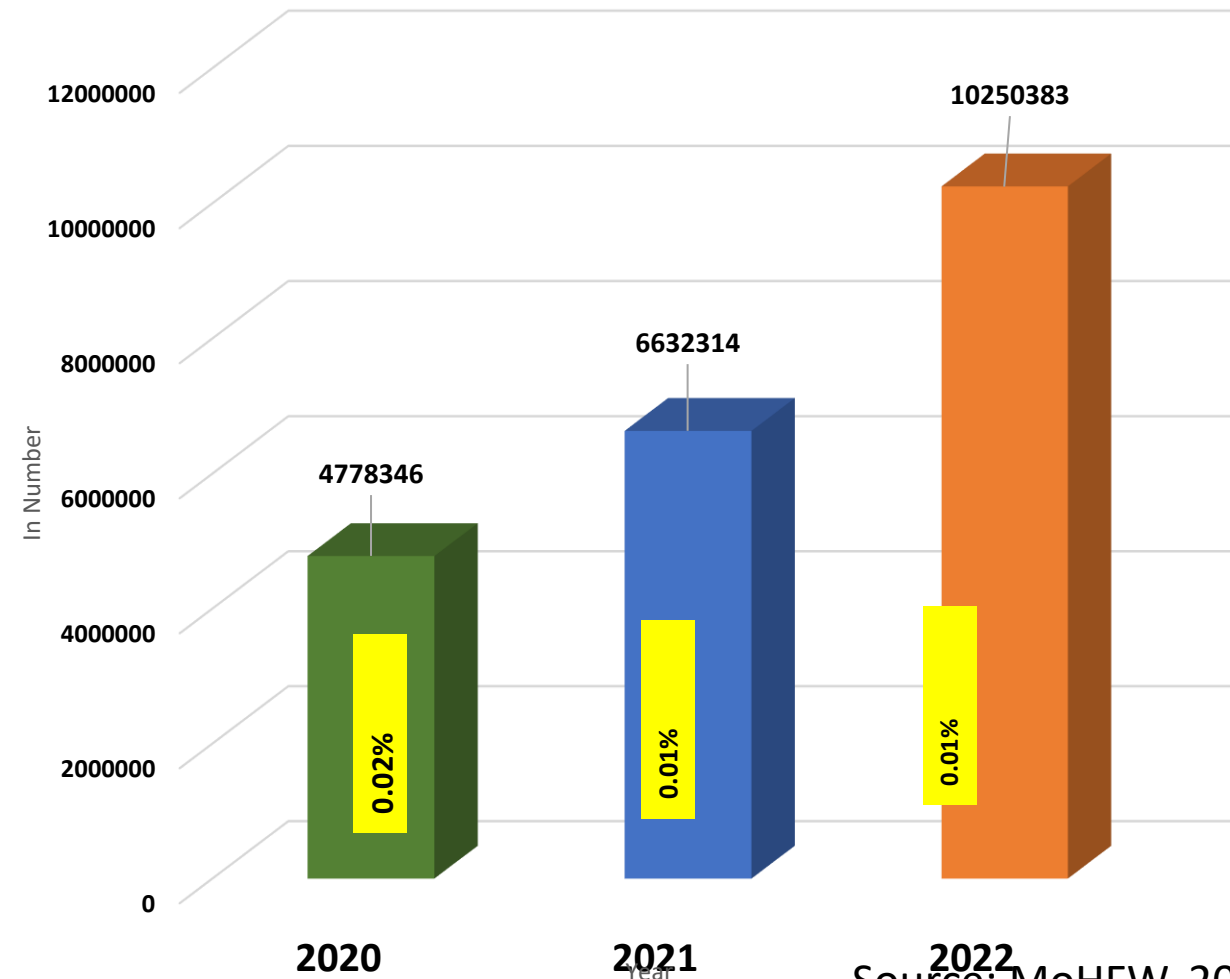
# Malaria Elimination Program Design and Service Delivery



## Epidemiological Situation of Malaria in Rajasthan (2020-2022)

- Rajasthan state is classified as **Category 1 (Elimination Phase)**:
- The states/UTs with API less than one, and all the districts in the state with API less than one comes under this category. District
- Jaipur is categorized as a “category 1” district as it is reporting API less than one and is in the **elimination phase**

## Blood Slide Examination and Slide Positivity Rate%



Source: MoHFW, 2023



# Malaria Elimination Program in Rajasthan

| Specific objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Key interventions of Category I states/UTs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Interrupt transmission of malaria</li> <li>• Immediately notify each detected case</li> <li>• Detect any possible continuation of malaria transmission.</li> <li>• Determine the underlying causes of residual transmission.</li> <li>• Forecast and prevent any unusual situations related to malaria; ensure epidemic preparedness and respond in a timely and efficient manner to outbreak situations.</li> <li>• Prevent re-establishment of local transmission of malaria</li> <li>• Ascertain elimination of malaria</li> </ul> | <ul style="list-style-type: none"> <li>• All efforts will be directed at interrupting local transmission in all active foci of malaria.</li> <li>• Mandatory notification of each case of malaria from the private sector, other organized government sectors or any other health facility</li> <li>• Adequate case-based surveillance and complete case management established and fully functional across the entire country to handle each case of malaria.</li> <li>• Investigation and classification of all foci of malaria</li> <li>• A strict total coverage of all active foci by effective vector control measures</li> <li>• Early detection and treatment of all cases of malaria by means of ACD and/or PCD to prevent onward transmission.</li> <li>• State and national level malaria elimination database established and made operational.</li> <li>• Implementation of interventions for effective screening, management, and prevention of malaria among mobile and migrant populations</li> <li>• Establishment of an effective epidemic forecasting and response system</li> <li>• Ensuring rigorous quality assurance of all medicines and diagnostics</li> <li>• Setting up a national-level reference laboratory to serve following two functions: <ul style="list-style-type: none"> <li>◦ All positive and a fixed percentage of negative slides will be referred to this laboratory for confirmation of diagnosis and cross-checking. After elimination has been achieved in each State/UT, 100% of cases will be notified to this laboratory for confirmation of diagnosis. The laboratory will be notified immediately on all positive cases of malaria by each state/UT through either SMS, e-mail, or telephone with information on name, gender, address (village and district), date and type of testing and type of parasite for each positive case of malaria so that a national level database can be maintained.</li> <li>◦ Training of master trainers and accreditation/certification of microscopists as per Indian Public Health Standards shall also be undertaken at this laboratory.</li> </ul> </li> <li>• During investigation of foci, all suspected cases of malaria are to be screened for malaria. These could include household members, neighbors, schoolchildren, workplace colleagues and relatives.</li> <li>• Surveillance of special groups, migrant populations or populations residing in the vicinity of industrial areas are also to be covered under surveillance operations</li> </ul> |

- One of the key interventions is early detection and treatment of all cases of malaria by active case detection and passive case detection which will prevent onward transmission of malaria



# Capstone Work Area and the Objectives

## **Title:**

- Involvement of ASHAs in Active Case Surveillance in Malaria Elimination in Govindgarh catchment area

## **Objectives of Capstone:**

- To review roles and responsibilities of ASHAs in active case detection and treatment of Malaria
- To study involvement of ASHAs in active case detection
- To identify the enablers for involvement of ASHAs in malaria elimination
- To identify the challenges faced by ASHAs in Malaria Elimination Program

# Methodology:



## Study Design :

A mixed methods (qualitative and quantitative) approach using with participatory exploration of relevant information



## Study Participants:

Health workers in Govindgarh CHC and Dhoblai HWC ,ASHAs and Patients

A total of six key informant interviews using guide were conducted with:

- Senior Medical Officer (1),
- Senior Lab Technician (1),
- ANMs (2),
- ASHAs (2)



## Data Collection:

Qualitative data collected Pre-designed observation checklist and interview guide.

Quantitative data is collected on services related to Malaria

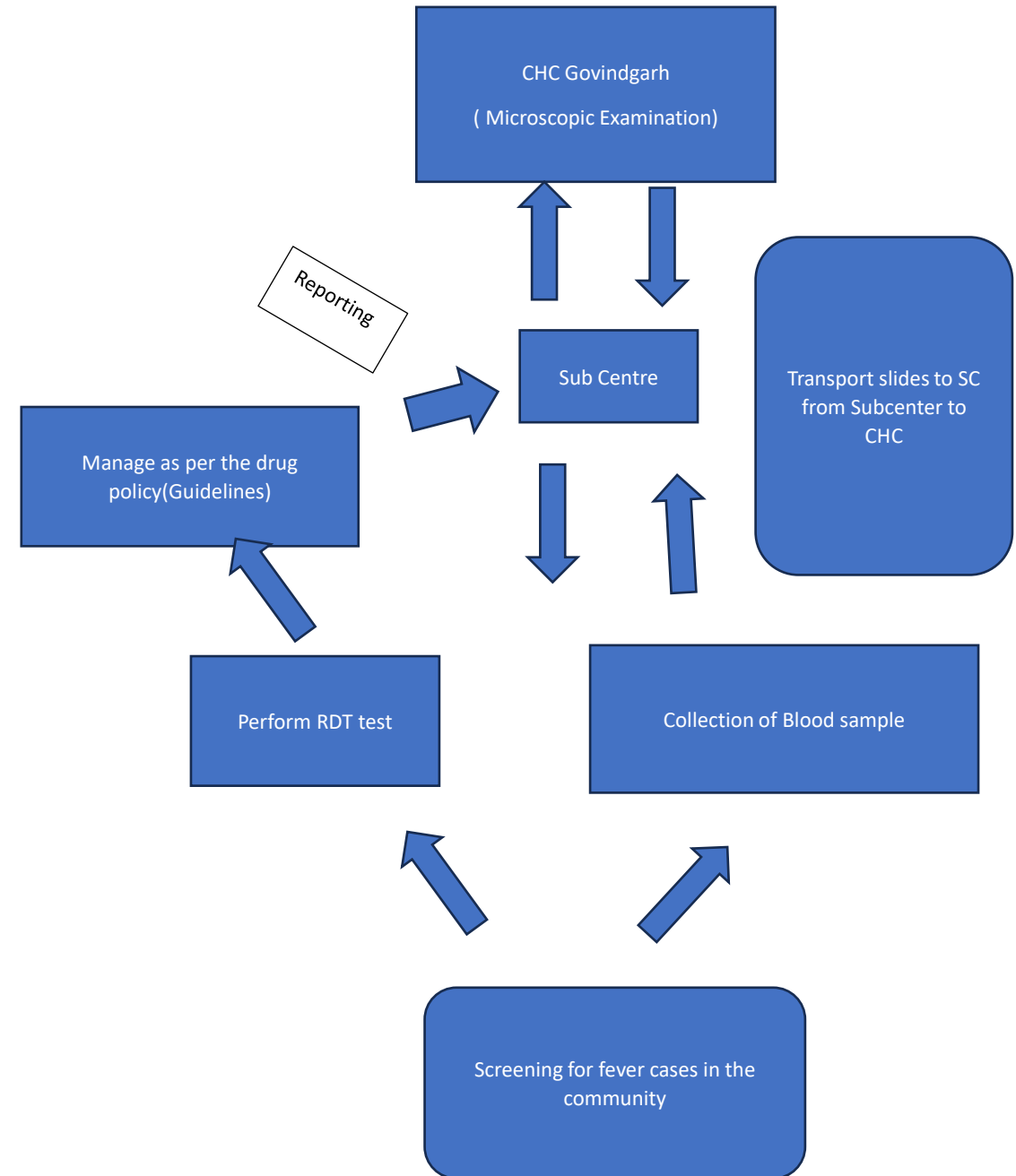


## Study Area :

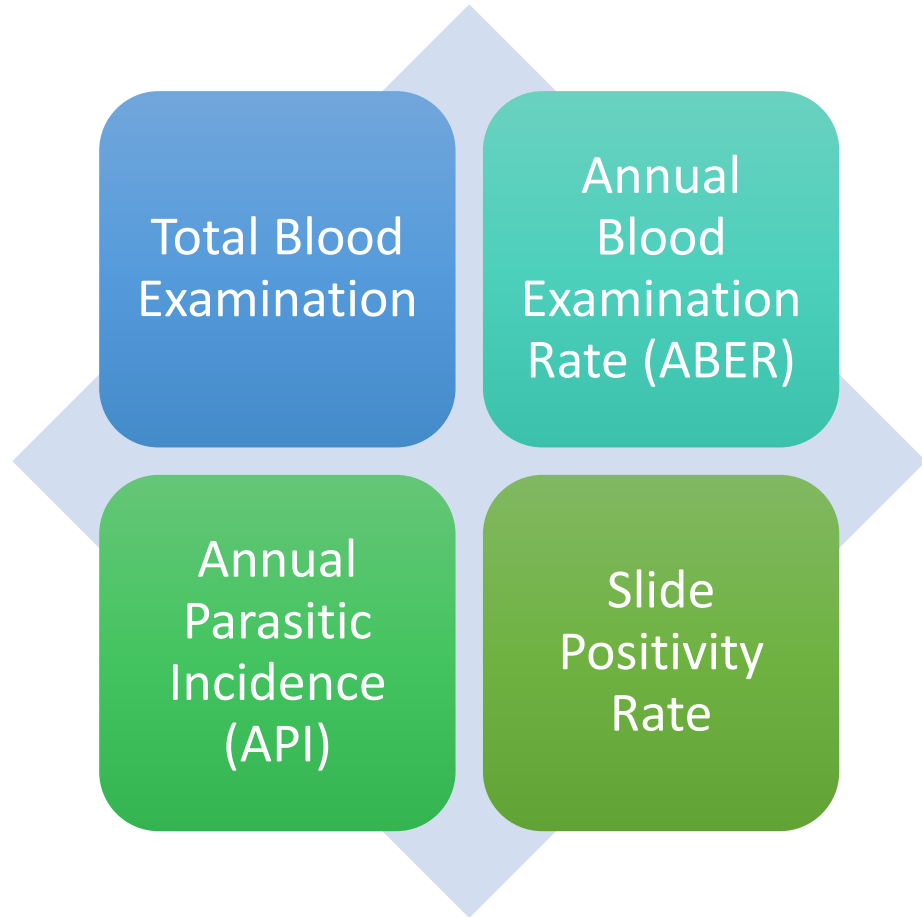
Govindagarh CHC

# Study Area : Govindagarh CHC

- **Situated in Jaipur I district in Rajasthan State**
  - **Total Beds: 30**
  - **Total Staff: 60**
  - **ASHAs: 30**
- **Coverage Population: 29690**
- **SIX Health Facilities under this CHC:**
  1. **Dhoblai Health and Wellness Centre**
  2. **Malikpur Health and Wellness Centre**
  3. **Narsingpura Health and Wellness Centre**
  4. **Shyaoo sub-center**
  5. **Kannipura Sub Centre**
  6. **Sitarampura Sub Centre**

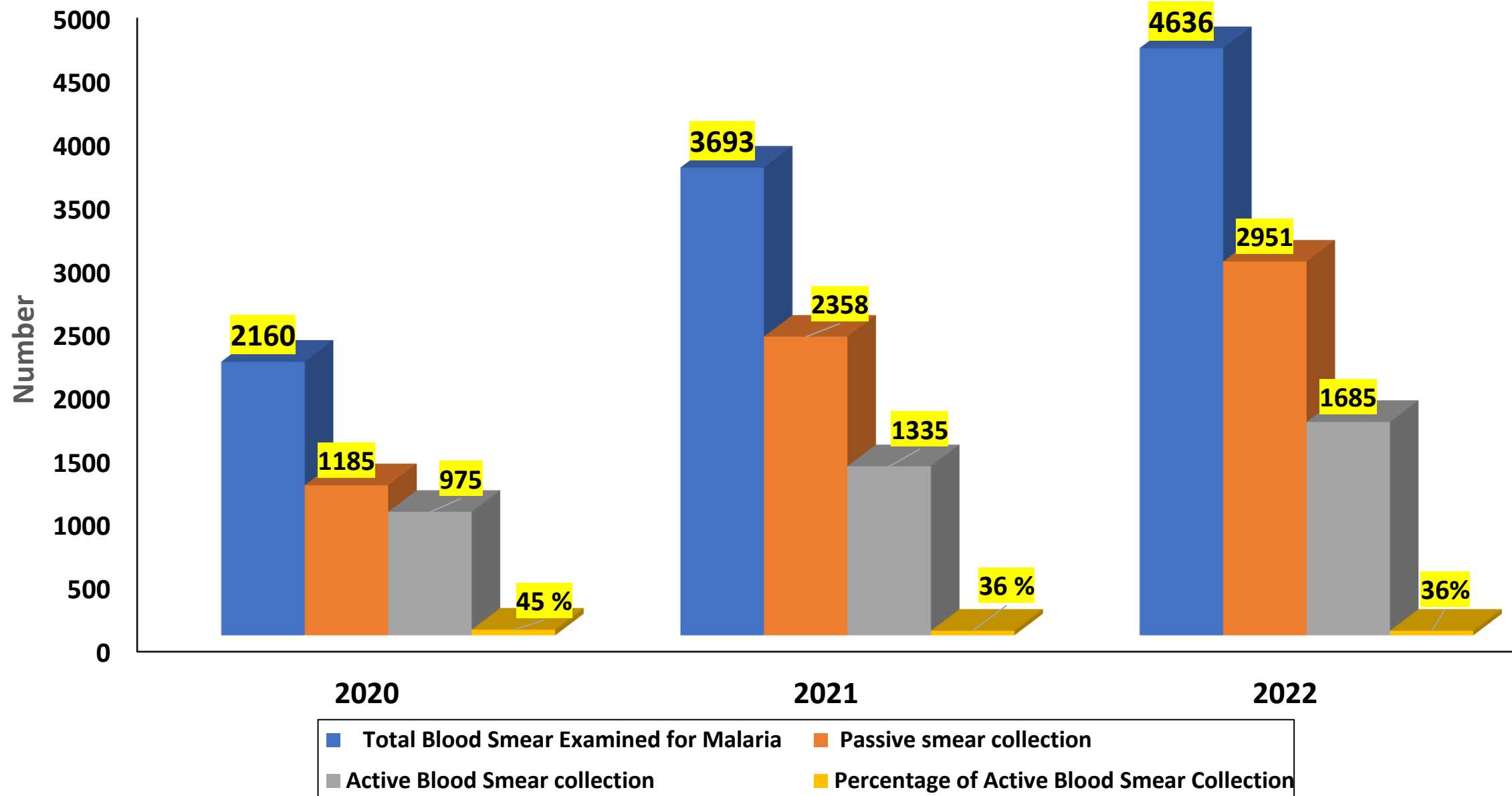


# SERVICE STATISTICS

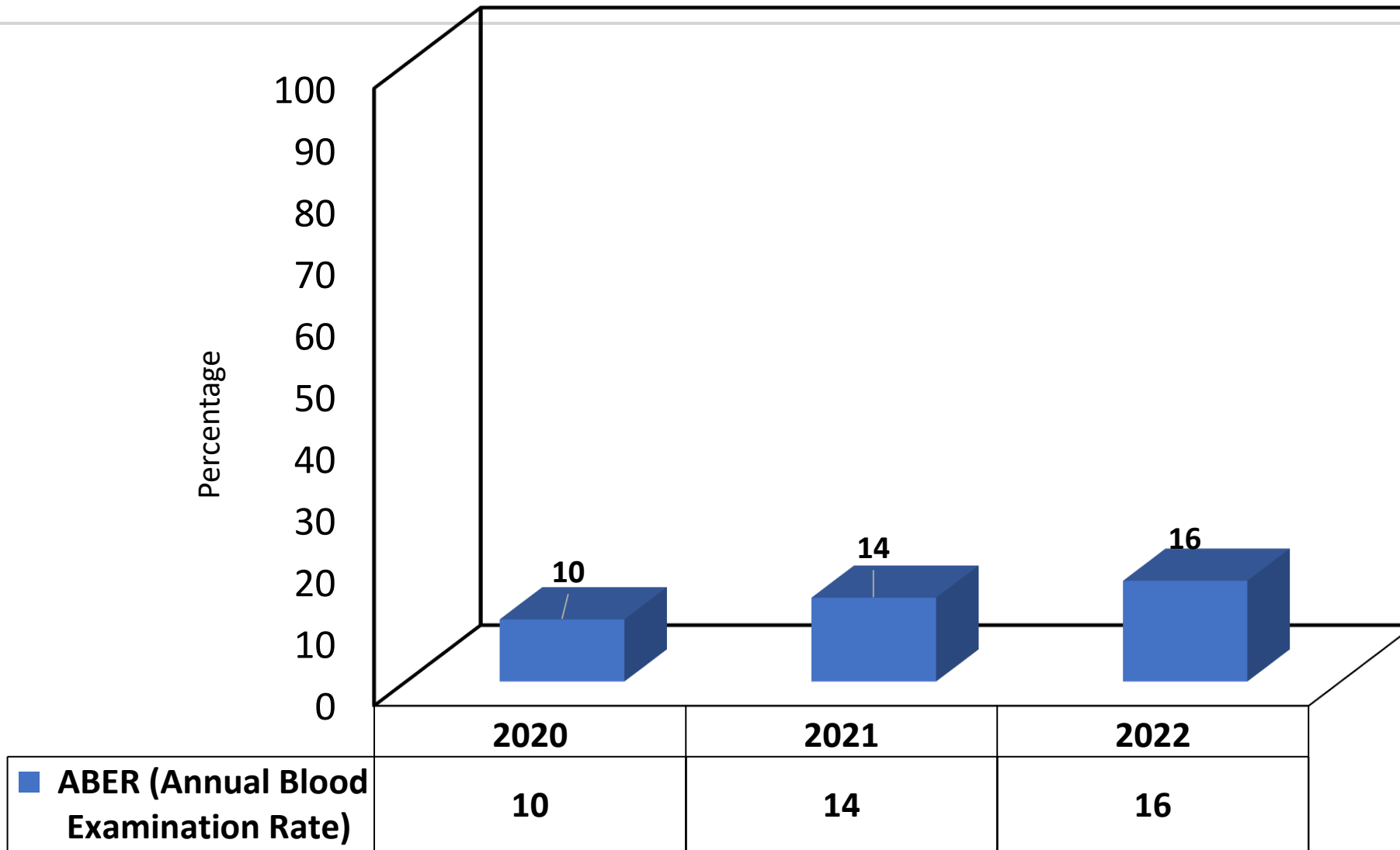




# Number of Slide Examination



# ABER of Govindgarh CHC



# Annual Parasitic Incidence (API) and Slide Positivity Rate

- No cases were confirmed as malaria positive from microscopic examination in 2018.
- API and SPR both are zero (0)
- CHC Govindgarh is in category 1 ( $API < 1$ )
- No deaths due to Malaria for last 5 years.

# Number RDT TESTS:

| B. Malaria RDT                                   | 2020 | 2021 | 2022 |
|--------------------------------------------------|------|------|------|
| RDT conducted for Malaria                        | 146  | 202  | 19   |
| Malaria RDT Conducted P Vivax Test +ve)          | 3    | 16   | 2    |
| Malaria RDT Conducted P Falciparum Test +ve)     | 0    | 0    | 0    |
| Patients Treated on Outpatient Basis for Malaria | 3    | 16   | 2    |

# Challenges and Enablers

---

| Problems/Challenges                                                                                                                                                                                         | Enablers                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Focus has been made on NCDs by the GoR, therefore, less attention was observed for Malaria Elimination</li> </ul>                                                    | <ul style="list-style-type: none"> <li>ASHAs Mobilization for active surveillance</li> </ul>                                              |
| <ul style="list-style-type: none"> <li>Inaccuracy in data recording and reporting</li> </ul>                                                                                                                | <ul style="list-style-type: none"> <li>Incentivisation of ASHA in Malaria program</li> </ul>                                              |
| <ul style="list-style-type: none"> <li>Training is a continuous phenomenon, which is not happening. ASHAs were not trained on RDT, lack of competence among ASHAs in preparation of blood slides</li> </ul> | <ul style="list-style-type: none"> <li>Basic knowledge on prevention of Malaria among ASHAs</li> </ul>                                    |
| <ul style="list-style-type: none"> <li>Delay in release of incentives to ASHAs</li> </ul>                                                                                                                   | <ul style="list-style-type: none"> <li>Availability of logistics and resources, availability of microscopic examination at CHC</li> </ul> |
| <ul style="list-style-type: none"> <li>Lack of clarity in malaria specific responsibilities among staff (ANMs as supervisor to ASHA)</li> </ul>                                                             | <ul style="list-style-type: none"> <li>Trained and qualified Lab staff</li> </ul>                                                         |
| <ul style="list-style-type: none"> <li>Program guideline is not found in OPD and not followed properly (Clinical Mgt)</li> </ul>                                                                            | <ul style="list-style-type: none"> <li>Integrated program for Vector borne diseases</li> </ul>                                            |
|                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Rapid response team is formed before/during outbreak</li> </ul>                                    |
|                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Pachayat's active involvement in solving issues proposed by the sub-centre</li> </ul>              |



## Shortlist of Five most important Problems/Challenges

- |   |                                                                                                                                                                     |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | • Focus has been made on NCDs by the GoR, therefore, less attention was observed for Malaria Elimination                                                            |
| 2 | • Training is a continuous phenomenon, which is not happening. ASHAs were not trained on RDT, lack of competence among ASHAs in preparation of quality blood slides |
| 3 | • Inaccuracy in data recording and reporting                                                                                                                        |
| 4 | • Delay in release of incentives to ASHAs                                                                                                                           |
| 5 | • Lack of clarity in malaria specific responsibilities among staff (ANMs as supervisor to ASHA)                                                                     |

| Problems                                                                                         | Suggestive Actions                                                                                                                        | Feasibility | Priority     |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|
| 1. Lack of attention on Malaria Elimination at local level                                       | • Increase functionality of VHSNC, SHGs for active participation                                                                          | Swift       | Top          |
|                                                                                                  | • Sensitization of teachers and school children for malaria preventive activities                                                         | Swift       | Intermediate |
| 2.Lack of RDT training and refresher training                                                    | • Continuous training on RDT and refresher training for Blood smear preparation for ASHAs                                                 | Swift       | Top          |
|                                                                                                  | • Quality check of slides prepared by ASHAs                                                                                               | Swift       | Inter        |
|                                                                                                  | • Onsite mentoring by lab staff for skill building                                                                                        | Challenging | Top          |
| 3.Inaccuracy in data recording and reporting                                                     | • Continuous training on Recording and Reporting to all staff including frontline workers                                                 | Swift       | Top          |
|                                                                                                  | • Regular monitoring of recording and reporting                                                                                           | Swift       | Top          |
|                                                                                                  | • Monthly meeting focusing on progress of malaria elimination and decision making, planning etc                                           | Swift       | Low          |
| 4. Delay in release of incentives to ASHAs                                                       | • Transparency in online data entry and linkages with incentives                                                                          | Challenging | Intermediate |
|                                                                                                  | • Supportive supervision in terms of field visits and mentoring to motivate ASHAs (conflict management)                                   | Challenging | Top          |
| 5. Lack of clarity in malaria specific responsibilities among staff (ANMs as supervisor to ASHA) | • Clarity in roles and responsibilities for ASHAs and ANMs for malaria related work in simple and easy language (integration of all work) | Swift       | Intermediate |

## Shortlist of five most important Enablers

- 1 ASHAs Mobilization for active surveillance
- 2 Incentivisation of ASHA in Malaria program
- 3 Availability of logistics to ASHA (Slides /Lancet) and microscopic examination
- 4 Trained and qualified Lab staff
- 5 Basic knowledge on prevention of Malaria among ASHAs

| Best Practices                                                                                                                   | Supporting actions required to sustain the best practices                                                |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>ASHAs Mobilization for active surveillance</li> </ul>                                     | <p>Continuous training and refresher training for ASHAs with onsite mentoring for skill up-dation</p>    |
| <ul style="list-style-type: none"> <li>Incentivisation of ASHA in Malaria program</li> </ul>                                     | <p>Verify the slides send and incentive received on the basis of records and reports</p>                 |
|                                                                                                                                  | <p>Encourage ASHAs to screen all fever cases in the community for getting better amount</p>              |
| <ul style="list-style-type: none"> <li>Availability of logistics to ASHA (Slides /Lancet) and microscopic examination</li> </ul> | <p>Co-ordinate with the store department</p>                                                             |
|                                                                                                                                  | <p>Cross verify the expenses and reports</p>                                                             |
|                                                                                                                                  | <p>Maintain buffer stock at HWC/ Sub center</p>                                                          |
|                                                                                                                                  | <p>Use latest updated version of microscope (rather old one)</p>                                         |
| <ul style="list-style-type: none"> <li>Trained and qualified Lab staff</li> </ul>                                                | <p>Utilize the lab staff training competence for ASHAs for demonstration of preparing quality slides</p> |
| <ul style="list-style-type: none"> <li>Basic knowledge on prevention of Malaria among ASHAs</li> </ul>                           | <p>Enhance knowledge by conducting meetings and sharing knowledge with other ASHAs</p>                   |

# RECOMMENDATION



Regular and  
refresher training.



Motivation



Effective  
Monitoring



Supportive  
Supervision



Engagement of  
local Stakeholder



Blood smear collection by ASHAs  
in Field

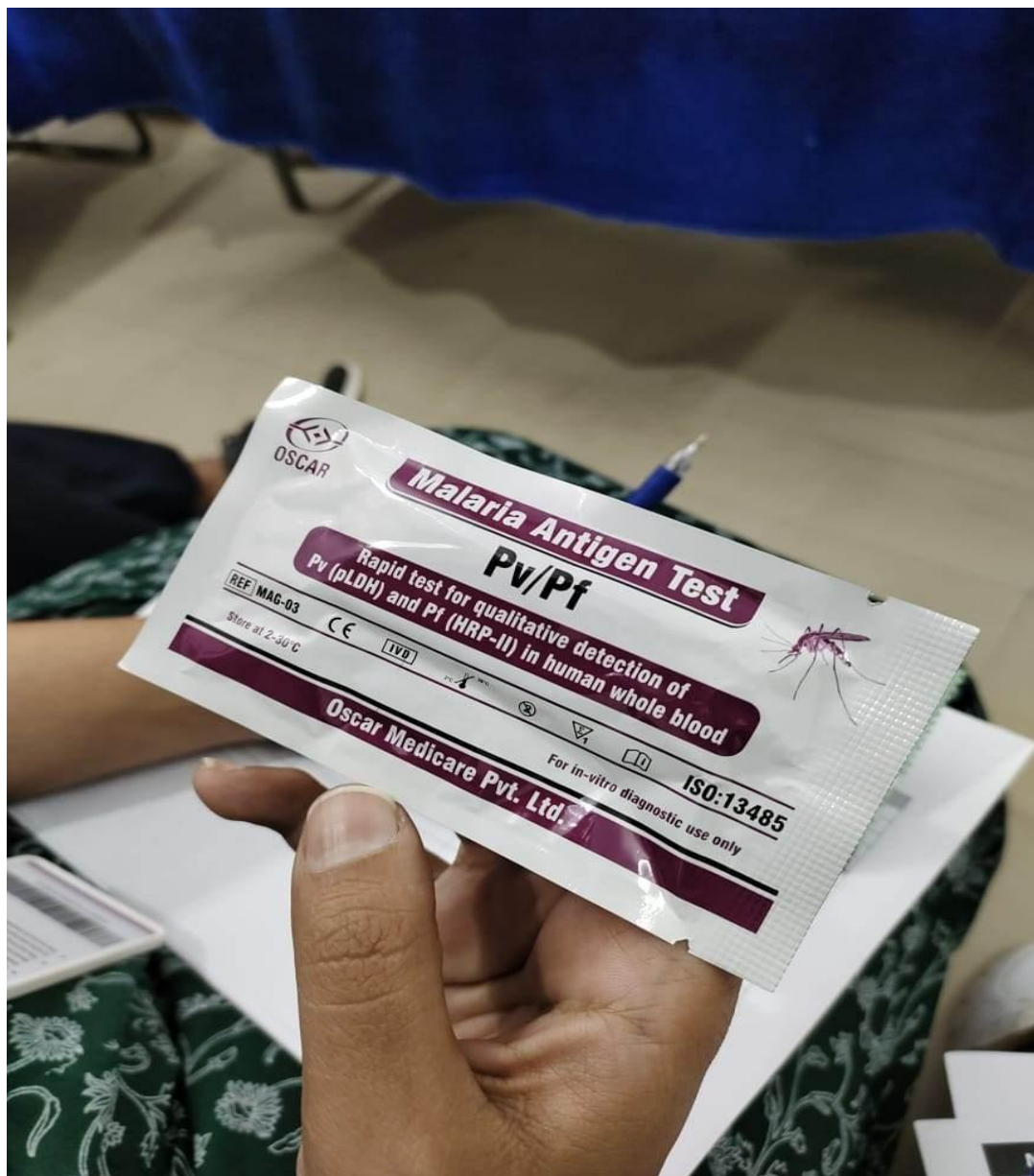


















मलेरिया, डेंगू और चिकनगुनिया से बचाव का सरल और व्यावहारिक सरल उपाय

**हर रविवार - 30 मिनट - डेंगू, मलेरिया पर चार**

प्रत्येक रविवार प्रातः 8 बजे से 8:30 बजे तक परिवार का प्रत्येक सदस्य निम्न बातों का रखें ध्यान।

- \* फ्रिज ट्रे, कुलर
- \* चाइनीज बेम्बू, मनी प्लांट
- \* सजावटी फव्वारा
- \* फूलदान, गमलों की ट्रे
- \* बाल्टी, ड्रम
- \* खुले में पड़ा कबाड़ का सामान



STOP MALARIA, DENGUE



अपने परिवार को मलेरिया, डेंगू और चिकनगुनिया से बचाने के लिए मच्छर पैदा होने के बताए गए स्थानों को सप्ताह में एक बार रगड़ कर अवश्य साफ करें, सूखने के बाद ही पानी भर कर उपयोग में लें और पानी के पात्रों को हमेशा ढक कर रखें।

मलेरिया, डेंगू और चिकनगुनिया से बचाव का सरल और व्यावहारिक सरल उपाय

# References:

1. NATIONAL FRAMEWORK FOR MALARIA ELIMINATION IN INDIA (2016-2030)  
DIRECTORATE OF NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME  
(NVBDPC) DIRECTORATE GENERAL OF HEALTH SERVICES (DGHS) MINISTRY OF  
HEALTH & FAMILY WELFARE GOVERNMENT OF INDIA Government of India.
2. Ministry of Health and Family Welfare.
3. Ministry of Health and welfare India.
4. Guidelines for Involvement of ASHAs in VBDs.
5. J. Kishore. National Health Programs of India. 14th ed. New Delhi: Century  
Publications; 2022. 1–1038 p.
6. Secondary data of the CHC





- THANK YOU

