

# **MALARIA ELIMINATION: ARE WE READY?**

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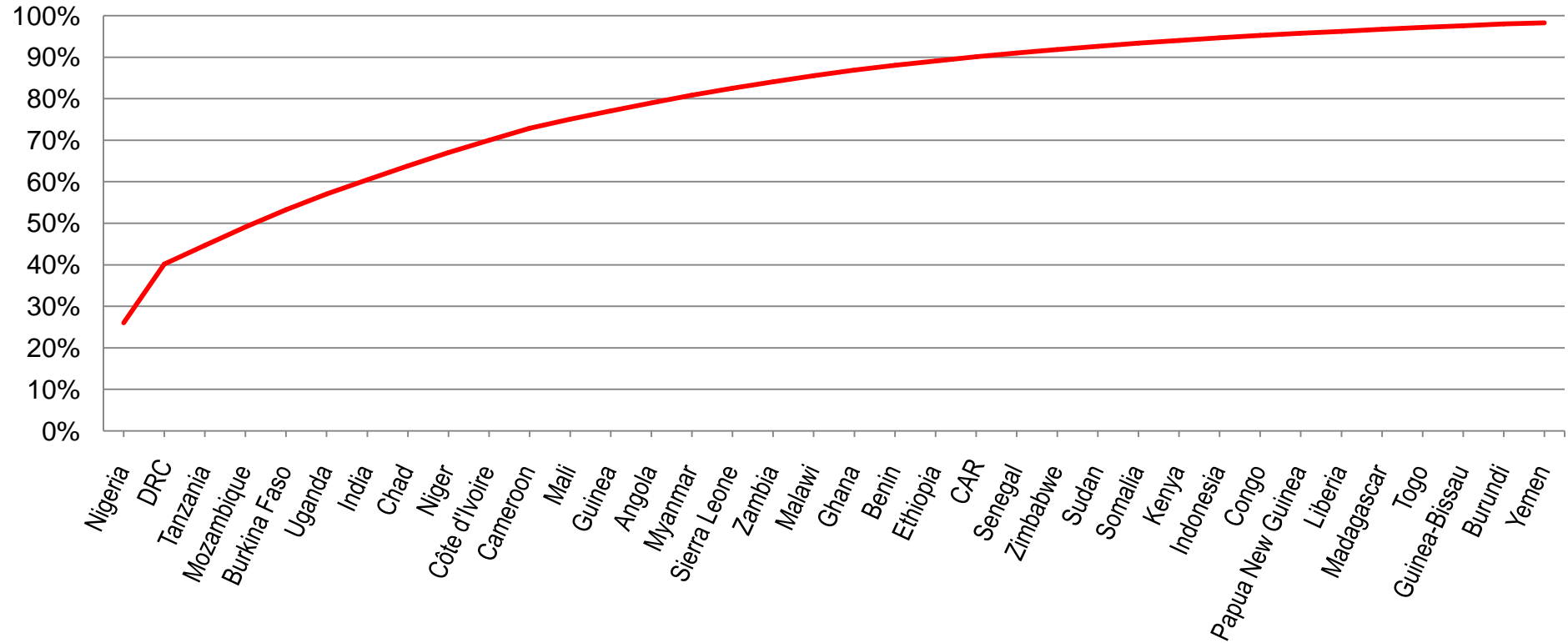
# Outline

- **Where are we today?**
- **WHO Global Malaria Programme**
- **Much ado about Malaria Elimination?**
- **Major challenges ahead**
- **Concluding thoughts**

# Where are we today?

- **Malaria mortality rate estimates:**
  - 25% decline globally
  - 33% decline in the WHO African Region over past decade
  - More than 1 million lives saved (World Malaria Report 2014)
- Most malaria endemic countries are scaling interventions for impact
- A true reflection of the global situation ? or malaria has been over diagnosed in the past? Presumptive diagnosis cases as positive cases?

# The burden of malaria in sub-Saharan Africa and Nigeria

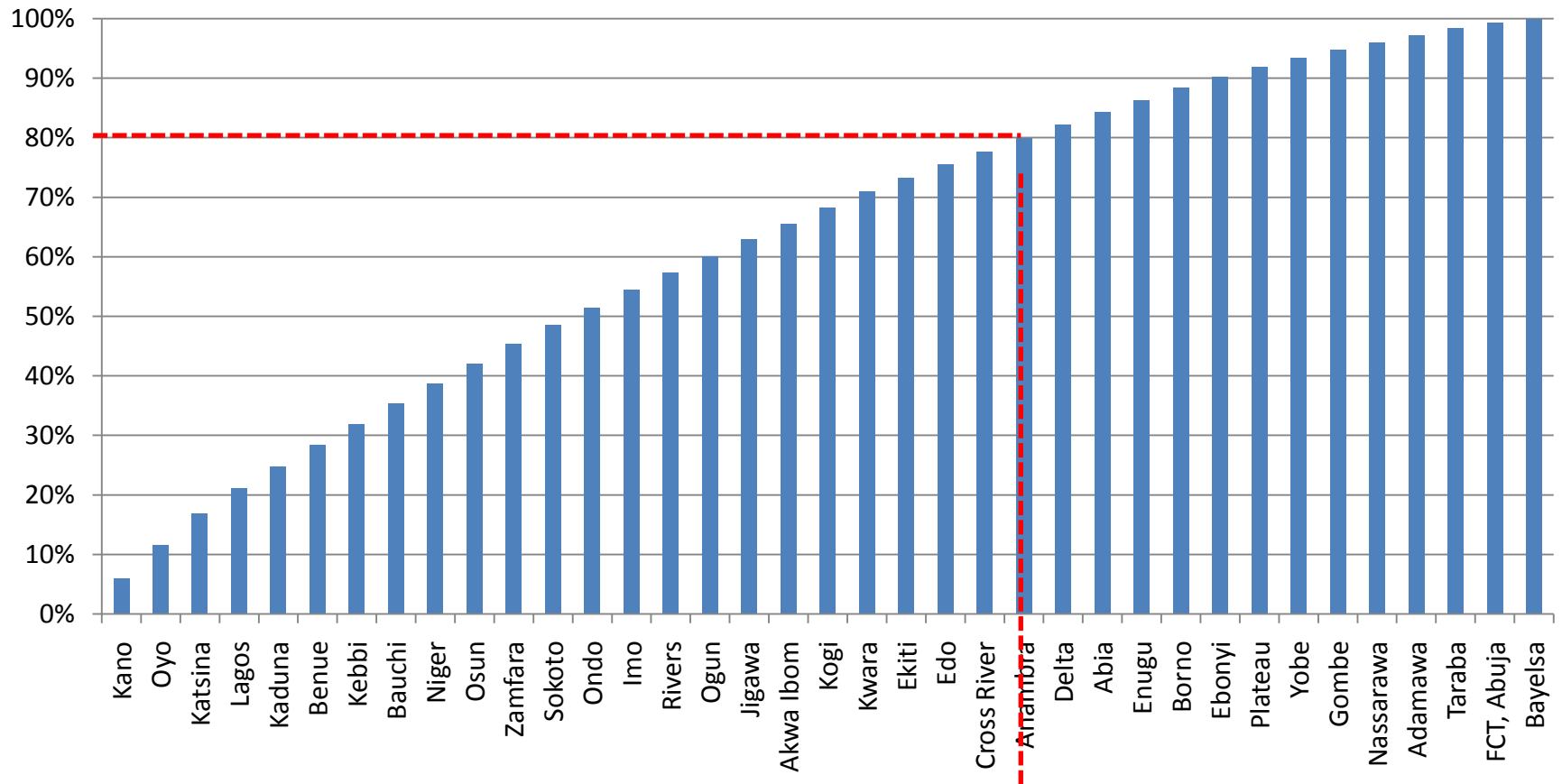


- **216 million cases** (149-274 Million),  $\approx$  **81%** in Africa
- **655,000 deaths** (539,000 – 906,000) - **91%** in Africa, **86%** in children under 5 (1 death every 45 seconds)

# Disease burden:

## 24 states account for ~80% of malaria case load in children

Cumulative contribution to absolute case load among <5 children



(NMIS 2012)

# **WHO Global Malaria Programme**

# Current evidence-based strategies and actions

## Prevention

- Long Lasting Insecticide Treated Nets (LLINs)
- Indoor Residual Spraying
- Larval source reduction

In areas of high and stable transmission

- IPT in pregnancy (IPTp)
- IPT in infancy (IPTi)

In areas of high seasonal transmission

- Seasonal Malaria Chemoprevention (SMC)

## Diagnosis & Treatment

- Parasite based diagnosis
  - Microscopy
  - Rapid Diagnostic Tests
- Artemisinin-based combination therapies (ACTs)
- IV Artesunate (Severe malaria)

Case management service delivery areas::

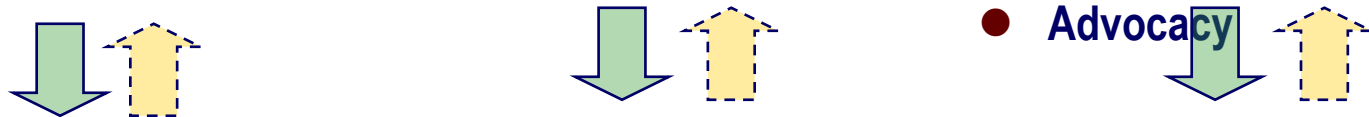
- Health facilities
- Community Case Management
- Private sector

## Surveillance, M & E and Research

- Routine HMIS
- Malaria surveillance and response systems
- Household surveys

## Advocacy Communication and Social mobilization

- BCC/IEC
- Community sensitization
- Advocacy



**Strengthening health systems**

# ***WHO Global Technical Strategies 2015-2025***

- Vision: Achieve zero new infections
  - Goal : By 2025, cases of malaria reduced by 50% of 2015 baseline.
  - All at risk persons have access to locally recommended preventive interventions
- Vision: Achieve zero malaria deaths
    - Deaths due to malaria reduced by half compared to 2015 and reduced to zero in four regions
    - All persons with suspected malaria receive a parasitological confirmation by either microscopy or rapid diagnostic test
    - All persons with confirmed malaria have access to quality-assured first line treatment
    - All confirmed cases of malaria are tracked in a surveillance system



# ***Strategic directions***

Prevent cases and reduce transmission

Test, Treat and Track all malaria cases

Sustainability, Acceleration and Innovation

# *Prevent Cases and reduce transmission*

Long Lasting  
Insecticidal Nets

Indoor Residual  
Spraying

Seasonal Malaria  
Chemoprophylaxis

Intermittent  
Preventive  
Therapy

New approaches  
e.g Malaria  
Vaccine

- Most powerful and most broadly applied prevention interventions are long-lasting insecticidal nets (LLINs) and indoor residual spraying (IRS).
- Preventive chemotherapy like SMC and IPT
- New approaches being tested to reduce transmission and will inform policy guidance as evidence emerges e.g malaria vaccines

# Test, Treat and Track all malaria cases

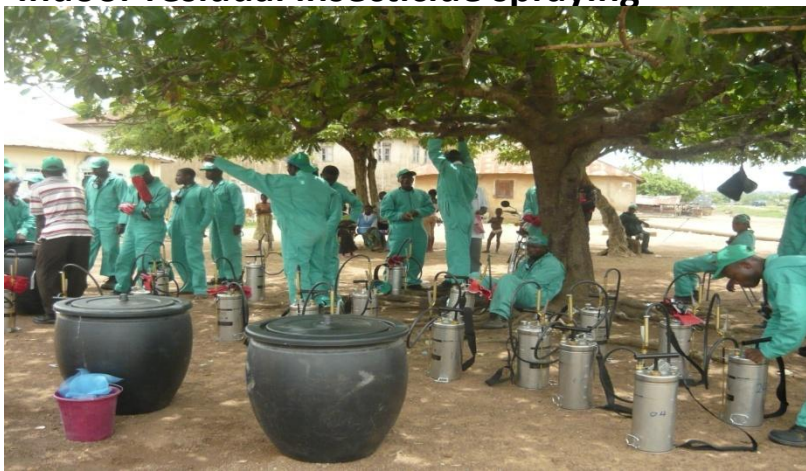


- Every suspected malaria case should be **tested**
- Every confirmed case should be **treated** with a quality-assured antimalarial medicine.
- Every malaria case should be **tracked** in a surveillance system



Larviciding

Indoor residual insecticide spraying



Environmental management



11/09/2015

**Much ado about elimination**

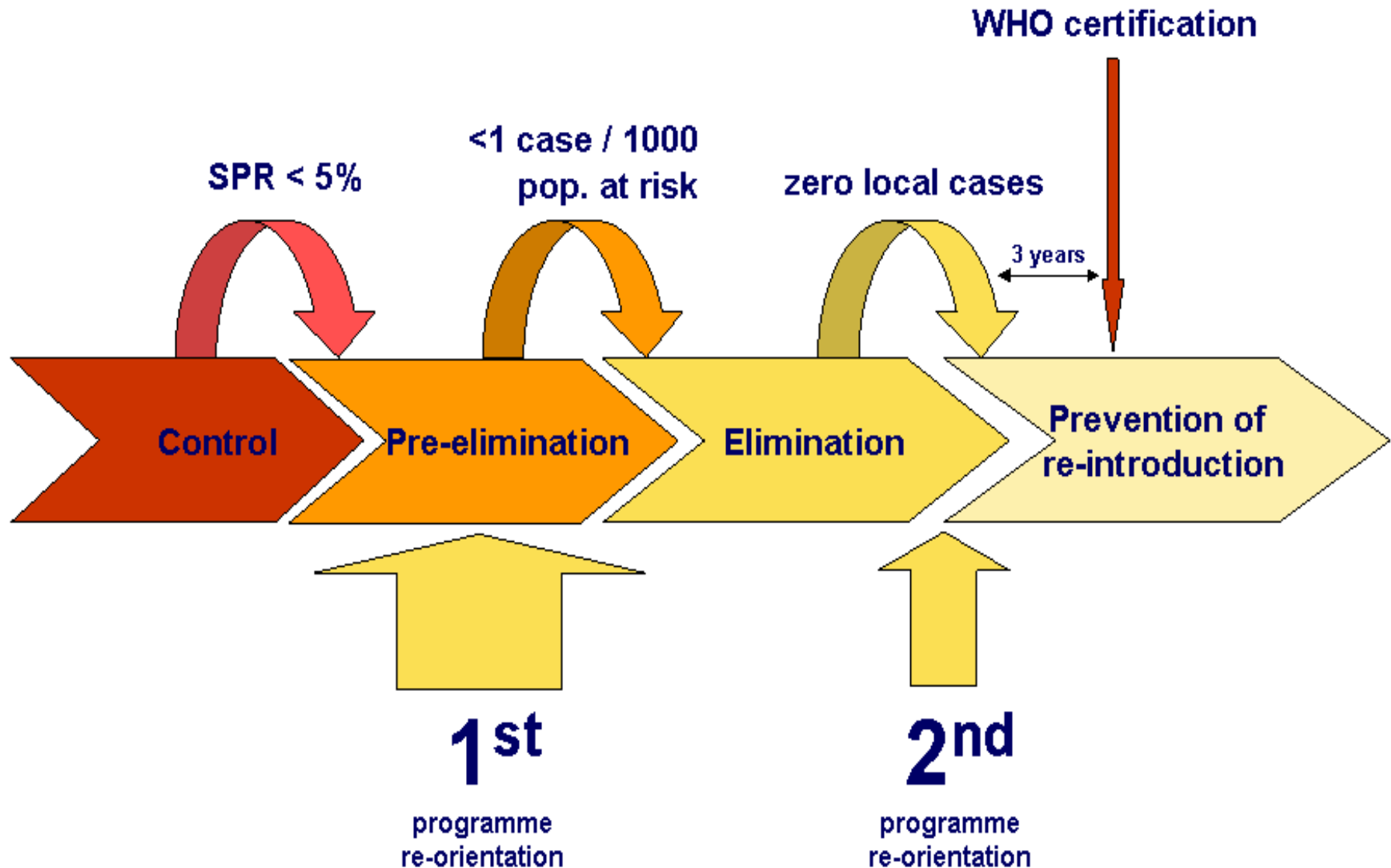
## **Malaria: From Control to Elimination and Eradication**

**Control:** Reducing the malaria burden to a level where it is no more a major public health problem

**Elimination:** Stopping or halting local mosquito transmission

**Eradication:** extermination of the malaria parasites from the globe.      a tall order ?

# Focus goal: Malaria Control to elimination.



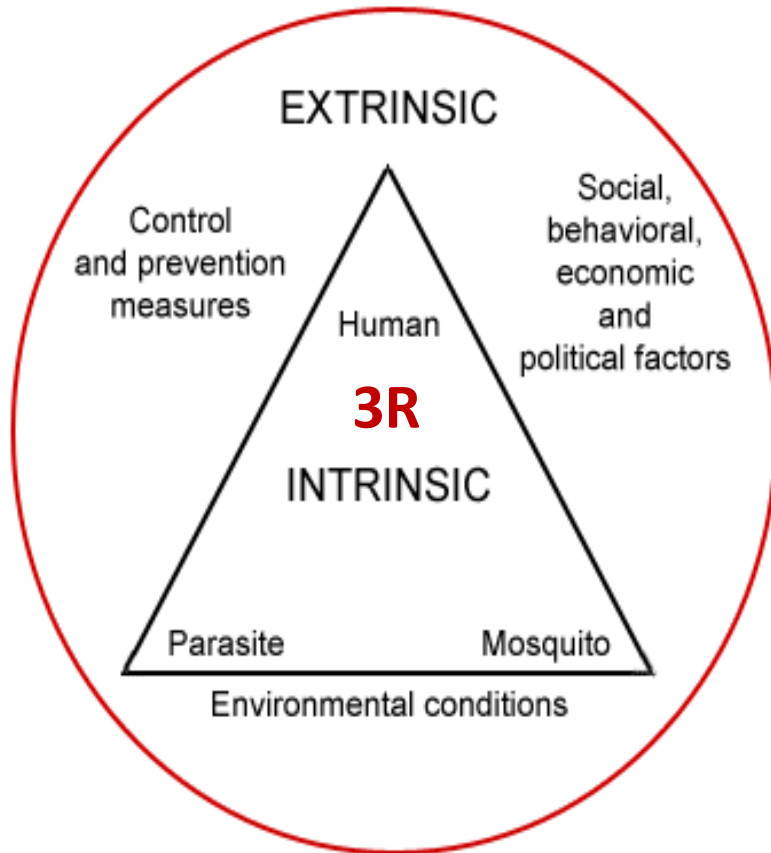
**What major challenges lie ahead**



## *Malaria Vaccine (Magic bullet?): progress*

- No commercially available malaria vaccine, despite decades of intense research and development effort.
- The most advanced vaccine candidate against *Plasmodium falciparum* is RTS,S/AS01.
- Ongoing clinical trial with 15,460 children: Burkina Faso, Gabon, Ghana, Kenya, Malawi, Mozambique & Tanzania.
- Depending on the full phase 3 results, the first WHO policy recommendations on use may occur in 2015.
- The policy timings will depend on the outcome of the regulatory process with the European Medicines Agency.

# One size does not fit all.....



- Thorough understanding of the extrinsic and intrinsic factors of malaria transmission.
- **Stratification of malaria risk**
- Targeted intervention within local context
- Monitoring of the efficacy of interventions
- **Increased funding of priority research**



**Artemisia annua, CNAP, York UK**

# *there are pre-requisites.....*

- **Research** driven interventions
- Strong political will
- Availability of resources (DOMESTIC)
- Inter-sectoral collaboration
- Vibrant Behavioural Change Communication
- Community participation
- Sustainability mechanism
- A strengthened health system
- Public private partnerships

**Concluding thoughts**

# *The Nigeria Pre-elimination Plan*



## National **MALARIA** Strategic Plan

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*2014 – 2020*

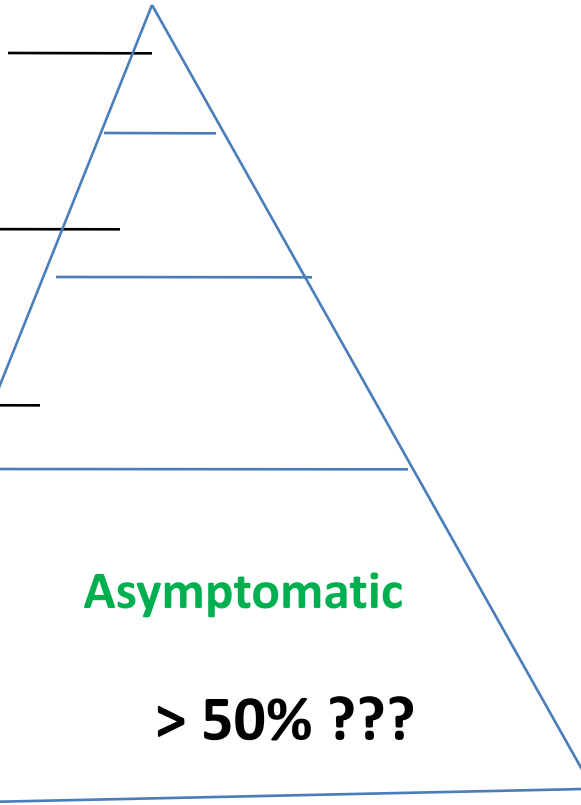
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**National Malaria Elimination Programme**  
Federal Ministry of Health,  
Abuja,  
Nigeria.

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# Malaria burden

Fatal: ~ 660,000/year



Life threatening

Febrile illness

Asymptomatic

> 50% ???

Slide: Courtesy M. Molyneux (2001)

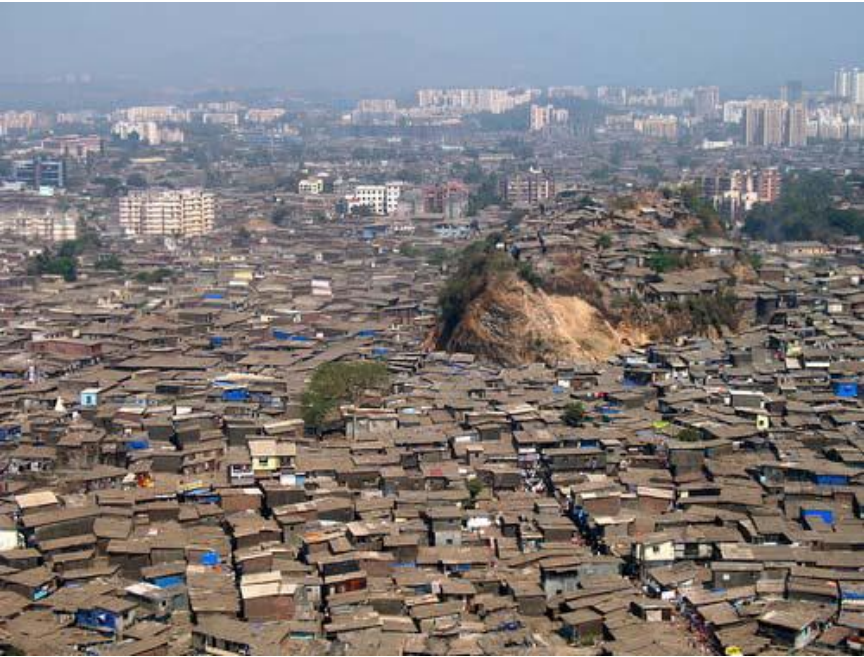
## Domestic funding for malaria is greatest among countries with Lowest malaria mortality rates

- What is the contribution of the FGN to malaria control ?
- What proportion of population protected by ITNs or indoor residual spraying (IRS) ?
- What is the proportion of suspected malaria cases attending public health facilities receiving a rapid diagnostic test ?
- The greatest current threat to continued success in malaria control and elimination is not Financial.

**Are the right people in the right places to drive elimination ?**



# Malaria elimination in the face of climate change and urbanization



## **Control to Eradication?**

“While keeping in mind the realities one can nevertheless be confident that malaria is well on its way towards oblivion. Already as a malariologist, I feel premonitory twinges of seclusion, and in my own organisation I am now a sort of ‘last survivor’. So perhaps it is fitting that I should take this backward glance at the fascinating pages of malaria history”.

Paul Russell 1955: Man’s Mastery of Malaria

**Malaria Elimination requires a holistic approach with a strong political commitment and the right people in the right place to drive the policy. The Elimination road map must be crystal clear with milestones otherwise this noble dream will be a mirage.**

**THANK YOU**