

WorldMEDSchool
GLOBAL EDUCATION

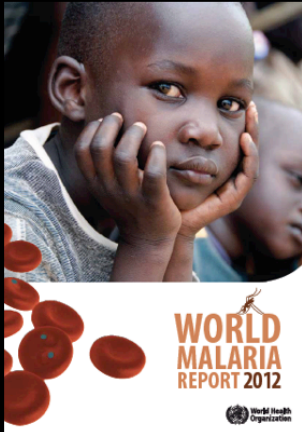
Malaria today (and tomorrow): progresses and challenges

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23 July 2013



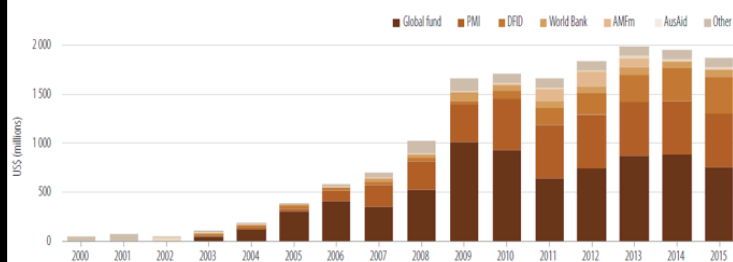
GLOBAL MALARIA
PROGRAMME

World Malaria Report 2012



International funding for malaria control has risen dramatically over past decade

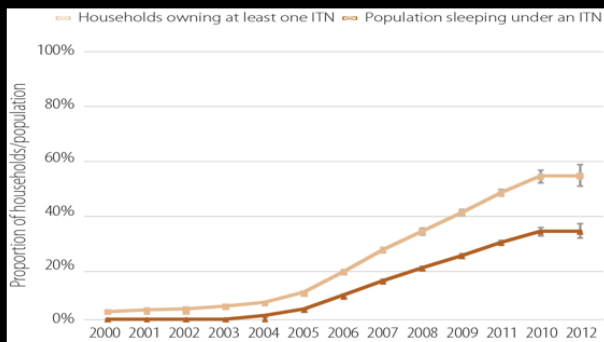
Figure 3.1 Past and projected international funding for malaria control 2000–2015



Current core global malaria control interventions



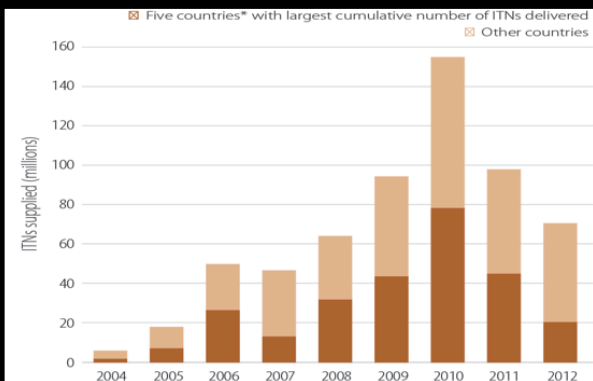
Access to and use of Insecticide Treated Nets (ITNs) in sub-Saharan Africa



Proportion of population sleeping under an ITN derived from relationship with household ownership of at least one ITN analyzed by linear regression in 48 household surveys 2001-2011, $y = 0.67x - 0.03$.

Source: ITN coverage model from the Institute for Health Metrics and Evaluation, which takes into account ITNs supplied by manufacturers, ITNs delivered by NMCPs and household survey results (1). Includes Djibouti, Somalia and Sudan which are in the WHO Eastern Mediterranean Region.

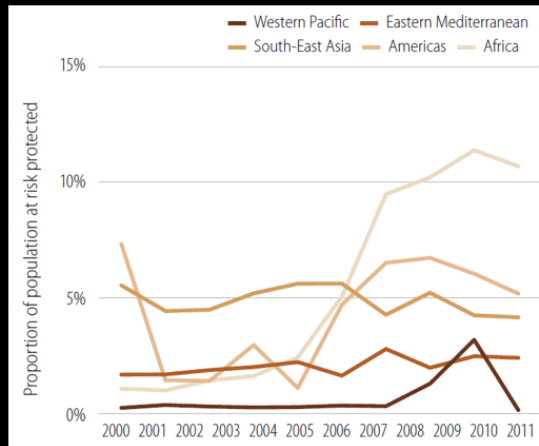
Major decreases in deliveries of insecticide treated nets (ITNs) over past 2 years



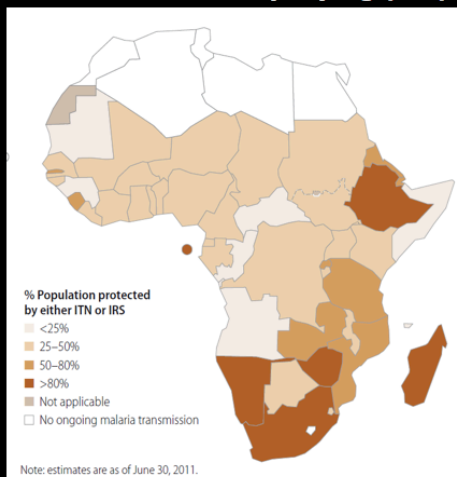
* Democratic Republic of the Congo, Ethiopia, Kenya, Nigeria, United Republic of Tanzania

Source: Alliance for Malaria Prevention. Data for the first three quarters of 2012 have been multiplied by 4/3 to provide an annual estimate.

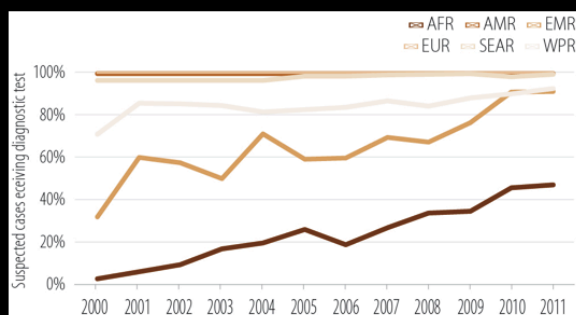
Proportion of population protected by indoor residual spraying (IRS)



Proportion of population protected by ITNs or indoor residual spraying (IRS)

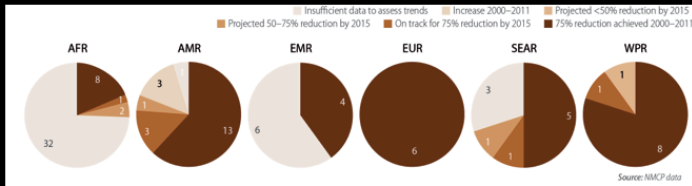


Proportion of suspected malaria cases attending public health facilities receiving a diagnostic test



Source: NMCP reports

50 countries are on track to reduce malaria case incidence by 75% by 2015: these account for only 3% of total estimated cases



MDG 6, Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria

Decrease: 55/100

Increased: 3/100

Insufficient data: 42/100

**Malaria mortality rate estimates:
25% decline globally
33% decline in WHO African Region
over past decade**

More than 1 million lives saved

Challenges

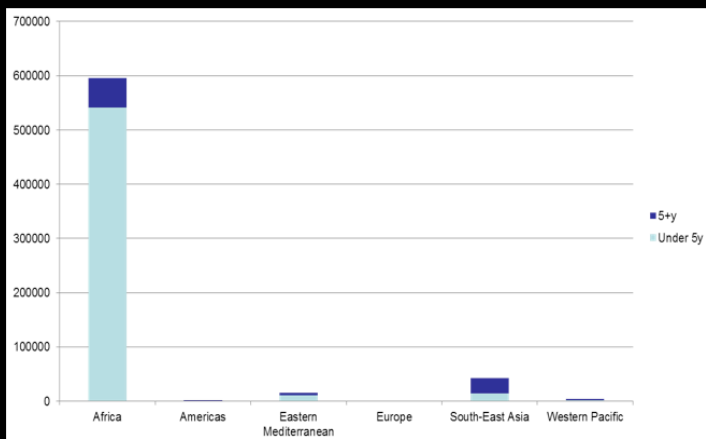


Bonnie Gillespie / Photoshare

Despite progress, malaria remains an enormous public health problem: 219 Million cases (uncertainty range: 154M to 289M) and 660,000 deaths (uncertainty range: 490,000 to 836,000) in 2010

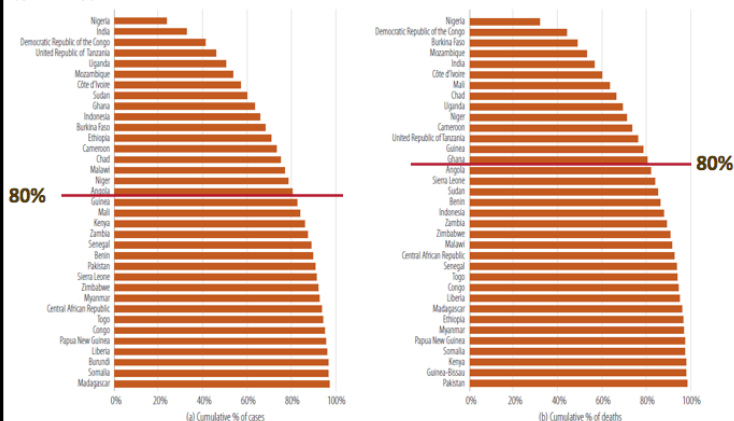


Malaria burden 2010: deaths by region & age group

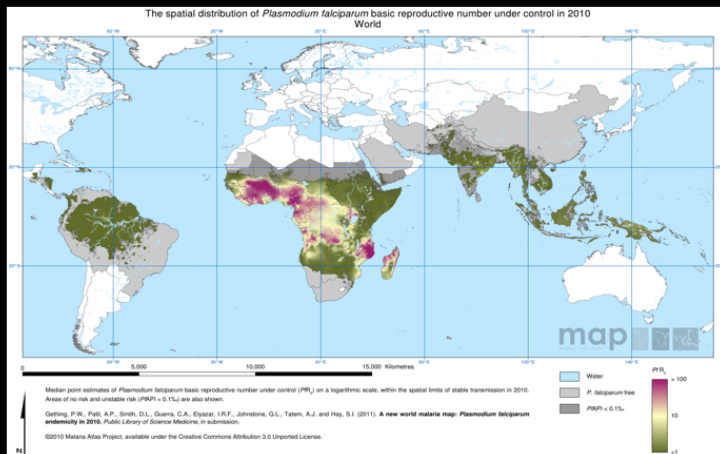


Malaria burden 2010: cases and deaths by country

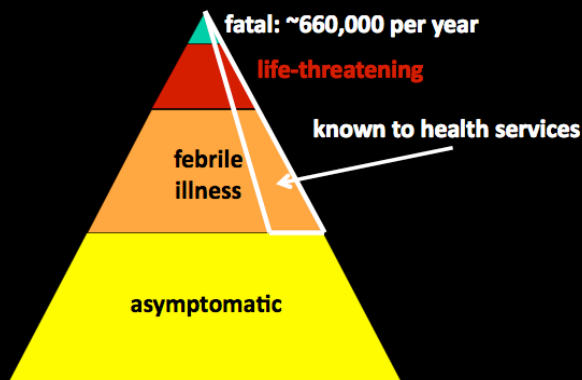
Figure 8.4 Cumulative proportion of the global estimated cases and deaths accounted for by the countries with the highest number of (a) cases and (b) deaths



Intrinsic potential for disease spread



Malaria burden



Artemisinin resistance: a major threat to malaria control and elimination efforts



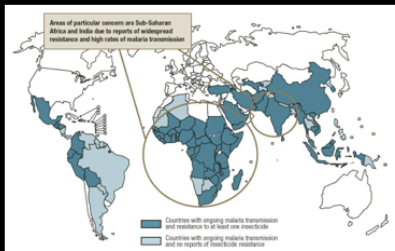
- Foci identified in four countries in Greater Mekong subregion, mainly along international borders
- Artemisinin resistance so far only confirmed in this region
- Containment efforts ongoing since 2008

Emergency response framework



- Emergency response based on strategic recommendations of joint assessment by development partners
- Proposed actions in line with recommendations from the Global Plan for Artemisinin Resistance Containment
- Aim not to replace existing national, regional or global strategies – but to increase coordination, quality and coverage of interventions
- Launched on World Malaria Day 2013 in Phnom Penh, Cambodia, where WHO is opening a new Regional Hub to coordinate efforts
- Global Fund has committed 100 million USD to combat artemisinin resistance in GMS

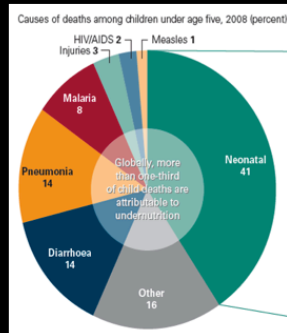
Anopheles mosquito resistance to insecticides: 64 countries and counting



Opportunities

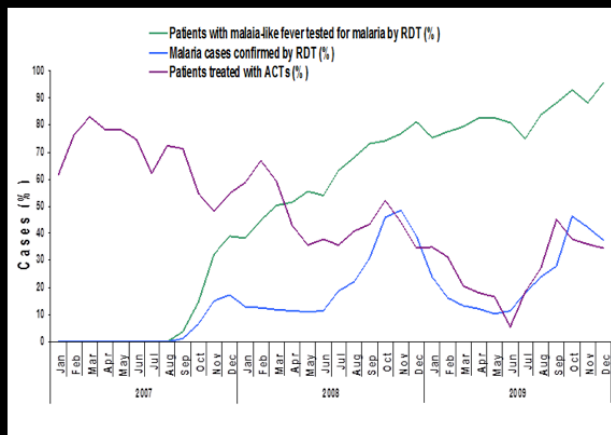
Integrated Community Case Management (iCCM)

- Diagnostic testing and treatment of malaria, as well as diagnosis and treatment of pneumonia, diarrhea at community level

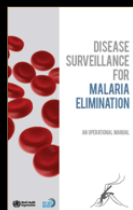
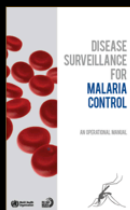


UN Child Mortality Report 2010

Scaling up diagnostic testing: Senegal example of improving intervention targeting

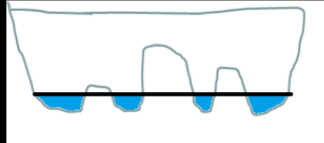


Surveillance: without it, we are flying blind

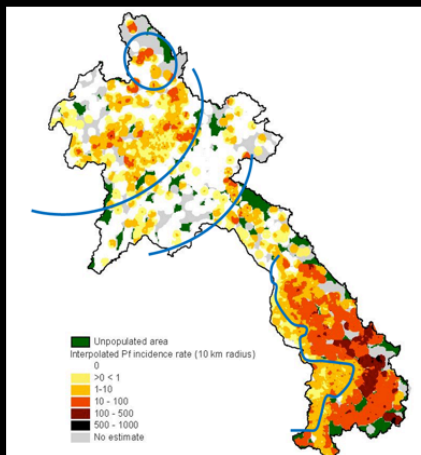


Launched in Namibia by
WHO Director-General on
World Malaria Day –
24 April 2012

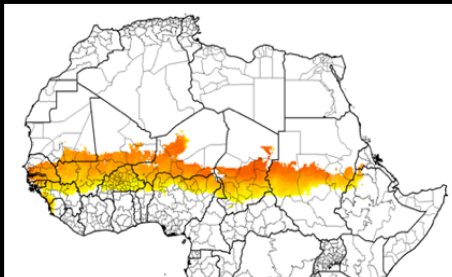
Reducing malaria transmission: like draining a pond



Malaria Stratification: Lao PDR



Seasonal Malaria Chemoprevention (SMC): Newly recommended intervention for children <5 years in Sahel sub-region of Africa



Prevents ~75% of all malaria episodes
Prevents ~75% of severe malaria episodes

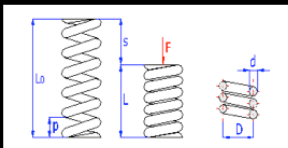
Concluding thoughts

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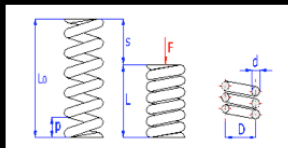
**The greatest current threat to
continued success in malaria
control and elimination is
financial**

**Fighting malaria is like
compressing a spring**

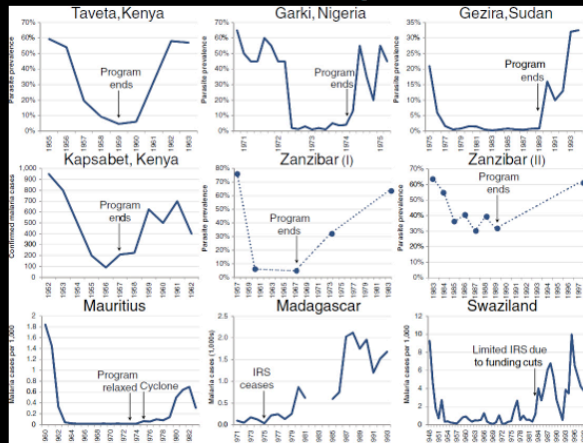
Investment ► Control



Dis-investment ► Resurgence



The risk of interrupted investment: malaria resurgences



Cohen et al. *Malaria Journal* 2012 11:122

Need to engage non-Health Sectors



Water and Sanitation



Military



Housing



Infrastructure Projects

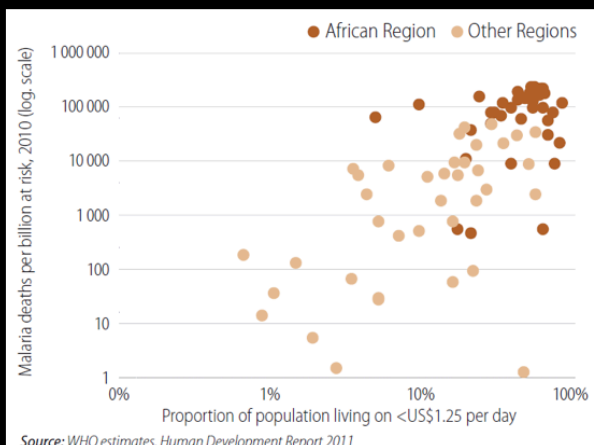


Environment



Education

Malaria and poverty are inextricably linked



Source: WHO estimates, Human Development Report 2011

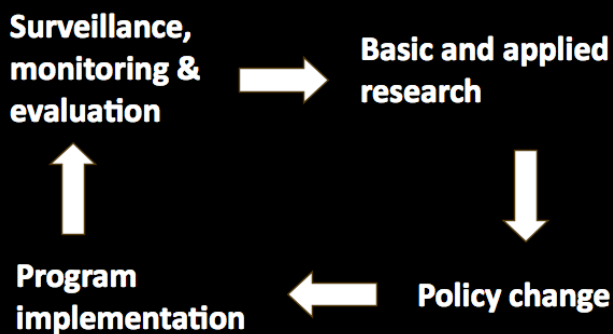
Health systems Human capacity

**Health commodities do not deliver
themselves**

**The fight against malaria can only be
won by well trained people**



Driving the malaria burden downward: a cycle of innovation



Need to avoid unhelpful dichotomies

Africa vs. Outside of Africa	➤	We need durable progress in both
Control vs. Elimination	➤	We need both
<i>Plasmodium falciparum</i> vs. <i>Plasmodium vivax</i>	➤	We need both
Attacking the vector vs. Attacking the parasite	➤	We need both
Saving lives today vs. Eradication tomorrow	➤	We need both



**Today, no one should die for
lack of a \$5 bednet, a 50 cent
diagnostic test, and a \$1
antimalarial treatment**

