

GOVERNMENT OF SIERRA LEONE

Ministry of Health

Sierra Leone



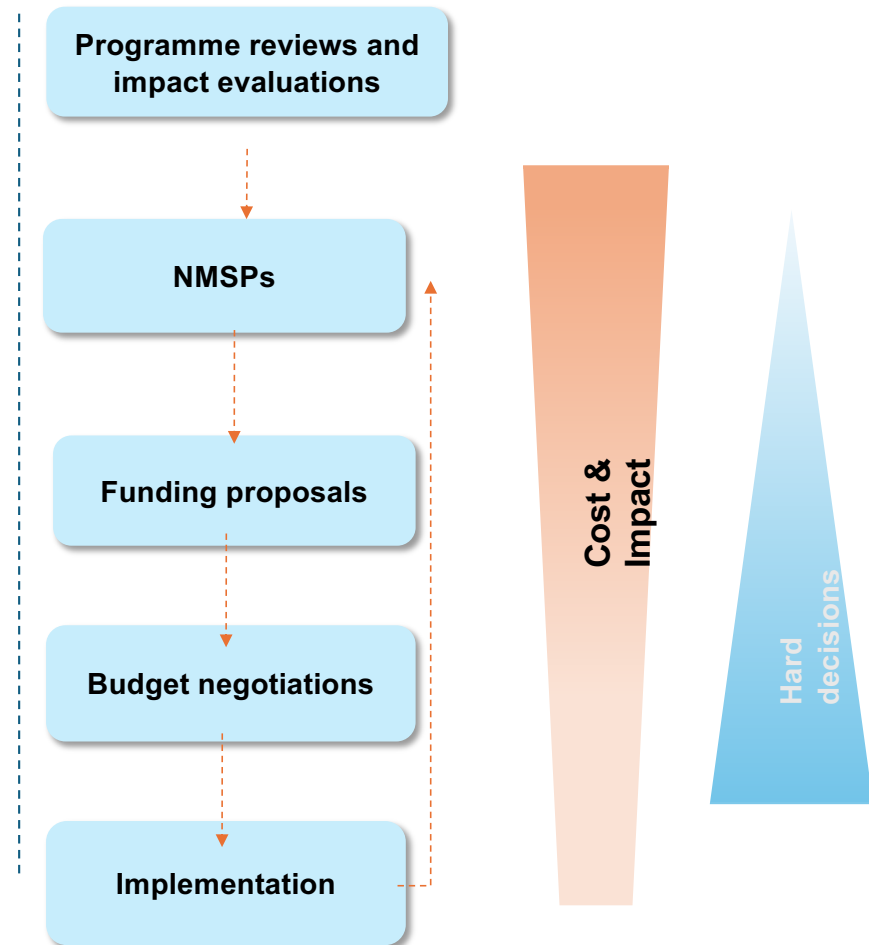
National Malaria Control Programme



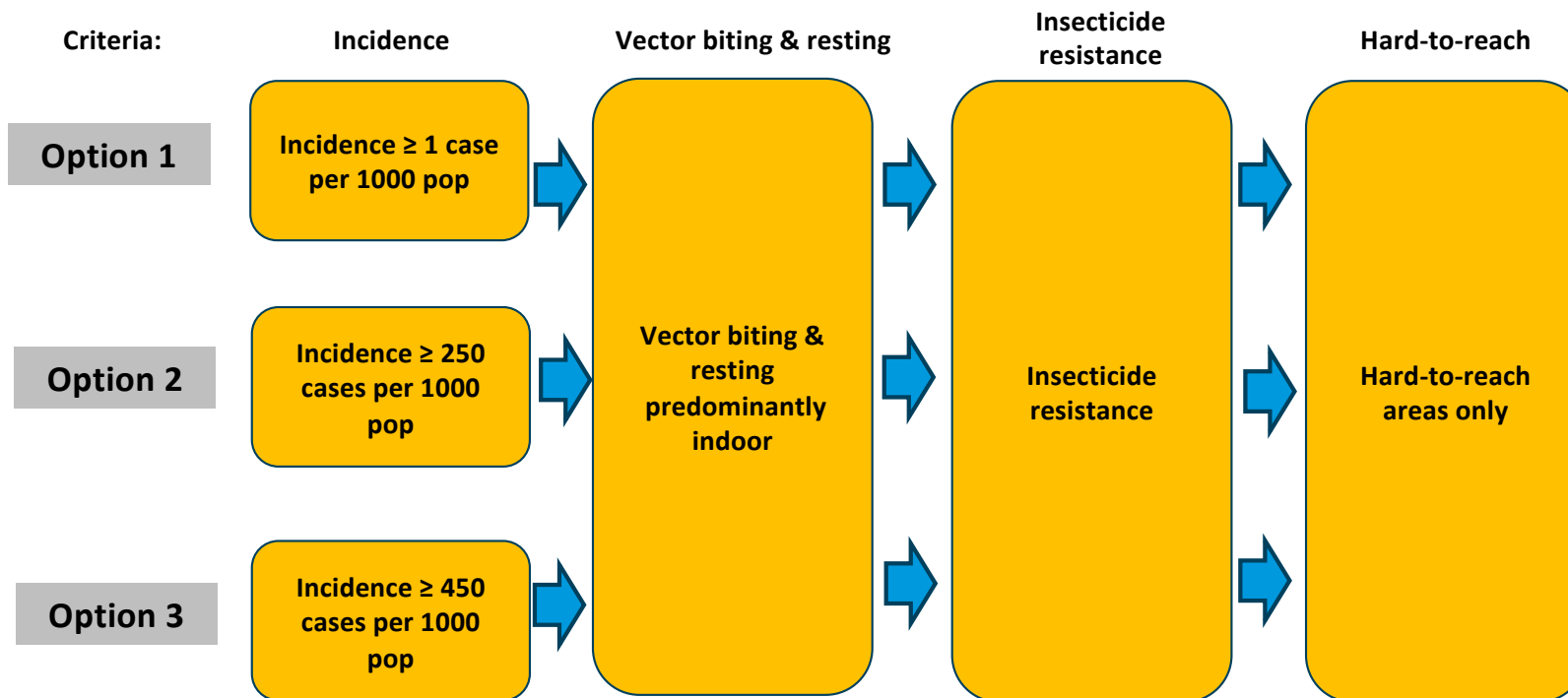
Alliance for Malaria Prevention (AMP)
Nairobi, Kenya, 7-11 March 2025

Background

- The National Malaria Control Programme (NMCP) has increasingly embraced data-driven approaches to enhance the effectiveness of malaria interventions.
- This shift towards utilizing data for decision-making involves several key processes and strategies:
- Stratification of Malaria Risks and Determinants: This involves collecting and analysis of epidemiological, entomological, environmental and intervention data
- With a comprehensive understanding of malaria risks and determinants, we develop criteria to target intervention strategies.
- Among these strategies include deploying choice of insecticide-treated nets, mode of ITN distribution and conducting indoor residual spraying



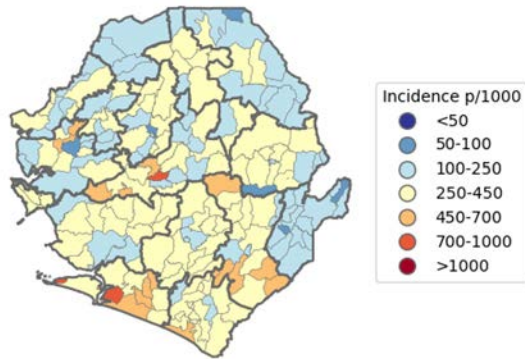
IRS targeting – options for criteria



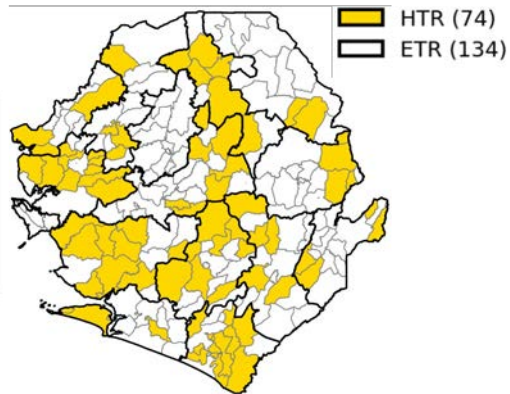
IRS targeting- Data review

Malaria transmission

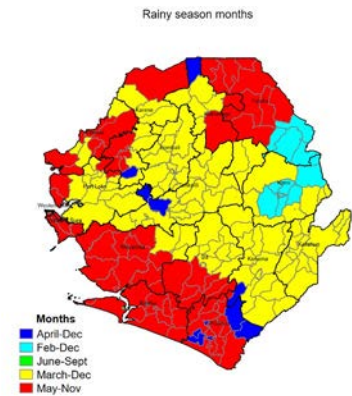
Incidence adjusted for testing and reporting rates
2022-2024 median



Hard to reach areas



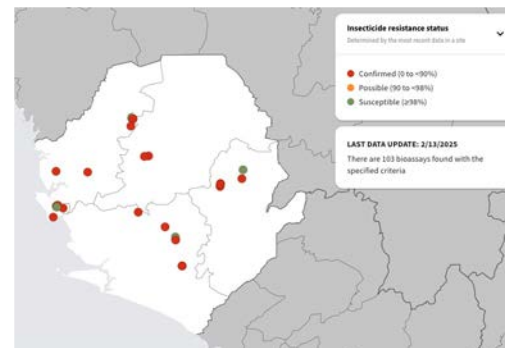
Rainfall seasonality (to inform timing)



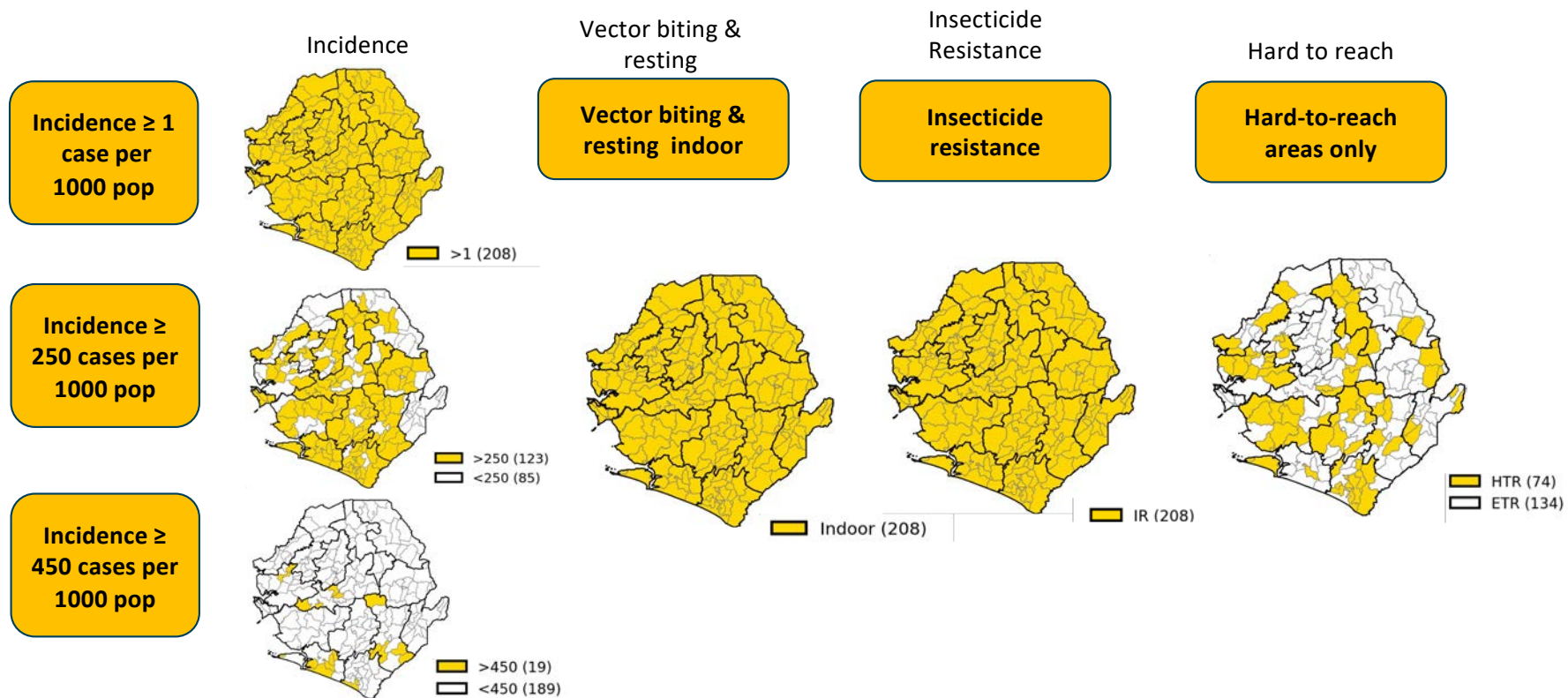
Vector biting and resting

Widespread
predominantly indoor
biting and resting

Insecticide resistance

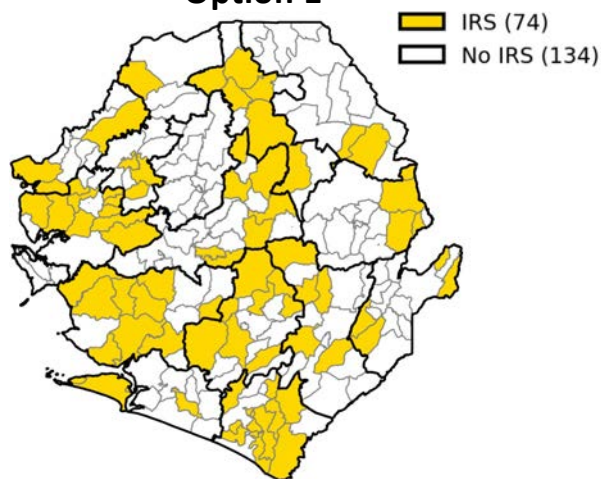


IRS targeting – application of criteria



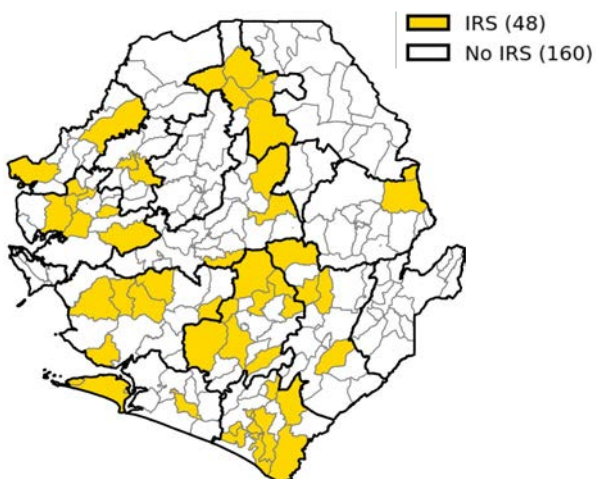
Option to select IRS targeting

Option 1



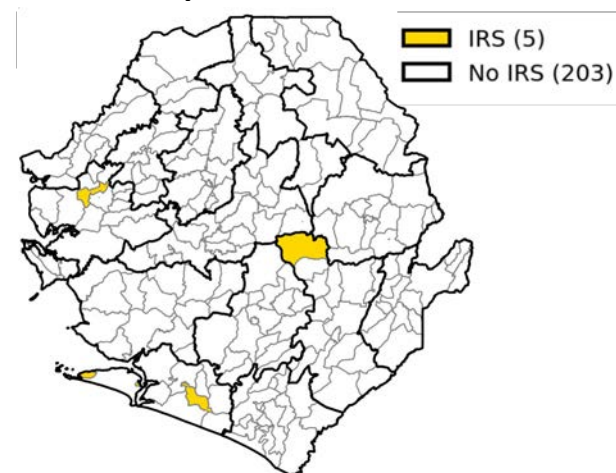
- incidence ≥ 1 case per 1000 pop
- Vector biting & resting predominantly indoor
- insecticide resistant
- Hard-to-reach

Option 2



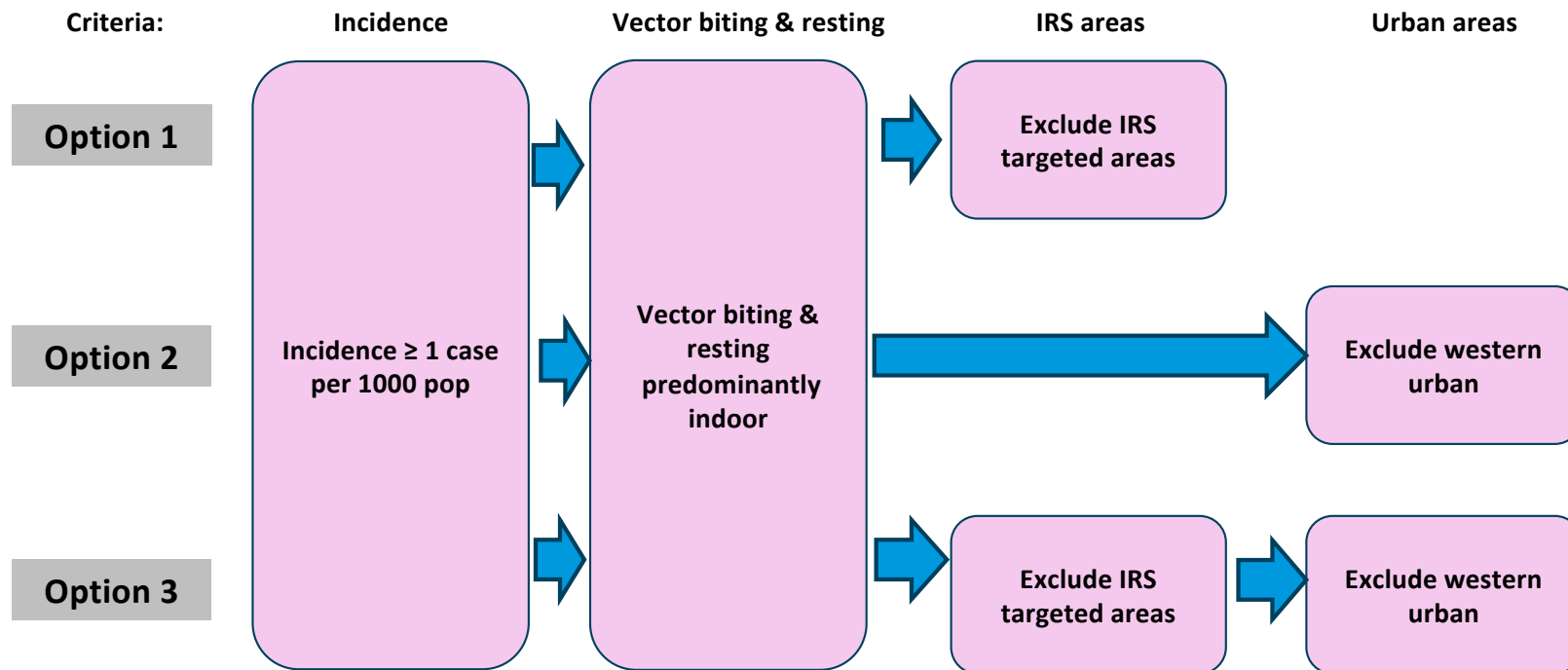
- incidence >250 cases per 1000 pop
- Vector biting & resting predominantly indoor
- insecticide resistant
- Hard-to-reach

Option 3



- incidence >450 cases per 1000 pop
- Vector biting & resting predominantly indoor
- insecticide resistant
- Hard-to-reach

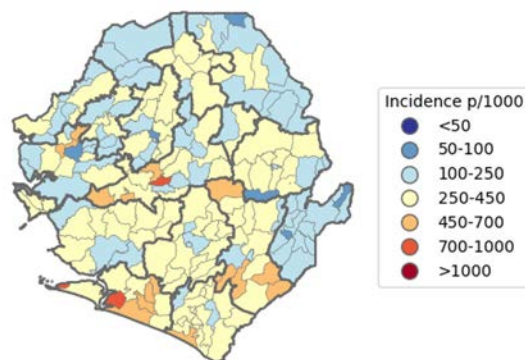
Mass ITNs targeting – options for criteria



Mass ITN campaigns-data review

Malaria transmission

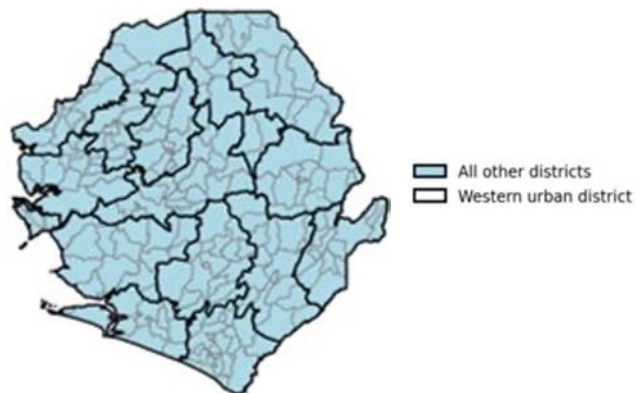
Incidence adjusted for testing and reporting rates
2022-2024 median



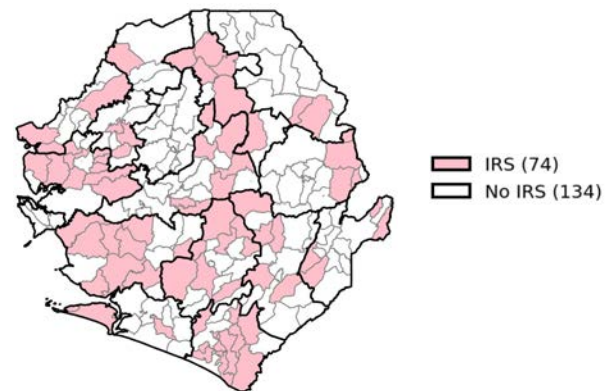
Vector biting and resting

Widespread
predominantly indoor
biting and resting

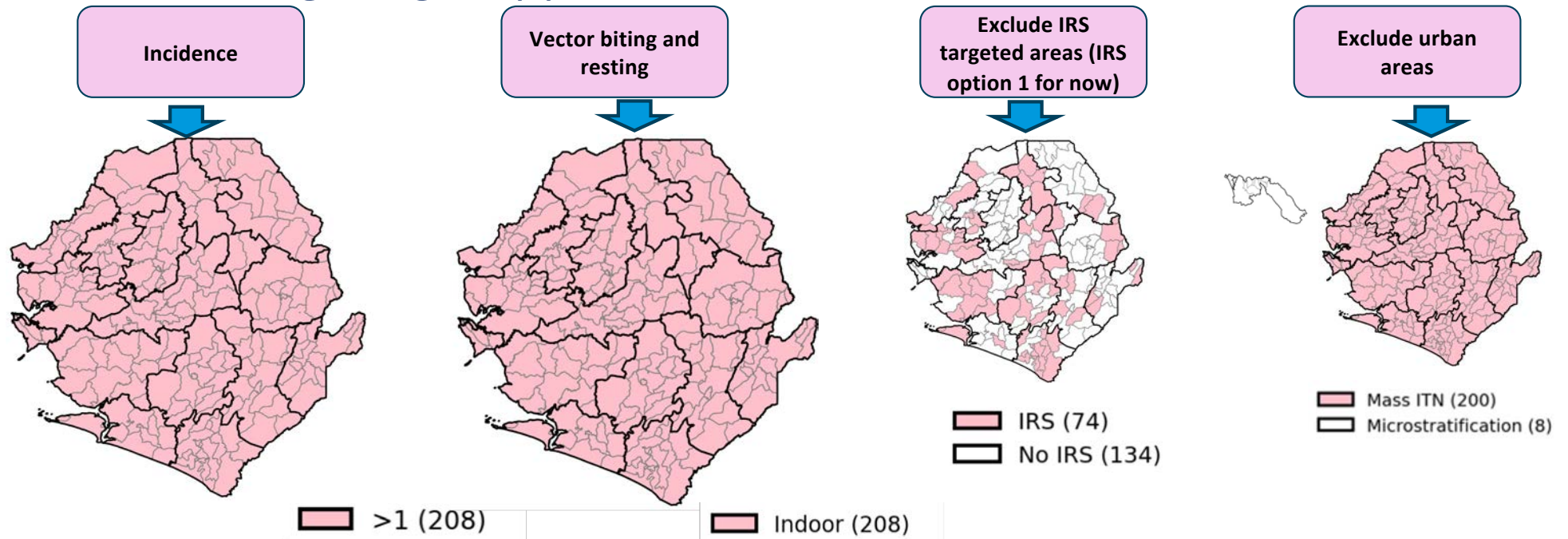
Urban areas



Areas targeted for IRS (IRS option 1 for placeholder)

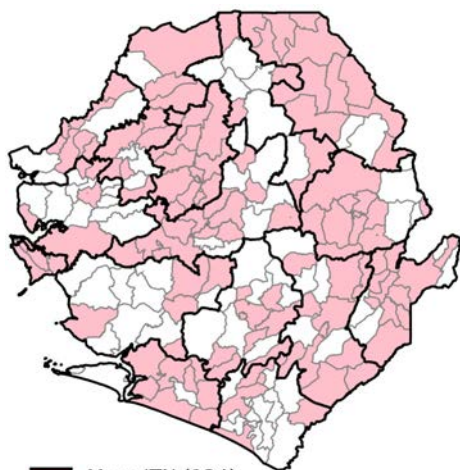


Mass ITN targeting – application of criteria



Option to select mass ITN targeting

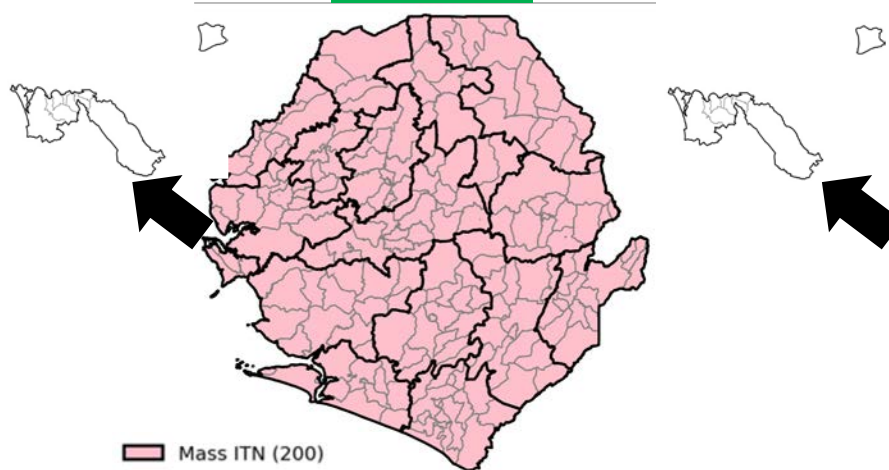
Option 1



Mass ITN (134)
No Mass ITN (74)

- incidence ≥ 1 case per 1000 pop
- Vector biting & resting predominantly indoor
- Exclude IRS targeted area

Option 2



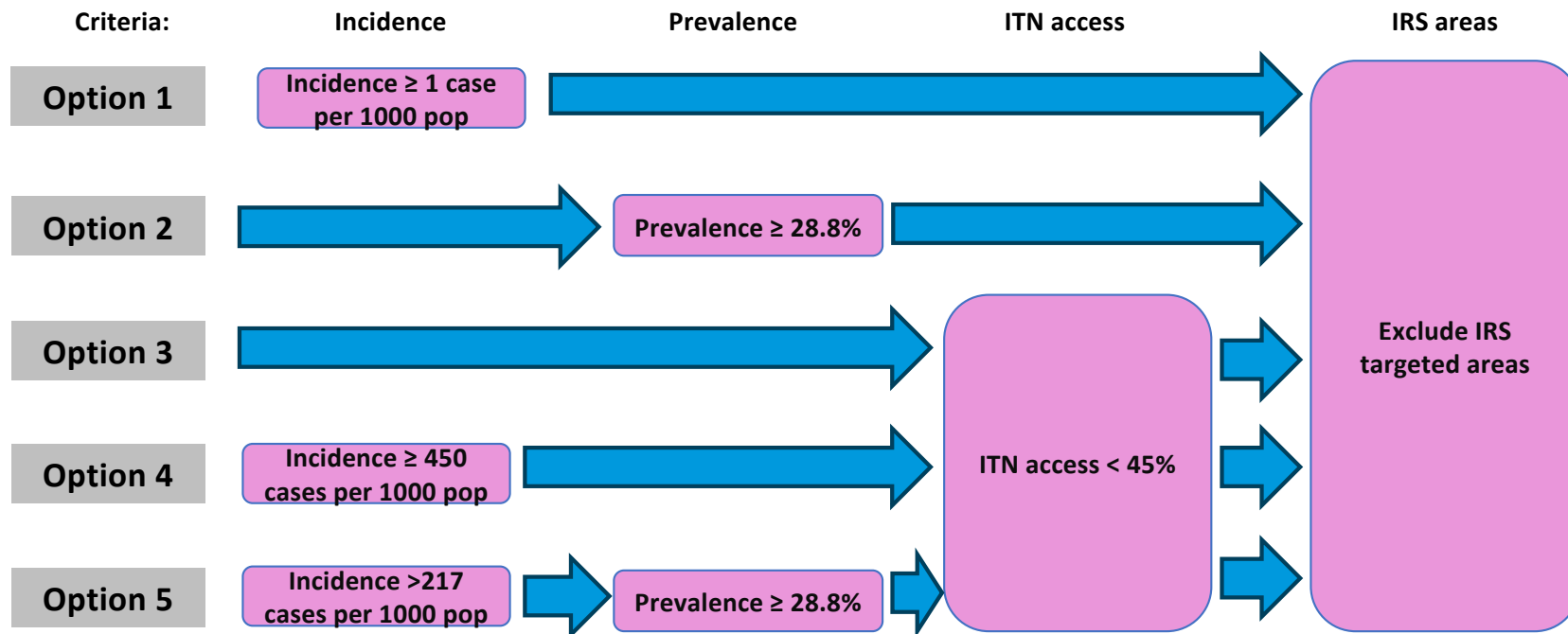
Mass ITN (200)
Microstratification (8)

- incidence ≥ 1 case per 1000 pop
- Vector biting & resting predominantly indoor
- Exclude western urban

Option 3

- incidence ≥ 1 case per 1000 pop
- Vector biting & resting predominantly indoor
- Exclude western urban & IRS targeted areas

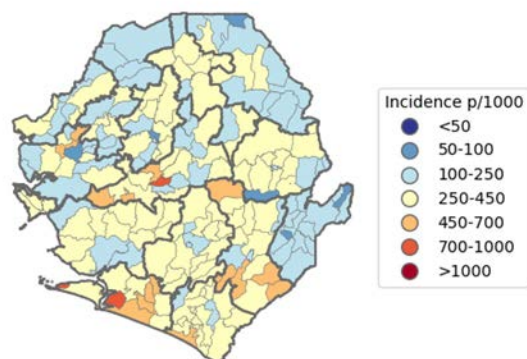
SBD targeting (Considering IRS) – options for criteria



SBD targeting – data review

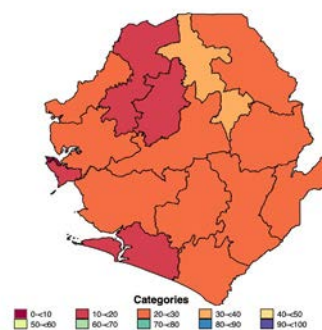
Malaria transmission

Incidence adjusted for testing and reporting rates
2022-2024 median



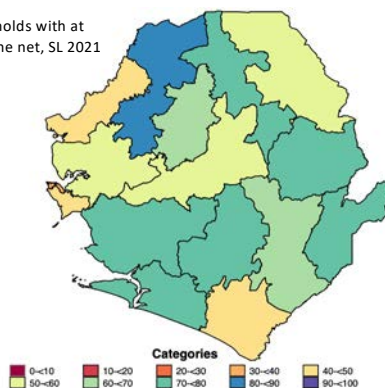
Malaria prevalence

Prevalence of malaria by microscopy (6 - 59 months) - 2021
Sierra Leone

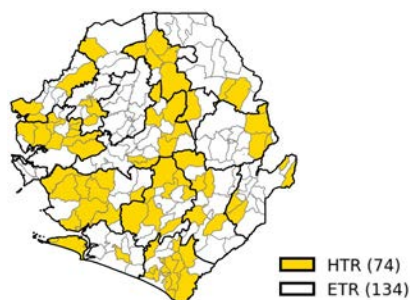


ITN access

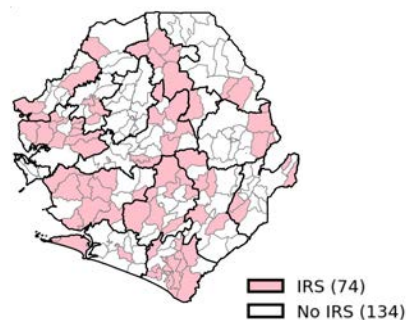
Households with at least one net, SL 2021 MIS



Hard to reach areas

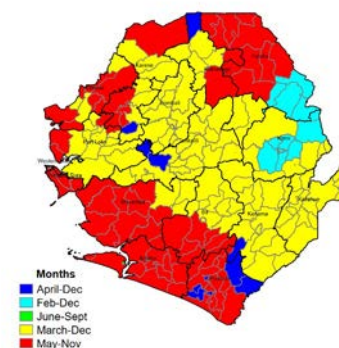


Areas targeted for IRS (IRS option 1 for placeholder)

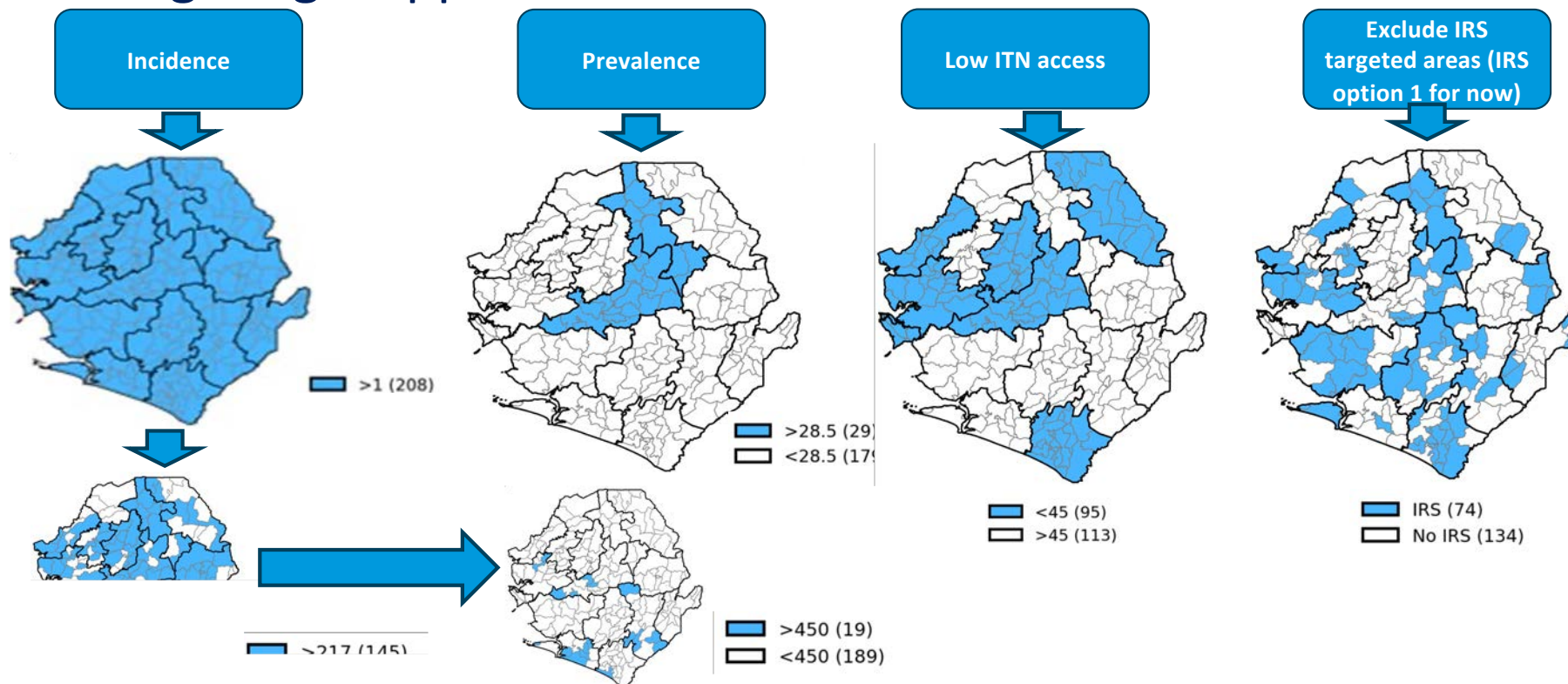


Rainfall seasonality (to inform timing)

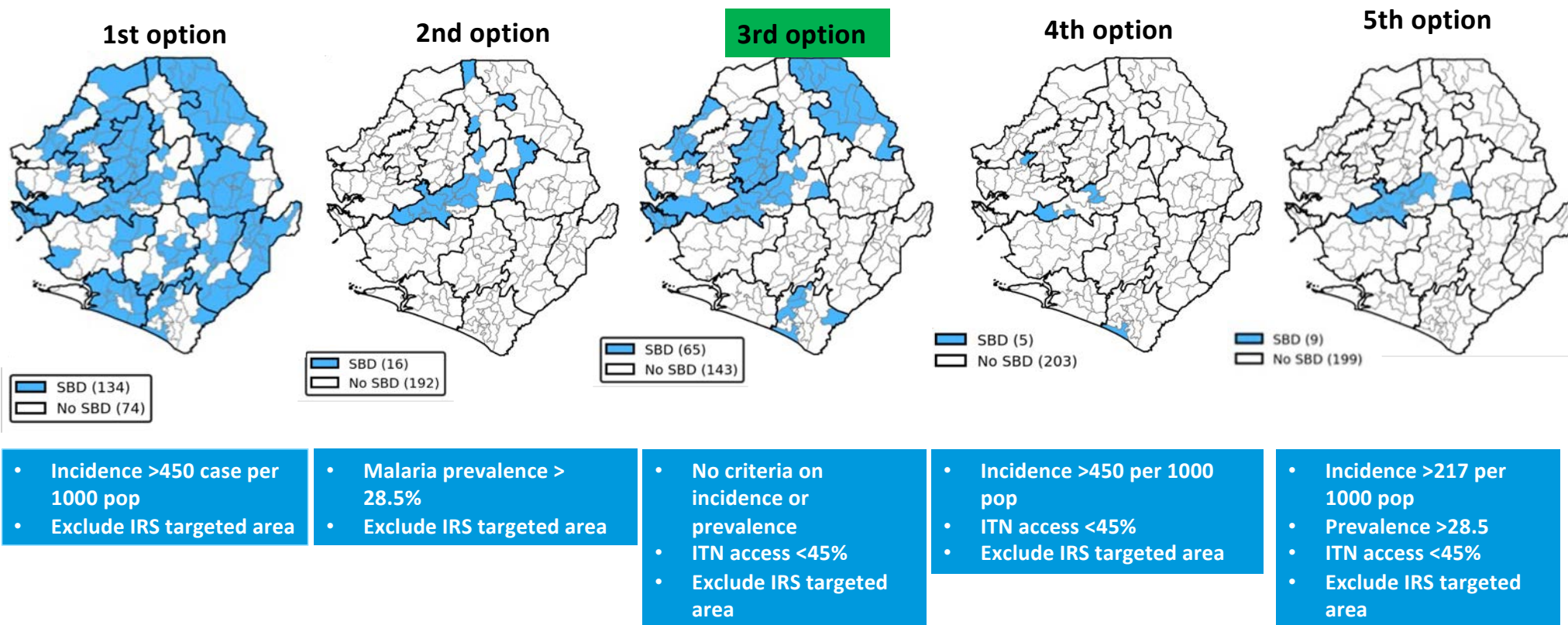
Rainy season months



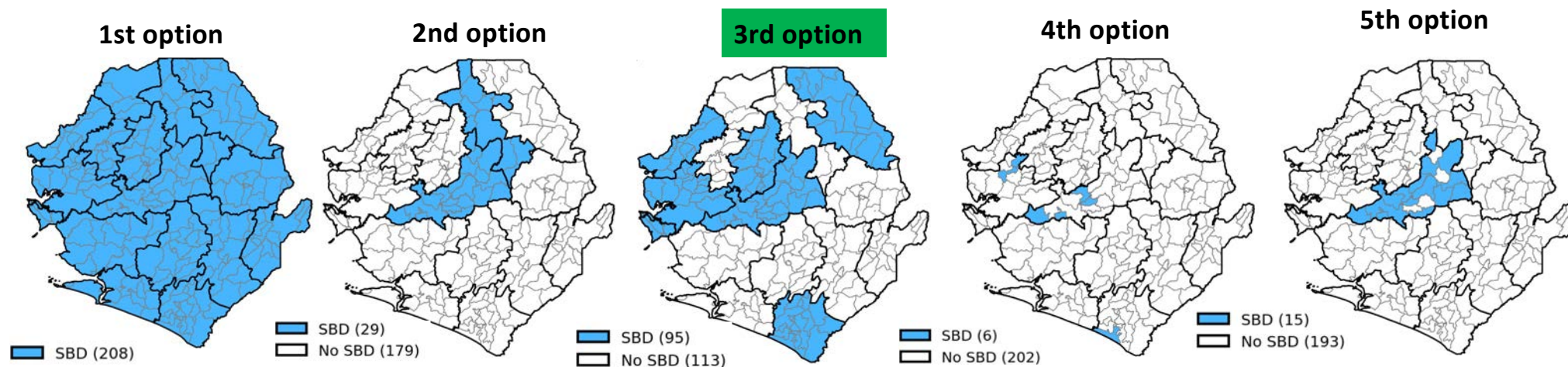
SBD targeting – application of criteria



Option to select SBD option- using IRS option 1 as place holder



Option to select SBD option (Not considering IRS)



- Incidence >450 case per 1000 pop

- Malaria prevalence > 28.5%

- No criteria on incidence or prevalence
- ITN access <45%

- Incidence >450 per 1000 pop
- ITN access <45%

- Incidence >217 per 1000 pop
- Prevalence >28.5
- ITN access <45%

Routine ITN targeting at ANC & EPI

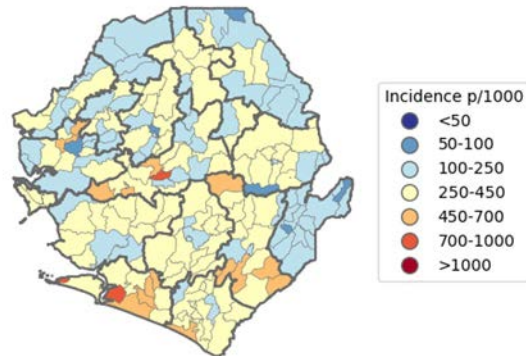
Criteria

Transmission
(Incidence)

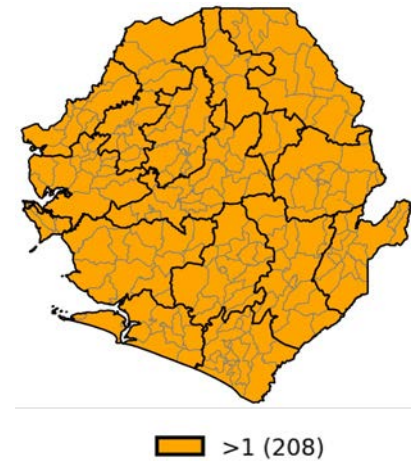
Malaria
transmission > 1
cases per 1000
population

Data

Incidence adjusted for testing and reporting rates
2022-2024 median



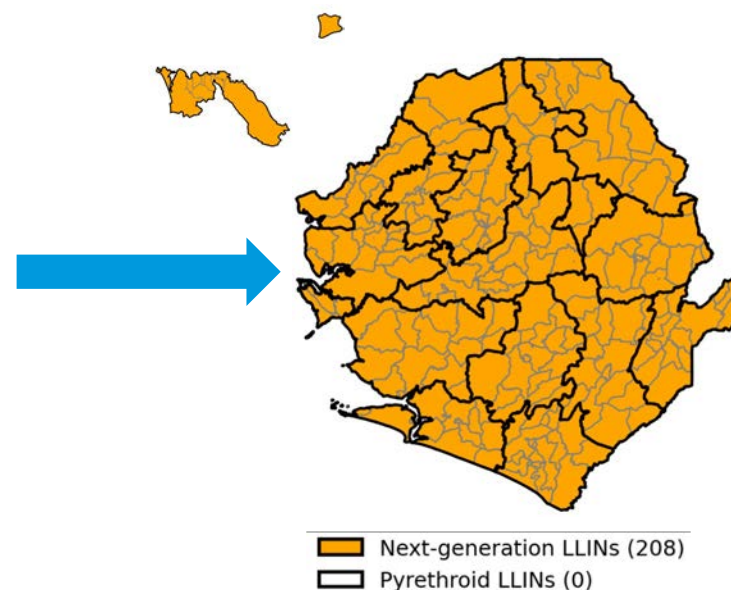
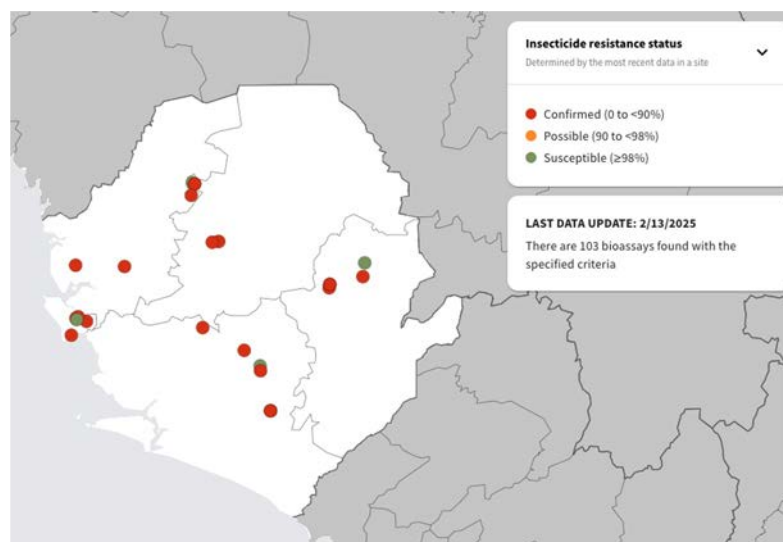
Targeting: chiefdoms for ANC and EPI distribution



Choice of nets – PRELIMINARY targeting to be validated

Insecticide resistance

<90% mosquito
mortality 24h after
pyrethroid exposure



List of partners

1. WHO Global Malaria Programme, Geneva
2. WHO Country Office and Local Consultant
3. WHO AFRO (Regional and MCAT)
4. Clinton Health Access Initiative (CHAI), Country and HQ
5. Northwestern University, USA
6. AHADI (Applied Health Analytics for Delivery and Innovation), USA
7. Imperial College, London
8. PMI-Evolve, Sierra Leone
9. Stat SL, Sierra Leone

Thank you