

Pre-transmission assessment survey in two health districts (Boké and Guéckédou) in Guinea after five rounds of MDA

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This presentation is made possible by the generous support of the American people through the United States Agency for International Development (USAID).

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This presentation also acknowledges the Ministry of Health of Guinea, project staff, community health workers and communities.



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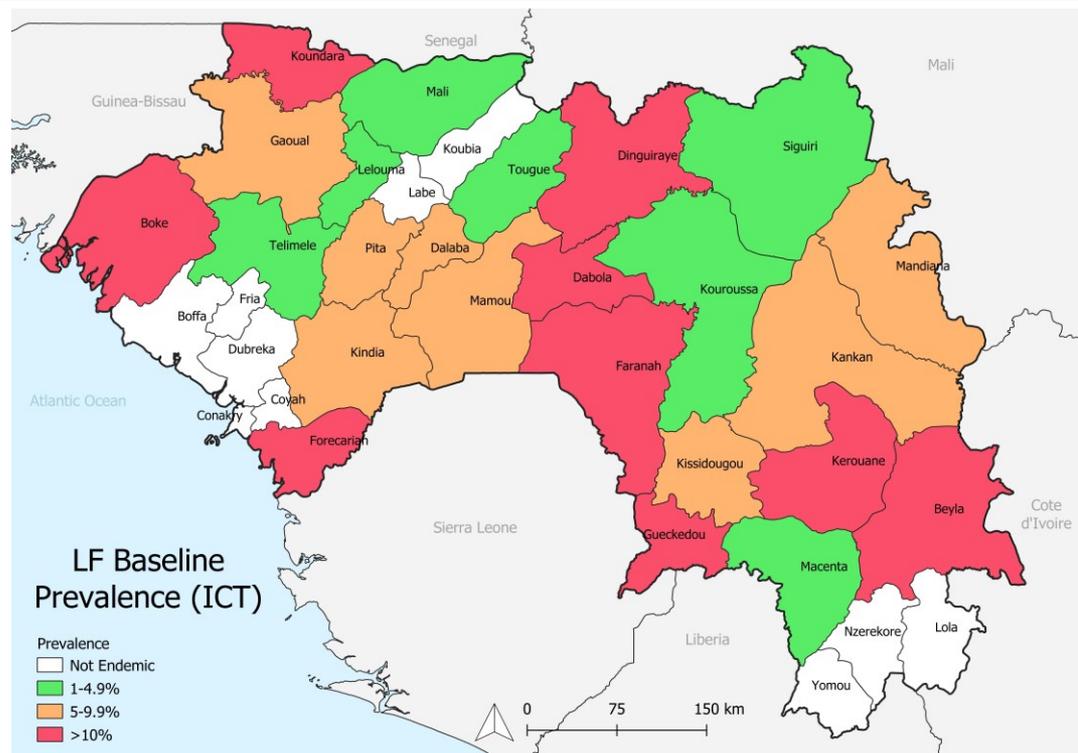
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Background

- LF mapping completed by 2013 found **24 endemic HDs** out of the 38 HDs



Baseline LF (mf) in Boké and Guéckédou

Regions	Health districts	Villages (sentinel site)	Baseline Prevalence (microfilaremia)	Survey date	Survey year
Boké	Boké	Djikity centre	2,3%	August	2013
N'Zérékoré	Guéckédou	Koundou-Toh	2,3%	November	2012



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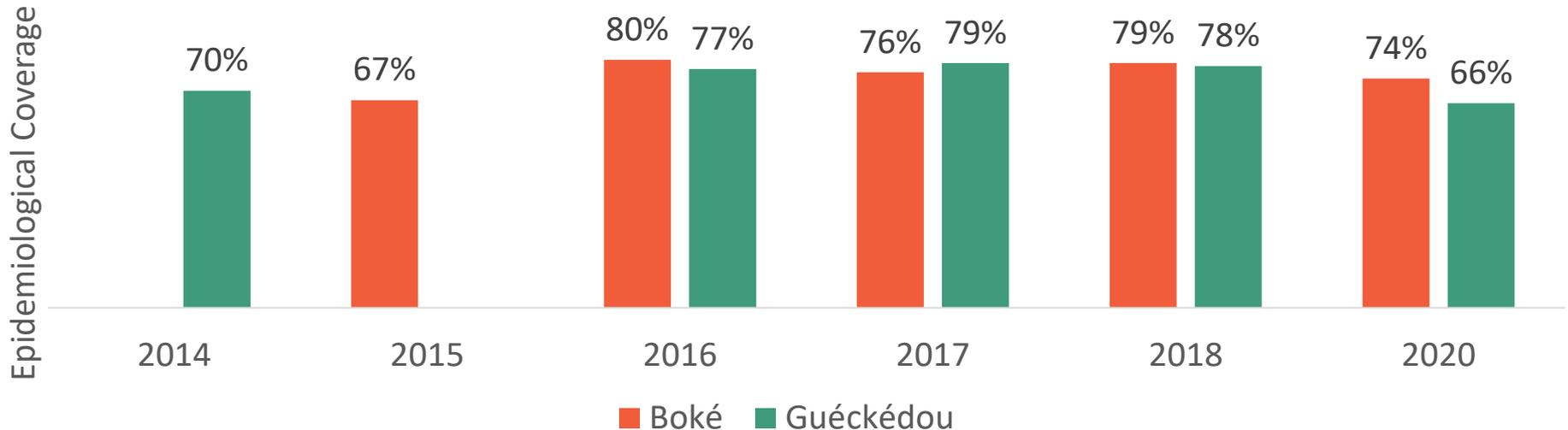
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Background

- From 2014-2020, annual mass drug administration (MDA) with ivermectin and albendazole in Boké and Guéckédou resulted in 5 rounds of effective epidemiological coverage ($\geq 65\%$)



- In 2021, the country conducted its first pre-transmission assessment survey (preTAS) in these two HDs



Objective

To evaluate the prevalence of LF in Boké and Guéckédou after 5 rounds of MDA with effective coverage to determine whether the districts are eligible for the first transmission assessment survey (TAS1) and to stop MDA



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Methodology

1. Type of survey

- Cross-sectional survey conducted in 1 sentinel site and 1 spot-check (control) site per HD

2. Target population and sampling

- *Target population*: persons aged ≥ 5 years who were permanent residents in the selected sites
- *Convenience sampling*: a minimum of 300 people to be tested per site. WHO recommends 300-500 people
- *Type of tests*: Filariasis Test Strips (FTS) were used to detect circulating filarial antigen from *Wuchereria bancrofti* with finger prick blood samples. Night blood sample between 10pm and 2am was used for participants testing positive.



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Methodology

3. Training of survey team

- All surveyors and supervisors were trained to properly use FTS, how to conduct sampling, and use Android devices for electronic data collection (EDC)
- Field practical training was done after the classroom training

4. Inclusion criteria

- Persons aged 5 and above who agree to participate in the survey (parental consent requested for children aged 5-14)



Methodology

5. COVID-19 barriers and measures

- The Scope of Practice included COVID-19 risk mitigation measures for training and survey
 - ✓ Key measures: Mask wearing, handwashing, physical distancing (2 meters)
 - ✓ National NTD Program provided masks to all participants
 - ✓ Raising awareness among the population on COVID-19 (signs/symptoms, mode of transmission, management and prevention)
 - ✓ Act | West COVID-19 Supervisors Checklist was utilized in the field to ensure compliance

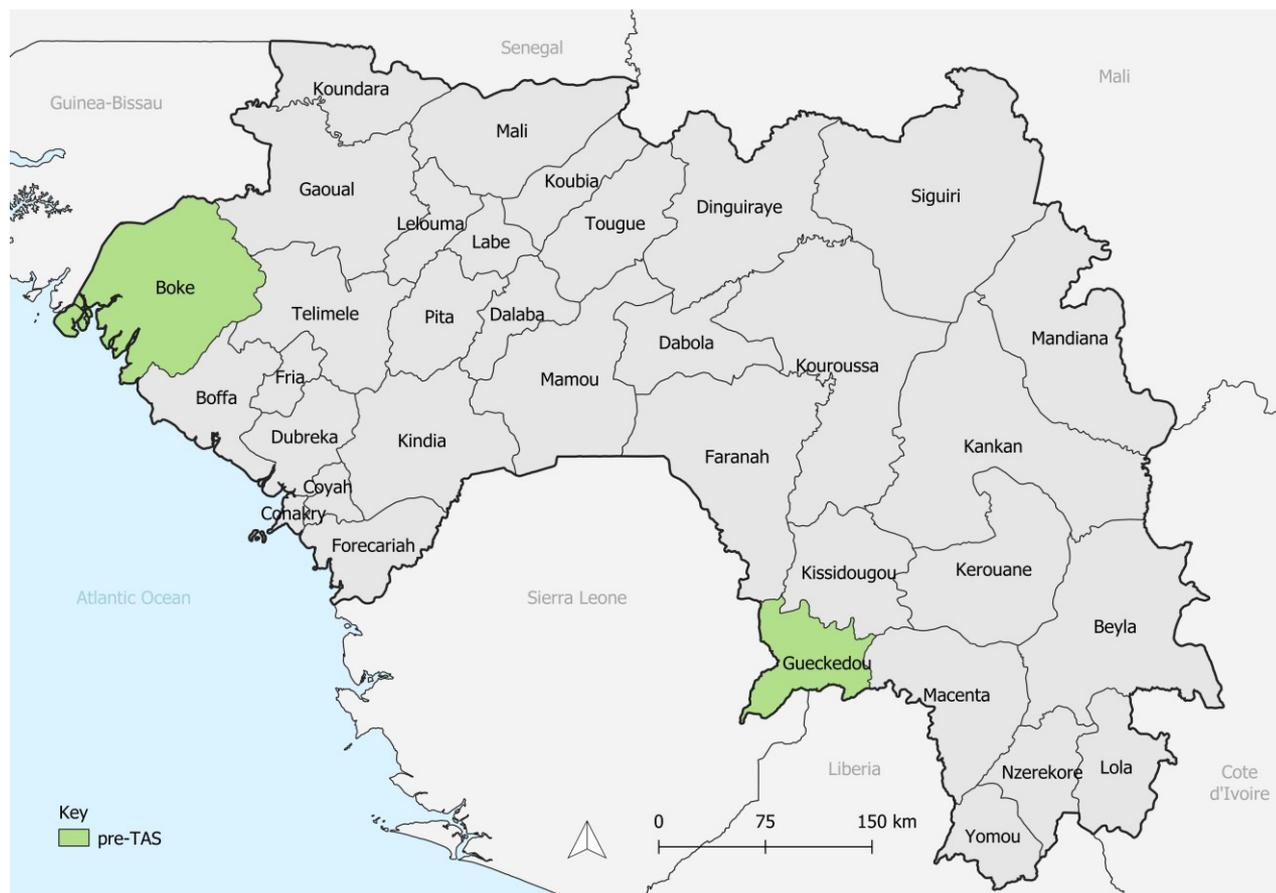


Methodology

6. Survey Districts

Boké, in the Boké region

Guéckédou, in the N'Zérékoré region



Methodology

7. Data Collection

- *Interviews:* All participants provided verbal consent and were interviewed. Information was recorded, including age and sex through EDC
- Participants were sampled at fixed-point sites. Geographic coordinates were recorded.



Results

A total of **1,264 people** (52% female) between the ages of 5 and 97 years were surveyed across the 4 sites. There were 1,253 valid FTS tests.

- General data

Health districts	Type of site	Site name	# tests carried out	# Valid tests	# Negative cases	# Positive cases	% Positive cases	Final result
Boke	Sentinel	Djikity centre	317	307	307	0	0,0%	Passed
	Control	Sarabayah	316	310	309	1	0,3%	Passed
Gueckedou	Sentinel	Koundou-Toh	315	312	310	2	0,6%	Passed
	Control	Doukouno	315	314	314	0	0,0%	Passed



Results

- A total of three FTS positive cases were found: one in Boké (Sarabayah, SC) and two in Guéckédou (Koundou-Toh, SS)
 - One female tested positive in Guéckédou
 - Positive cases ranged from 30-78 years of age
- Positive cases and their families were treated with ivermectin + albendazole.
- Night-time blood sampling between 10:00 pm and 2:00 am was performed for one positive case (who agreed to be sampled) for *Wuchereria Bancrofti* microfilariae detection, with negative result.



Conclusion

Five rounds of annual LF MDA with effective epidemiological coverage have significantly reduced the prevalence of LF in Boké and Guéckédou HDs to below the 2% antigen prevalence threshold as recommended by WHO. The two HDs are eligible to conduct TAS1 to determine whether the criteria to stop MDA has been achieved.





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