

YELLOW FEVER VACCINE AVAILABILITY AND NEEDS FOR THE AFRICAN REGION

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Three categories of YF risk

High risk

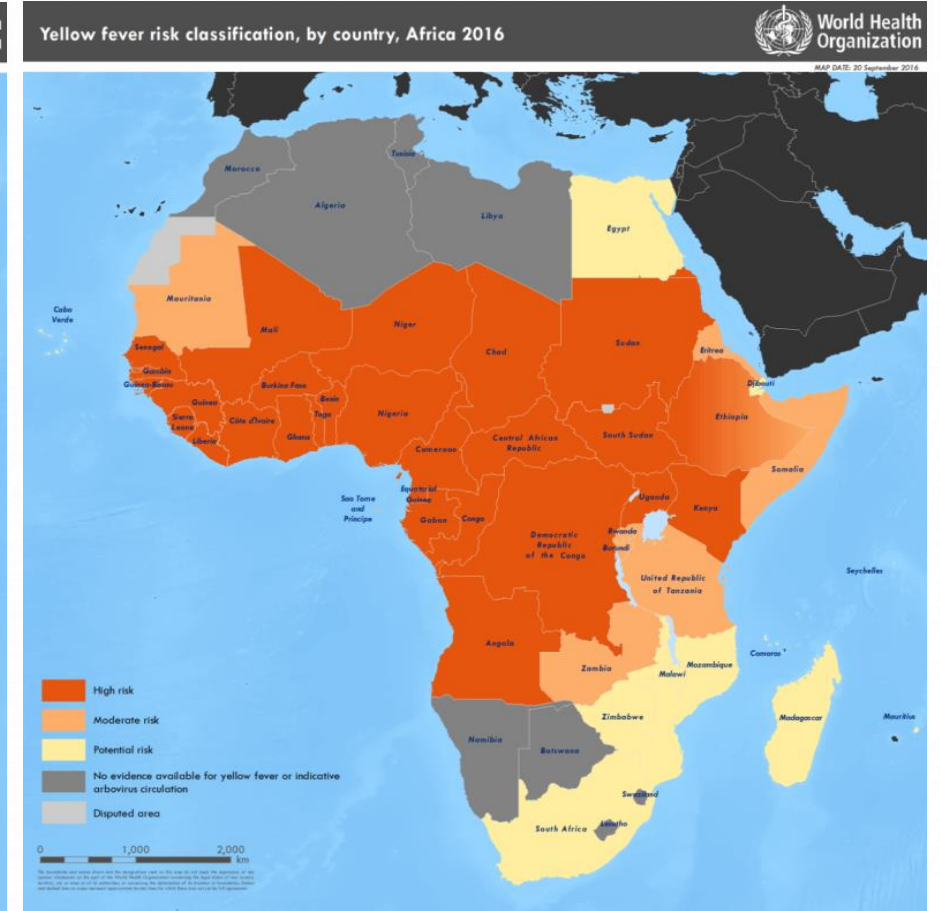
- National preventive campaigns & routine EPI national
- Case based surveillance
- Build resilient urban centers

Moderate risk

- Targeted vaccination approach
- Sentinel surveillance
- Build resilient urban centers

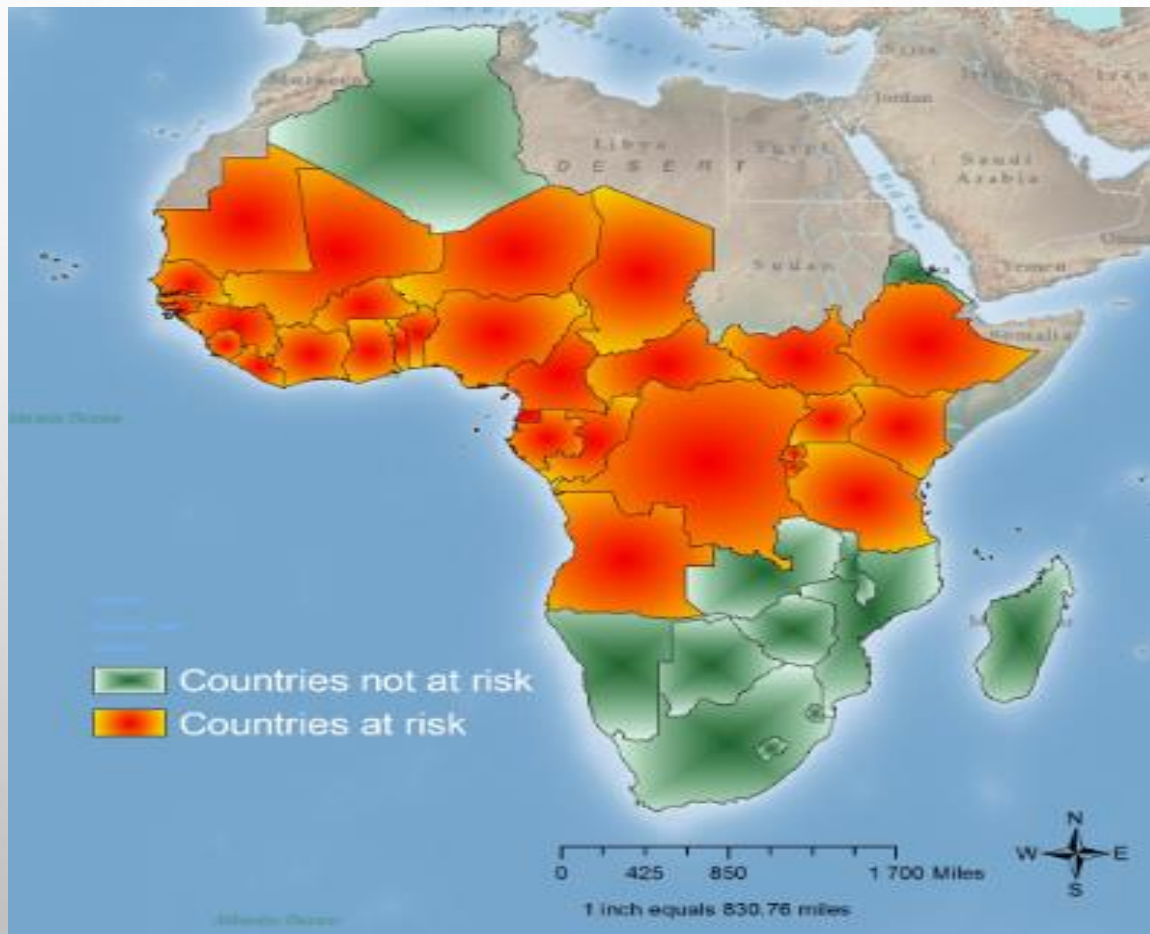
Potential for transmission

- No regular vaccination approach
- Country control plan
- Build resilient urban centers

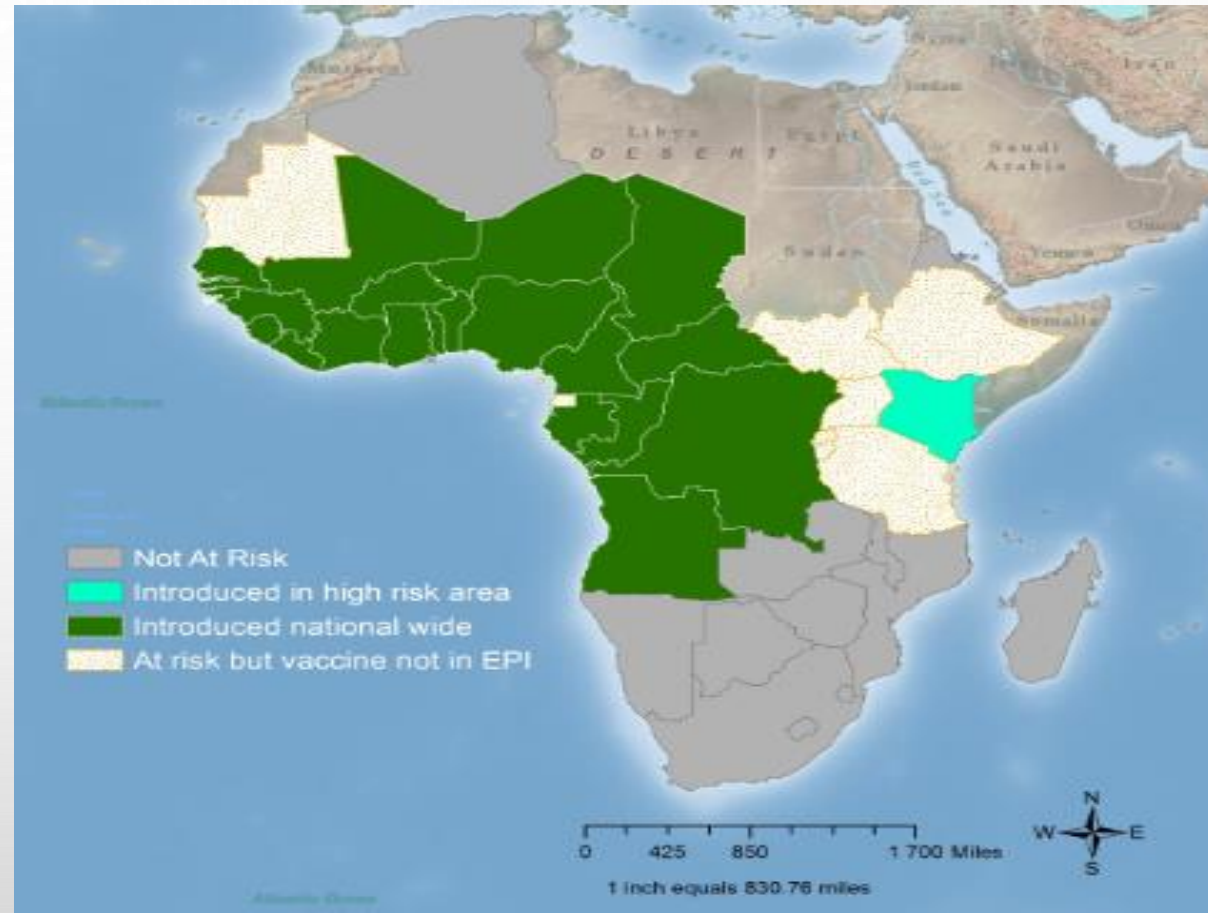


Countries at high risk of YF and vaccine introduction

YF risk situation



YF vaccine introduction in AFR



Sao Tome Y Principe and Seychelles introduced but are not listed as at risk countries

8 countries at risk but not introduced : Burundi, Equatorial Guinea, Ethiopia, Mauritania, Rwanda, Somalia, South Sudan, Uganda

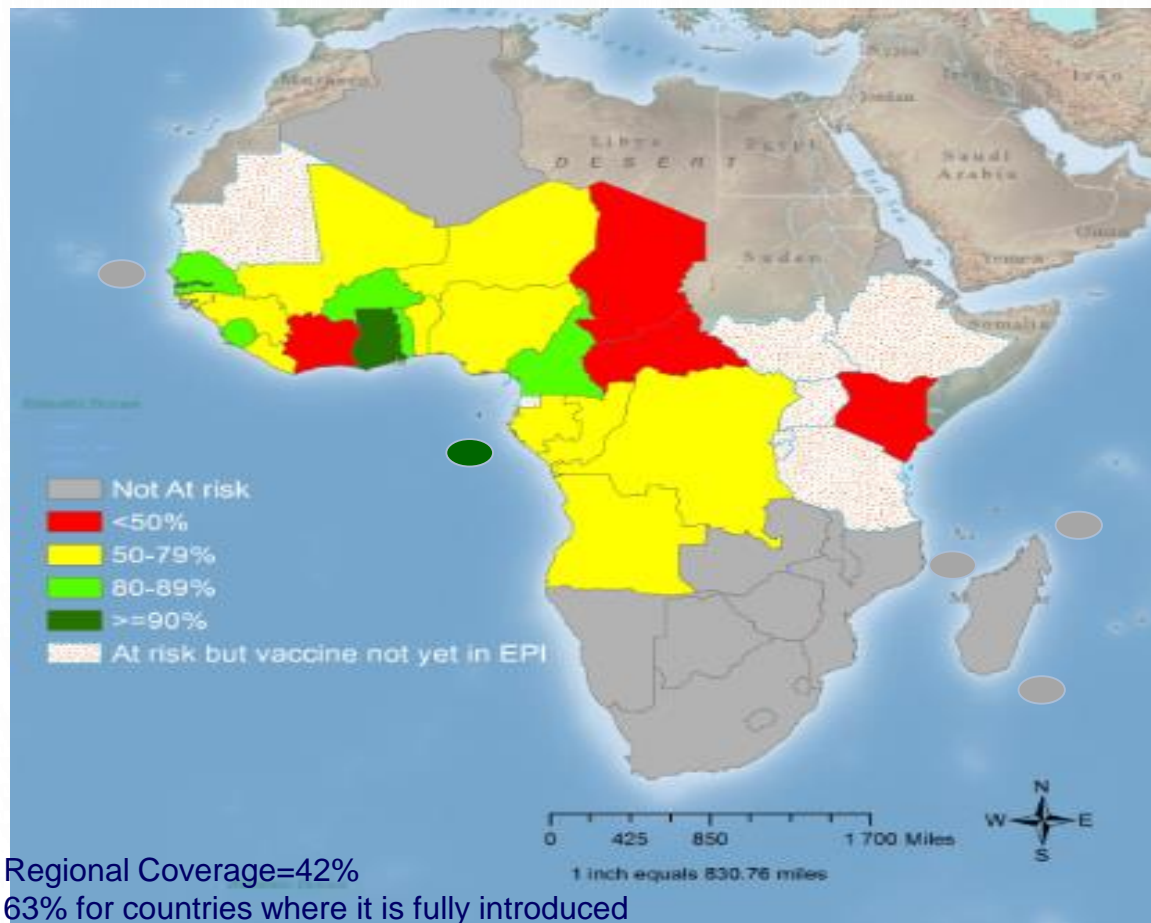
Regional Coverage=43%

64% for countries where it is fully introduced

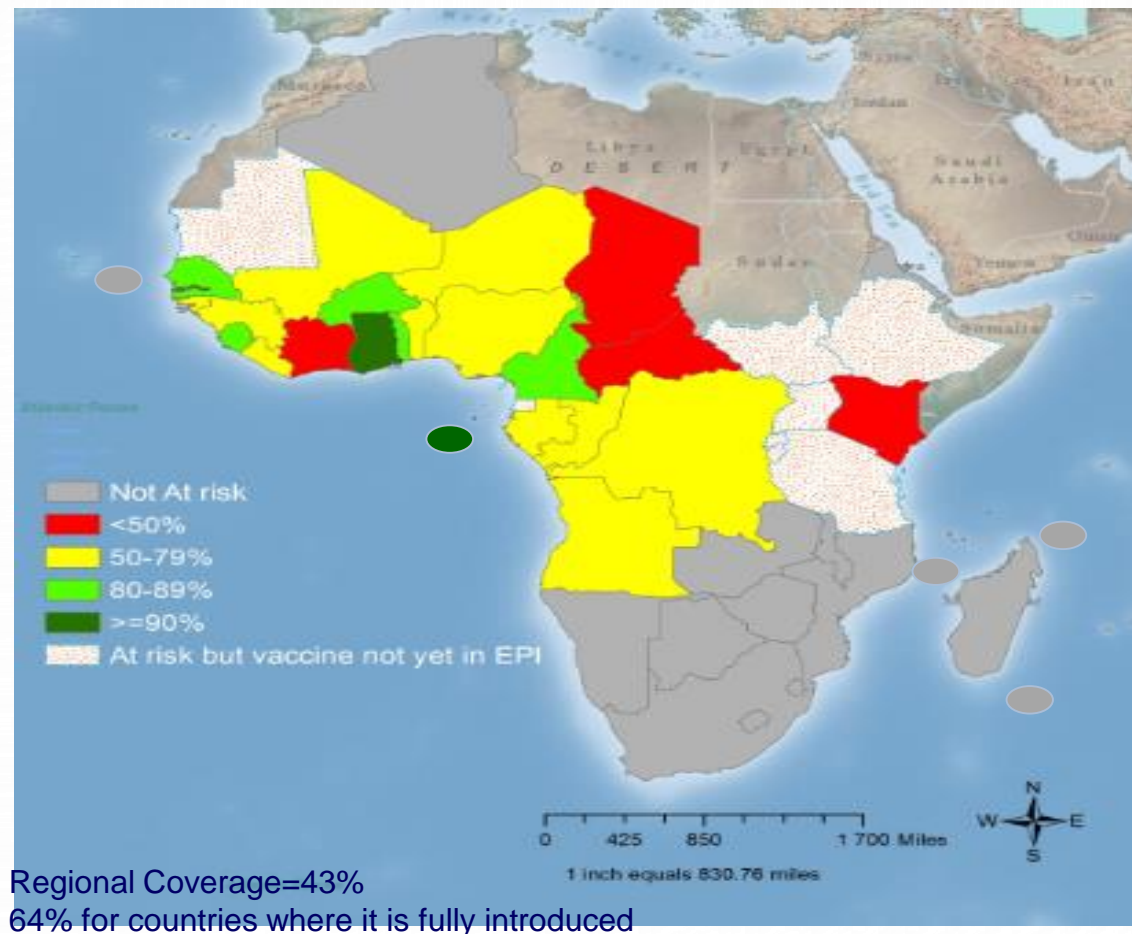
Source: WUENIC 2015 released on July 2016

YF vaccine coverage (WHO and UNICEF Estimates of National Immunization Coverage [WUENIC]), AFR 2014 and 2015

2014

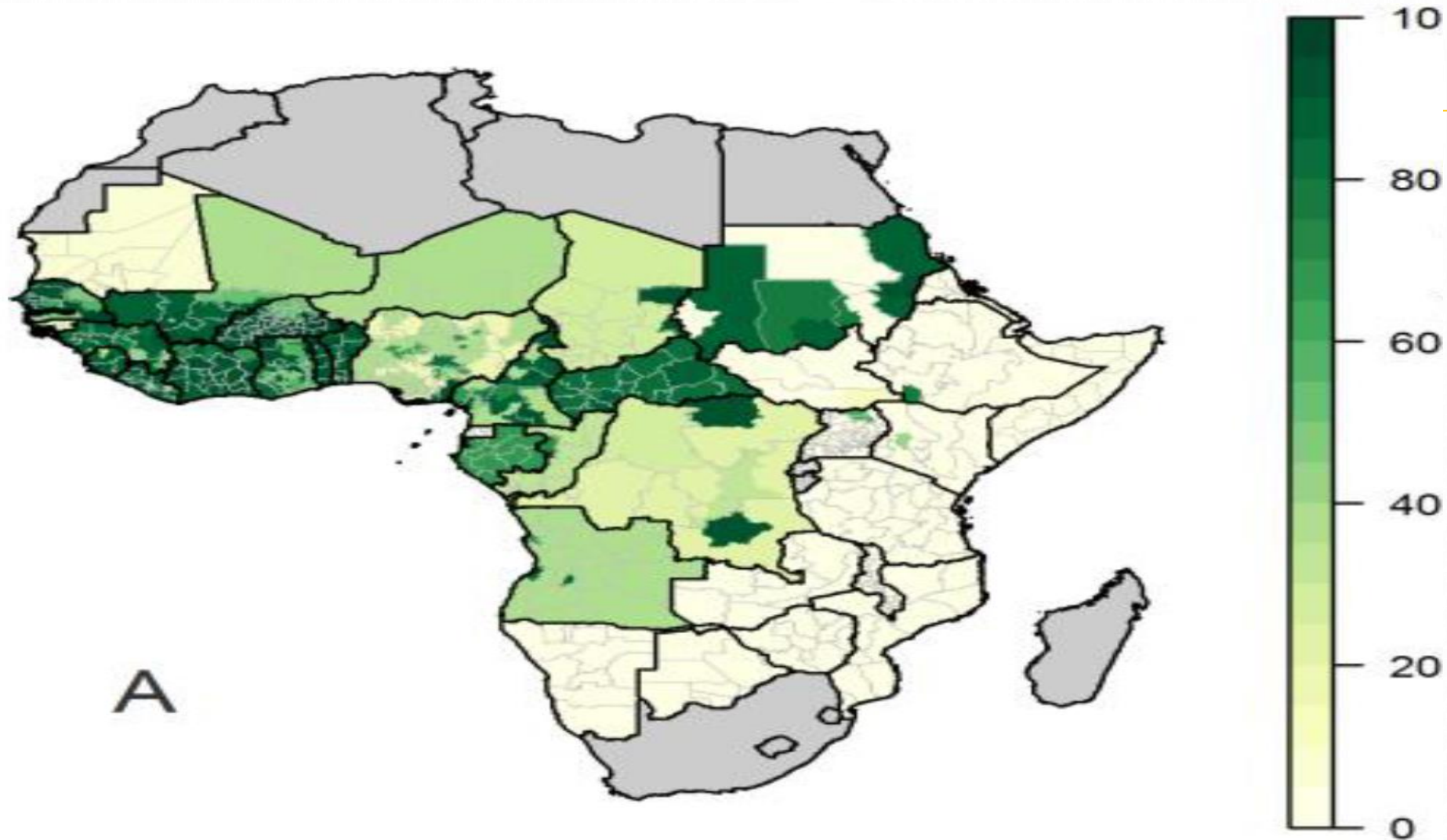


2015



Source: WUENIC 2015 released on July 2016

YF Population Immunity Estimates



Source: Kévin Jean, Arran Hamlet, Tini Garske: Evaluation of a long-term control strategy for Yellow Fever; Report to WHO; Imperial College London; Nov 2016

The Implementation Framework for Elimination of YF Epidemics (EYE)

- ◆ **Vision:** A WHO African region that is free of YF epidemics.
- ◆ **Goal:** To eliminate YF epidemics in the African Region by 2026.
- ◆ **Objectives**
 1. To protect populations in all 35 countries at risk, through conducting preventive mass and routine vaccinations.
 2. To prevent international spread of YF through vaccination of travelers and robust screening and onsite vaccination for people not vaccinated at major points of entry.
 3. To detect, confirm and contain outbreaks rapidly.

Targets (2017-2026)

- All high-risk countries will have completed national preventive mass vaccination campaigns
- At least 440 million people will have been vaccinated in the African Region.

Milestones-1

By the end of 2017:

- ◆ The Regional Committee of WHO in the African region adopted the implementation framework of the EYE strategy.
- ◆ All at risk countries will have initiated the implementation of this EYE framework.
- ◆ At least 25 million people will have been vaccinated in Angola, Congo, Ghana and Nigeria.

Milestones-2

By the end of 2018:

- ◆ Three reference laboratories in Africa will have fully functional confirmation capacity.

By the end of 2019:

- ◆ All high-risk countries will have introduced YF vaccination into routine immunization.

By the end of 2020:

- ◆ Six sub-regional reference laboratories will be fully functional for both serology and molecular diagnosis of YF

Milestones-3

By the end of 2021:

- ◆ Campaigns will have been completed in Nigeria and Ghana.

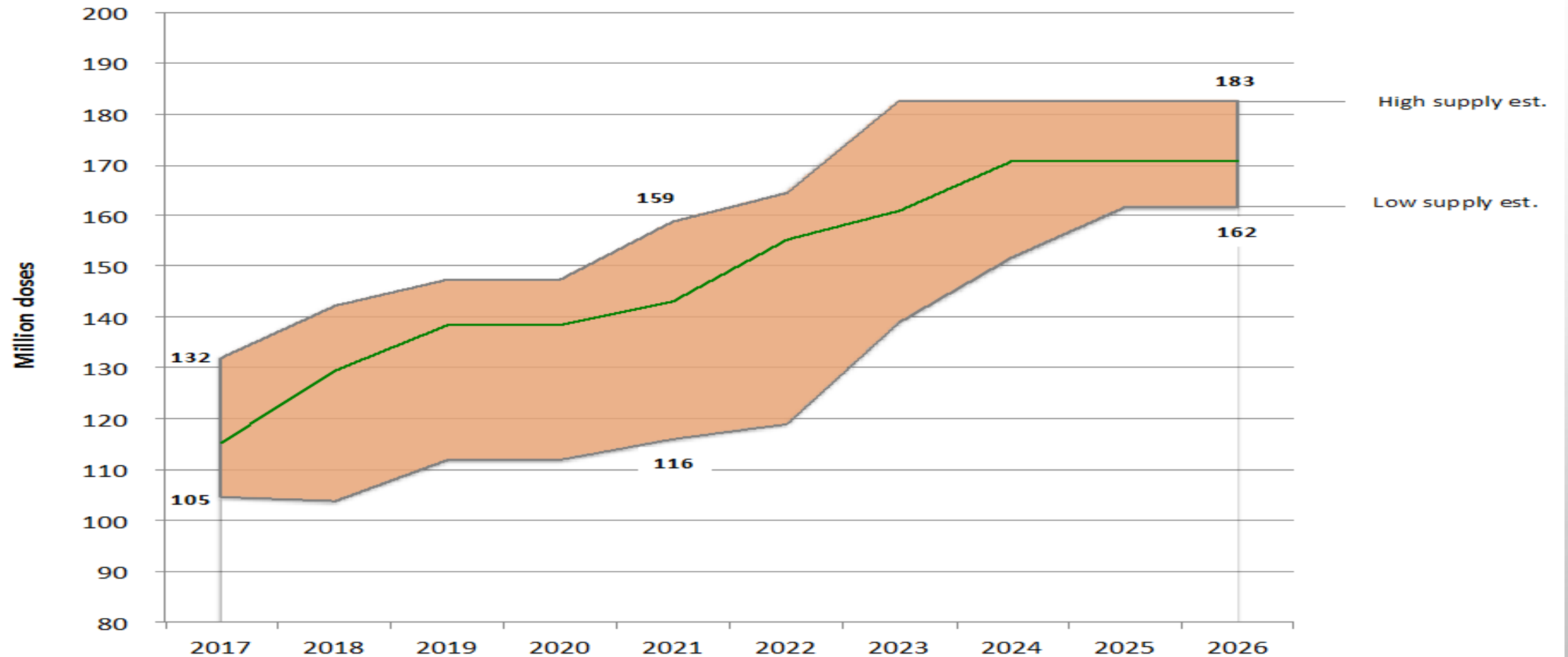
By the end of 2022:

- ◆ Seven of the 13 high-risk countries in the region will have completed preventive mass vaccination campaigns

By the end of 2024:

- ◆ All high-risk countries will have established diagnostic capacity to confirm YF

Estimated global YF vaccine supply (high to low risk-adjusted estimates), 2017-2026



Source: Gavi. Supply and procurement roadmap Yellow fever vaccine, update August 2016)

YF Vaccines available to African countries in 2017 (in million doses)

- Newly available quantity

- Since Jan thru Aug 26.6
- Expected until Dec 24.5

- Total 2017 51.1

- Deliveries (executed and planned)

- For EPI routine immunization 30.1
- For mass campaigns 19.7
- To replenish emergency stockpile 3.5 (total stock 6.0)

- **Total 2017 53.3**

Proposed sequencing of preventive mass vaccination campaigns in 13 high risk countries over time, Africa (Number of doses - 1000s)

Country	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
1. Angola	2 843	1467	0	0	0	0	0	0	4 310
2. Ghana	3 057	6 246	6 380	0	0	0	0	0	156 83
3. Nigeria	14 324	20 987	21 520	22 062	22 613	23 174	23 744	12 162	160 585
4. Dem. Rep. of Congo	0	20426	21039	21664	21186	0	0	0	84 314
5. Congo Republic		2489	0	0	0	0	0	0	2 489
6. Uganda	0	4 891	20190	20829		0	0	0	45 910
7. Guinea-Bissau	0	0	2354	0	0		0	0	2 354
8. Ethiopia	0	0	0	19164	19585	20007	6810	0	65566
9. South Sudan	0	0	0	0	8310	8507			16 817
10. Equatorial Guinea	0	0	0	0	0	1147	0	0	1 147
11. Chad	0	0	0	0	0	0	9881	10173	20 054
12. Niger	0	0	0	0	0	0	15810	16441	32 252
13. Gabon	0	0	0	0	0	0	0	677	677
TOTAL	20,224	56,506	71,48383	83,719	71,724	52,835	56,245	39,453	452,189

Routine immunization: specific solutions in the broader context

- **Links into health systems strengthening work**
- **Link with wider work on increasing coverage of all routine immunizations**
 - use and improvement of health records and information systems
 - training and support of the health worker
- **Advocacy to countries that need to introduce**
 - build government understanding of the risks
 - involve Regional and National TAGs
- **Special attention to vulnerable and marginalized populations**
- **Catch-up campaigns when and where routine is suboptimal**

Conclusions

- **Vaccination: scale up - combined routine/campaign still optimal**
- **Approaches**
 - Country risk category
 - Address the urban risk
 - Revolving emergency vaccine stockpile
 - Need to maintain high coverages: catch-up campaigns
- **Ensure adequate supply**
 - Vaccine manufacturers expected to meet the 10 year global demand of 1.38 billion doses
- **Commitment of stakeholders**
 - Partners and financers
 - Gavi Board approved

Thank you



World Health
Organization

ELIMINATE **YELLOW FEVER** EPIDEMICS

For further information

www.who.int/csr/disease/yellowfev/eye-strategy/en/