

ELIMINATE **YELLOW FEVER** EPIDEMICS

Global strategy for Eliminating Yellow Fever Epidemics (EYE)

SAGE, October 2016

Eliminate Yellow Fever Epidemics (EYE)

- **Global strategy**

- Countries at risk in Africa (n=34) and the Americas (13)
- Risk beyond these borders
 - Neighbouring countries
 - Risk of exportation to other continents

- **Time frame 2017-2026**

- **Builds on lessons learned and partner consultation**

- Vaccine supply issues must be solved
- Improve countries appropriation of the strategies
 - Vaccine introduction
- Must lean on strong participative governance

- **Comprehensive**

- Preventive vaccination strategies
- Preparedness, detection and response to outbreaks
- Includes research for new tools to address the risk

Three strategic objectives

	RESHAPED & SCALED-UP	NEW
<ul style="list-style-type: none"> • Protect at-risk populations <ul style="list-style-type: none"> ➤ Preventive mass vaccination campaigns (PMVC) ➤ Vaccinate every child (EPI) ➤ Risk assessments 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	
<ul style="list-style-type: none"> • Prevent international spread <ul style="list-style-type: none"> ➤ Protect high risk workers ➤ Apply the International Health Regulations ➤ Build resilient urban centres 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓ ✓
<ul style="list-style-type: none"> • Contain outbreaks rapidly <ul style="list-style-type: none"> ➤ Strengthen surveillance and laboratory capacity ➤ Ensure emergency stockpile vaccines ➤ Immediate outbreak response 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	

Revised risk classification to guide preventive strategies

- **Three step methodology – independent from supply constraint**
 - **1)** Estimate crude risk based on intensity of yellow fever virus transmission: “natural” risk
Modelled geographic transmission and resulting disease burden
 - ▶ **higher risk targeted to achieve sustained vaccine coverage**
 - ▶ **higher risk match the former “A” and “B” countries**
 - **2)** Actual risk based on population immune/nonimmune estimates
 - ▶ **Determines where action is needed**
 - **3)** Prioritization of countries based on their perceived level of risk
(history of arbovirus outbreak and expert opinion)

Three categories of risk

High risk

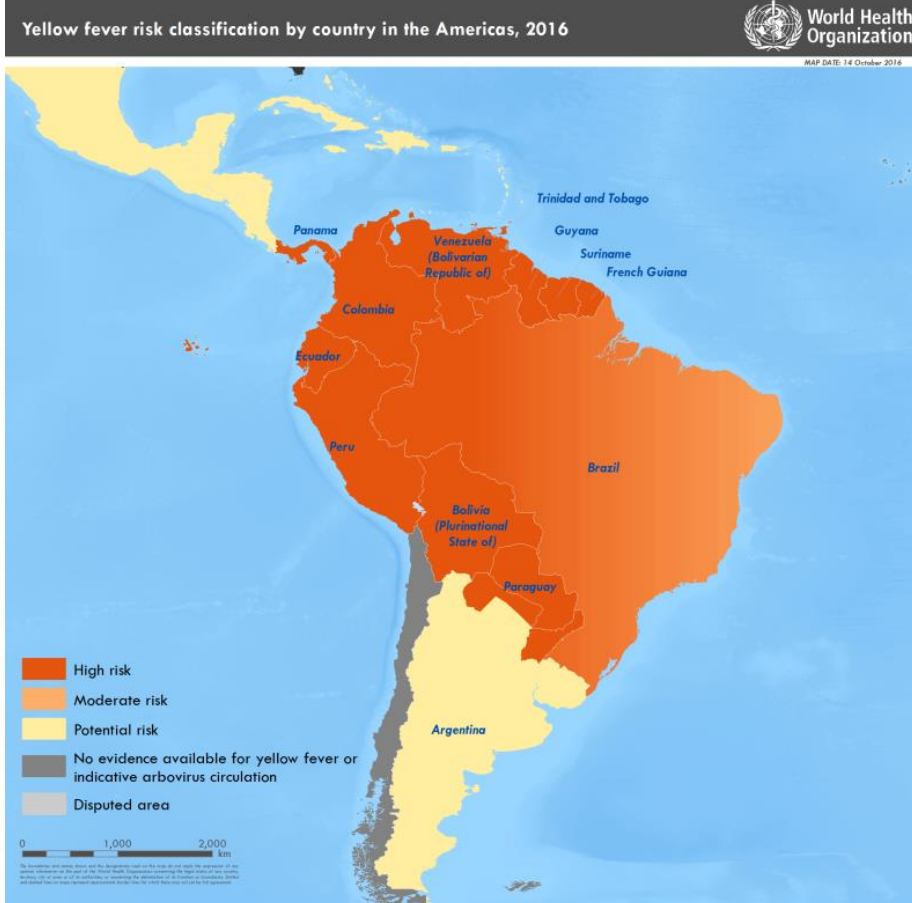
- National preventive campaigns & routine EPI national
- Case based surveillance
- Build resilient urban centers

Moderate risk

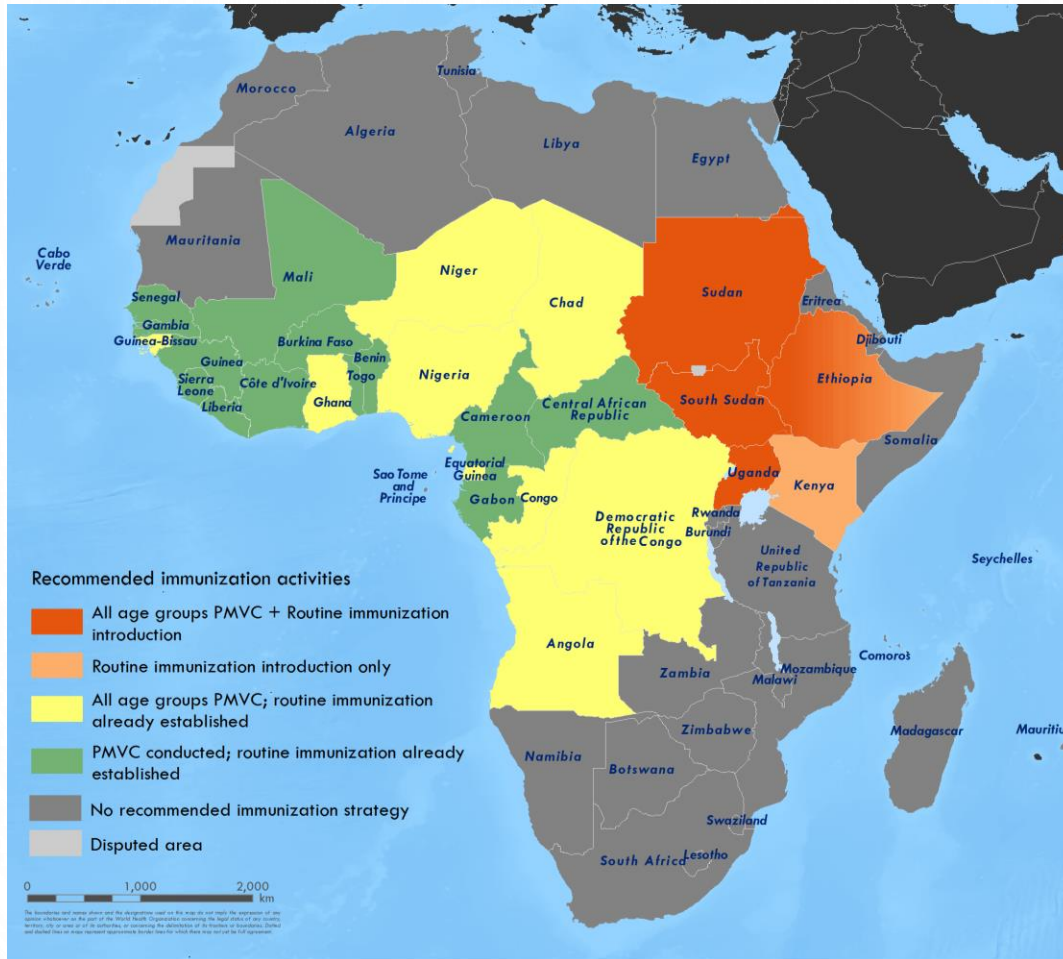
- Targeted vaccination approach
- Sentinel surveillance
- Build resilient urban centers

Potential for transmission

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



Strategic Objective 1: Protect at-risk populations



- **Africa**

- 27 high risk countries

Of these:

- 5 countries yet to introduce national YF routine immunization

- 13 countries yet to conduct/complete national preventive mass campaigns

Strategic Objective 1: Protect at-risk populations



- **Americas**

- 13 high risk countries

Of these:

- 0 countries yet to introduce routine immunization

- 11 countries to complete preventive mass campaigns

Low routine coverage: tackling root causes

- **Country stock-out**

- Between 2013 -2015, 15 / 34 countries reported a YF vaccine stock-out at national level

- **Difference MCV1-YF**

	WUENIC 2015 (median of the countries, in %)	
	MCV 1	YF
Africa (22)	75.5	70
Americas (9)	94	72

- **Fear of vaccine wastage**

- Promote 5 dose vial use

- **District level information needed**

Routine immunization: specific solutions in the broader context

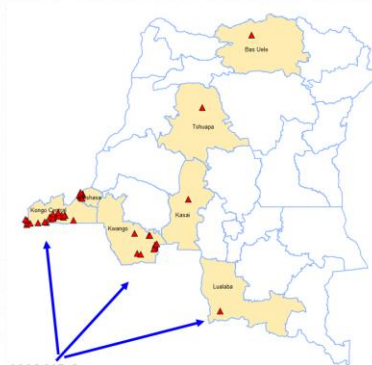
- **Links into health systems strengthening work**
- **Link with wider work on increasing coverage of all routine immunizations**
 - use and improvement of health records and information systems
 - training and support of the health worker
- **Advocacy to countries that need to introduce**
 - build government 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**

Strategic objective 2: Prevent international spread

- **Protect travelers (worker, tourists)**
 - Workers in extractive industries (oiling, mining, forestry, infrastructures) with increased sylvatic exposure
 - Local staff; as well international
 - Engage with private sector to protect staff and families



National



LUANDA
International



Inter-continental

- **Strengthen the International Health Regulation application**
 - “Double checking” upon entry in and arrival from at-risk areas
 - Engage transportations agencies and border control agencies/customs
- **Build resilient urban centers able to rapidly control YF transmission**
 - Urban readiness plans, with focus on transportation hubs

Strategic objective 3: Contain outbreaks rapidly

- **Surveillance and laboratory capacity**

- **Detect earlier**

- ▶ Develop new methods
 - Point of care lab techniques
 - New specimen sampling methods
 - Additional serology tests

- **Confirm faster**

- ▶ Scale up of subregional reference confirmation
 - 2018: 3 African subregional reference laboratories fully functional
 - 2020: 6 African subregional reference laboratories fully functional
- ▶ Build national laboratory capacity
- ▶ Strengthen and expand External Quality Assurance / Quality Control
 - 2020: fully functional

Strategic objective 3: Contain outbreaks rapidly

- **Respond immediately**
 - **Investigation capacity**
 - ▶ In-country capacity building
 - ▶ International deployment
 - **Ensure an emergency vaccine stockpile is always available**
 - ▶ Revolving stockpile: 6 million doses
 - ▶ Supply optimization (fractional dosing)
 - **Enable coordinated control interventions**
 - ▶ Reactive vaccination
 - ▶ Case management
 - ▶ Vector control
 - ▶ Community mobilization

Core activities needed from the start to ensure EYE success

Cross-cutting support to the 3 strategic axes

- **Sustained vaccine market: affordable vaccines**
- **Political commitment at regional and country levels**
- **Robust project governance with strong partnerships**
 - Steering committee: core group and members
 - Secretariat at WHO
 - Working groups
- **Development of a research agenda for public health**

Conclusions

- **Vaccination: scale up - combined routine/campaign still optimal**
- **New approaches**
 - Country risk category
 - Protect specific risk populations
 - 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
 - to be presented to Gavi PPC and Board

→ **SAGE position is crucial in EYE development**

Feedback from SAGE

- **Agree on the need for new strategic thinking?**
- **Support the general approach of EYE?**
- **New risk categories for countries**
- **Missing / underdeveloped strategic elements**

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