

SAGE WORKING GROUP ON YELLOW FEVER VACCINES

Session 5: Yellow Fever

SAGE will receive the report of the SAGE working group on yellow fever vaccines and recommendations for endorsements

Members SAGE Working Group on YF vaccines

- C. Akoua-Koffi, Virologiste, *Cote d'Ivoire***
- A. Barrett, Virologist, *USA***
- L. Dixin, Virologist, *China***
- E. Gotuzzo, Clinician and YF specialist, *Peru***
- P. Kusmiaty, Laboratory specialist, *Indonesia*.**
- M. Neil, Health Information System, USA***
- M. Niedrig, Virologist , *Germany*.**
- E. Staples, Epidemiologist , *USA***
- C-A. Siegrist Immunologist, *Switzerland*.**
- P. Tharmaphornpilas. Epidemiologist, *Thailand***
- O. Tomori Nigeria, Virologist, *Nigeria***
- P. Vasconcellos, Virologist & Epidemiologist , *Brazil***

Task & TORs of Working Group

To review evidence & prepare recommendations for SAGE endorsement on the use of YF vaccines in order to update the 2003 WHO position

Specifically, the WG was to review the

- need for booster doses every 10 years to maintain protection against YF disease**
- Interference between YF and other co-administered vaccines**

Task & TORs of Working Group

- **safety of YF vaccine in selected special populations, (*persons >60 years old, HIV-infected, or with other immunocompromising conditions, pregnant women, lactating women, specifically the safety of vaccine exposure in their breastfed infants*)**
- **Impact of vaccination strategies on control of yellow fever (*routine vaccination versus outbreak control, combined routine immunizations and preventive campaigns*)**

ACTIVITIES OF THE WORKING GROUP

WG (set up Sept. 2011), conducted monthly teleconferences between Dec. 2011 & Jul. 2012

Held 2 face-to-face meetings (Apr. 2012 & Jan. 2013) and a final teleconference in Mar. 2013

The WG reviewed published, peer-reviewed studies as primary source of data, and relevant unpublished data, available to WHO.

WORKING GROUP PRESENTATIONS TO SAGE

4 Presentations

I. Introduction and status report on yellow fever control

O. Tomori

II. Evidence review with respect to the duration of protection and vaccine safety in special populations,

E. Staples

III. Other evidence reviewed by the SAGE working group.

A. Barrett

IV. Proposed recommendations. *O. Tomori,*

Introduction and status report on yellow fever control

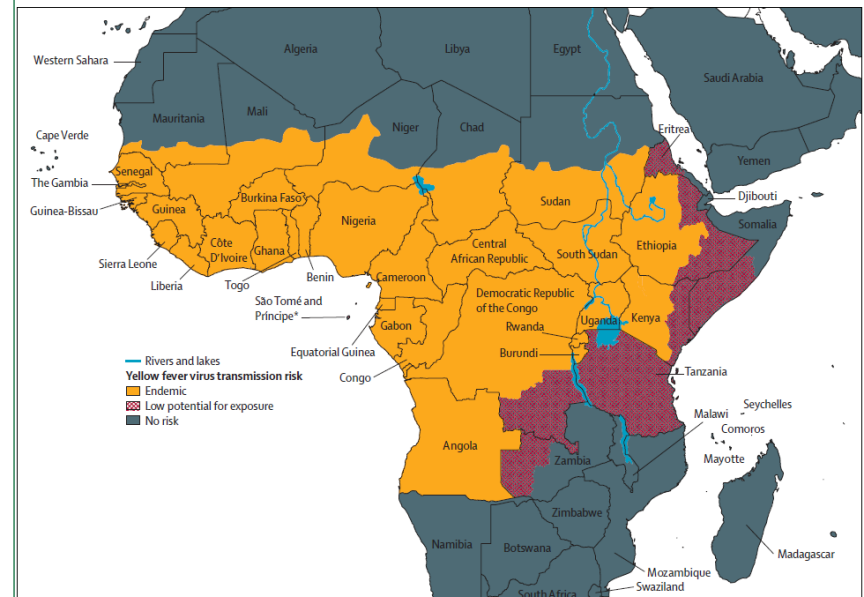
O.Tomori

YF Endemic zones

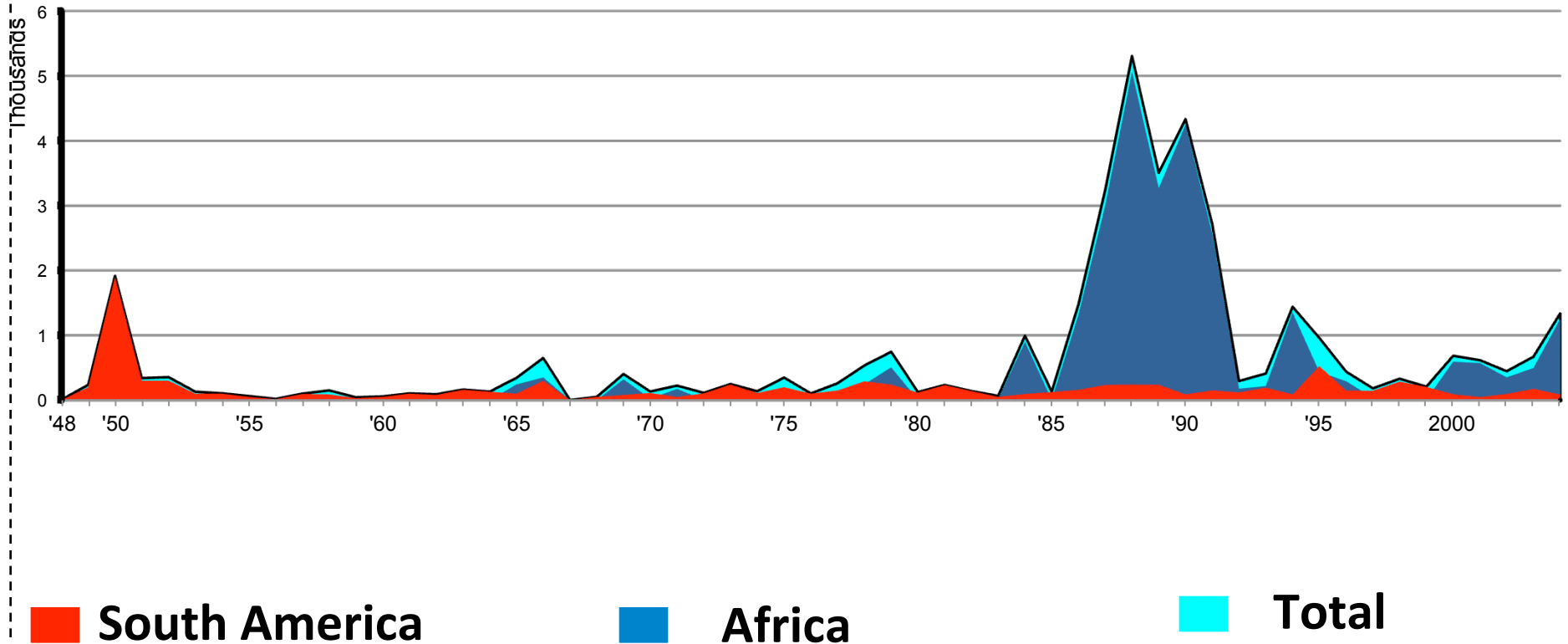
SOUTH AMERICA



AFRICA



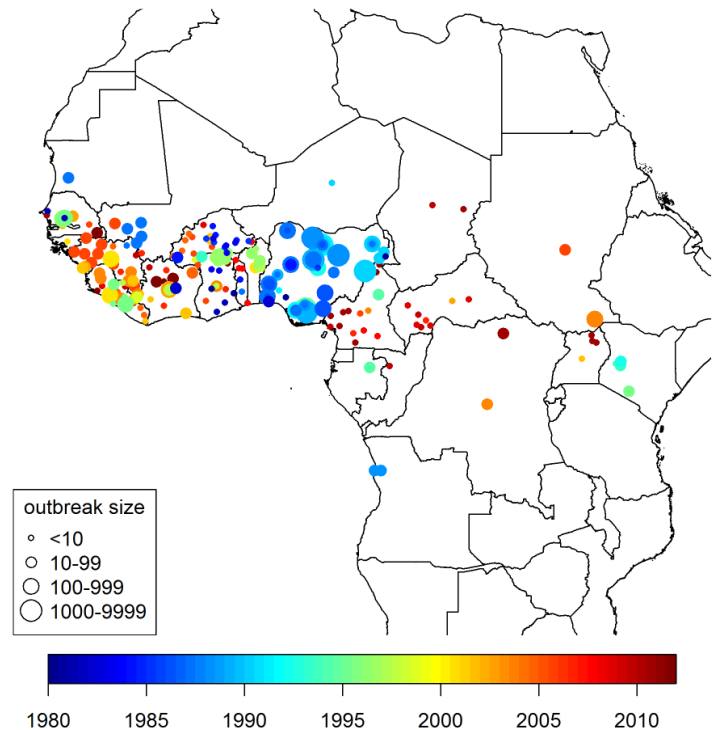
YF Incidence & Geographical Distribution 1948-2012



YF : A never-ending re-emerging disease

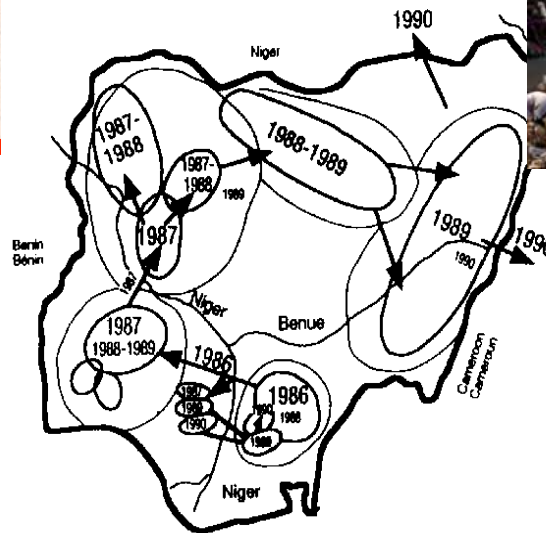
- YF re-emerged, mid '80s
 - Nigeria, '87-'92: >116,000 cases
 - Niger, 1990
- Epidemics in newly affected areas
 - KEN - 1992
 - GAB - 1994
 - CAR - 2008
 - UGA - 2010/2011
 - CAE, DRC, CHA, SUD - 2012

Reported YF outbreaks, 1980-2010





1987



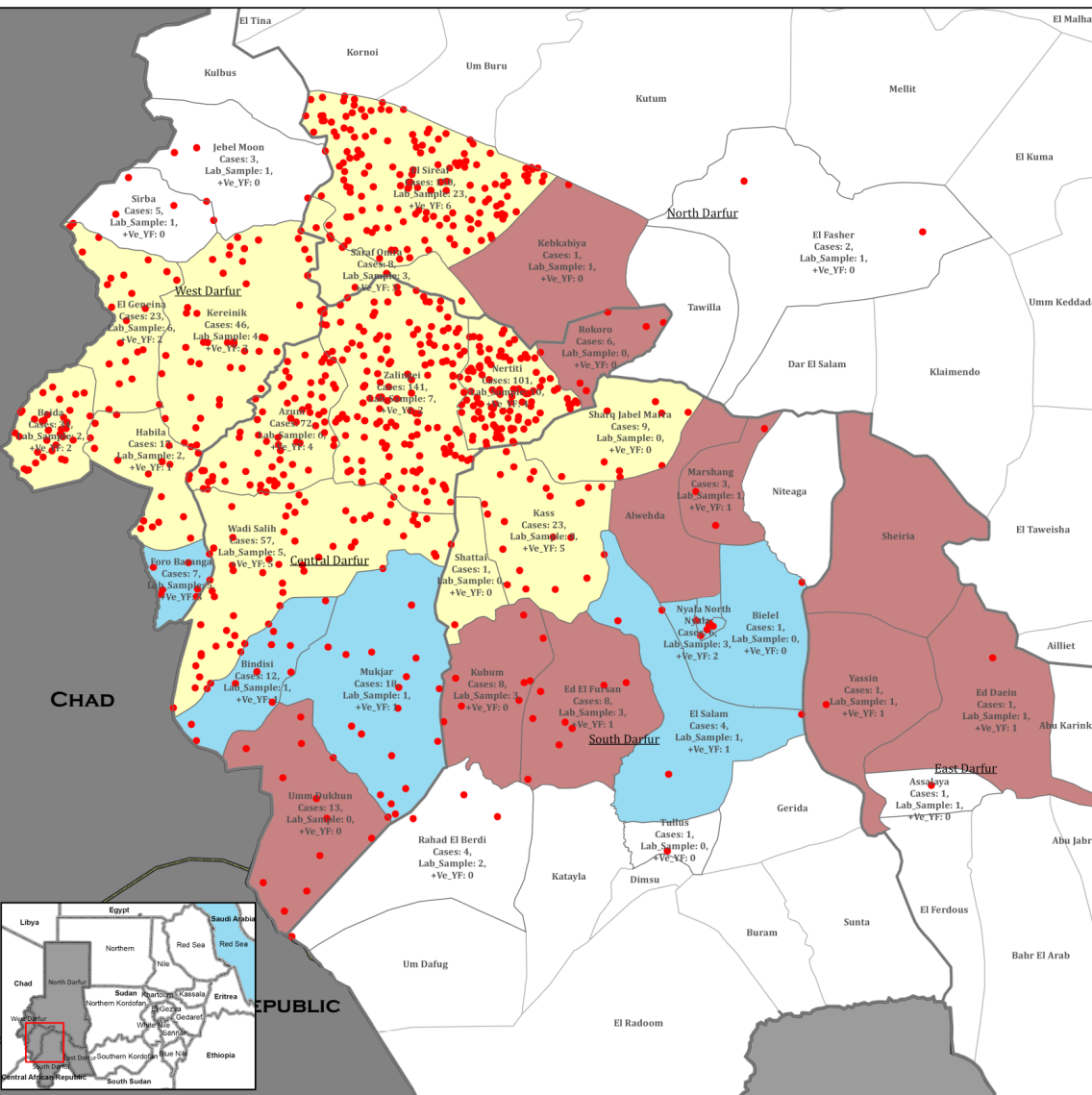
1992

>116,000 cases



>5,000 died

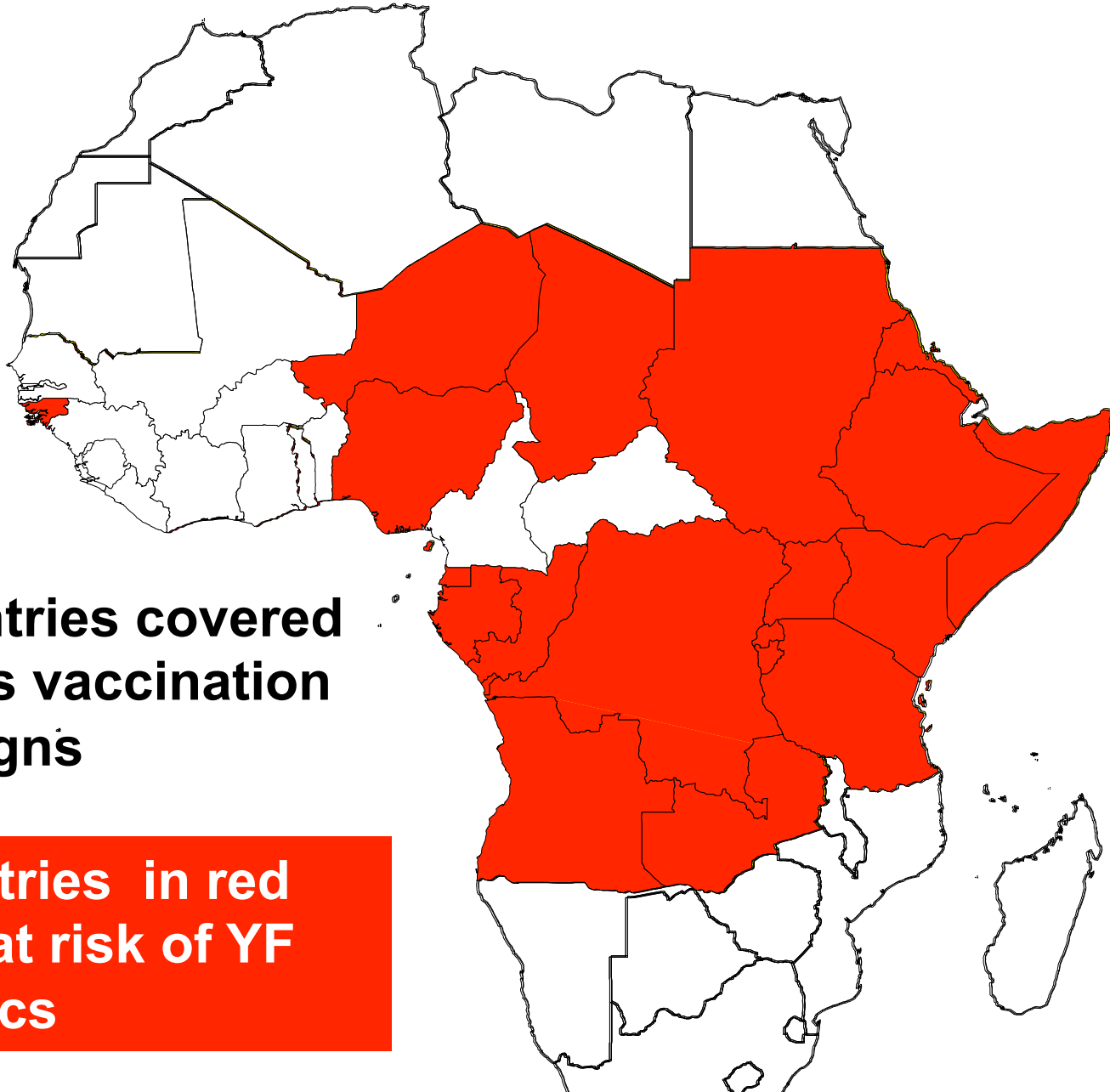
In Darfur - 2012



Darfur, Yellow Fever epidemic, 2012

849 cases - 171 deaths

YF - 34 Endemic Countries 2005 GAVI Initiative

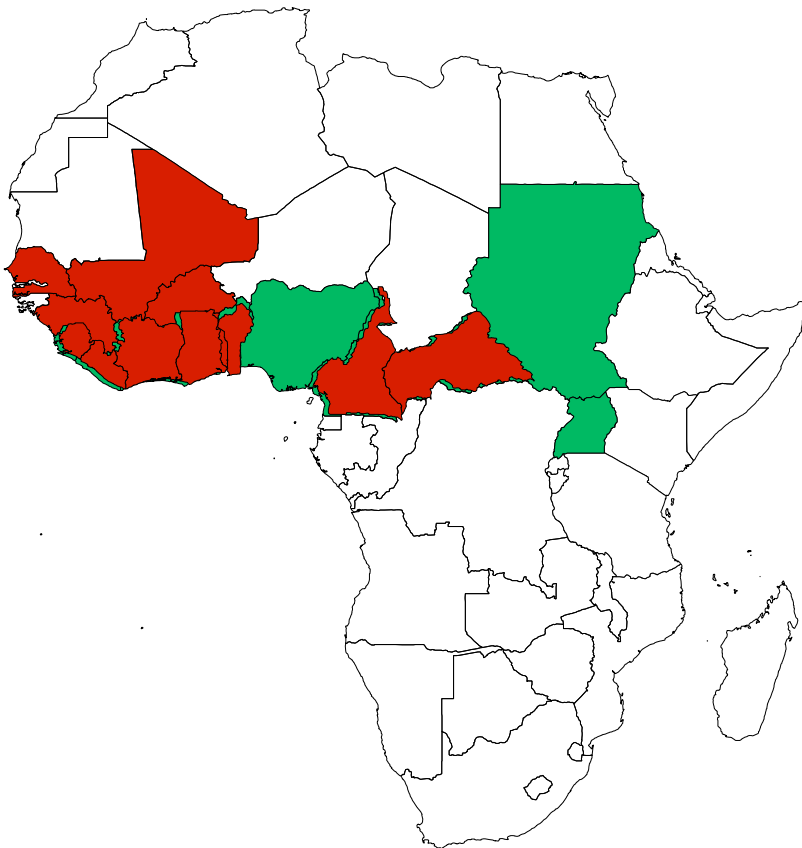


12 countries covered by mass vaccination campaigns

22 countries in red remain at risk of YF epidemics

Achievement of the 2005 Initiative - 1

- 90 million people vaccinated
- No YF epidemics in WA since 2006

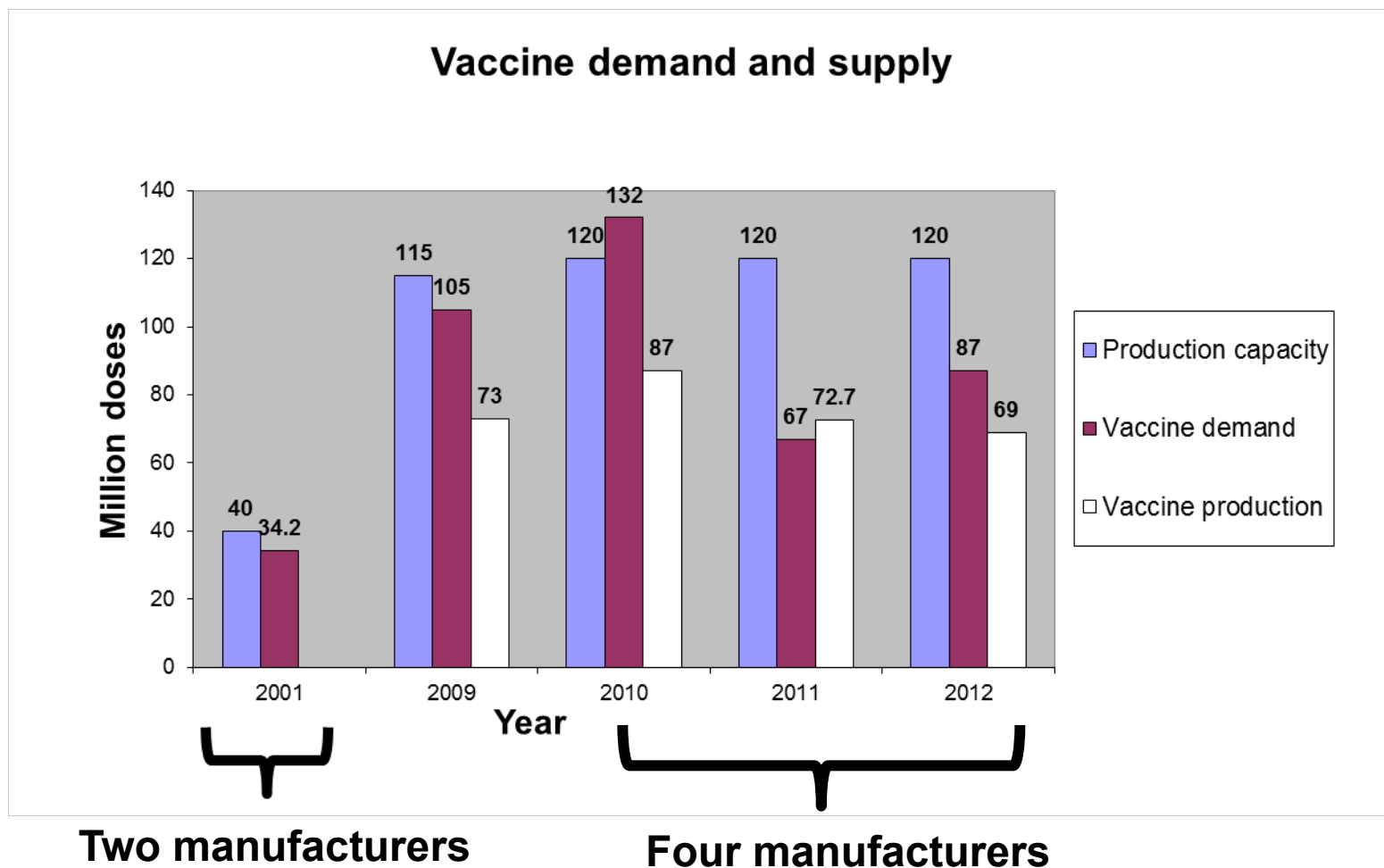


		Vaccinated (in million)	Coverage (%)
Togo	2007	3.6	98
Senegal	2007	3.1	99
Mali	2008	5.9	99
Burkina Faso	2008	7.6	99
Cameroon	2009	7.5	99
Benin	2009	6.3	99
Liberia	2009	2.9	99
Sierra Leone	2009	4.1	96
Guinea	2010	6.0	89
Côte d'Ivoire	2011-12	15,4	84
Ghana	2011-2	7,6	88
CAR	2010-11	2.7	90

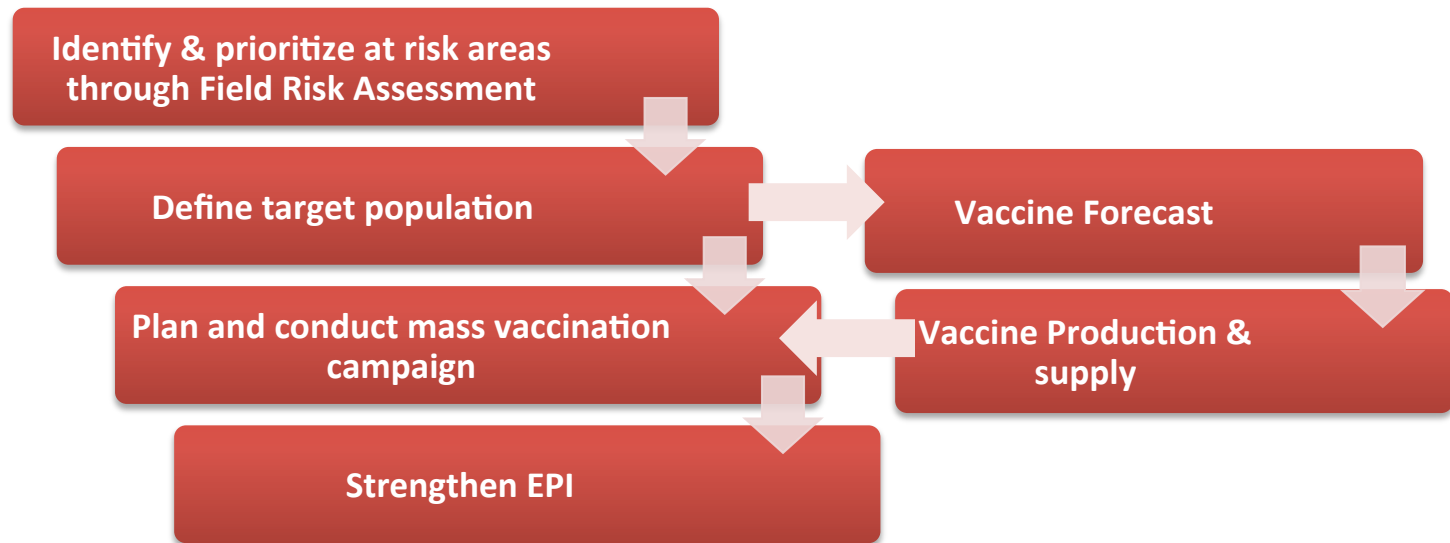
- YF Preventive campaign achieved
- Risk assessment done - campaign planned (2013-2017)

Achievement of the 2005 initiative - 2

Increase vaccine production and supply



YF Strategic Framework 2013-2020



- Endorsed by TFI in December 2012
 - AFRO to submit a YF Control resolution to 2014 RC

YF Strategic framework 2013-2020

- Objective: to protect 155 m people and eliminate YF epidemics for next 30-40 years**
- Estimated cost: \$290 million USD**
 - \$160m already committed (Nigeria),**
 - \$130m needed**

Specifically, SAGE will be asked to:

- **Reconsider the need for booster doses every 10 years;**
- **Review the safety profile of the vaccines and update the recommendations on safety issues with respect to immunization of HIV infected and other immunocompromised populations, pregnant or lactating women, people over 60 years old and in context of viscerotropic and neurological diseases;**
- **Review the role of RI versus outbreak control;**
- **Review the impact of the combined vaccination strategy (routine immunization and preventive campaigns);**
- **Review of interference between yellow fever and other vaccines and co-administered vaccination & identify critical research questions.**