



ELIMINATE
YELLOW FEVER
EPIDEMICS

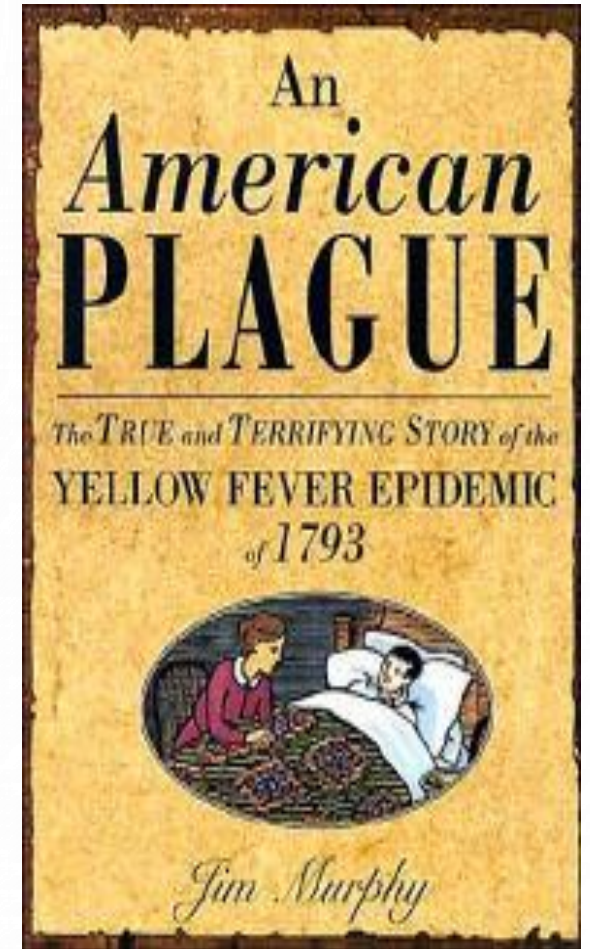
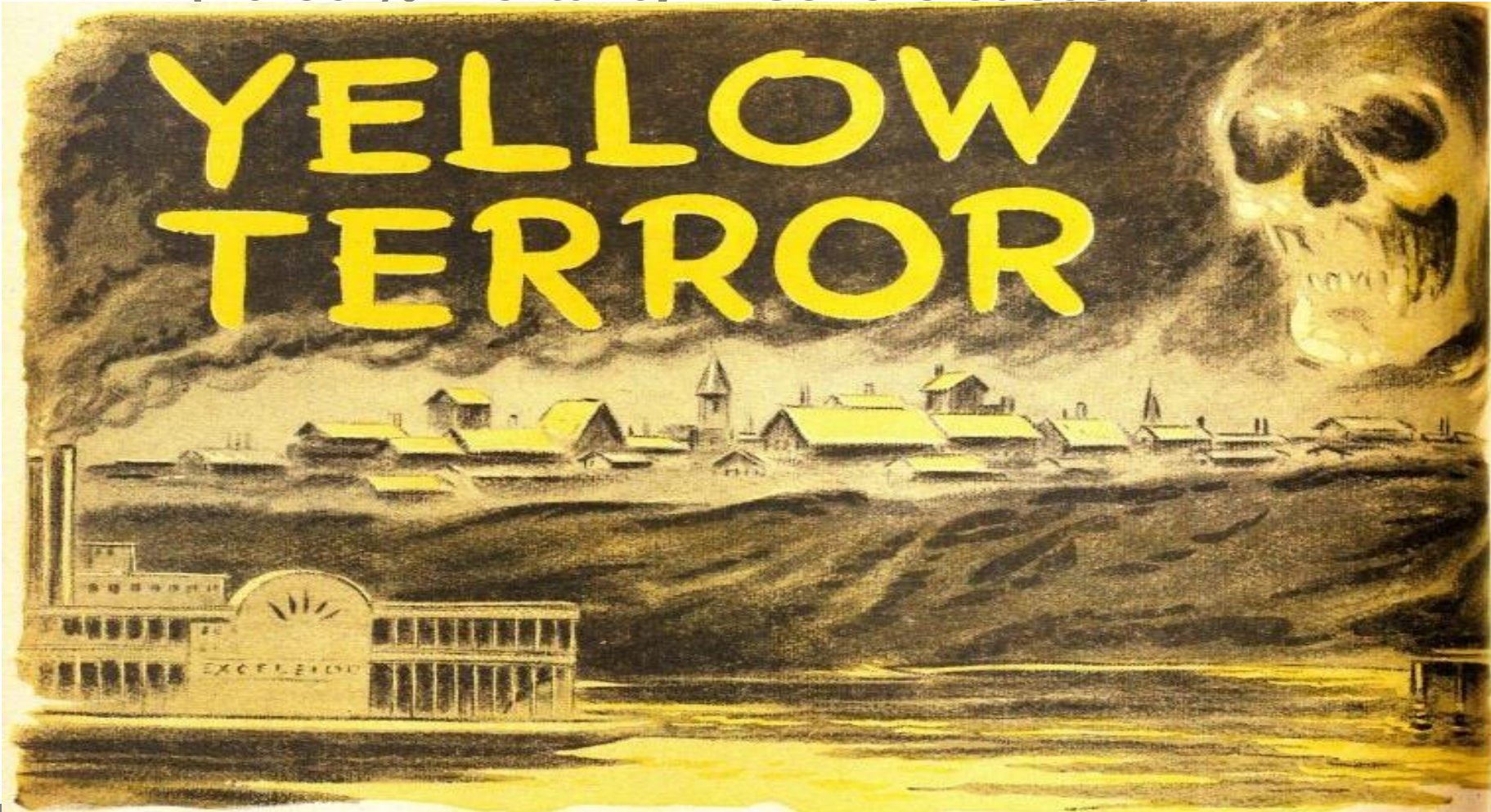
Global strategy for Eliminating Yellow Fever Epidemics (EYE)

DCVMN 18th AGM 25-28 September 2017 – Seoul

Vaccines: inspiring innovation

Dr Sylvie Briand, Director Infectious Hazards Management
WHO / Health Emergencies Programme

Yellow fever: scary epidemic disease
(20-50 % mortality in severe cases)



Excellent yellow fever vaccine

Life long
protection



Safe vaccine



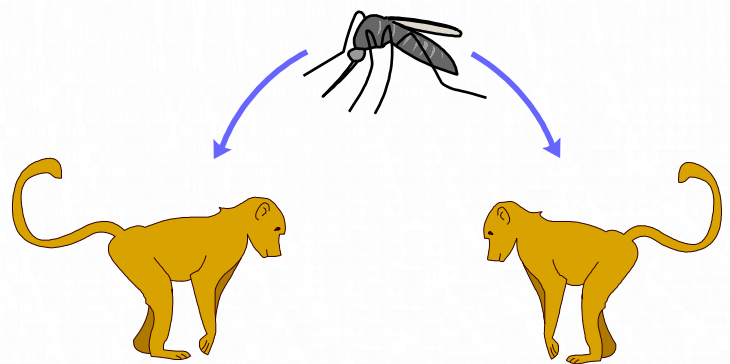
Urbanisation, migrations/travels and epidemic amplification



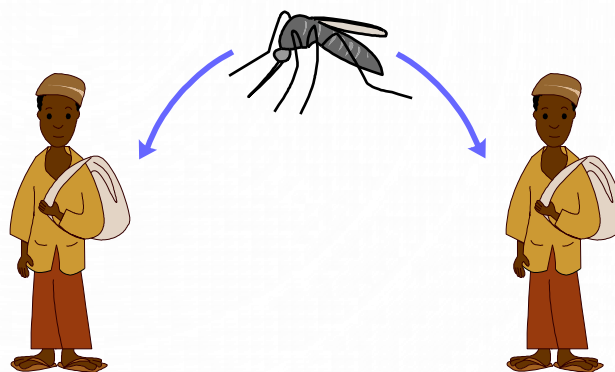
Increased global risk
of yellow fever



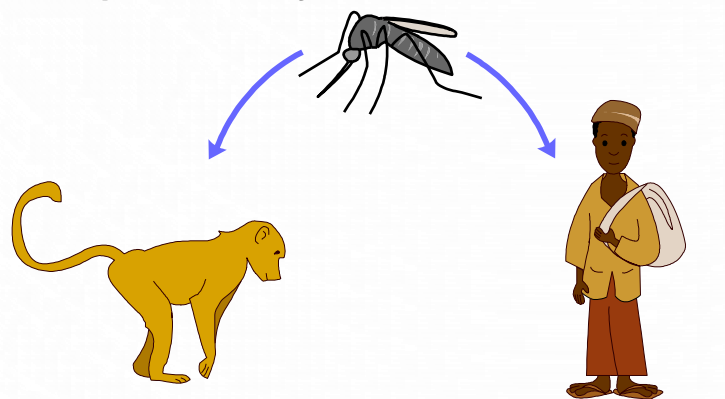
Sylvatic, intermediate and urban yellow fever



Transmission monkey-mosquito-monkey



Transmission human-mosquito-human

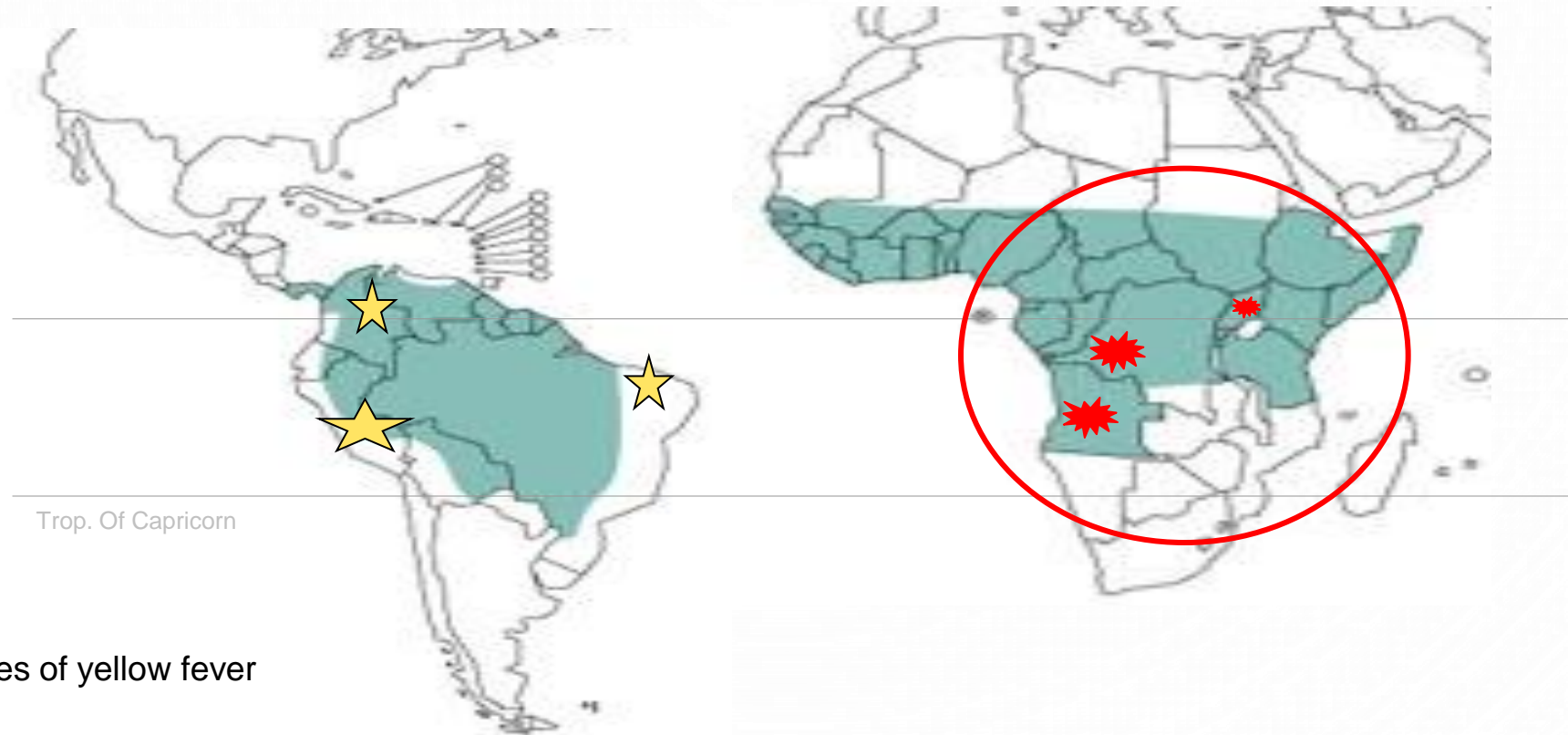


Transmission monkey-mosquito-human

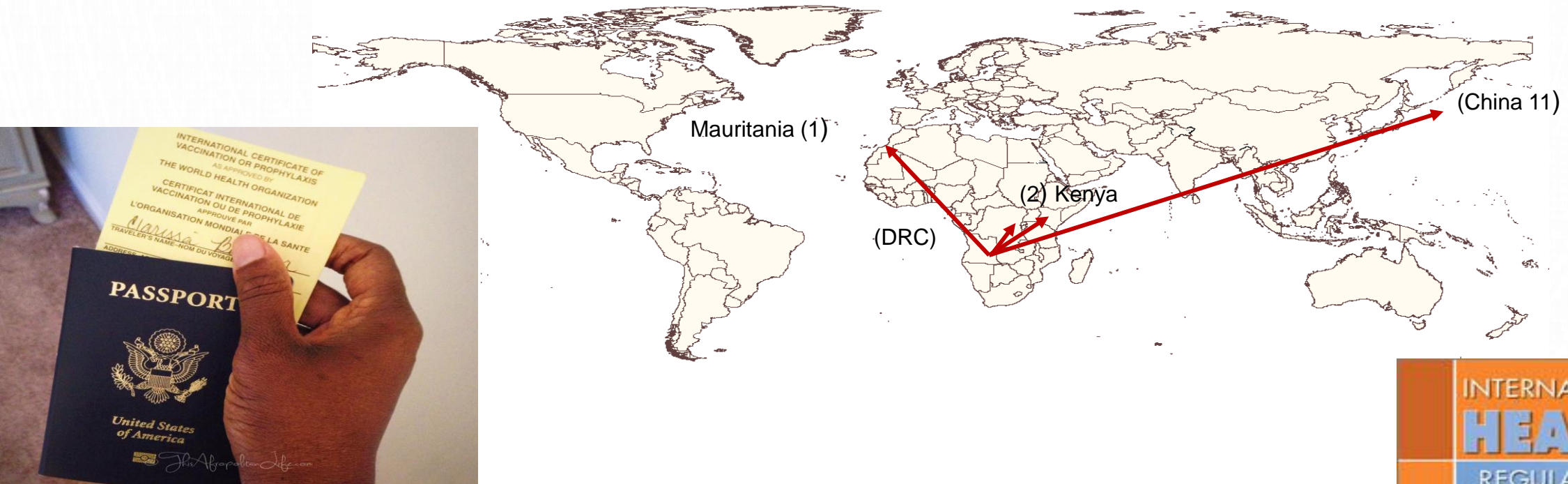


Endemic yellow fever countries

YF outbreaks in 2016



Yellow fever international spread - Angola (2016)

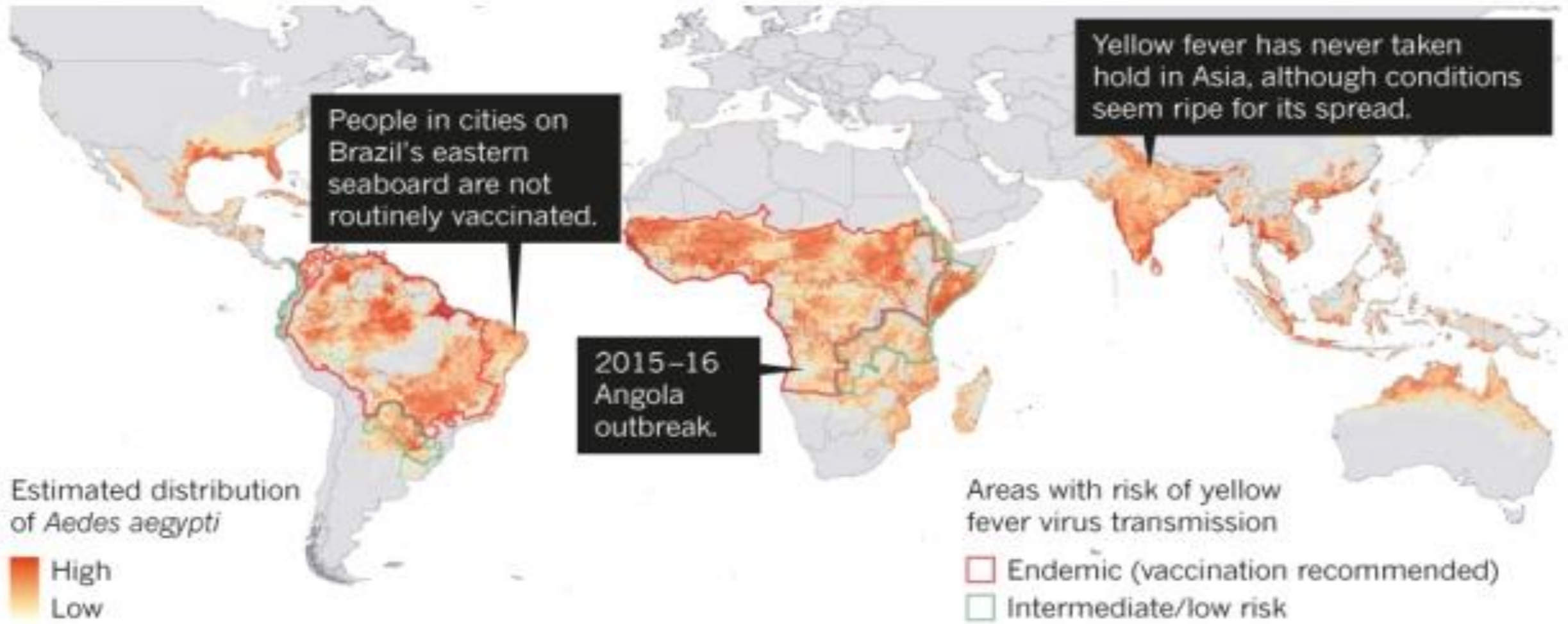


WHERE MIGHT YELLOW FEVER GO NEXT?

An ongoing outbreak of yellow fever in Angola has scientists worried that the virus might spread to cities that harbour its urban carrier, the *Aedes aegypti* mosquito.



©nature



Tackling the re-emerging yellow fever risk

- **1. Reduce risk of large and uncontrollable outbreaks in endemic countries**
- **2. Prevent epidemics in non-endemic countries**

Eliminate yellow fever epidemics by 2026



27 in Africa
13 in the Americas

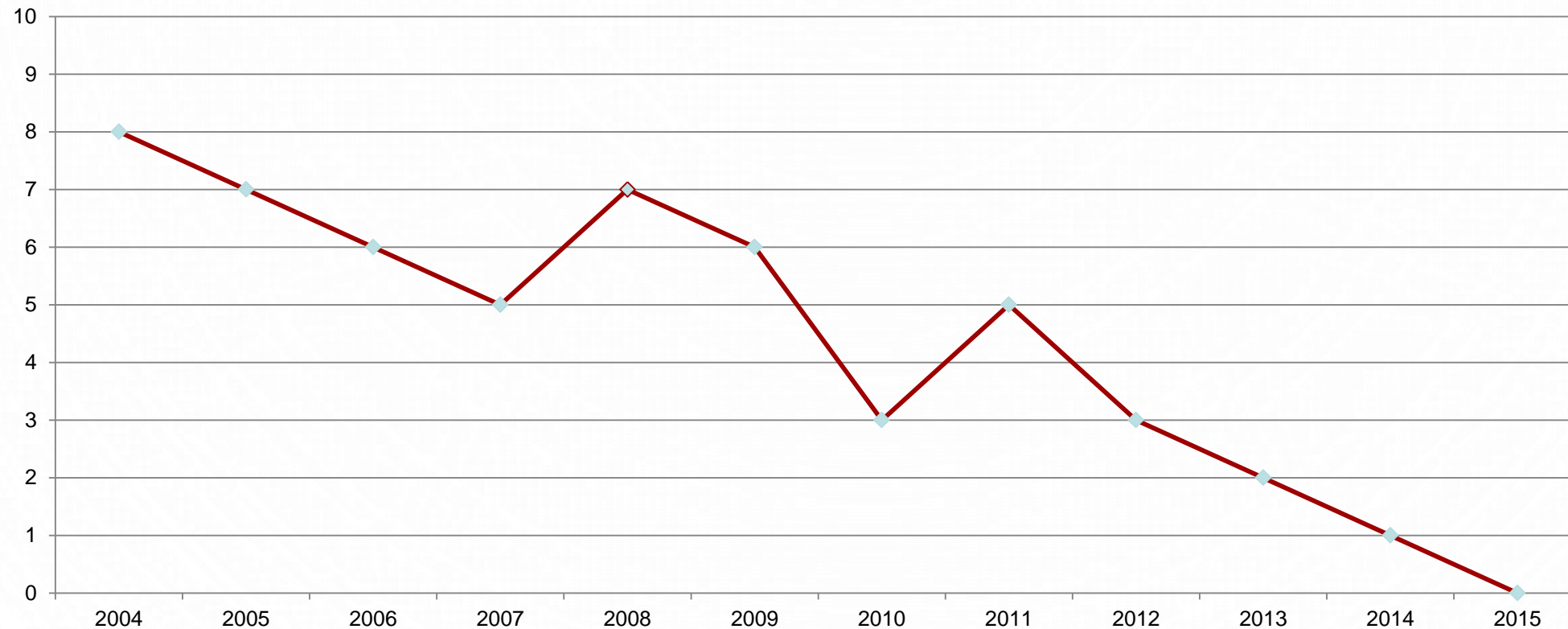
GAVI
UNICEF



ELIMINATE
YELLOW FEVER
EPIDEMICS

Yellow Fever Initiative supported by GAVI : mass vaccination 2005-2012 in West Africa

West Africa: No outbreaks were reported in 2015





STRATEGIC OBJECTIVE 1:

Protect at-risk populations: no epidemic

**Where risk is high,
vaccinate everyone**

Quickly raise population immunity levels through mass vaccination campaigns.

Reach every child

Sustain high yellow fever vaccine coverage in all districts through childhood routine immunization.

Risk assessments

Assess the risk of yellow fever epidemics in at risk countries to set priority for interventions.



STRATEGIC OBJECTIVE 2:

Prevent international spread: no exportation

Protect high-risk workers **NEW!**

Engage private sector to protect unimmunized workers with sylvatic exposure (eg. oil and mining industry, agro business).

Apply International Health Regulations (IHR)

Develop innovative approaches to strengthen IHR application in countries at risk or potential for yellow fever.

Build resilient urban centers **NEW!**

Develop and implement urban readiness plans to enable urban coping with epidemics.



STRATEGIC OBJECTIVE 3:

Contain outbreaks rapidly: no sustained transmission

Detect early

Strengthen surveillance and laboratory capacities.

Vaccine supply is ready at all times

Ensure permanent availability of yellow fever vaccines worldwide for rapid intervention.

Respond immediately

Launch coordinated control interventions including reactive immunization, community mobilization, vector control and case management.

Mass Vaccination Campaign in urban settings (2016)



- Mass vaccination in large urban settings :
 - 10 weeks to vaccinate 5.9 m people in Luanda (91%)
 - Major logistic challenges: syringes, training, lack of operational costs, intense pop movement
 - Waste management : Campaign in Kinshasa: 13.5 tones of injection material
 - Coordination of partners
- Timing for deployment 4-21 days average 11,5 days
- First mass vaccination with yellow fever fractionate vaccine dose



Key points



1. Urban YF outbreaks are difficult to control
2. Change in epidemiologic patterns and increased global risk
3. It is urgent to increase population immunity in high risk endemic YF countries
4. Limited global vaccine supply requires innovative approaches for vaccination and sustained vaccine production



ELIMINATE
YELLOW FEVER
EPIDEMICS

Thank you

For further information

<http://www.who.int/csr/disease/yellowfev/en>

@SCBriand - # WHO-DON #yellowfever



World Health
Organization