REPUBLIC OF KENYA
ZDU ZOONOTIC DISEASE UNIT

East Africa Regional Rabies Meeting

7th -9th February 2017

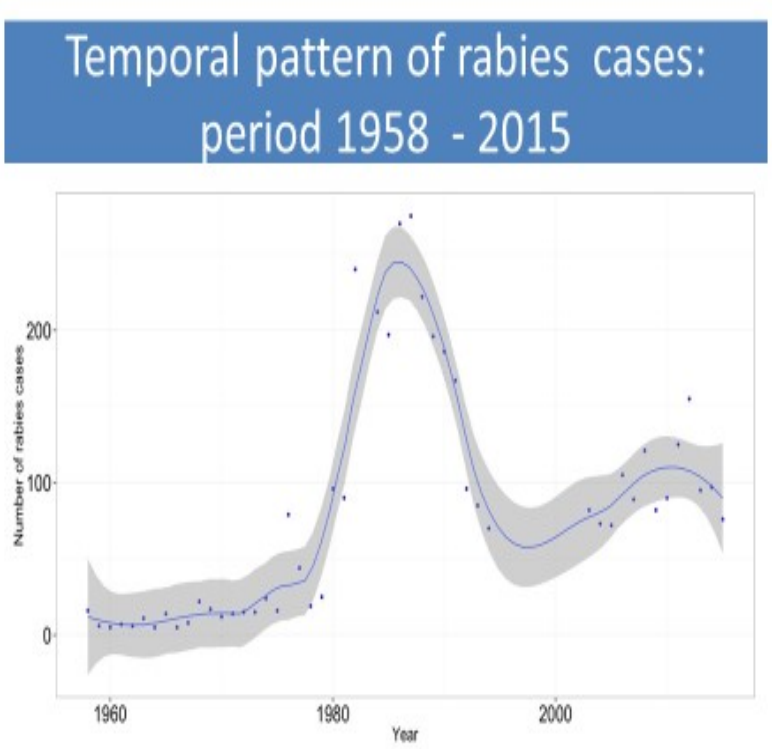
Nairobi, Kenya

Kenya

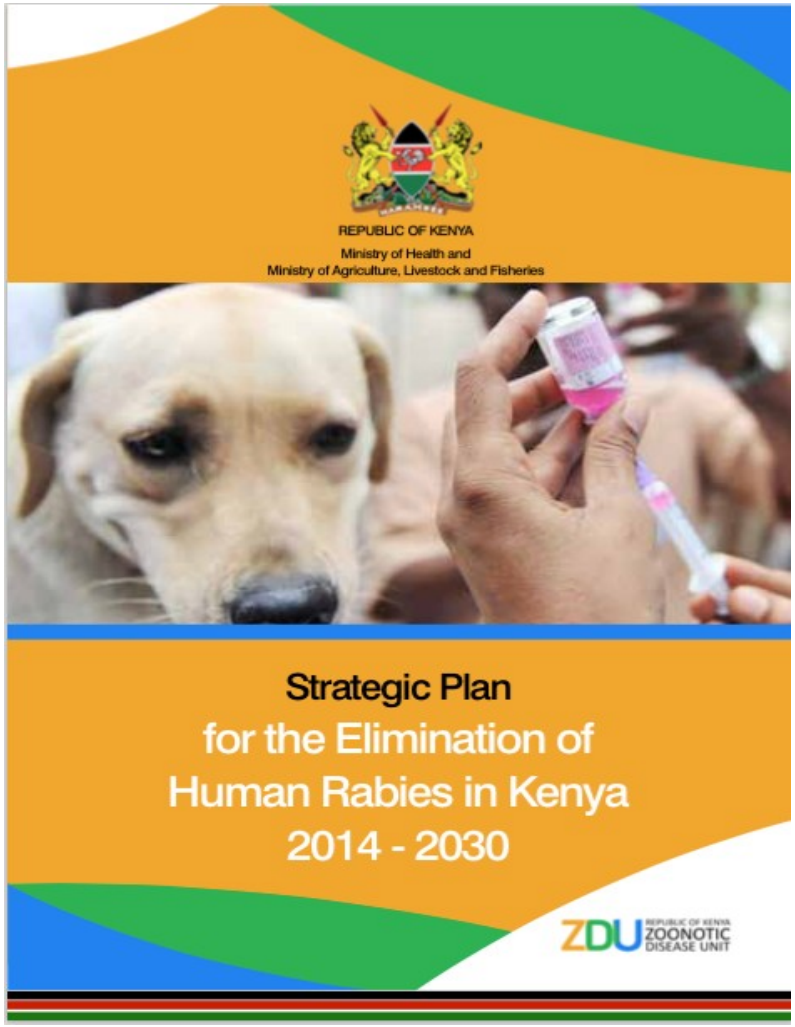
- Human population 48M (2017)
- National average 1:8 dog: human ratio
- 42% less than 15 years

Rabies in Kenya

- Disease of antiquity; 1st case diagnosed 1912
  - Human case:1928
- Endemic to the country
- Virtually controlled but breakdown of efforts resulted in resurgence
- False perception of low burden



Strategy for rabies Elimination of Human rabies in Kenya



Mass dog vaccination

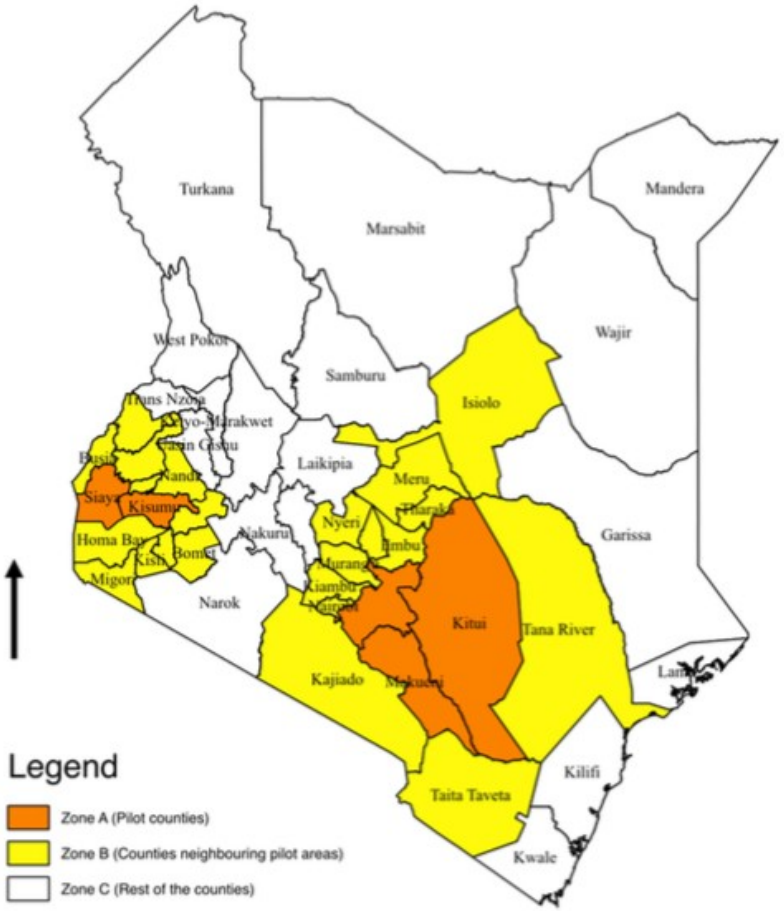
Provision of PEP to exposed persons

Public health education

Guiding principles of the strategy

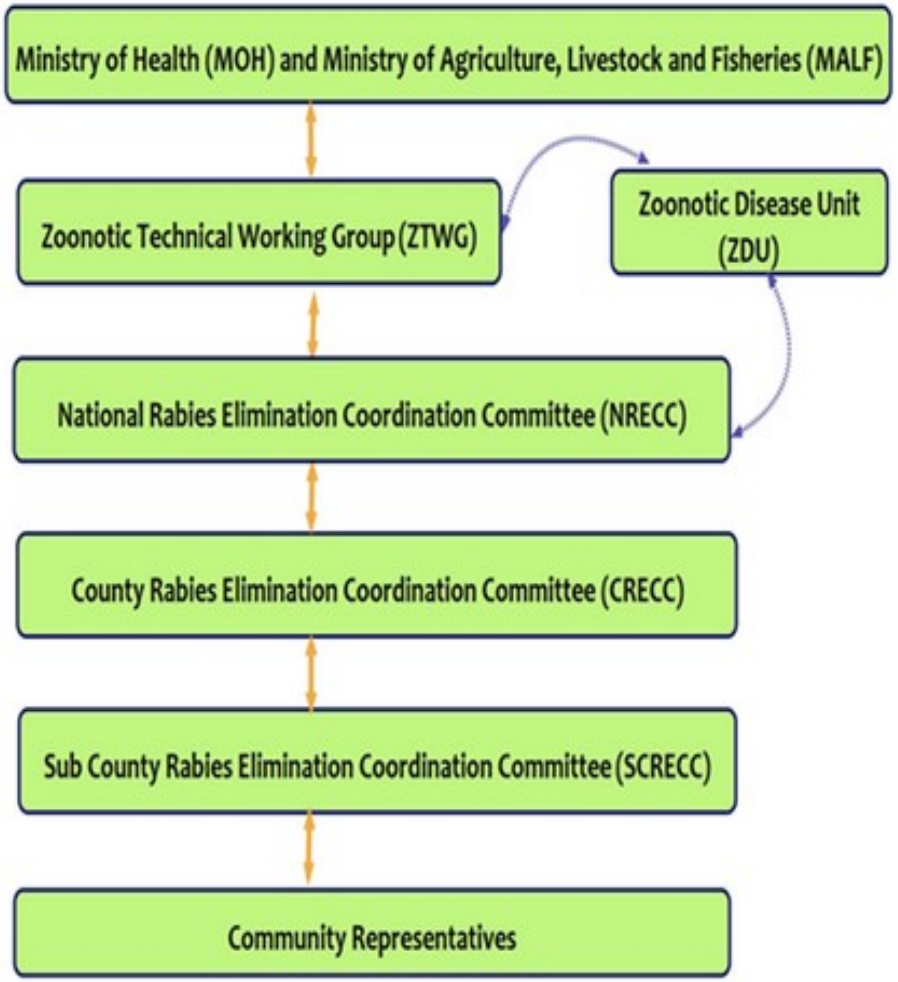
- Rabies control is a public good
- Rabid domestic dogs: transmit 98% of human rabies
- More than 80% of dogs in Kenya are owned
- Mass dog vaccination is a cost-effective strategy
  - Rabies elimination
    - 70% of dog population, 3 consecutive years
- There is no documented evidence that wildlife maintain rabies virus

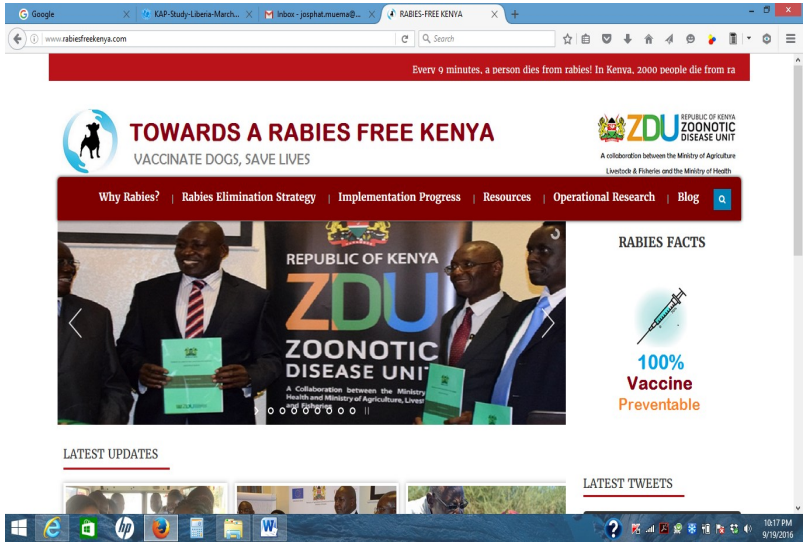
Pilot Counties



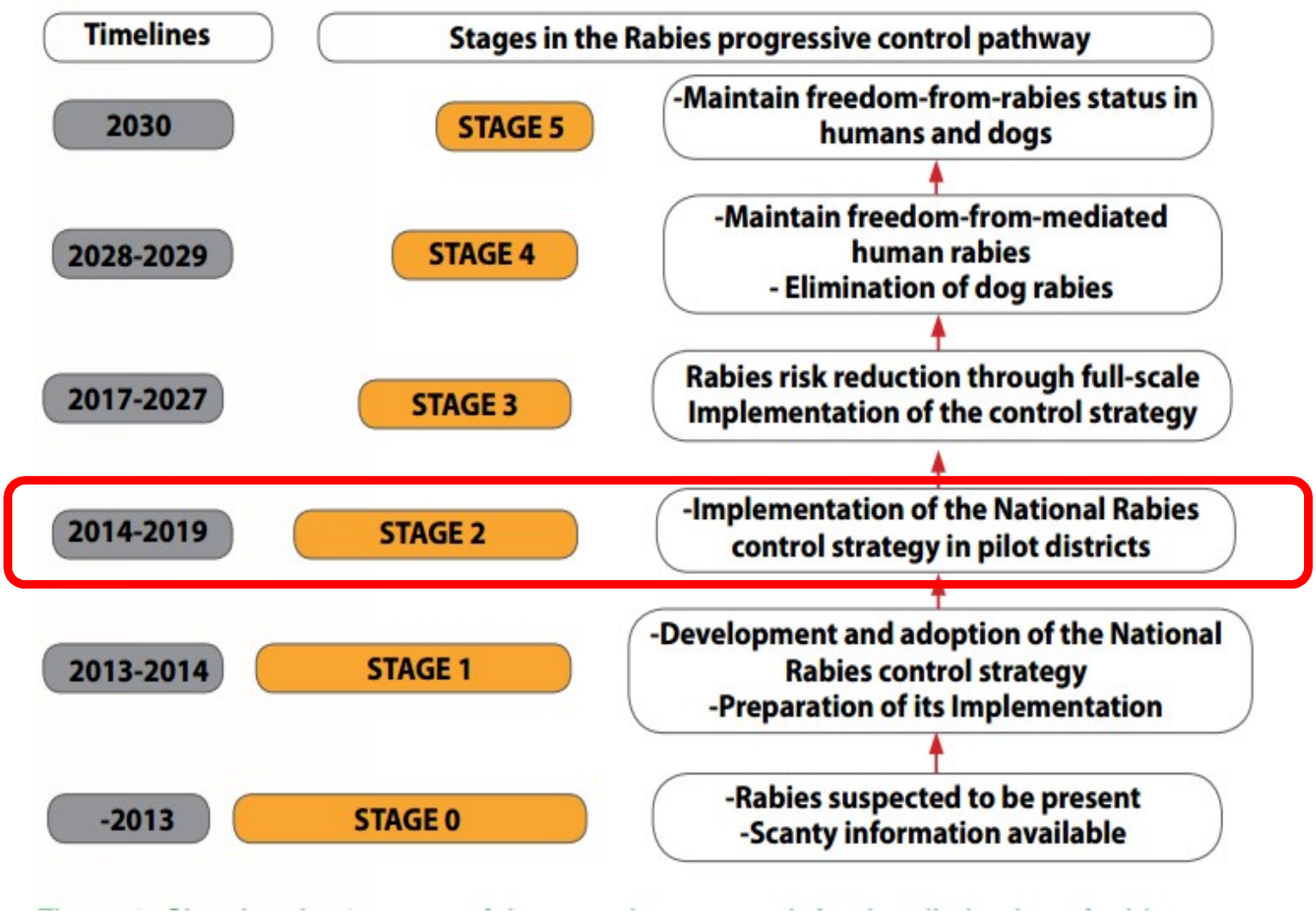
- Zone A: Western Kenya
  - Kisumu, Siaya,Makueni, Kitui Machakos
- Zone B: Eastern Kenya
  - Close proximity to pilot areas
- Zone C: Rest of the country

Coordinating structure





Implementation progress



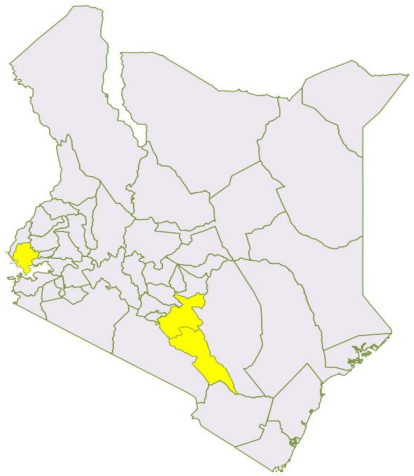
Rabies elimination Activities in 3 of the 5 pilot counties

Makueni : started in 2015

- Baseline surveys
- Four round mass dog vaccination
- Surveillance project
- Vaccination coverage 65%

Siaya: started in 2016

- One round Mass dog vaccination
- Coverage: 52%
- Human dog bite surveillance



Machakos :

- Baseline surveys-underway

Ongoing Activities

- **Surveillance**
  - Human
    - Active case search
    - Contact tracing
    - Strengthen reporting system
  - **Dog**
    - Contact tracing
- **Public Education**
  - TV and Radio
  - Paper and electronic media
  - School health programs
- **Case Management**
  - Provision of PEP
  - Sensitization of clinicians

Lessons learnt

- Need proper planning – involve all stakeholders
- Invest in public education
- Need to strengthen diagnostics
- Involving children through schools
- Need for well designed operational research:
  - Dog ecology studies
  - Post vaccination surveys
- Importance of human-dog bite surveillance
- Partner coordination
- Buy in by Counties to adopt and implement the strategy

Estimated Rabies Elimination Cost

Mass dog vaccination in Siaya	
Dogs vaccinated: 14,330	$21,791
Cost per dog:	$1.5
Estimated dog: human ratio	1:8
Estimated dogs to be vaccinated	4.025 M dogs
Estimated cost for vaccinating this for 3 years	$18.4 M
Cost of PEP	
DHIS2 dog bites per year	70,000
PEP cost for (5 doses)for 1 case	$100
Total PEP cost for 3 years	$21M
Enhance rabies Surveillance	$48 M
Rabies Elimination **Direct cost**	$44.2M
Rabies Elimination **Indirect cost**	$11M
Total Rabies Elimination Cost	Ksh. 55,239,752
Internal resources (PEP cost+ indirect cost)	58% of Total cost
External resources (direct cost- PEP cost)	42% of total cost

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