

RABIES OUTBREAK RESPONSE IN GEM DISTRICT, SIAYA COUNTY JUNE 2013



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Background Information

Rabies

- **Acute viral *encephalomyelitis* caused by rabies virus**
 - **Transmission is through saliva**
 - **Incubation period is variable ranging from five days to seven years in humans**
- **Worldwide >70,000 deaths occur each year**
- **In Kenya ~1,000 deaths each year**

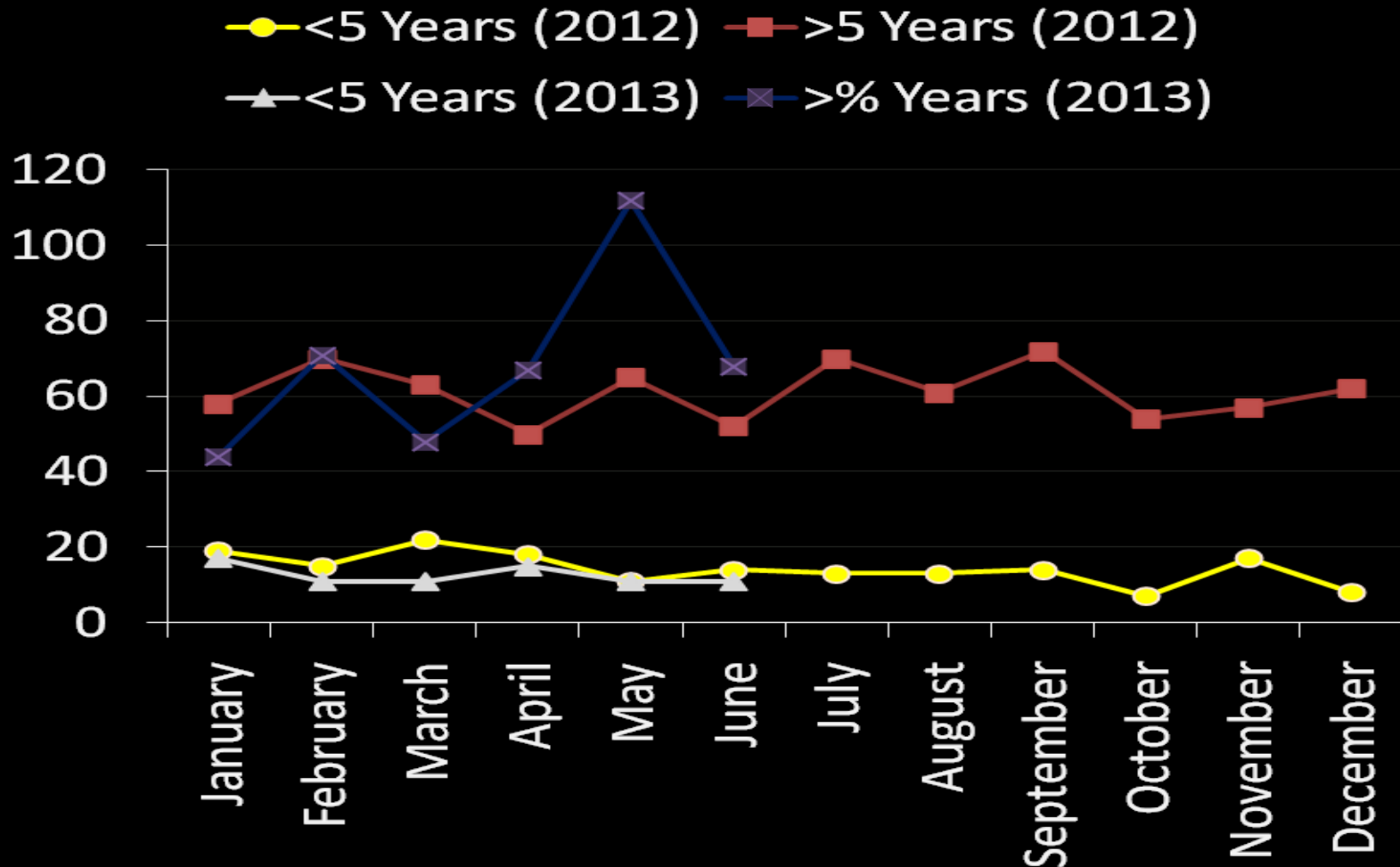
Outbreak Background

- **March 2013 - ZDU notified of a six year old boy who died of rabies**
 - **Boy from Gem, died in Aga Khan Kisumu**
 - **Date of death 8th march**
- **Brain tissue tested positive for rabies by DRIT at KEMRI/CDC lab**
 - **Confirmed-Immunoflorescent Antibody Test at the Central Veterinary Laboratories Kabete**

Human Rabies Case

- **Boy was bitten by a puppy – 1/1/2013**
 - **Puppy was bought from a shop**
 - **Boy taken to Ramula Health Centre**
 - **Anti rabies vaccine wasn't given**
- **Residence - Yala division, Gem district, Siaya county**
- **Fell ill – 2/3/2013; treated for malaria at Ramula HC**
 - **Self referral to Aga Khan – died 8/3/2013**

Number of Animal Bites in Gem District, 2012/2013



Outbreak Response

- This was 2nd Outbreak in the district in previous 1 year
- District requested for technical and financial support to respond
- Joint response between MALF and MoH planned

Objectives of the Response

- **Vaccinate 70% of the dogs in the target area**
- **Sensitize teachers and community leaders on rabies prevention**
- **Train health workers on dog bite management and rabies prevention**

Methods

Response Team

- **Activities restricted to Yala Division**
- **Consisted of**
 - **ZDU staff** - **Officer from MoLF**
 - **Epidemiologist- Nyanza**
- **Field work – 17th to 22nd June 2013**
 - **Delivered vaccines**
 - **Prepared training materials**
 - **Participated in trainings – teachers, HWs, CHWs**
 - **Participated in preparatory meetings for the animal vaccination**
 - **Organized for independent monitoring**

Independent Monitoring (IM)

- Modeled along polio IM
- Monitors - recruited by national supervisors
 - 8 students from Odera Akango University College
 - Each team – 2 students
 - Coordinators - CDVS (Siaya County) and DMOH
- Half day training for monitors and coordinators done by national team
- Monitoring – 29th and 30th June
- Sample size (minimum)- 2% of the target pop i.e (minimum of 100 animals)

Independent Monitoring ...

- **All locations participating in the campaign**
- **4 villages randomly selected from each location;**
- **At least 20 randomly selected households in each selected village**
- **Verified vaccination status of animals present during their visit;**
- **Vaccination status ascertained by checking vaccination cards and spray paint**

Results

Training for HWs, CHWs

Trained community health workers,
health workers and community
leaders

✦ Health Workers- 25

✦ Community health workers and
community leaders- 55

Community Health worker trainings in Yala township



Animal Vaccination

- Successful campaign; animals vaccinated:
 - **5,196** dogs
 - 834 cats
 - 143 donkeys
- Target - 5000 dogs (104%)

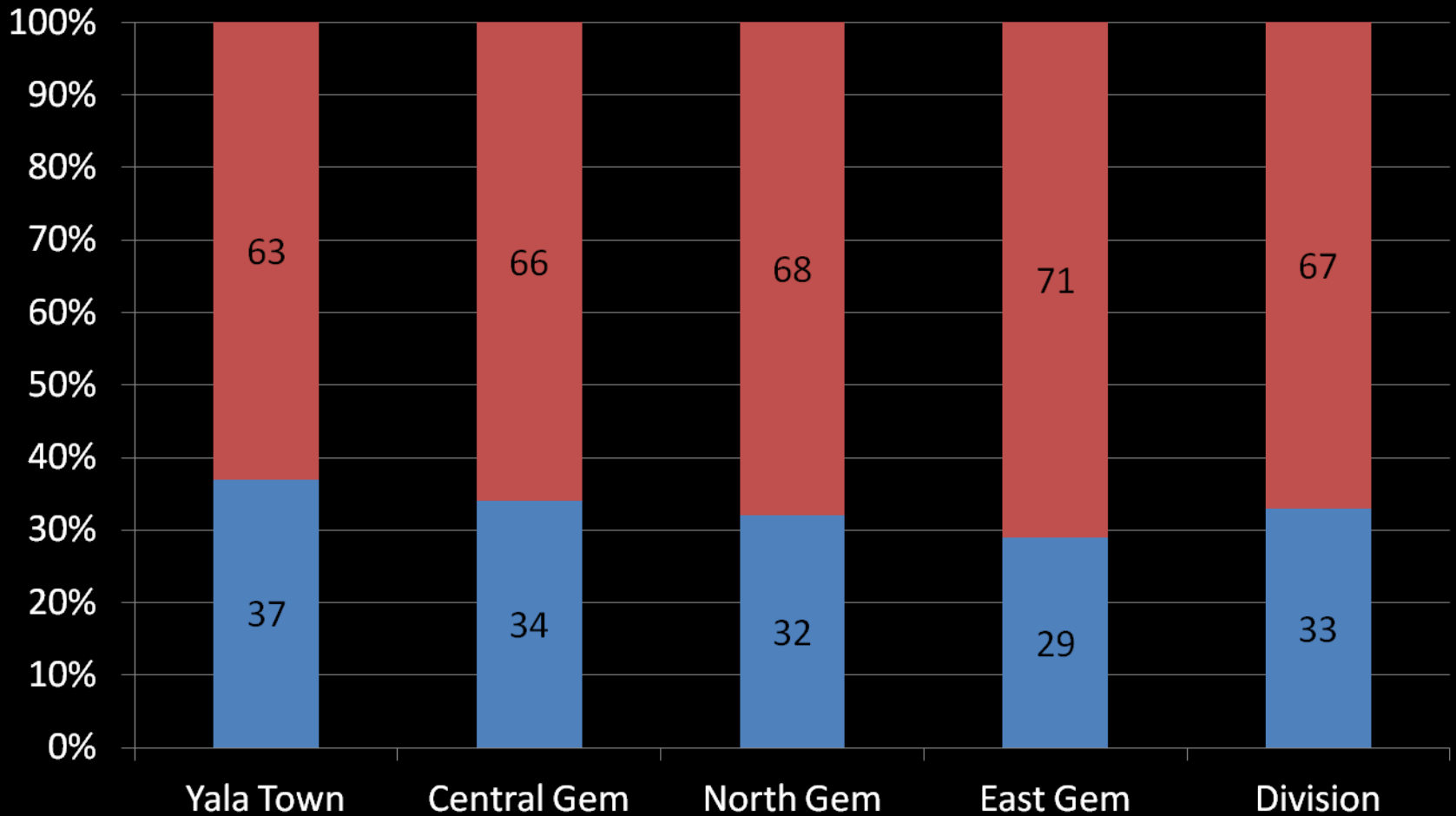
Independent Monitoring Results

Household Composition

- 1,650 households visited
- 8,268 people lived in those households
 - 33% (n = 2692) were aged 15 years and below
 - mean age of interviewees was 42 years (SD = 9 years)

Distribution of HH members by Age

■ <15 Years ■ >15 Years



IM Vaccination Coverage - Dogs

- **2615 dogs - found in the house holds (1.6 per house hold)**
 - **17% - vaccinated in the last one year**
 - **67% - confirmed to have been vaccinated during the campaign**
 - **coverage was highest in North Gem location (96%) and lowest in Central Gem location (37%)**

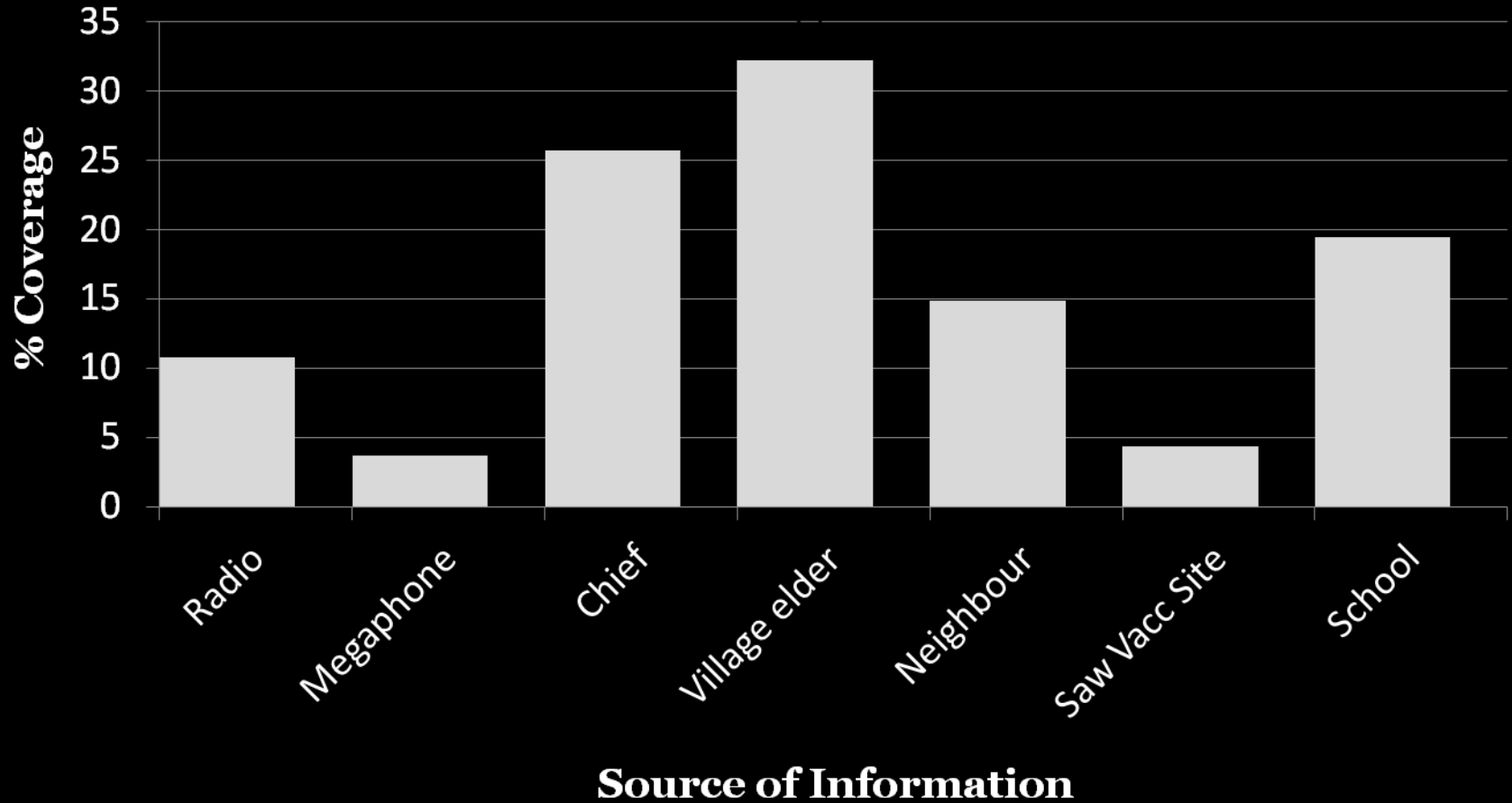
Distribution of vaccinated dogs by location

	Yala TownShip	Central Gem	North Gem	East Gem	Total
Total Dogs in HH	400	745	568	902	2615
vaccinated in campaign (verbal)	314	647	543	652	2156
Confirmed campaign Vacc	290	273	547	644	1754
Vaccine Cov(%)	73	37	96	71	67

Awareness of the campaign

- **86% (n=1423) - aware of the vaccination campaign**
 - **32% (n=458) got the information from their village elder**
 - **26% (n=366) from their chief**
 - **4% (n=52) got the information from a mega phone**

Animal owners aware of campaign by source of information



Conclusions

- **Outbreak response was successful**
 - **Dog vaccination target met**
- **Independent monitoring revealed**
 - **Very low routine vaccination coverage**
 - **Central Gem was poorly covered during campaign**
 - **Village elder, chiefs were most effective for mobilization**
 - **Lack of awareness of the campaign and animals not being at home were major reasons for non vaccination**

Recommendations

- **Efforts needed to improve routine animal vaccination**
- **Mop up should have been done in Central Gem**
- **Future campaigns need to have more effective social mobilization**
 - **Use of megaphones to be enhanced**
- **Roll out similar interventions in other divisions of Gem**

Acknowledgments

- DVO and DMoH Gem
- ZDU
- FAO
- KEMRI/CDC
- MoH
- MoALF
- Sharon Project- Galazo International



Children bringing their dogs for rabies vaccinations at kanyuto primary school

Thank You!

Asante!