

Experiences, challenges and lessons learnt in implementation of One Health Approach in Rabies elimination in Tanzania



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Rabies in Tanzania

- Rabies was first documented in Tanzania in 1933.
- Since then, the disease has widely spread throughout the country with varying patterns of infection between regions.
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- Rabies is endemic in the country causing an estimated 1,499 human deaths annually with at least 98% attributable to rabid domestic dogs.
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- Lack of effective surveillance and diagnostic systems has resulted in underestimation of the burden of rabies in Tanzania.
- Figures captured by the passive surveillance system show underestimate of the incidence and burden of the disease by 100 times in humans (Cleveland et al. 2002).

EXPERIENCES

1. Policy change

- The Rabies elimination activities in Tanzania brought about major changes in policy due to increased awareness of rabies among policy makers which led to the development of National rabies control strategy
- The government of Tanzania is committed to eliminate dog mediated human rabies by 2030 using Stepwise Approach Rabies Elimination (SARE) as recommended by FAO/GARC
- At the global conference on rabies elimination in 2015 Tanzania been represented, a common goal of zero human deaths from canine rabies by 2030 was agreed by the WHO, WOAH, FAO and GARC

TIMELINES & STAGES

STAGES IN RABIES PROGRESSIVE CONTROL PATHWAY

2030



STAGE 5



MAINTAIN FREEDOM FROM RABIES STATUS
IN HUMANS AND DOGS

2028 - 2029



STAGE 4



MAINTAIN FREEDOM FROM DOG-MEDIATED
HUMAN RABIES & ELIMINATION OF DOG RABIES

2021 - 2028



STAGE 3



RABIES RISK REDUCTION THROUGH FULL SCALE
IMPLEMENTATION OF COUNTRY RABIES CONTROL STRATEGY

2017 - 2021



STAGE 2



IMPLEMENTATION OF THE NATIONAL RABIES CONTROL
STRATEGY IN THE DISTRICTS WITHIN THE CONTROL AND
BUFFER ZONES

2016 - 2017



STAGE 1



DEVELOPMENT AND ADOPTION OF THE
NATIONAL RABIES CONTROL STRATEGY AND
PREPARATION FOR ITS IMPLEMENTATION

2010 - 2016



STAGE 0



RABIES SUSPECTED TO BE PRESENT &
SCANT INFORMATION AVAILABLE

2. RABIES PREPAREDNESS AND RESPONSE

The Ministry of Livestock and Fisheries collaborates with development partners, Ministry of Health and One Health Coordination Section- Prime Minister's office in preparedness and responding to rabies outbreak across the country.

- Some joint events carried out include:

- i. Organizing awareness raising events across the country and conducting mass vaccination of dogs and cats in all districts during the annual world rabies days



Rabies Preparedness and Response...

(ii) In 2018/2019 outbreak of rabies in humans in Moshi, Tanzania, the Ministry in collaboration with FAO through USAID funding contained through mass vaccination in the whole district including awareness creation

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Rabies P&R...

(i) In May, 2019, the Ministry in collaboration with OH partners carried out Rabies After Action Review in Malinyi and Ulanga to identify gaps, best practices, success and system weakness

Ref: After-action review of rabies and anthrax outbreaks multisectoral response in Tanzania, challenges and lessons ([Kunda John Stephen](#); [Justine Assenga](#); [Jubilate Bernard](#); [Ernest Eblate](#); [Elibariki Mwakapeje](#); [Janneth Mghamba](#); [Harrison Chinyuka](#); and [Dominic Kambarage](#))

Rabies P&R.....

(iv) Between 2011 and 2015, the government-led rabies elimination and demonstration programme across Southeast Tanzania was implemented as among the large-scale intervention for human and animals.

The programme demonstrated that, dog mediated rabies can be eliminated through mass dog vaccinations and provision of PEP to human bite victims.

The programme was funded by the Bill and Melinda Gates through WHO country office.

Rabies P&R....

- (v) OH Rapid Response Teams (OH-RRTs in Arusha, Mwanza, Songwe, Dodoma, Mtwara, Lindi, Ruvuma and Rukwa.
- Outcome:
 - ❖ 234 personnel from animal and public health, wildlife and environment sectors were trained on coordinated approach for preparedness and response to Prioritized Zoonotic Diseases (PZDs) including rabies.
 - ❖ OHRRTs training package was also developed to extend OHRRTs training to other districts

3. Joint risk assessment rolls out

- The Ministry of Livestock and Fisheries in collaboration with OH line Ministries and FAO carried out one national and one subnational JRA.

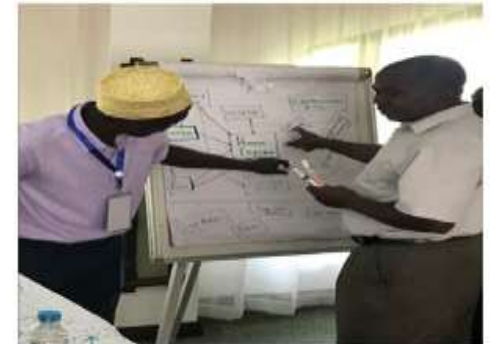


JRA.....

JRA is designed to address shared health threats at the human-animal-environment interface by jointly assessing specific priority zoonotic disease risks. i.e rabies, HPAI and Anthrax.

The JRA was focused on rabies and Anthrax

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JRA.....

- The outcome of JRA was development of rabies advocacy materials and other zoonoses



B: CHALLENGES

- ❖ Inefficient cold chain system at all levels in Animal Health sector for storage of vaccines and other biologicals
- ❖ Low purchasing power of rabies vaccine in rural community: The Ministry is in the process of in country vaccine production unit to produce more animal vaccines including rabies
- ❖ Low awareness: low *awareness* and knowledge of *rabies among the community*
- ❖ Sylvatic rabies in wildlife: a wildlife (sylvatic) cycle of rabies also exists, with wild animals (e.g. foxes, hyenas and wild dogs) serving as the maintenance host of the virus

CHALLENGES...

- ❖ Improperly owned dogs/stray dogs without ownership



A.

Lesson learnt in rabies elimination in Tanzania

1. Mass dog vaccinations is most successful strategy for controlling canine rabies in Tanzania. Therefore, increasing awareness for dog owners on rabies prevention/control and giving incentives to veterinarians and other animal health workers to implement vaccination will be key to long-term campaign success



LESSON LEARNT...

2. Stakeholder mapping, involvement and coordination is important successive control and progressive elimination of dog mediated rabies. It has ensured cost effective implementation of response and control program.

LESSON LEARNT...

3. Innovations in vaccine delivery: There are a number of innovations needed in implementing vaccination campaign namely: Vaccinations during school holidays or during weekends, vaccination sites in schools and shopping centers, engaging a human health sector, Use of fifth year veterinary university student vaccinators under supervision, pre vaccination campaigns

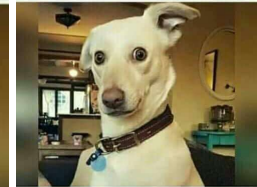


Photo captures, Rabies in Moshi



LESSON LEARNT...

4. Keeping dog vaccination cost low through bulk procurement of vaccines and setting indicative prices
5. Linking animal health surveillance to human health surveillance for rabies. Health-facilities treat bite patients with information from the veterinary sector
6. Country participation in global events on rabies awareness program has raised public awareness and attracted more stakeholders in control program.



THANK YOU

