# Strategic Plan for Elimination of Rabies in Kenya

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1<sup>st</sup> Pan- African Rabies Control Network Meeting 9 -11 June 2015, Gauteng, South Africa.

### **Background**

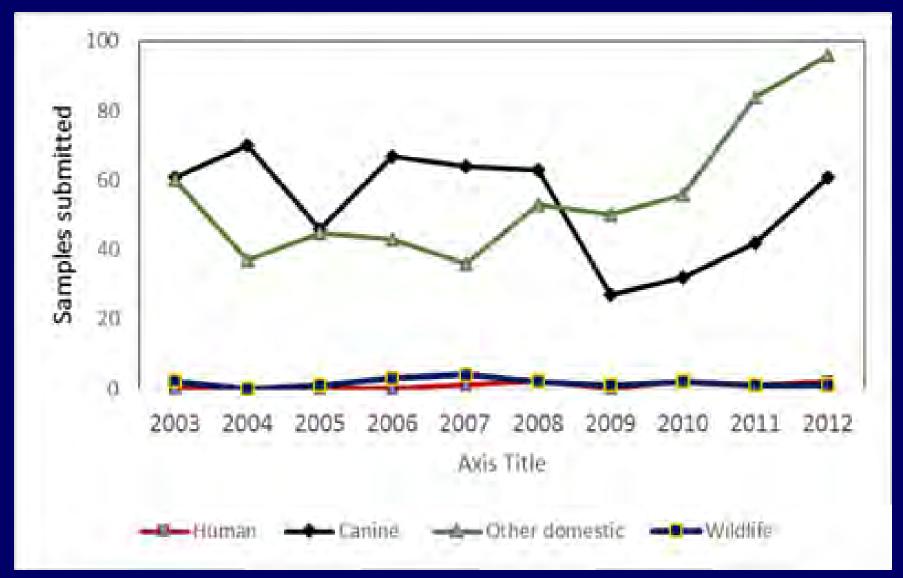
- Human population
  - 44 million (2014)
- Livestock populations
  - Cattle 18 million
  - Sheep 18 million
  - Goats 28 million
  - Camels 3 million
- Dogs 4.5 million
- Wildlife
  - Rich in diversity and numbers



- 1<sup>st</sup> case of human rabies documented in 1928
- Epidemics in 1930/40's early 1950s (DVS records)
- Widespread mass dog vaccinations in 1950/60's that controlled rabies
- By 1973, rabies virtually eliminated
- Breakdown in these efforts, epidemics in late 1970's, disease spread to most parts of the country by 1982

- Endemic in Kenya with varying incidence levels
- Domestic dogs transmit at least 98% of human rabies in Kenya
- Nearly 2,000 human deaths from rabies occur annually (Kitala et al, 2000)
- Rabies listed as one of the priority zoonotic diseases for the country.

#### **Burden of Rabies**



**Source: Central Veterinary Laboratory** 

## Is Dog mediated Human Rabies Elimination Possible?

- South Africa KZN
  - Government and donors launched rabies elimination project in 2007
  - Animal rabies has been reduced from 473 cases in 2007 to 37 in 2014
  - No single human case for last two years
- Philippines
  - The number of human deaths from rabies has decreased significantly from 48 cases in 2008 to 13 in 2012, a 70% reduction

### Guiding principles of the strategy

- Rabies control is a public good; elimination of rabies is an effort that all interested sectors should be involved in
- Rabid domestic dogs transmit at least 98% of human rabies

 Rabies cycles are maintained by domestic dogs in East Africa; no evidence of role of wildlife

### **Guiding Principles of the Strategy**

- Sustained annual mass dog vaccination (at least 3 consecutive years) of > 70% of dog population eliminates rabies in dogs, other domestic animals and subsequently in humans
- More than 70% of dogs in Kenya are owned and are accessible for parenteral vaccination
- Rabies elimination is a cost-effective strategy, saves lives and results in decline in the use of costly PEP

## **Strategies for Rabies Elimination**





### **Strategies for Rabies Elimination**

- Control of dog rabies
  - Mass dog vaccination
  - Promotion of responsible dog ownership
- Advocacy, social mobilization and partnerships
- Control of human rabies
  - Pre/post exposure treatment
  - Training of health workers
- Surveillance, outbreak response & research
- Partnerships and multisectoral coordination
- Resource mobilization

## **Objective of the Strategy**

To eliminate human dog-mediated human rabies by 2030



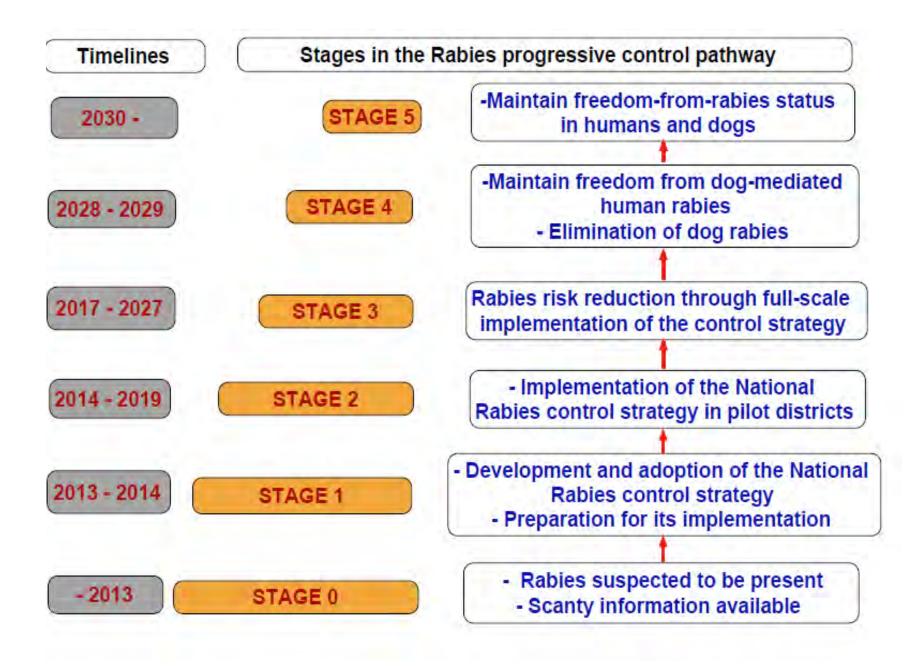


### **Implementation Plan**

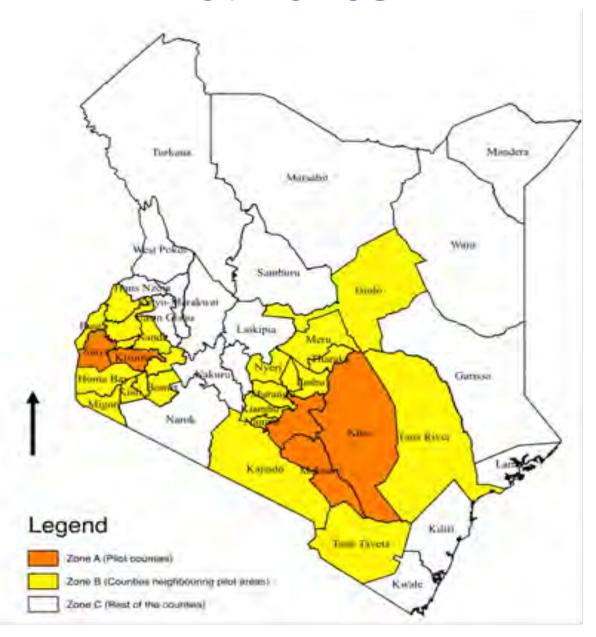
The strategy for the elimination of human- dog mediated human rabies will be based on a Stepwise Approach to Rabies Elimination (SARE)

# Stepwise Approach to Rabies Elimination (SARE)

- A comprehensive risk based model that proposes a stepwise approach in the reduction of disease risk
- Allows for regional or synchronized activities towards disease elimination
- The Rabies SARE consists of six stages (stage 0 5)
- Set of activities in each stage that build on to each other until country completely declared free of rabies in stage 5



### **Pilot Zones**



#### **Resource Mobilization**

- Total cost in pilot zones in 5 years \$11M
  - -Human PEP 53%
  - Mass dog vaccination 31%
- Proposed funding mechanism
  - Government of Kenya 30% (vaccines)
  - Partners and International organizations
  - Grants
  - -NGO's

## **Thank You**

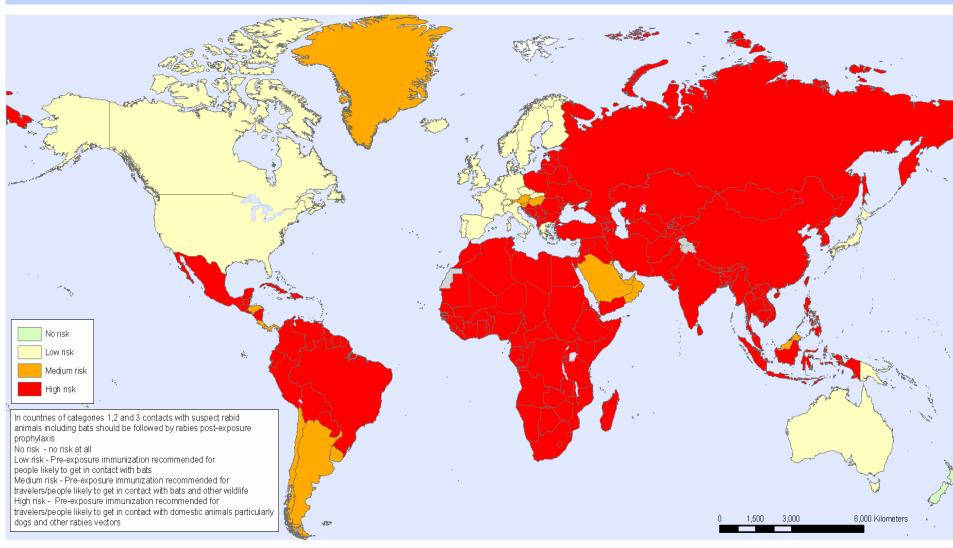
#### Introduction

- Rabies is a neglected zoonotic disease
- Invariably fatal in humans, livestock & other mammals.



- It causes approx 60,000 deaths annually mainly in developing countries with one person dying of rabies every 10 minutes.
- More than 95% of human deaths occur in Africa and Asia.
- Rural populations, especially children <15 years are at the greatest risk of rabies exposure

#### Rabies, countries or areas at risk



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: WHO Rabnet/CDC Map Production: Public Health Information and Geographic Information Systems (GIS) World Health Organization



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## Stage 1 (2013-2014); Preparatory Phase

- Establishment of inter-sectoral NRECC
- Selection of pilot areas
  - Machakos, Makueni, Kisumu , Kitui ,Siaya and Kisumu
- Strengthen rabies surveillance
  - Early detection and reporting of cases
- Development of Guidelines
  - To standardize implementation of activities in counties
- Training
  - Training of staff; professionals, community

#### **South Africa**

- The KwaZulu-Natal province of South Africa had been plagued by dog rabies
- During 1983–2007, 79% of laboratory-confirmed human cases in South Africa occurred in this province
- Govt and donors launched rabies elimination project in 2009
- The occurrence of animal rabies has been halved in 3 years, with an initial decrease in human cases
- For the first time in 20 years, KwaZulu-Natal reported a continuous 12-month period without a single human case in 2012

### **Phillipines**

 The regional program for rabies elimination partnership between Govt, WHO, Bill & Melinda Gates Foundation

 The project involves vaccination of more than 3 million dogs over 5 years

 The number of human deaths from rabies has decreased significantly, from 48 cases in 2008 to 13 in 2012, a 70% reduction

### **Other Stages**

 Stage 3 (2019-2025): Rabies risk reduction through full-scale implementation of control and elimination strategy

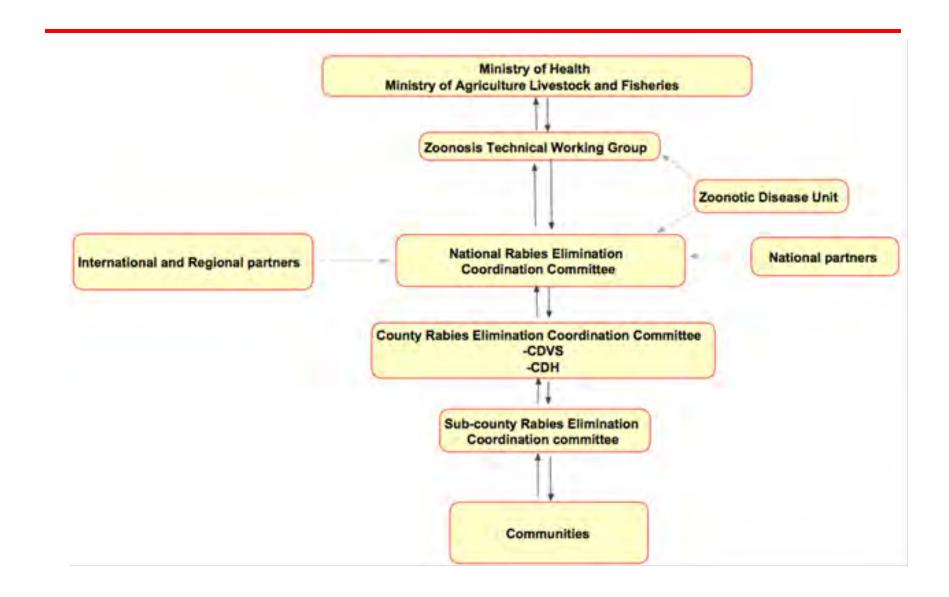
 Stage 4 (2025-2028) - Maintaining freedom from dog-mediated human rabies and elimination of canine rabies

 Stage 5 (2028-2030) – Maintain Freedom from rabies in humans and dogs

## Stage 2: Roll out of activities in Pilot areas (2015 – 2019)

- Setting up CRECCs and SCRECCs
- Training of staff
- Dog ecology studies
- Mass dog vaccinations
- Dog population management
- Advocacy, communication and social mobilization
- Pre/Post exposure measures
- Surveillance and Research

## Coordination structure of the National Rabies Elimination Strategy



### **Next steps**

- Lobby for funding for its implementation
  - Government ministries
  - International organizations/partners
  - -NGO's
  - County Governments
- Development of guidelines to standardize implementation of activities
- Implementation in pilot counties



## WORLD ANIMAL PROTECTION WORK IN AFRICA – HUMAN RABIES

CONTROL

Tennyson Williams
Regional Director for Africa

1<sup>st</sup> PARaCoN Conference, Johannesburg, South Africa



#### Introduction



- This PARaCoN platform has provided the astonishing potential that Africa has to help address problems associated with dog population management and rabies elimination from across Africa and the world
- Participants are familiar with challenges that face Africa (and around the world in general), including:
  - Social
  - > Economic
  - Cultural
  - Political

#### Introduction



#### We know:

- dogs are inhumanely killed as a measure to control rabies
- thousands of lives continue to be lost to rabies
- productivity potential of communities and countries affected are seriously undermined
- many governments from across the continent are yet to prioritise rabies elimination among existing competing interests, and
- that change needs to happen

## Status of Dog population in Africa



- Estimates from World Health Organization:
  - around 78 million owned dogs
  - excess of 70 million dogs are technically strays owned but allowed to roam freely
- The dog is still primarily a utility animal closely linked to livestock and wildlife and extensively used for guarding.
- Majority of owners do not place much value on their dogs.
- Vast majority of African dogs can be classified as roaming most owners do not confine their dogs.

## Status of Dog population in Africa



- Challenges to the welfare of the dogs in the Africa context due to:
  - > Poverty
  - Changing socio-cultural and Religious status of dogs in society
  - Lack of access to veterinary services and its affordability

#### Rabies in Africa



- Globally, about 55,000 80,000 people, most of them children, die annually as a result of rabies
- Over 24,000 of those are reported to occur in Africa alone
- Rabies is endemic across Africa due to:
  - lack of government support to control programs
  - lack of accessibility and affordability of veterinary services political instabilities
  - lack of resources

#### Rabies in Africa



- African Governments allocate very little priority to management of dog issues
- Exception where they (dogs) play a role in transmission of zoonosis, mainly rabies
- Governments adopt an ineffective and quick-fix approach of culling dogs in the name of controlling the spread of rabies

#### Rabies in Africa



- Our experience and knowledge show that culling programmes do not work because:
  - It is difficult to eradicate the animals finding and catching them is hard enough, but people love their dogs and will do their level best to avoid them being killed
  - Dogs are mobile and territorial removing dogs from one area, simply invites dogs from another area in, bringing all their problems with them
  - Failure to deal with the root causes of why the animals are on the streets in the first place including; over breeding and a culture of dumping unwanted dogs

Causes can vary but unless they are tackled, culling can only result in a temporary drop in the number of dogs on the street

#### **World Animal Protection**



- Dedicated to enhancing welfare and ending cruelty to animals across the world for over 30 years
- Our successes and ambitious plans for the future supported by hundreds of thousands of people, governments, international institutions and businesses in over 50 countries
- We and our many partners share a common view that a sustainable world is one where animals are free from suffering.

### **World Animal Protection**



- Our strategy for the future is to develop substantial programmes to enhance animal welfare in:
  - farming
  - > the wild
  - disasters
  - Communities
- We will:
  - take on specific issues that will bring the world's attention to animal welfare issues
  - mobilise people and organisations to change how we perceive and treat animals

### **World Animal Protection**



- Our vision within Africa over the coming years commits to scaling up and engaging in activities which will rapidly increase our:
  - reach
  - influence
  - credibility
- Example Work on animals in communities focus on dog population management and rabies elimination - key aspect of our coming together to mark this first PARaCoN conference.

## **Our Approach**



- For effective and sustainable elimination of rabies:
  - A holistic approach is needed
  - An approach that is aimed at improving the welfare of dogs and creating an environment for harmonious coexistence
- To date, we have worked with partners to further this holistic approach in Zanzibar, Southern Tanzania, Kenya and Sierra Leone

## Dog population management and rabies elimination







## Dog population management and rabies elimination







## **Our Approach**



- Key lessons emerging from these projects are:
  - the challenge but critical importance of developing credible baselines, particularly dog numbers and distribution
  - the need to make maximum use and improve efficiency of existing government infrastructure
  - the importance of public mobilisation

## **Experience from the Field**



- The next advance is to build in a component to improve responsible dog ownership, a fundamental aspect of ensuring a safe and healthy dog population
- Good animal welfare practice need to be mainstreamed by governments - essential not only for rabies elimination but also for long term public health and economic benefit to the nation accrued in terms of cost and productivity in areas of:
  - > health
  - labour
  - human welfare
  - > GDP

## **Experience from the Field**



- Engagement of multi-sector stakeholders ranging from:
  - health professionals
  - veterinary authorities
  - different line ministries (particularly health, environment and education)
  - community leaders
- Understanding community's perception to dogs and engaging them in devising humane strategies for fostering harmonious co-existence.



- This conference has created an opportunity for highlighting the importance of using existing official mechanisms as vehicles for driving the rabies elimination process in Africa.
- Our Africa Regional Office is primarily responsible for facilitating activities and processes that will assist countries at local, national and regional levels.
- For sustainable impact to be achieved the competent country authorities need to prioritise rabies elimination and resource the activities appropriately through a regional plan that sovereign countries have signed up to.



- A regional plan ideally achieved through institutions mandated to set these up including:
  - African Union InterAfrican Bureau for Animal Resources (AU-IBAR)
  - Regional Economic Communities (RECs)
- An opportunity for us here at PARaCoN to lobby and technically support this endeavour.
- Based on our experiences around the world (including ongoing engagements in Africa), we are available to offer support to countries within the platform.



- The national competent authorities will never be given the directive and sufficient resources to deal with rabies until it is a political priority.
- That because of poor surveillance capabilities in all countries, the perceived local threat of rabies is unlikely to ever reach levels of mortalities or loss of productivity that will force governments to take notice.
- We would therefore, need to adapt one aspect of our strategy to focus on another angle – development of nationally owned policy guidelines.



- Tactical selection of obligatory instruments will hopefully speed up uptake of policy at national level.
- World Animal Protection Africa is well positioned to catalyse this approach with key global players such as one health tripartite and GARC.

## Conclusion



- Rabies elimination and improving the welfare of dogs is key priority for World Animal Protection and we are currently running a global campaign to achieve this.
- We have outlined our approach in our newly published resource entitled 'Humane Dog Management: Better lives for dogs and communities'.

## Conclusion



- We will continue to collaborate with key institutions and communities across Africa to ensure that we realise our common vision of canine rabies free Africa.
- We reiterate our willingness to cooperate with governments across the continent and share our years of knowledge and experience in order to create an African continent where dogs and humans have harmonious co-existence.

## **THANK YOU**







## Developing a Stepwise Approach towards (Dog-Transmitted) Rabies Elimination (SARE)

Katinka de Balogh
Senior Officer – Veterinary Public Health
Animal Health Service
Food and Agriculture Organization of the United Nations



### Global Rabies Burden: A Public Health Concern

- Neglected and re-emerging zoonotic disease
  - 50-70,000 cases per year
- Rabies is inextricable linked to poverty
- Rabies is a vaccine preventable disease

#### Challenges:

- Lack of available and accessible PEP
- Low vaccination rate of dogs







### **Dog Rabies Control**

- Over 95% of all human rabies deaths are observed in Asia and Africa
- Over 99% of the human rabies cases reported are due to dog-bites
- Global elimination of dog transmitted human rabies under consideration



HOW CAN WE ACHIEVE SUSTAINED ELIMINATION OF DOG TRANSMITTED RABIES?

## Rabies outbreaks out...

Countries are often overwhelmed when dealing with (human) rabies outbreaks....

- Fear
- Political/social pressure,
- Lack of resources
- Lack of available and accessible PEP
- Low vaccination rate of dogs.....



### Why develop a stepwise approach?

#### Goal of SARE:

- I. Provide a structured approach
- II. Enable countries to define the "Stage" of rabies control they are in
- III. Provide defined "keys" to move to a next stage (measure progress)
- IV. Indicated links to relevant sections of the rabiesblueprint

#### Role of FAO:

 To assist countries in getting started and implement SARE

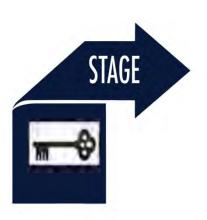






## Stepwise Approach: How does it work?

6 stages to move from endemic to free from human rabies transmitted by dogs



Endemic ----

**FREE** 

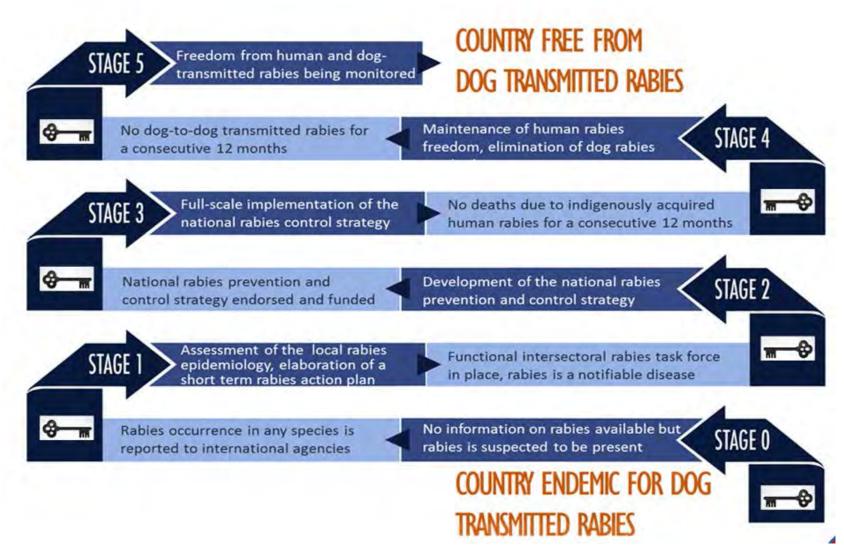
List of achievements (keys) essential to move to the next stage

#### **SARE Topics Considered**

- I. Legislation
- II. Data collection and analysis
- III. Laboratory diagnosis
- IV. Information, education, and communication

- IV. Prevention and control
- V. Dog population related issues
- VI. Cross cutting issues





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### 6.4 Vue d'ensemble des étapes:

Une description plus précise de chaque étape et les clés permettant de passer à l'étape suivante sont détaillées dans les sections suivantes de ce document. Ce diagramme présente une vue générale du processus :



Le tableau ci-dessous indique les acronymes utilisés pour chaque thème. La section suivantefournit une description détaillée de chaque étape individuelle de la SARE.

# COUNTRY ENDEMIC FOR DOG TRANSMITTED RABIES Stage 0



No information on rabies available but rabies suspected to be present



**Key to move from Stage 0 to Stage 1:**Rabies occurrence in any species is reported to international agencies





















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local and national authorities

Topic	Activities & achievements)	Blueprint or other	
LEG	A national rabies case definition (both, for human and animal rabies) is available	2,5	
LAB	Contacts to an international rabies reference laboratory or international organizations are established	3.1.7 Which laborat available, OIE-ref-la WHO-coll-centres, I centre, 2	
LAB	Several rabies suspect samples are submitted to a national laboratory, if available	Simple-techniques-f	
LAB	At least one rabies suspect sample of either animals or humans is submitted to an international rabies reference laboratory for confirmation	Simple-techniques-f sample, 6, WHO gu shipping	
IEC	Result of rabies sample(s) are shared appropriately with		



#### Key:

Notification of at least one rabies case (any species) has been co international reference laboratory- and has been notified to global orga (human rabies) and OIE (animal rabies).



## Republic of Congo

STAGE O

STAGE 1

**June 2013** 

November 2013

**December 2013** 

**Early 2014** 

**April 2015** 

Stakeholder Consultation

+

Strengthening Lab Capacity

Clinical human cases and first rabies case diagnosed in a dog (Point Noire)

Outbreak notified to OIE

FAO/WHO/WAP course on dog handling and vaccination (Point Noire) Suspected rabies case Dolisie Need for High level interest and support





## Stage I



Assessment of the local rabies epidemiology, elaboration of a short term rabies action plan



Key to move from Stage 1 to Stage 2:

Functional intersectoral rabies task force in place,
rabies is a notifiable disease (in humans and
animals)



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Le Plan Directeur de Prévention et de Contrôle de la Rage Canine | 8

### 6.6 Description de l'etape 1

#### Description:

À ce stade, le gouvernement évalue les structures mises en place, les activités lancées et les ressources disponibles. Le pays commence la collecte et l'analyse des données existantes et des nouvelles données relatives à la rage, telles que les événements liés aux morsures d'animal et l'évaluation des activités de prévention et de contrôle de la rage au moins dans certaines régions du pays. Quelques activités de suivi de cas ou d'épisodes de rage (y compris des études spécifiques, telles que la surveillance active dans certaines régions ou des campagnes locales de vaccination des chiens, la gestion de la population canine et des initiatives de sensibilisation) ont déjà lieu ou ont été lancées. Les informations recueillies et ces expériences permettent l'élaboration d'un plan d'action à court terme relatif aux premiers besoins et aux pratiques réussies. II est jugé important d'acquérir une connaissance approfondie des parties prenantes impliquées dans la prévention et le contrôle de la rage dans le pays et de comprendre les besoins des communautés affectées par la rage. Cette étape comprend des activités permettant de jeter les bases de l'élaboration d'une stratégie et d'un programme nationaux de prévention et de contrôle de la rage. En règle générale, les fonds alloués à la lutte contre la rage sont inexistants ou limités à cette étape.

Cette liste peut aider à définir les progrès réalisés jusqu'ici ainsi que les points qui demandent encore des efforts.

#### Activités et infrastructure devant être mises en place au cours de l'étape 1 :

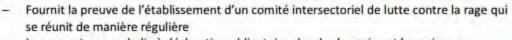
Thème	Liste descriptive des activités et accomplissements	Liens	
LEG	Le cadre légal a été revu	- 3.2. Le cadre législatif	
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	Le Pl	an Directeur de Prévention et de Contrôle de la	Rage Canine   9	
	LAB	Les analyses de laboratoire sont possibles	- 3.1.8 Les exigences mínimales de laboratoire	
			- OIE Manuel des tests de diagnostic et des vaccins pour les animaux terrestres	
			- La gestion des risques biologiques en laboratoire	
	LAB	La capacité d'effectuer un diagnostic en laboratoire existe au moins un niveau d'un laboratoire national	- 3.1.8 Les exigences minimales pour les laboratoires	
			OIE Manuel des tests de diagnostic et des vaccins pour les animaux terrestres	
			- La gestion des risques biologiques en laboratoire	
	LAB	Des prélèvements peuvent être effectués et leur transport est possible	- OIE Manuel des tests de diagnostic et des vaccins pour les animaux terrestres	
			- La gestion des risques biologiques en laboratoire  - 5.3.1 La surveillance de la rage	
	IEC	Des plans de formation des formateurs ainsi que des	- 3.1.6 Le personnel est-il suffisamment formé ?	
		cours de mise à niveau sur la rage destinés aux professionnels de la santé humaine et animale ont été développés	- 5.3 Qui devons nous former et à quoi ?	
	IEC	Un plan de communication à propos de la rage a été élaboré	- Plan de communication	
	IEC	Des campagnes de sensibilisation et de vigilance de la population et un programme de sensibilisation des responsables de communauté et des autorités ont été lancés	- 5.4.7 Campagne de sensibilisation	

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	régions pilotes	
PCA	Des initiatives locales de promotion de la responsabilisation des propriétaires de chiens, notamment en cas de foyer, ont été lancées	- 5.4.16- La gestion de la population canine
PID	L'identification des principales parties prenantes nationales en termes de prévention et de contrôle de la rage a été réalisée	Zoonose : un guide pour l'établissement de la collaboration
PID	La consultation des parties prenantes a eu lieu	- 2. Rôles et responsabilités
PID	Un comité ou un groupe de travail intersectoriel de lutte contre la rage a été mis en place	- 2. Rôles et responsabilités  - Zoonose : un guide pour l'établissement de la collaboration
PID	Un plan de lutte contre la rage à court terme a été élaboré sur la base de la check-list jointe et des expériences recueillies dans les régions pilotes	- 5.1 Qu'avons nous besoin de savoir avant de commencer ?
PID	Les mécanismes de mobilisation des fonds d'urgence en cas d'un foyer ont été identifiés	- 3.3 Les coûts et financement
PID	Un plan d'action de lutte contre la rage à court terme a été amélioré et entériné par les parties prenantes appropriées aux niveaux national et local	- 1.8 Quelles sont les mesures disponibles ?  - 2. Rôles et responsabilités

#### Points clé :



- La rage est une maladie à déclaration obligatoire chez les humains et les animaux
- Les principaux déficits ainsi que les actions requises ont été identifiés et un plan d'action de lutte contre la rage à court terme a été formulé
- Un système de surveillance de la rage basique et fonctionnel a été établi, il comprend l'envoi de rapports ainsi que la notification des cas réguliers (meilleure disponibilité des données de surveillance)
- La vaccination des chiens a été lancée dans certaines régions du pays
- La PEP est disponible dans certaines régions du pays
- Le nombre de campagnes de sensibilisation augmente clairement

#### LEG = Législation



## Stage 2



Development of the national rabies prevention and control strategy



<u>Key to move from Stage 2 to Stage 3:</u>
National rabies prevention and control strategy endorsed and funded



## Themes considered

LEG Legislation

DCA Data collection and analysis

LAB Laboratory diagnosis

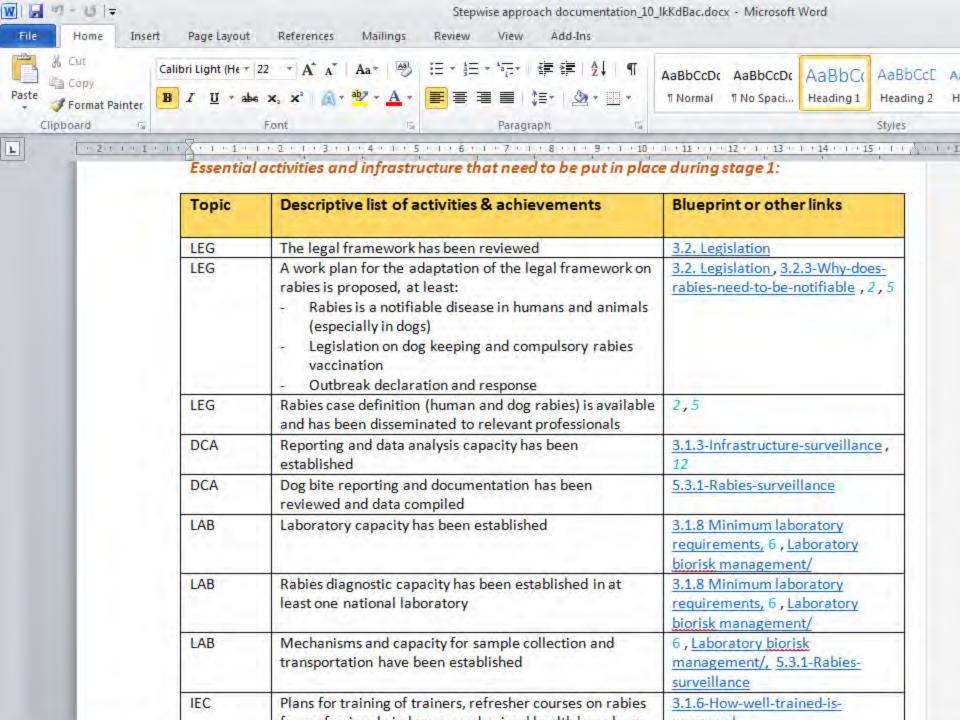
IEC Information, education and

communication

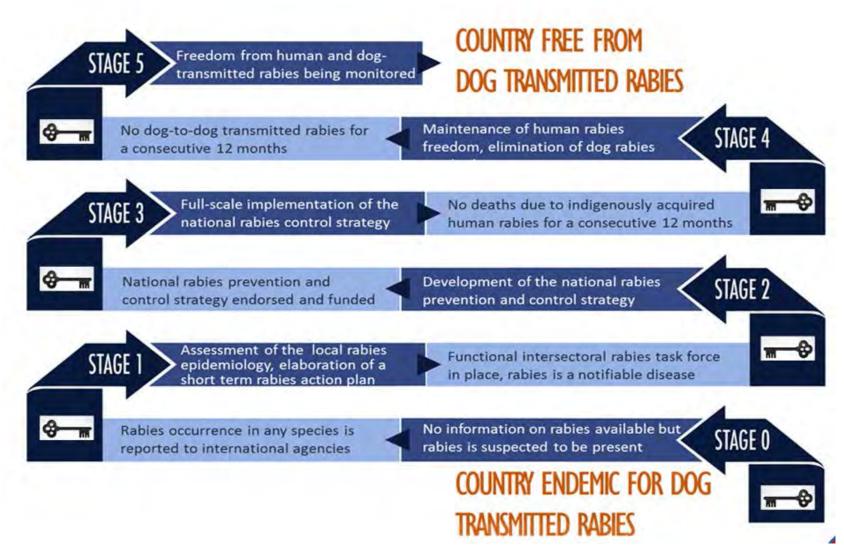
PCO Prevention and control

DPO Dog population related issues

CCI Cross cutting issues







## Republic of Georgia



- Large vaccination campaign for WRD 2013
- Rabies as now one of the priority diseases (National rabies strategy developed 2014)



## **How to Access SARE Online**



http://caninerabiesblueprint.org/TheStepwise-Approach-towards
http://caninerabiesblueprint.org/IMG/pdf
/canine\_rabies\_blueprint\_v3\_=\_stepwise\_approach\_to\_planning\_and
\_evaluation.pdf



#### WHAT STAGE IS YOUR COUNTRY IN?



# Welcome to the Stepwise approach towards rabies elimination SARE workshop

# Outline of workshop

- Introduction to SARE (done)
- Case-study (warm up)
- Determination of SARE stage of your country and identification of gaps
- Create action plan per country short, medium and long term
- Brief summaries and establishing a common target for rabies elimination
- Discussion

### Faciltators

- Bernadette Abela Ridder
- Herve Bourhy
- Chari Amparo,
- Kevin le Roux
- Johann Kotze
- Sarah Cleaveland
- Paola de Benedictis
- Katinka de Balogh



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36	Α	В	C	D	E					
1	LEGISLA'	TION								
2	Instructio	nstructions: Enter "0" under Status if No or None, or "1" if Yes								
3										
4	STAGE		OTHER IMPORTANT INFORMATION (please include in REMARKS)	STATUS						
5	0	National case	A case definition for animal rabies is available		0					
6	1	definition for animal rabies	The animal rabies case definition has been disseminated to relevant professionals	Agencies the case definition was disseminated to	0					
7	2		The animal rabies case definition has been reviewed and was endorsed (intersectoral approach)	Agencies and lowest local government unit the definition was endorsed to	0					

8 0 A case definition for human rabies is available National case 0 definition for The human rabies case definition has been disseminated to Agencies the case definition was disseminated to 1 0 9 human rabies relevant professionals The human rabies case definition has been reviewed and was 2 Agencies and lowest local government unit the 0 endorsed (intersectoral approach) definition was endorsed to 10 Legal There is a legal framework Title of the framework and the year it was passed 11 1 0 If there is a legal framework, the framework has been Year the framework was reviewed 1 framework 0 reviewed in terms of how current it is. 12 Rabies is defined as a notifiable disease in humans and 1 0 13 animals in the framework Legislation includes dog keeping and compulsory rabies 0 vaccination 14 Legislation includes SOPs on outbreak declaration and 0 15 response Legal frameworks are in the process of being updated to 2 include specifications on international movements of animals, 0 preferably also compulsory vaccination of dogs 16 Legislation / Data coll & ax / Lab dx / IEC / Prev & Ctrl SUMMARY (Sta 14 4 1 INSTRUCTIONS Country profile Dog popn Cross-cutting issues SUMMARY (Score)





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# Please note:

- SARE is a living document and approach
- Your feedback on usefulness, strengths and weaknesses of SARE are key

# Case study

In a district hospital over the last week there have been 3 human cases reported to have hydrophobia and confusion.

- What will you do?
- What procedures are in place?



 List your groups top three constraints (except lack of funding)

1.

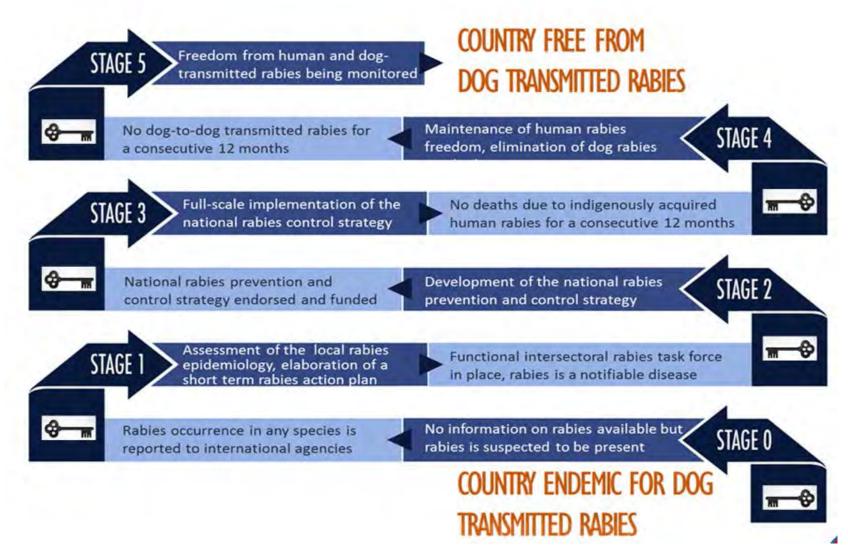
2.\_\_\_\_

3.\_\_\_\_\_



• Questions??







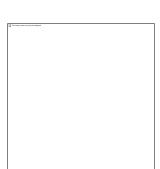
### **Thank You**





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#### Checklist on activities and achievements to determine where main efforts are needed:

Topic	Activities & achievements	NO	YES,	YES,	Blueprint or other links
			avail-	func-	
			able	tional	
LEG	Is there a legal framework for rabies available at				3.2. Legislation
	national level?				
LEG	Has a work plan for updating the legal framework on				3.2. Legislation
	rabies been proposed?				
LEG	Is rabies a notifiable disease in <u>humans</u> ?				3.2.3-Why-does-rabies-
					need-to-be-notifiable, 2,
					5
LEG	Is rabies a notifiable disease in animals (at least in				3.2.3-Why-does-rabies-
	dogs)?				need-to-be-notifiable, 2,
					5
LEG	Is there a case definition on human <u>rabies</u> ?				2,5
LEG	Is there a case definition for rabies in dogs?				2,5
LEG, IEC	Has this case definition been disseminated to relevant				2. Roles-and-
	professionals?				Responsibilities
LAB	Has laboratory capacity for rabies diagnosis been				3.1.8 Minimum laboratory
	established?				requirements, 6,
LAB	Is rabies diagnostic capacity available in at least one				3.1.8 Minimum laboratory
	national laboratory ?				requirements, 6,
					Laboratory biorisk
					management/
LAB	Has there been any capacity building for laboratory				3.1.3 Personnel-
	personnel in approved rabies laboratory methods?				surveillance
DCA	Are animal bite events recorded and documented?				5.3.1-Rabies-surveillance
DCA	Are dog bite events recorded and documented				5.3.1-Rabies-surveillance
	separately?				
DCA	Are there mechanisms for reporting of suspect rabies				5.3.1-Rabies-surveillance,
	cases present?				5,

How to decide what stage your country or region is in?



# Integrated Bite-Case Management (IBCM)

#### **Bite-Centre**

- Reporting of person bitten
- Wound treatment and PEP/RIG if required
- Follow-up, inform veterinary sector

#### (Joint) Field Investigation

- Suspected dog identification and containment/<u>euthanasi</u>a
- Dog contact tracing
- Tracing of humans exposed

Public awareness, dog vaccination campaigns and PEP go across stage 0-4 (5)



#### Rabies Stakeholder Consultations

Kick-starting integrated rabies control







**DRC** 

Kenya

**Republic of Congo** 

Cameroun

Gabon

Cameroun

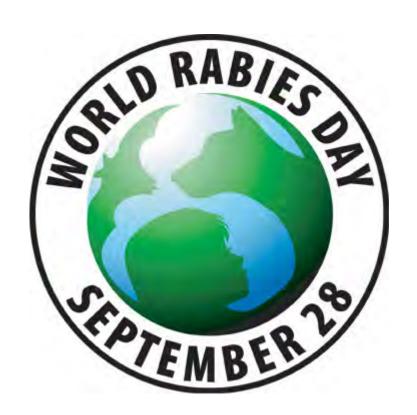
Georgia

**Regional Meetings** 

**Vietnam** 



### **Engage in World Rabies Day**







#### Risk of rabies outbreaks

- Lack of awareness
- No responsible dogownership
- Under-reporting of cases
- Weak health services
- Low rabies vaccination coverage
- Rabies not a priority



### Favourable conditions to address rabies





# Ingedients for successful control





### **Observations and Challenges**

- Dog vaccination and public awareness are key
  - Countries are often overwhelmed when dealing with rabies outbreaks
    - Fear, political/social pressure, scarse resources, other priorities...
- Need for coordination and communication between different sectors concerning:
  - (Joint) National rabies control strategy
  - Dog bite follow up
  - Joint outbreak investigation
- Important role of municipalities and communities



#### Reporting zoonotic disease

Veterinary/medical care sought

Animal or person becomes ill



Problems relating to veterinary sector

Problems relating to human health sector

Communication and transportation difficulties

Lack of incentive for owners to report

Veterinary/medical care sought

Animal or person becomes ill

Difficulties of travel to hospital

Poor knowledge and awareness

'non-institutional' health providers



Problems relating to veterinary sector

Problems relating to human health sector

Reliable diagnostic tests available

Appropriate samples collected for diagnosis of zoonotic disease

Veterinary/medical care sought

Animal or person becomes ill

Difficulties of travel to hospital

Poor knowledge and awareness

'non-institutional' health providers

Communication and transportation difficulties

Lack of incentive for owners to report



Problems relating to veterinary sector

Problems relating to human health sector

Poor diagnostic infrastructure, lack of trained personnel, lack of field-based tests

Lack of equipment/training for collection of diagnostic samples

Communication and transportation difficulties

Lack of incentive for owners to report

Reliable diagnostic tests

Appropriate samples collected for diagnosis of zoonotic disease

Veterinary/medical care sought

Animal or person becomes ill

Poor diagnostic infrastructure, lack of trained personnel, lack of hospital-based tests

Poor knowledge of zoonotic diseases among medical practitioners, non-specific clinical signs

Difficulties of travel to hospital

Poor knowledge and awareness

'non-institutional' health providers



Problems relating to veterinary sector

Poor diagnostic infrastructure, lack of trained personnel, lack of field-based tests

Lack of equipment/training for collection of diagnostic samples

Communication and transportation difficulties

Lack of incentive for owners to report

Report to international authorities

Report to national authorities

Reliable diagnostic tests available

Appropriate samples collected for diagnosis of zoonotic disease

Veterinary/medical care sought

Animal or person becomes ill

Problems relating to human health sector

Poor diagnostic infrastructure, lack of trained personnel, lack of hospital-based tests

Poor knowledge of zoonotic diseases among medical practitioners, non-specific clinical signs

Difficulties of travel to hospital

Poor knowledge and awareness

'non-institutional' health providers



Problems relating to veterinary sector

Unreliable reporting, negative consequences of reporting, poor intersectoral communication

Poor diagnostic infrastructure, lack of trained personnel, lack of field-based tests

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'non-institutional' health providers

J.Halliday et al. 2012



# Communities and laboratories are key for surveillance

- Surveillance for <u>action</u>
- Information exchange between sectors
- Reporting is the weakest link?



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# Syndromic surveillance

- Fever
- Central nervous symptoms
- Diarrhoea
- Respiratory illnesses



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### SARE workgroups

#### Francophone Country groups:

Group 1: Benin, Cameroon, CAR, Senegal, Madagascar

Group 2: Chad, Gabon, Rep. Congo, Niger,

Group 3:Ivory Coast, Mali, Togo, DRC,

#### Anglophone country groups:

Group 4: Angola, Ethiopia, Kenya, Lesotho, Swaziland

Group 5: Malawi, Mozambique, Tanzania, Namibia,

Nigeria, Botswana,

Group 6: South Africa, Sudan, Uganda, Zambia, Zimbabwe,