

Global operation of Mission Rabies activities and experience

Dr AJ Beron

Director, International Rabies Taskforce

Dr Inga McDermott

Mission Rabies Regional Projects Director



What is Mission Rabies?



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Established 2003



Established 2013

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MISSION RABIES

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The International Rabies Taskforce



Established in 2018 – to articulate to the rabies community the synergy of Mission Rabies, MSD and CDC in empowering rabies elimination projects globally under guidance from United Against Rabies (UAR)

Objective is to provide a practical toolset and training support at government level in supporting canine transmitted rabies elimination projects

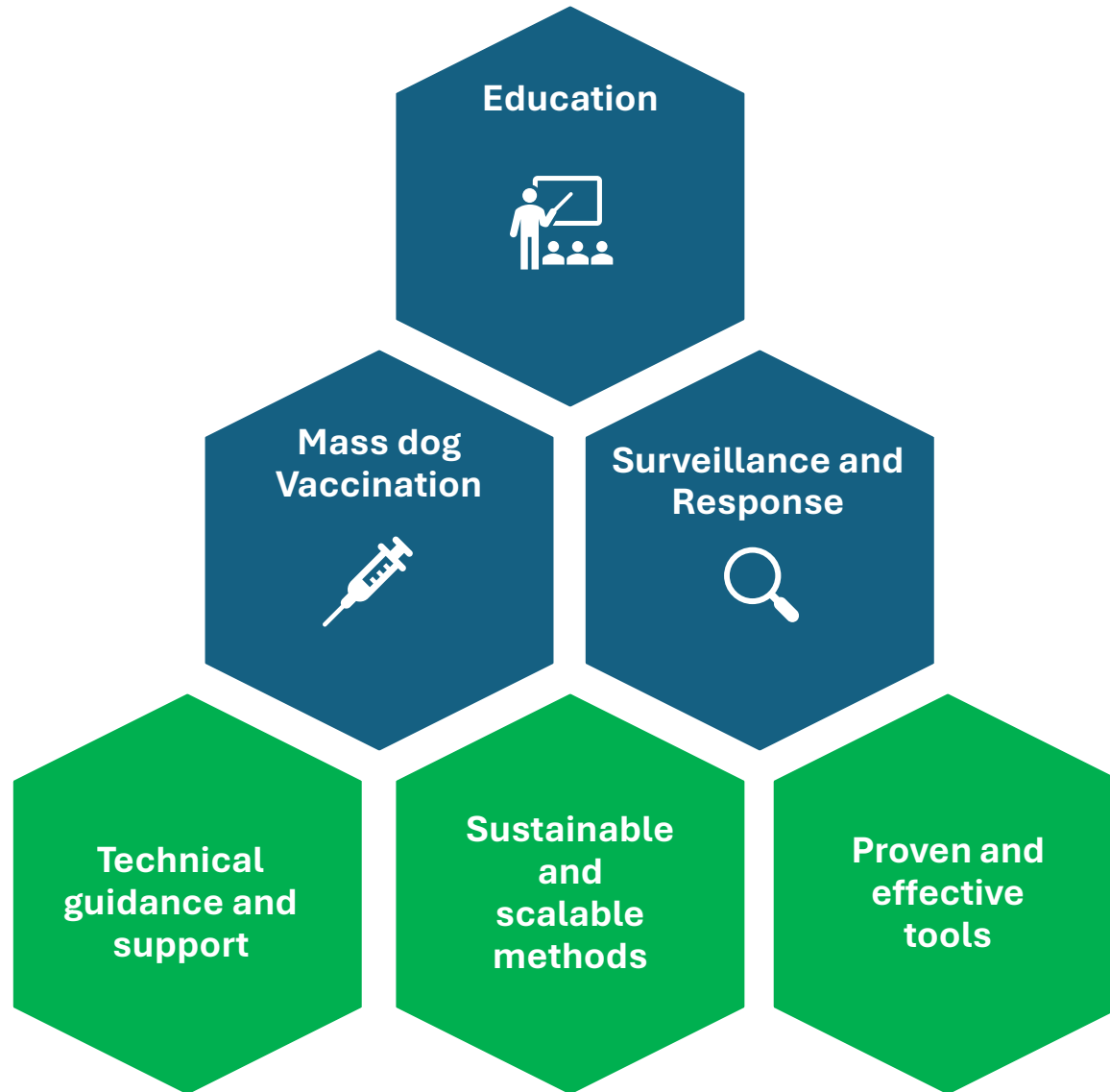
STRATEGIC TASKFORCE PARTNERS



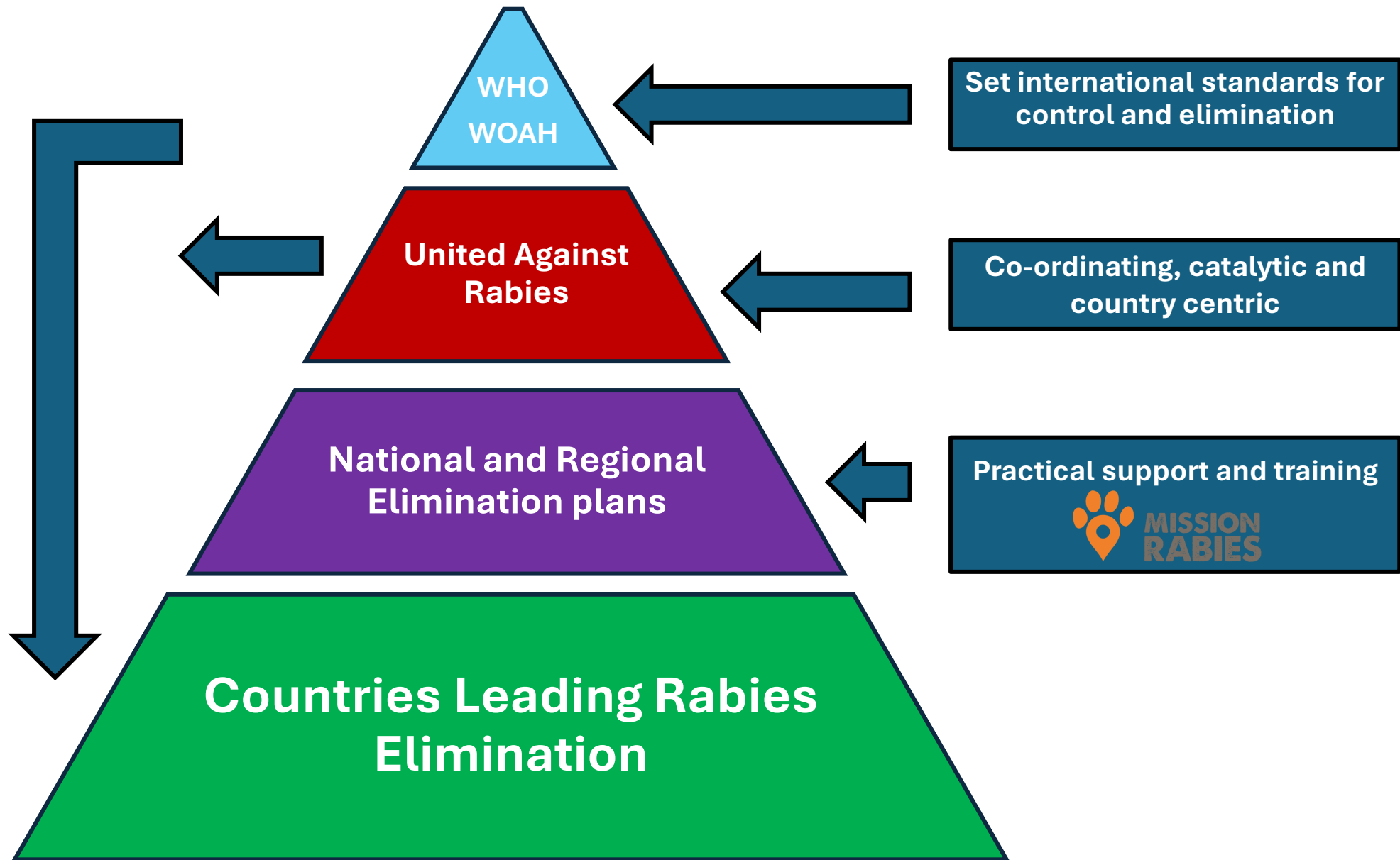
**US Centers for Disease
Control and Prevention**



What does Mission Rabies Do?



Where does Mission Rabies fit in?



The Mission Rabies tool belt



WVS DATA COLLECTION APP

Data-driven dog vaccination in the palm of your hand

The WVS App has been crafted from a decade of field experience running large-scale dog vaccination campaigns around the world. The system is a game-changer in campaign implementation, monitoring and evaluation, providing field staff with clarity on where they should focus vaccination efforts and campaign managers with the data they need to refine the program for efficiency and effectiveness. The app is a powerful tool in the quest to eliminate dog-transmitted rabies and is available to anyone running dog vaccination programs.

FIND OUT MORE



RABIES EXPOSURE ASSESSMENT AND CONTACT TRACING (REACT) APP

Digital support for robust rabies surveillance

The REACT App addresses two core challenges to the implementation of effective rabies surveillance: standardised investigation of suspect rabid animals in challenging field conditions; and timely centralisation of case data. The app structure is based on the cost-effective methods of Integrated Bite Case Management and makes it possible for anyone to implement this approach.

FIND OUT MORE



VAXPLAN

Untangle the complexities of planning an effective dog vaccination campaign.

The goal of any rabies control program is to vaccinate a high proportion of the dog population as efficiently as possible. How to achieve this is impacted hugely on the specific composition dog population in the project location; how easy dogs are to handle and how willing people are to bring them for vaccination.

The VaxPlan tool enables you to input the characteristics of your dog population and provides insights into the likely vaccination coverage that will be achieved from a given campaign structure. This can aid the planning of new programs, enhance the efficiency of existing programs and forecast the effects of strategic alterations.

LAUNCH THE TOOL



GDREP

Understanding the impacts and costs of national rabies control.

The Global Dog Rabies Elimination Pathway (GDREP) provides a means for public health officials to plan for a national strategy, allowing the resources required and estimated length of campaigns to be predicted.



STARC MAPPING

Maximising the impact of vaccination resources

The Settlement Type and Road Connectivity (STARC) Mapping tool enables a representation of the potential rabies burden and transmissibility to communities to be established and for mapping of campaigns to be optimised based on this data.



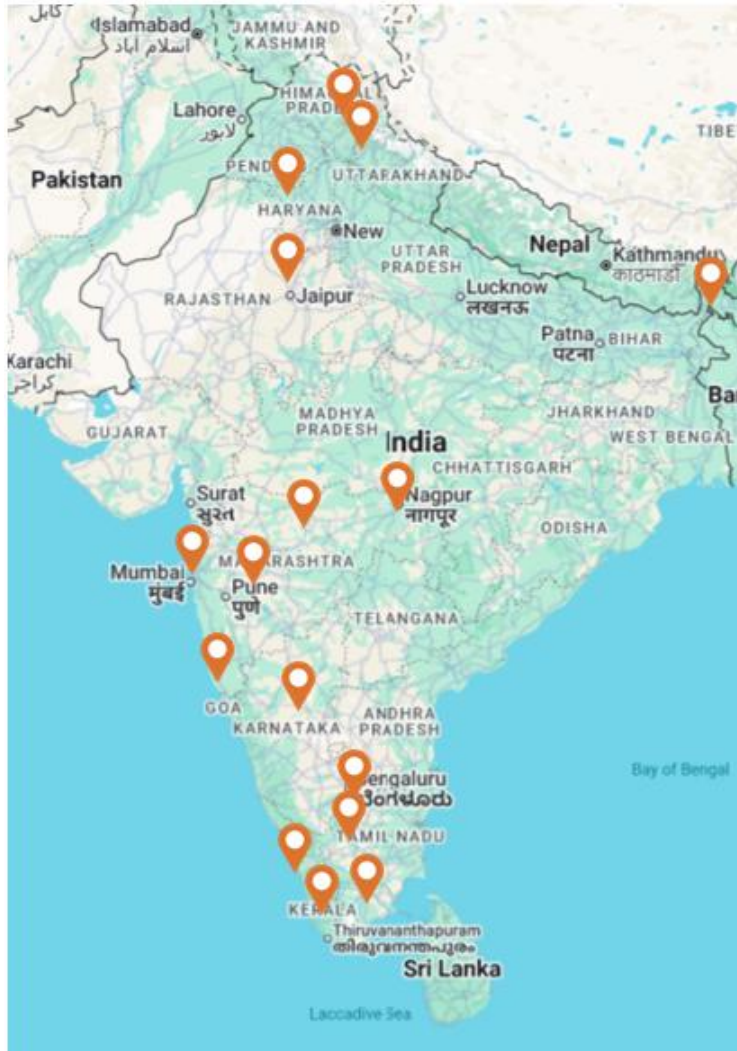
RABIES ECON

Explore the cost-benefit of your campaign.

The Rabies Econ tool supports governments in the planning and assessment of elimination programs, allowing estimations of the cost and benefits of different vaccination strategies to be made.

THE MOST RECENT VERSION OF THE TOOL CAN BE FOUND IN THIS PUBLICATION

Mission Rabies global reach - India



Core Projects

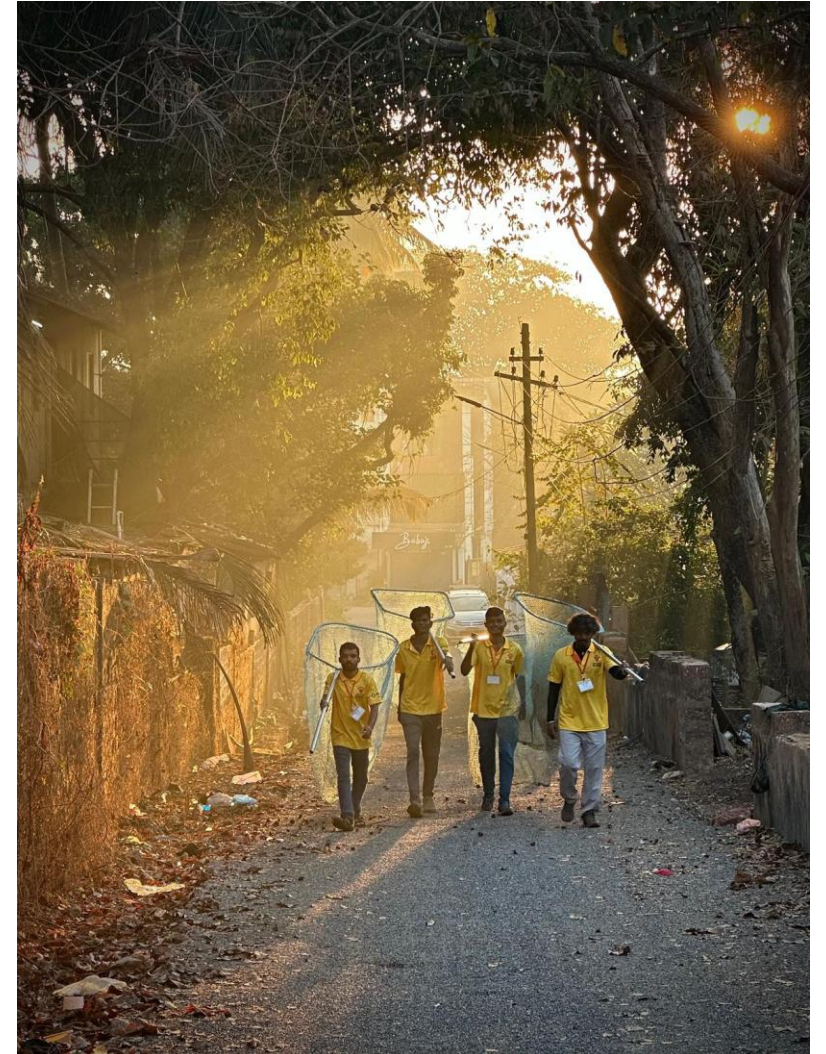
Goa	Patiala
Jaipur	Guwahati
Darjeeling Hills	Coimbatore
Pimpri Chinchwad	Pune
Gorkhaland Territorial Administration Area	Mumbai Metropolitan Region

Campaigns

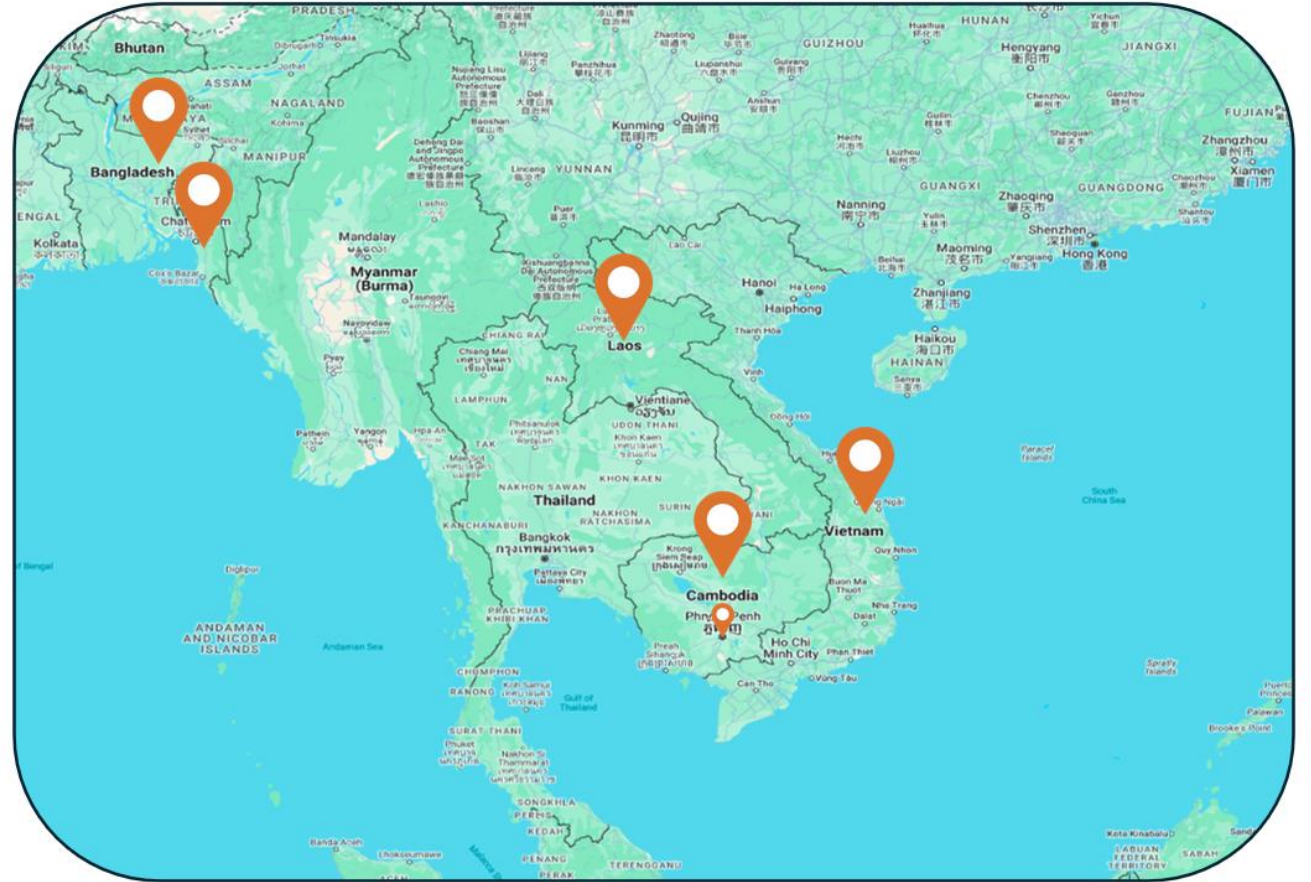
Thane Maharashtra	Kochi Kerala
Bardez Goa	Coimbatore Tamil Nadu
Kodaikanal Tamil Nadu	Shimla Himachal Pradesh

Technical Advisory

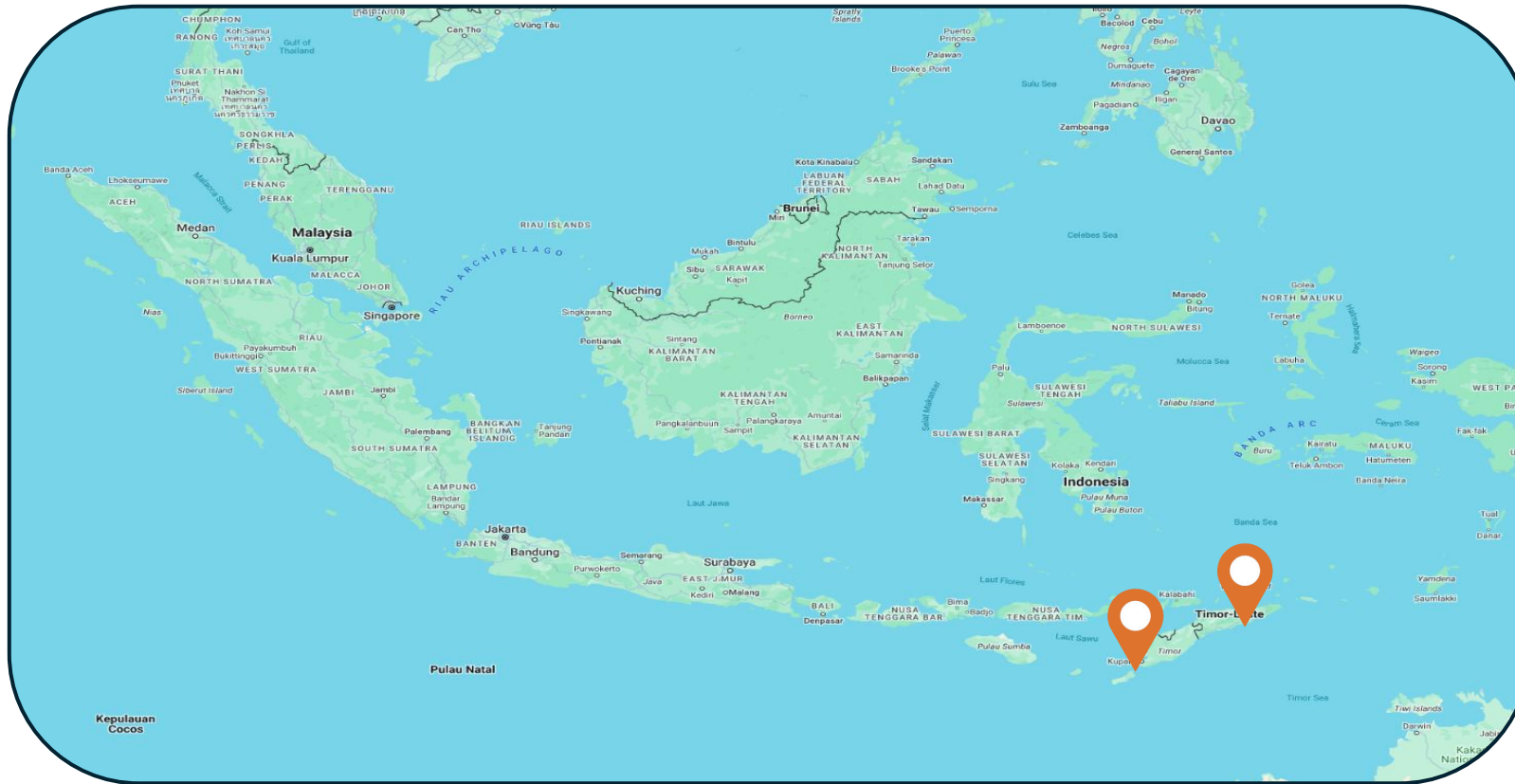
Bangalore (BBMP) Karnataka	Karnataka (AHVS) Karnataka State
Mumbai (BMC) Maharashtra	Thanjavur Tamil Nadu
Trivandrum Assam	
Nagpur Maharashtra	



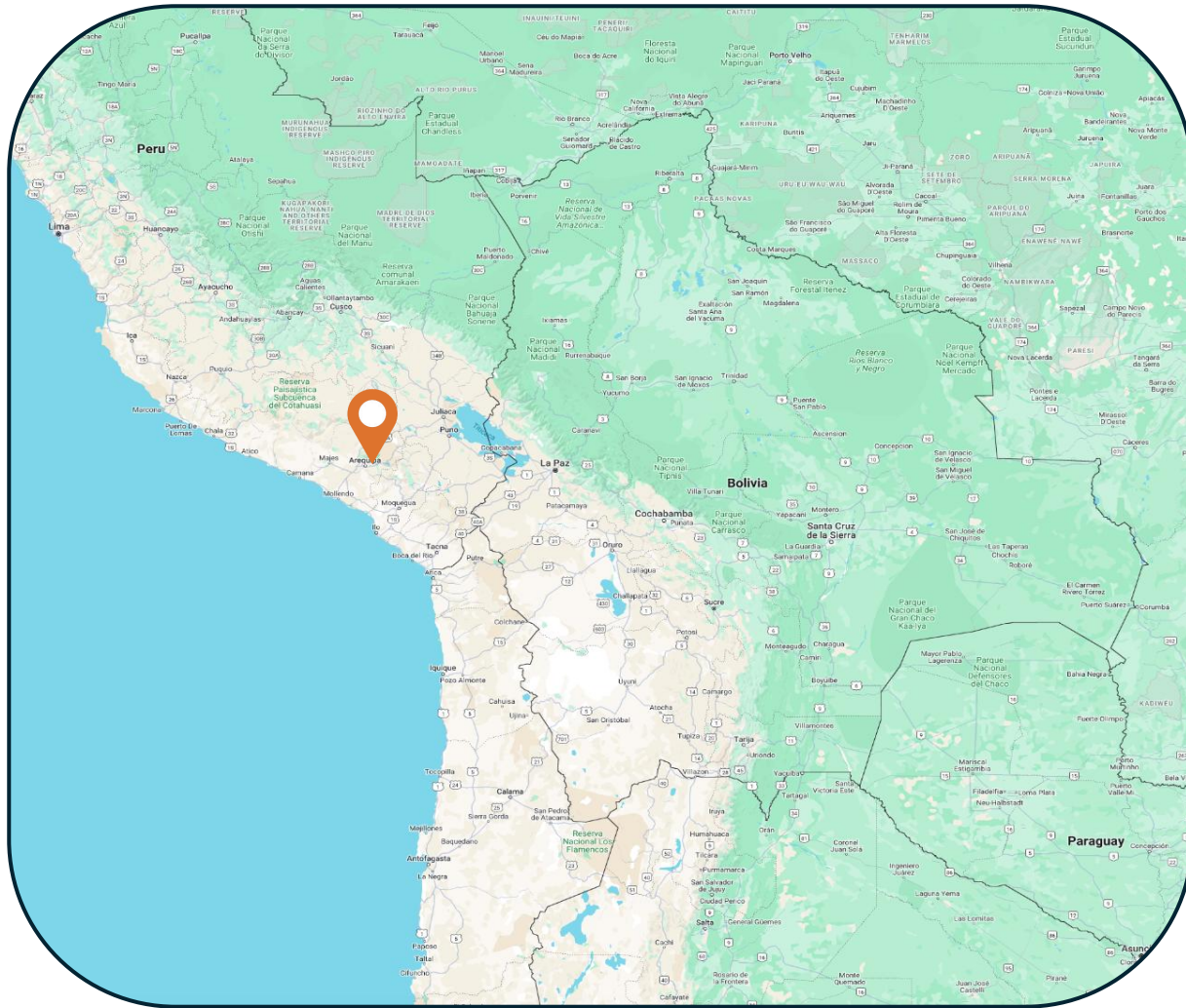
Mission Rabies global reach - Asia



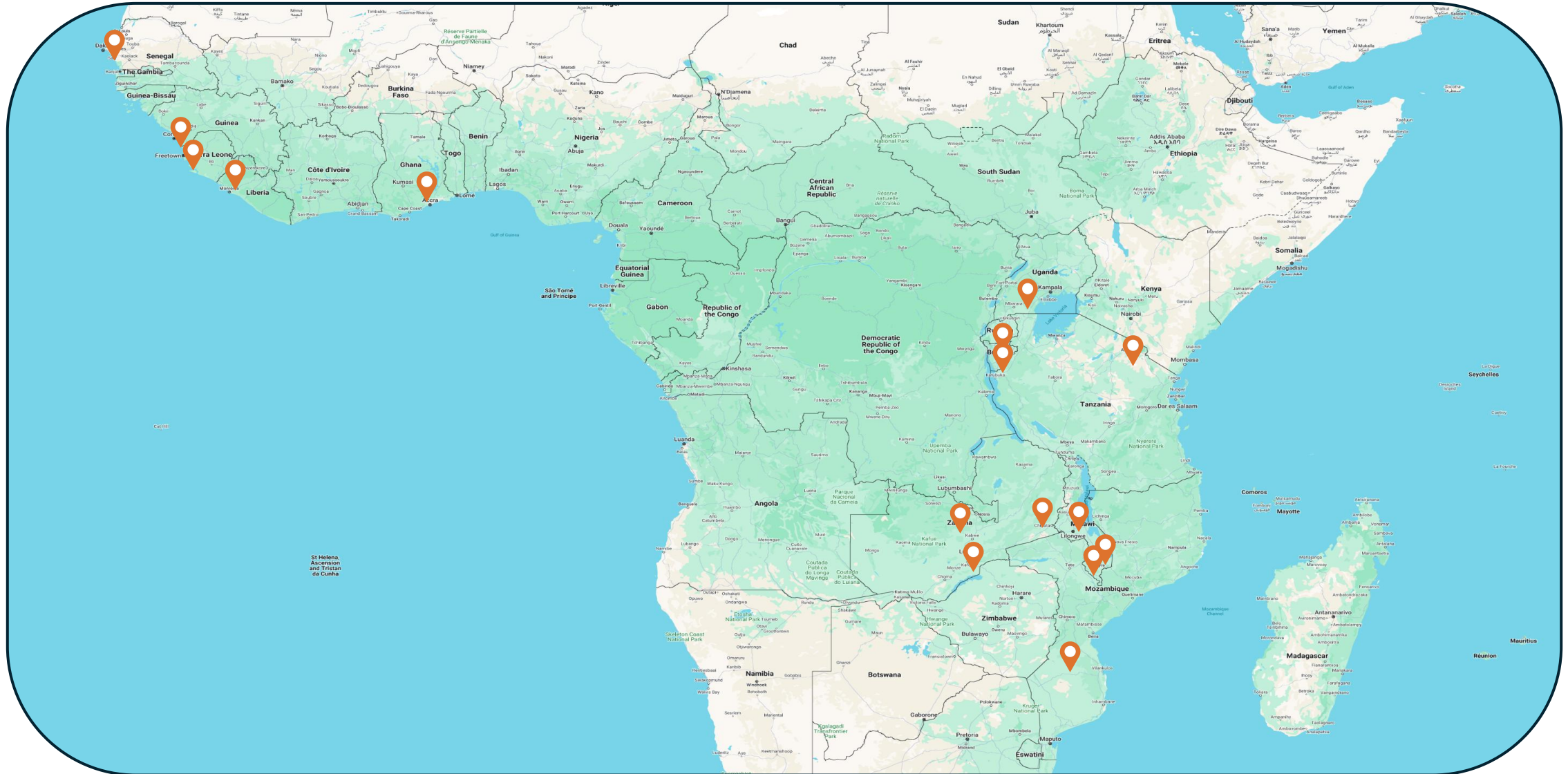
Mission Rabies global reach - Asia



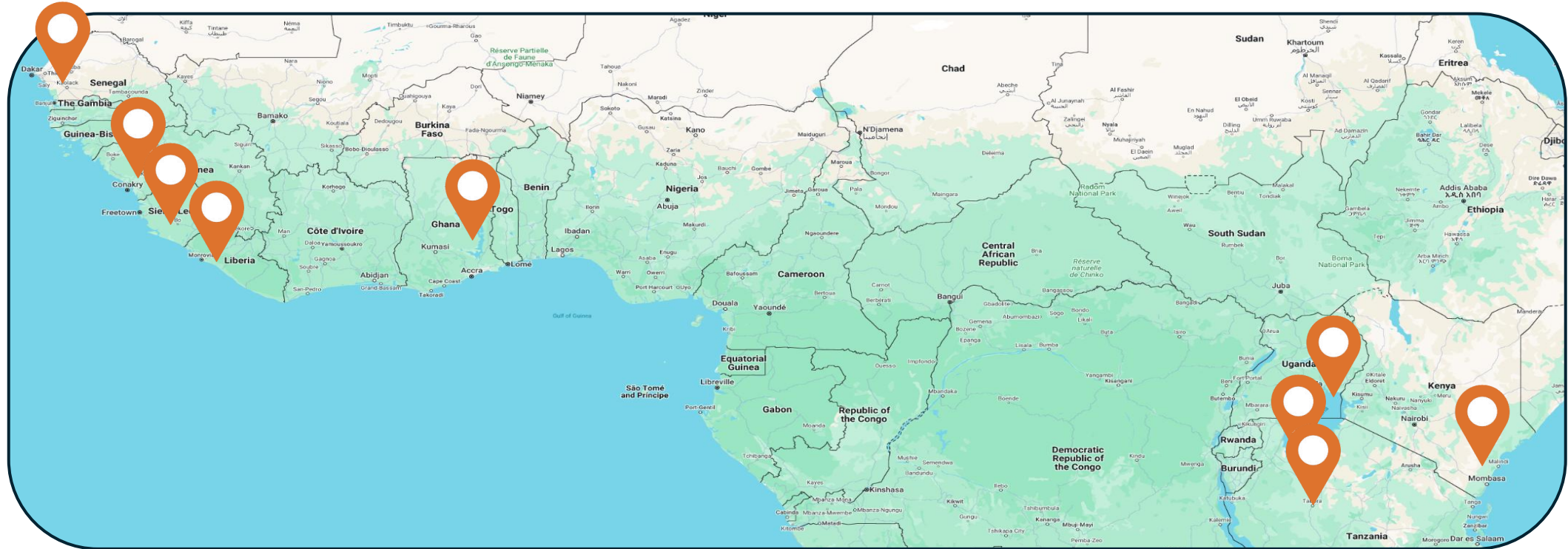
Mission Rabies global reach - South America



Mission Rabies global reach- Africa



Mission Rabies global reach- Africa



Mission Rabies global reach- Africa



Mission Rabies Malawi



**MISSION
RABIES**



Mass canine vaccination



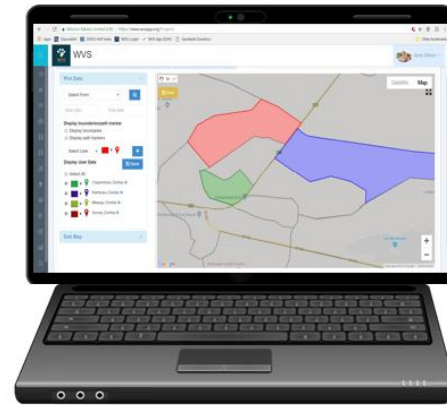
Vaccination of 70% of the dog population can eliminate rabies and is the most cost-effective approach. This strategy has been proven to be effective and is endorsed by the WHO.



Mass canine vaccination- Data



Field Teams



Manager

- All data collected on WVSApp
- Allows direction of teams
- Easy gathering of data even from remote areas
- Rapid reporting by teams, district and country
- Real time feedback mechanisms allowing adjustment of operations

Mission Rabies Malawi History

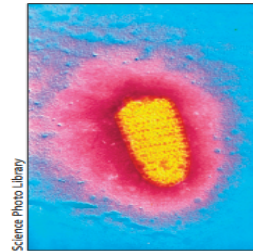
Year 2012

Publication Lancet Medical journal

Research concern

Publication on World Rabies Day raised concern over rising rabies cases in Malawi. 10 paediatric rabies cases recorded in 9 months at Queen Elizabeth Central Hospital, Blantyre. This was the highest recording of paediatric rabies deaths from a single institution in Africa.

Correspondence



Science Photo Library

World Rabies Day: evidence of rise in paediatric rabies cases in Malawi

Sept 28 marks World Rabies Day, launched in 2007 to increase public health awareness and reduce the incidence of this fatal but preventable disease. 5 years on, our experience in Malawi suggests that rabies incidence is rising and control measures are inadequate. We have seen ten cases of rabies in children at the Queen Elizabeth Central Hospital in Blantyre, Malawi, over a 9-month period (June, 2011, to February, 2012). This is the largest number of paediatric rabies cases described from a single institution in Africa and a three-fold increase in the number of cases reported between 2002 and 2005 at the same hospital.¹ All the patients had clear evidence of rabies encephalitis and all died. In the eight

Mission Rabies Malawi History

Year

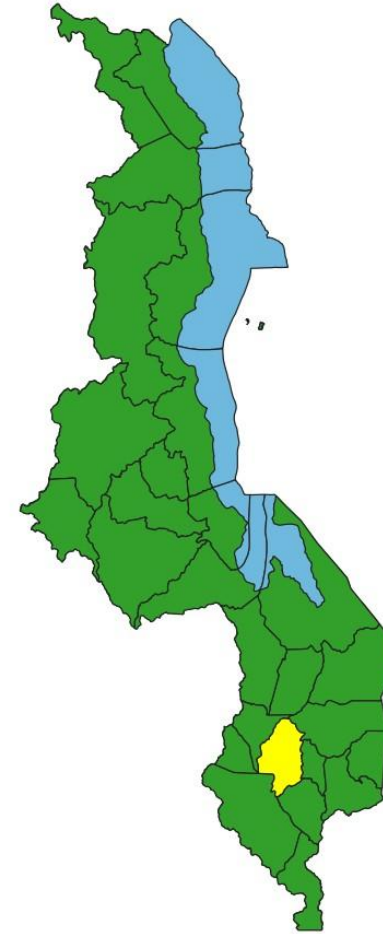
2015

Districts

Blantyre

Dogs Vaccinated

51,420



Mission Rabies Malawi History

Year

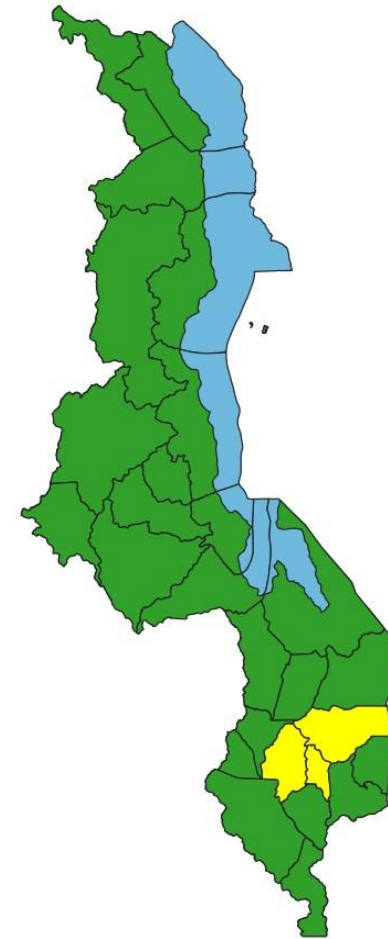
2016

Districts

3 + 2 city campaigns

Dogs Vaccinated

91,394



Mission Rabies Malawi History

Year

2018

Publication

Lancet Medical journal

Research evidence

Published data that strategic dog rabies vaccination campaigns had successfully reduced dog mediated paediatric human rabies deaths in Malawi

Canine rabies vaccination reduces child rabies cases in Malawi

In 2012, the largest ever case series of rabies from a single site in Africa was published by *The Lancet*.¹ On World Rabies Day 2018 (Sept 28, 2018), we can report a pronounced fall in the number of cases presenting to that site, following a successful mass canine vaccination programme implemented by the non-governmental organisation, Mission Rabies. Rabies is an endemic disease in Malawi. Substantial numbers of children die each year as a consequence.

a three-times increase in the number of cases reported between 2002 and 2005 at the same hospital.² Between May, 2012, and May, 2015, there were 12 paediatric rabies cases.

In May, 2015, a comprehensive canine rabies vaccination campaign was started in Blantyre, Malawi by Mission Rabies. In Blantyre, they achieved total vaccination coverage in the canine population of 79.3% in 2015, 78.3% in 2016, and 72.3% in 2017.³ Since these canine rabies vaccination campaigns, only two paediatric patients with rabies have been admitted to Queen Elizabeth Central Hospital (figure), representing a substantial and clinically meaningful decrease in cases of paediatric rabies.

Correspondence

Institute 1-12, E-28670 Madrid, Spain (JSM, AL) and Olympic Training Centre, Barcelona, Spain (FD)

- 1 Plum BM, de Hon O, Staal JR, et al. B2-agonists and physical performance. A systematic review and meta-analysis of randomized controlled trials. *Sport Med* 2011; 41: 39-57.
- 2 Martineau L, Horan MA, Rothwell NJ, Little RA. Muscling in on salbutamol. *Lancet* 1992; 349: 1094.
- 3 Haase CB, Backer V, Kalsen A, Rzeppe S, Hemmersbach P, Hostrup M. The influence of exercise and dehydration on the urine concentrations of salbutamol after inhaled administration of 1600 µg salbutamol as a single dose in relation to doping analysis. *Drug Test Anal* 2016; 8: 613-20.
- 4 Heuberger JAAC, van Dijkman SC, Cohen AF. Fertility of current urine salbutamol doping control. *Br J Clin Pharmacol* 2018; 84: 1839-38.
- 5 Saris WH, Senden JM, Brouns F. What is a normal red-blood cell mass for professional cyclists? *Lancet* 1998; 352: 1758.

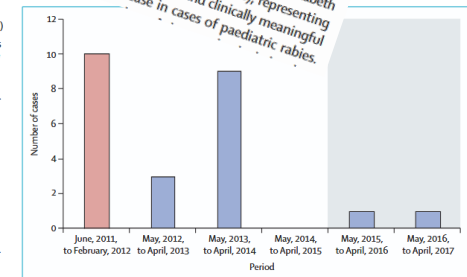


Figure: Paediatric rabies cases in Blantyre, Malawi. Grey shading indicates a period of vaccination campaign.

Canine rabies vaccination reduces child rabies cases in Malawi

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should promote rabies education, dog bite prevention, and wound care after a dog bite.

To continue their efforts to eliminate human rabies, Mission Rabies needs ongoing donor support. Their approach in Blantyre represents an excellent example for other countries with endemic rabies. Continuation of this

Mission Rabies Malawi History

Year

2019

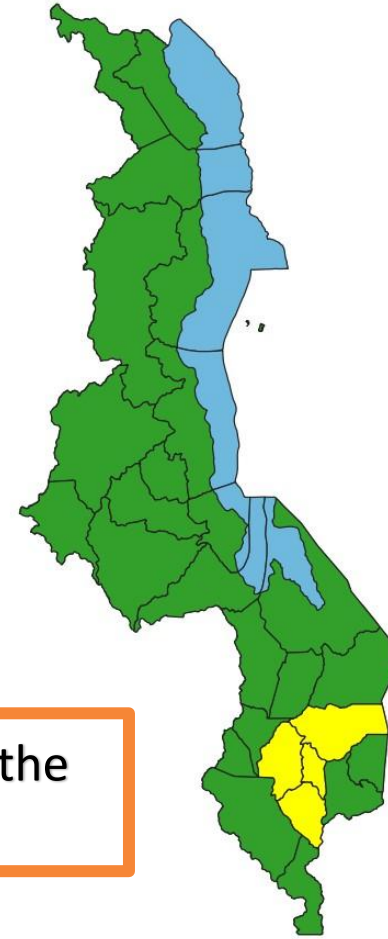
Districts

4 + 2 city campaigns

Dogs Vaccinated

103,759

Vaccination work continued during the Covid 19 pandemic and the years that followed



Mission Rabies Malawi History

Year

2023

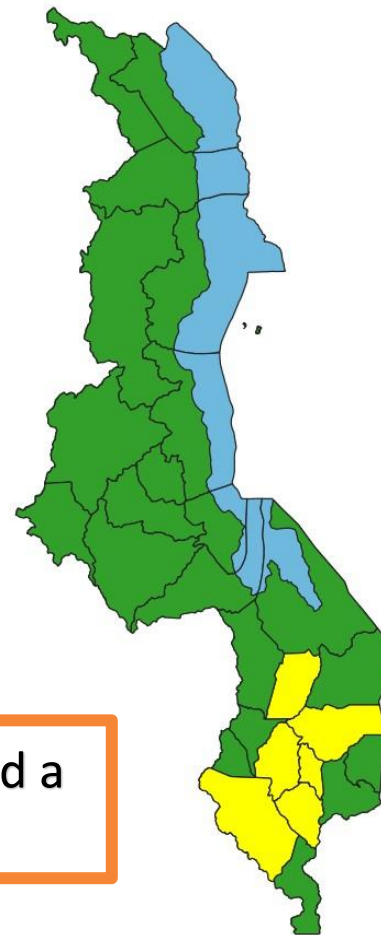
Districts

6+ 2 city campaigns

Dogs Vaccinated

95,650

Moved to a stronger collaboration with Malawi Government MoA and a risk-based model using STARC methodology



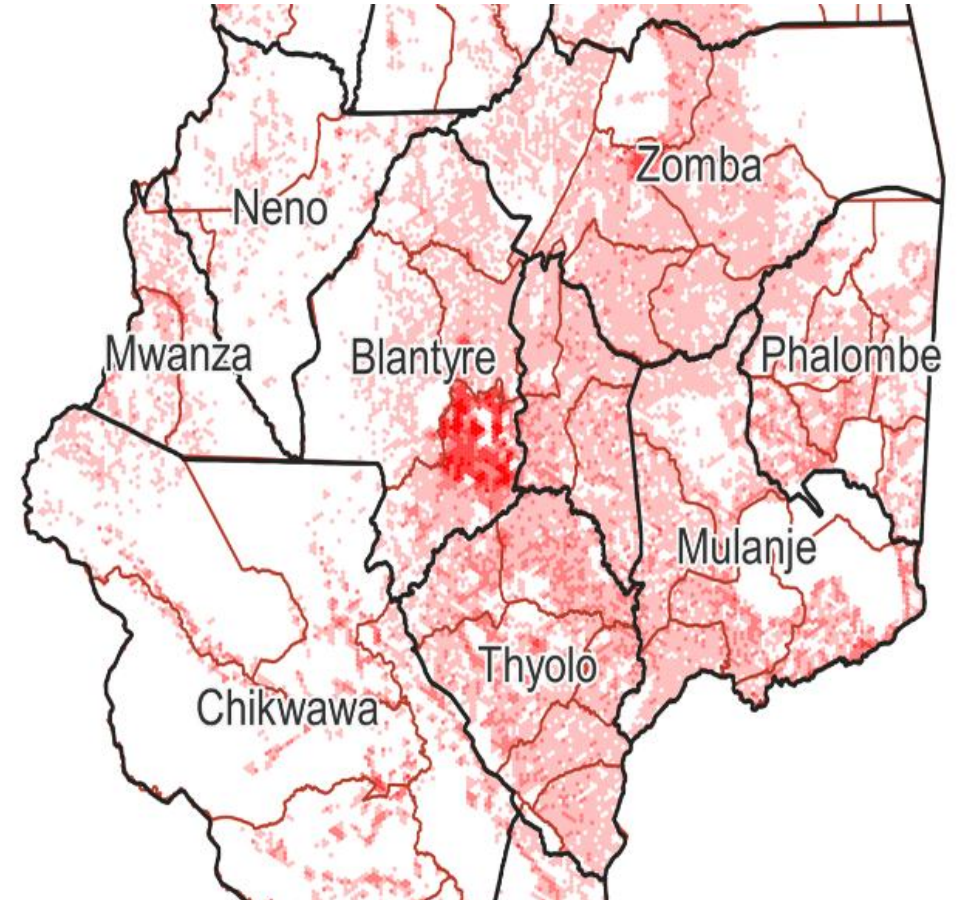
Mission Rabies Malawi Expansion

STARC

Settlement Type: Road Connectivity

Methodology

- Uses satellite technology feature extraction in GIS to identify rabies risk transmission zones
- Allows for resource prioritisation to highest risk areas
- More economical allowing faster project expansion



Mission Rabies Malawi History

Year

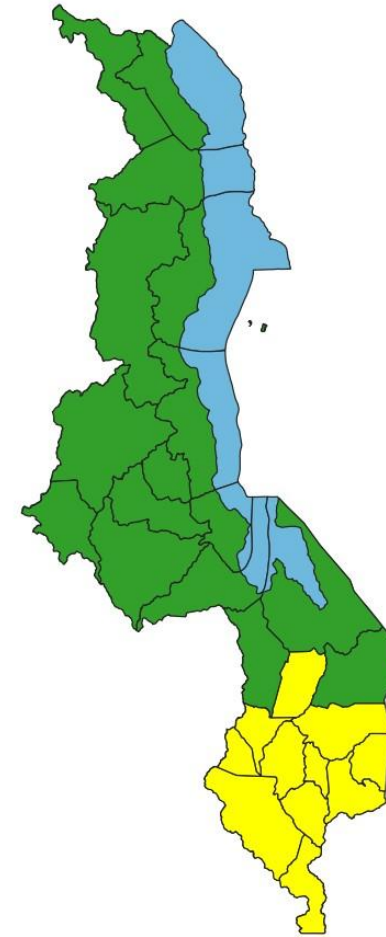
2024

Districts

11 + 2 city campaigns

Dogs Vaccinated

152,576



Mission Rabies Malawi 2025 Vaccination

Year

2025

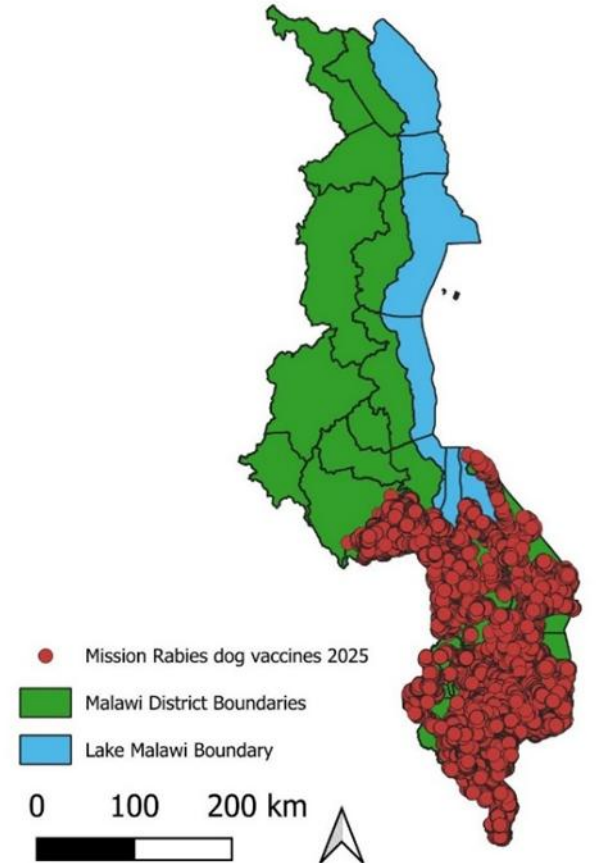
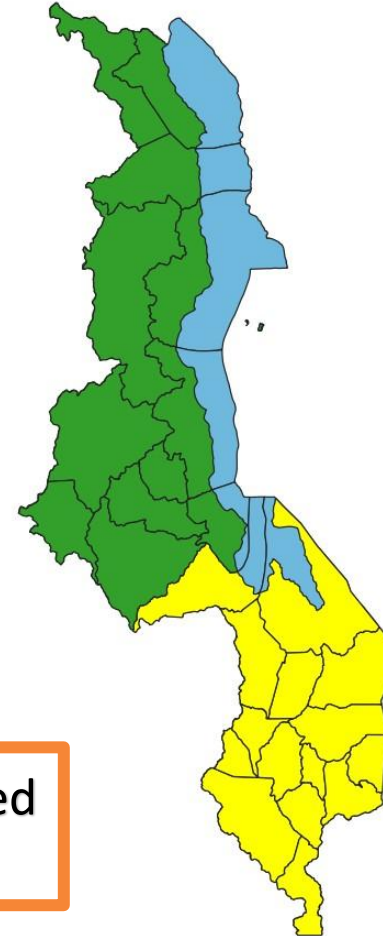
Districts

15 + 2 city campaigns

Dogs Vaccinated

188,006

2025 reached the landmark of having cumulatively administered over **1 million dog rabies vaccinations** in Malawi since 2015



Mission Rabies Malawi 2025 Education

Year	Primary Schools	Teachers	Children
2015			99,741
2016		4,002	371,401
2017	480	8,184	453,786
2018	430	5,509	441,250
2019	628	9,063	506,820
2020	575	7,633	510,685
2021	746	13,505	635,553
2022	747	10,394	720,429
2023	957	11,864	895,021
2024	1,595	20,437	1,385,195
2025	2,481	27,187	2,152,262
Total	8,639	117,778	8,172,143



Mission Rabies Malawi surveillance 2025

District capacity 15

New Gov staff trained 9

Dog bites investigated 2,152

Canine rabies cases tested 151

Positive rabies tests 108 (71.5%)



Mission Rabies Malawi 2026 plans

Year

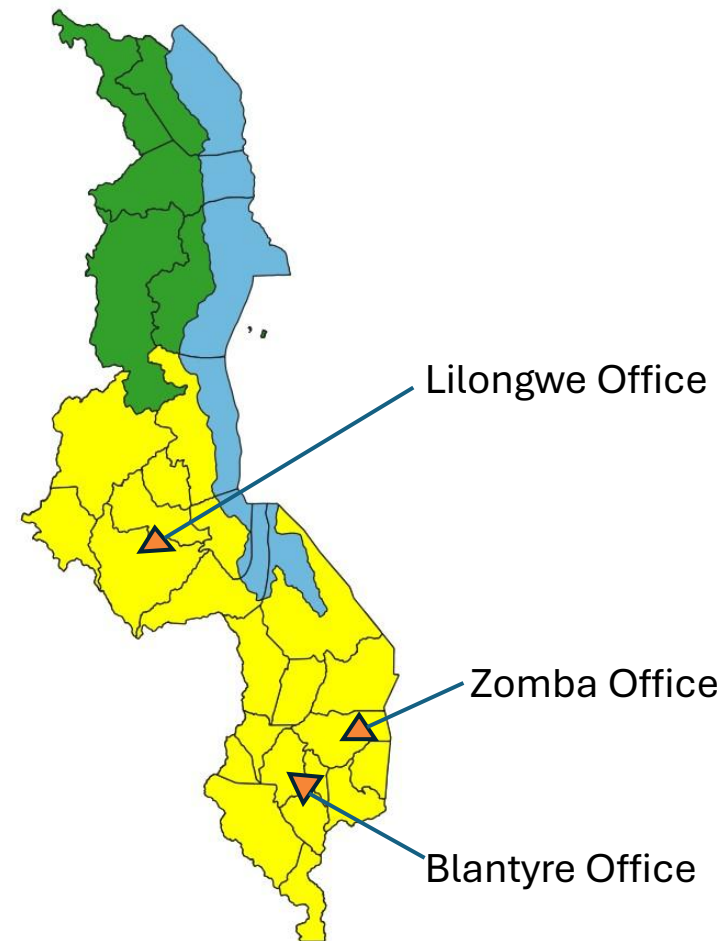
2026

Districts

Expansion into **22 districts** to cover the whole of the central and southern regions

Offices

Expansion to **3 offices** with a current total of **30 Malawian staff employed** managing the projects working closely alongside government partners





Presentation Agenda

- Overview of Mission Rabies global operations
- Mission Rabies Malawi history and progress
- Mission Rabies Malawi 2025 results and next steps



The International Rabies Taskforce



Established in 2018 – to articulate to the rabies community the synergy of MR, MSD and CDC in empowering rabies elimination projects globally under guidance from United Against Rabies (UAR)

Objective is to provide a practical toolset and training support at government level in supporting canine transmitted rabies elimination projects

STRATEGIC TASKFORCE PARTNERS



US Centers for Disease
Control and Prevention



Where does Mission Rabies fit in?

