Multisectoral Coordination Mechanism (MCM) in responding to rabies outbreak – A case of Bhutan

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Epidemiology of Rabies in Bhutan

- Rabies is cross-border transmission problem
- Endemic in southern districts
- Rabies in interior part of the country is incursion from the south
- Rabies outbreaks & cases in animals is decreasing gradually
Epidemiology of rabies in Bhutan

- Last reported human rabies case in 2016
- 7000 dog bites annually (1026 bites per 100,000 people)
One Health approach to Rabies Prevention & Control

Animal Health
1) Dog vaccination
2) Dog population control
3) Responsible dog ownership

Human Health
Accessibility of human PEP

Cross sectorial
1) Awareness and education
2) Assist in vaccination of dogs & DPM
3) Reporting, rapid response & containment
4) Operational research
5) Resource mobilization
6) Legal framework and government support
Rabies Prevention & Control

- Identify risk zones
- Advocacy & awareness
- Response
- Surveillance
- Detection
- Prevention
Annual Mass Dog Vaccination Campaign

- MDV campaign - rabies endemic areas
- Owner bring their dogs and strays are captured by AWOs
- Conduct vaccination of dogs and mark dogs with vegetable dye
- Conduct proportion count to ascertain coverage
- Minimum target – 70%
- Cross border vaccination in collaboration with counterparts across the border
- Use MDV APPS
Information Sharing

Dog bite cases in humans
Suspected rabies cases

Suspected rabies cases in dogs and other animals
Detail of exposed individuals

Joint outbreak investigation and awareness
Inter-Ministerial Committee for One Health (IMCOH)

- National One Health Technical Committee
- MoH (DMS & DOPH, MoAF (DoL, BAFRA, DOFPS))

Rapid Response Team

- Disease Outbreak Investigation Team
- Vaccination Team
- Health Team
- Quarantine & Movement Control Team
- Logistic Team
- Communication Team
Disease Outbreak Investigation Team (Human & Animal Health)
- Investigate & confirm the disease
- Determine source to rapidly control and prevent spread
- Advise RRTs to implement rapid containment activities
- Advocacy & awareness

Vaccination & Rapid Containment (Animal Health, LG & Communities)
- Case management
- MDV campaign in and around outbreak areas
- Pre-emptive culling of rabid and exposed dogs
- Advocacy and awareness

Health Team (Human health, Livestock, Communities)
- Identify human exposure cases and assess risks
- Provide pre and post bite vaccination including immunoglobulins
- Advocacy and awareness - dog bite management & rabies

Quarantine & Movement Control (BAFRA & RBP)
- Movement control of dog, other susceptible animals and livestock products from outbreak area
- Advocacy and awareness
Strategic Plan for Elimination of Rabies by 2030

- Two assessment (2017 and 2019) conducted using SARE-PWARE Tool
  - Score was 3.5 during both assessment
  - Will be able to achieve freedom from dog mediated human rabies 2025
  - Upon advise of IMCOH - realigned with the global target of 2030
  - National Strategic Plan for elimination of rabies prepared based on SARE-PWARE Assessment
**Way Forward**

- Implement Strategic Plan for Elimination of Rabies by 2030
  - Strengthen rabies surveillance in animals
  - Enhance mass vaccination of dogs in rabies endemic areas
  - Promote integrated bite case management (IBCM) through one health approach
  - Develop and implement National Advocacy Plan for rabies
  - Implement National Dog Population Management strategy
Acknowledgements
THANK YOU