

UNDERSTANDING NEEDS: CHALLENGES & OPPORTUNITIES IN CANINE RABIES MANAGEMENT



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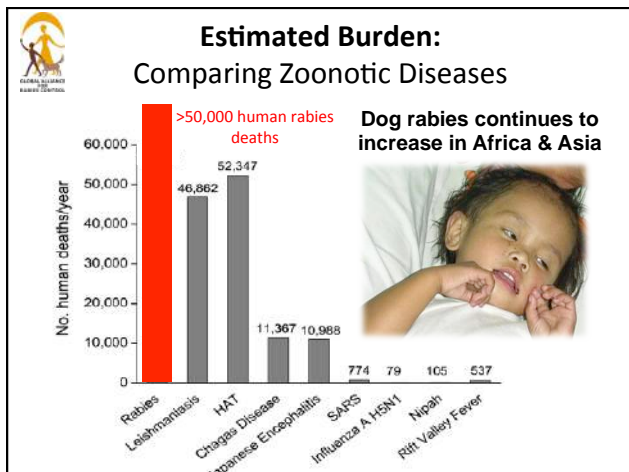
Rabies: A Global Disease



- Fatal viral disease transmitted via animal bites
- Highest case fatality of any infectious disease
- Acute progressive encephalitis
- Immunization prevents productive infections
- More than 60% of deaths are in children
- **>70 million people at risk of dying of rabies**
- Great psychological trauma after exposure
- Most cases occur in Africa and Asia





Knobel D, et al. Bull World Health Organ. 2005;83:360-8.
 Hampson et al. OIE Conference on Rabies Control. 2011.

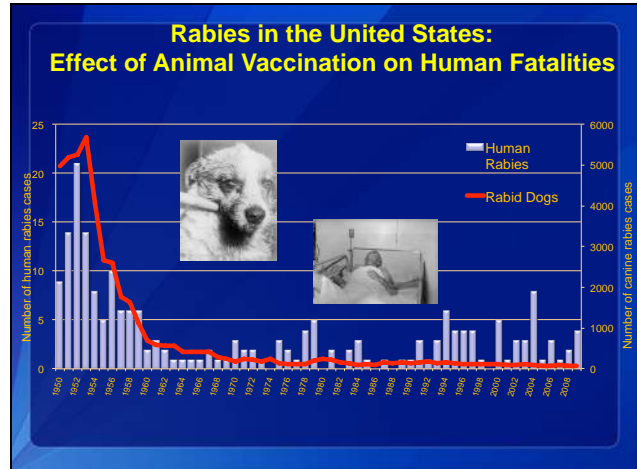
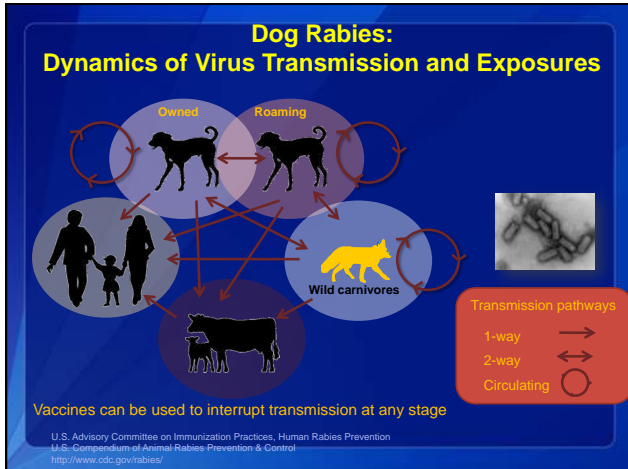


A Focus on Prevention: Dogs or Humans?

- Worldwide >90% of rabies exposures are from dogs
- Globally >99% of human rabies deaths are via dogs
- Bite wounds, stress, and trauma from dogs rabies
- Mass annual canine vaccination is effective
- Roaming infected dogs are obstacles to success
- Animal rabies prevention is cost-effective vs. culling



Lembo T, et al. PLoS Negl Trop Dis.2010;4:e626.
 Hampson K, et al. PLoS Negl Trop Dis.2011;5:e982.



- ### Recent Examples of Innovative Programs for Global Rabies Prevention and Control
- **Global Alliance for Rabies Control, established 2007**
 - Registered 501 c3 in US; registered charity in Scotland
 - **World Rabies Day, launched 2007**
 - >4.6 million animals vaccinated; >150 million people educated
 - **Partners for Rabies Prevention, established 2008**
 - Professional group of global stakeholders (FAO, GARC, OIE, etc.)
 - Public, private, NGOs, funding organizations, etc.
 - **E-global communications**
 - Bank of educational materials (e.g., 'blueprints')
 - **'One Health' rabies control pilot projects**
 - Example: Bohol Philippines, 2007–2011
- NGOs, Nongovernmental organizations

Designing a Road Map for Canine Rabies Prevention, Control & Elimination

4.3. How does someone start developing a communication plan?

STEP 1: Assessing the situation

LEMBO ET AL., 2012

An Example: Bohol, Philippines

A Partnership of the Provincial Government of Bohol, the Global Alliance for Rabies Control and the UBS Optimus Foundation
Supported by the national government and other partner organizations

47 municipalities, 1 city, 1109 villages, 1.2M people, ~100,000 dogs

Provincial Rabies Ordinance, July 2007 that created the Provincial, Municipal, Village Rabies Councils

The image shows a map of the Philippines with Bohol highlighted in red. A detailed map of Bohol is shown to the right, with various municipalities labeled. A legend indicates different rabies control zones: Zone 1 (Red), Zone 2 (Yellow), and Zone 3 (Green). A circular logo for 'GLOBAL RABIES CONTROL' is visible in the bottom right corner of the map area.

Community-based Rabies Advocacy Campaigns

Information & education campaign materials in vernacular
Synchronized village assemblies in 1,109 barangays twice a year
1,109 copies of rabies manual "How to Make Your Village Rabies Free"

The image displays several educational materials in Filipino, including a poster titled 'BOHOL - Libre sa Rabies sa 2010' and a manual titled 'KUMANGKANG SA MALAYO SA RABIES'. A photograph on the right shows a community assembly with people gathered around a dog. A circular logo for 'GLOBAL RABIES CONTROL' is in the bottom right corner.

Integration of Rabies & Responsible Pet Ownership into Elementary School Curriculum

- Piloted in year 1; province-wide integration in year 2
- reaching ~182,039 pupils (16% of total pop)

The image shows a classroom where a teacher is presenting to a group of young children. Several children have their hands raised, indicating active participation in the lesson. A poster about rabies and pet ownership is visible on the wall.

Dog Rabies Management Programs

Compulsory registration of dogs to establish dog ownership & traceability of biting incidents

Spay and neutering of dogs

Humane dog population management & advocacy for responsible pet ownership

Mass dog vaccination targeting ~70% coverage yearly to break the infectious cycle

The image is a collage of three photos: a 'DOG REGISTRY BOOK' from the Province of Bohol, a white 'DOG POUND VEHICLE', and a scene of people receiving dog vaccinations.

Community-based Paralegal Training

Backed by National Anti-Rabies Act 2007 and Animal Welfare Act 1998




- Orientation and paralegal trainings for 7,763 village-based rabies watchers
- Goal to capacitate these watchers to enforce the Rabies law using local legal procedures & paralegal forms to go after violating neighbors
- Contributed to **campaigns on leashing/ confinement, mandatory vaccination and dog population management**

Sustaining Community Support

- Community counterpart funds are generated through collection of **dog registration fees** meant to manage the number of dogs kept in the households
- Revenue sharing scheme was adopted:
 - ~50% village, 20% municipal, 30% provincial govt for operational costs of the program
 - Total community funds generated in the first 2 years: **~USD 105,740** (equivalent of the 1 year provincial operational fund)




SUMMARY

- ❑ Rabies is a serious neglected global viral zoonosis
- ❑ Proper management of dogs as the reservoir saves lives
- ❑ Annual mass immunization breaks the infectious cycle
- ❑ Canine birth control helps to stabilize local populations
- ❑ Surgical methods are inadequate to resolve current needs
- ❑ New approaches can integrate into existing programs via local community involvement for sustainability

ACKNOWLEDGEMENTS

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- ❑ Pan American Health Organization (especially F. Leanes)
- ❑ USDA, APHIS, Wildlife Services (especially D. Slate)
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- ❑ Rabies Program (especially M. Ka,, T. S. X.

