


# Rabies in Sri Lanka

## current situation and the way forward


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# Introduction

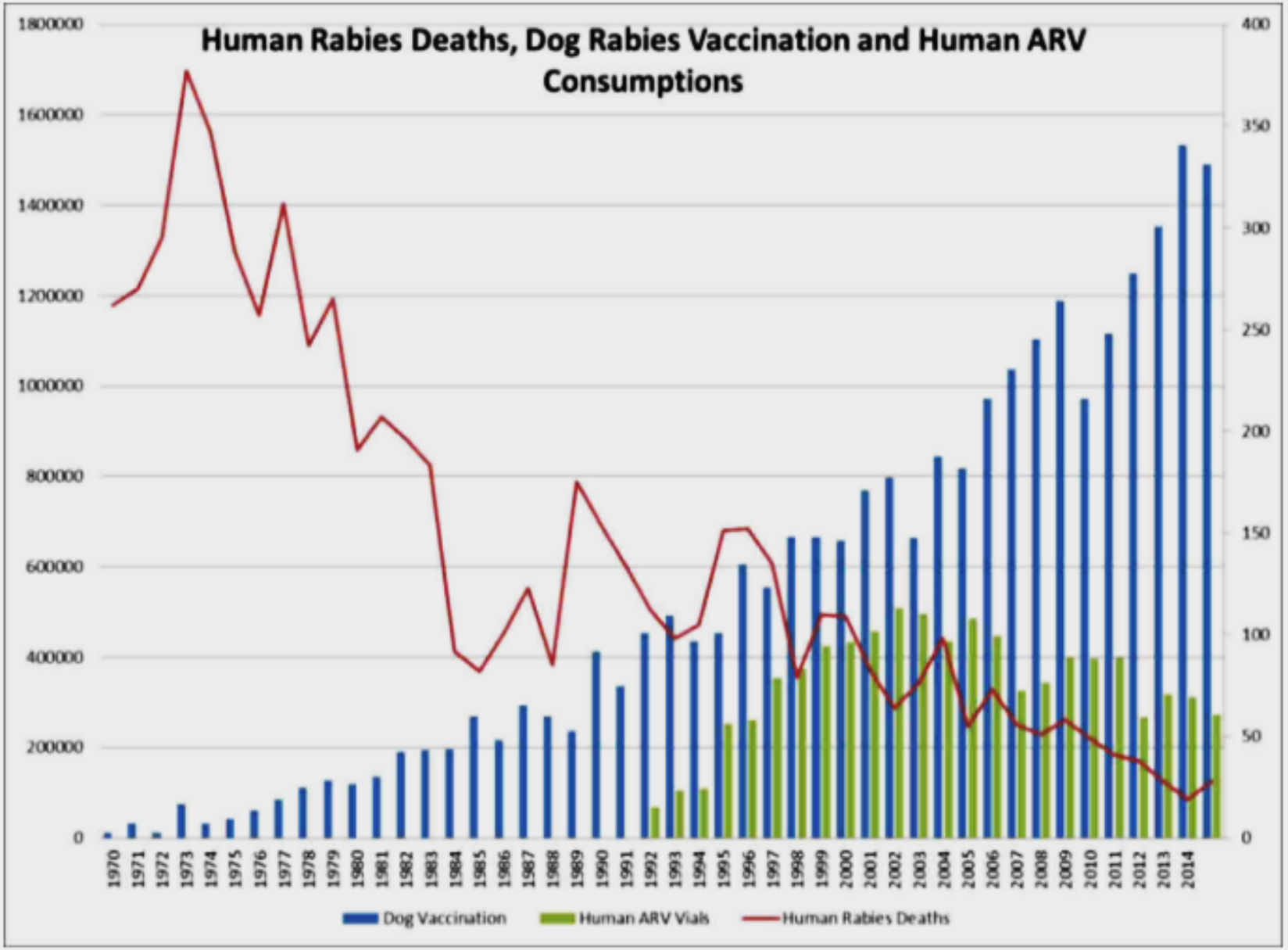
- **Sri Lanka** - an island with a land extent - 65,524 $Km^2$
  - Rabies is endemic
  - Dog is the main reservoir
  - Cats 2nd commonest

- Dog to man ratio around 1:8
- Significant stray dog population
- Vaccination of domestic dogs not mandated by law
- Improperly / unvaccinated domestic dog is our main problem

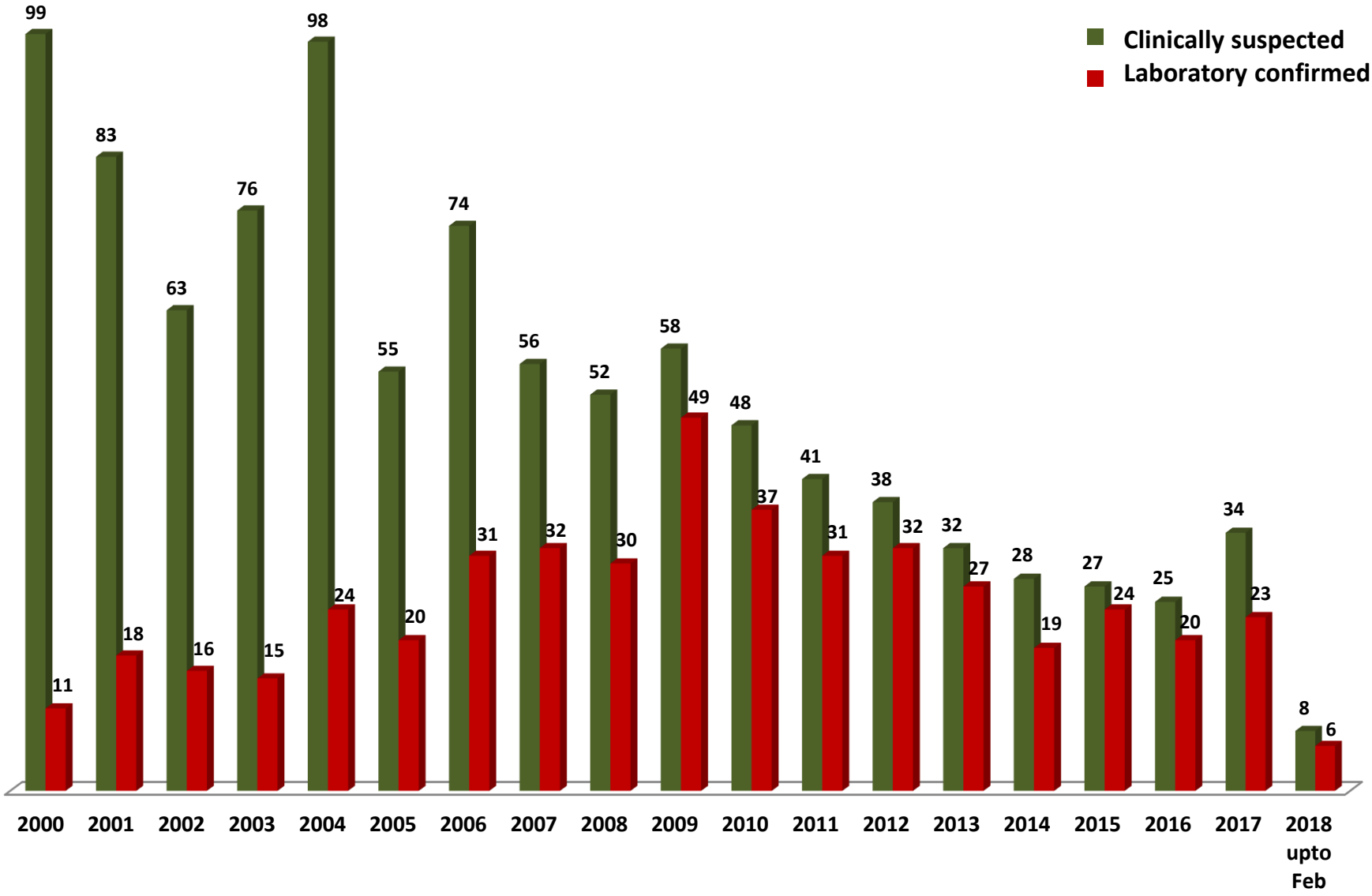
# Human rabies

- Human rabies deaths occur every year
- Mainly transmitted by dogs (over 98%)
- Numbers have reduced rapidly during the last 3 decades
- Fluctuating around 20 per year for past 3-4 years
- Children are less affected (<20%)

RABIES PREVENTION AND CONTROL UP TO 2015



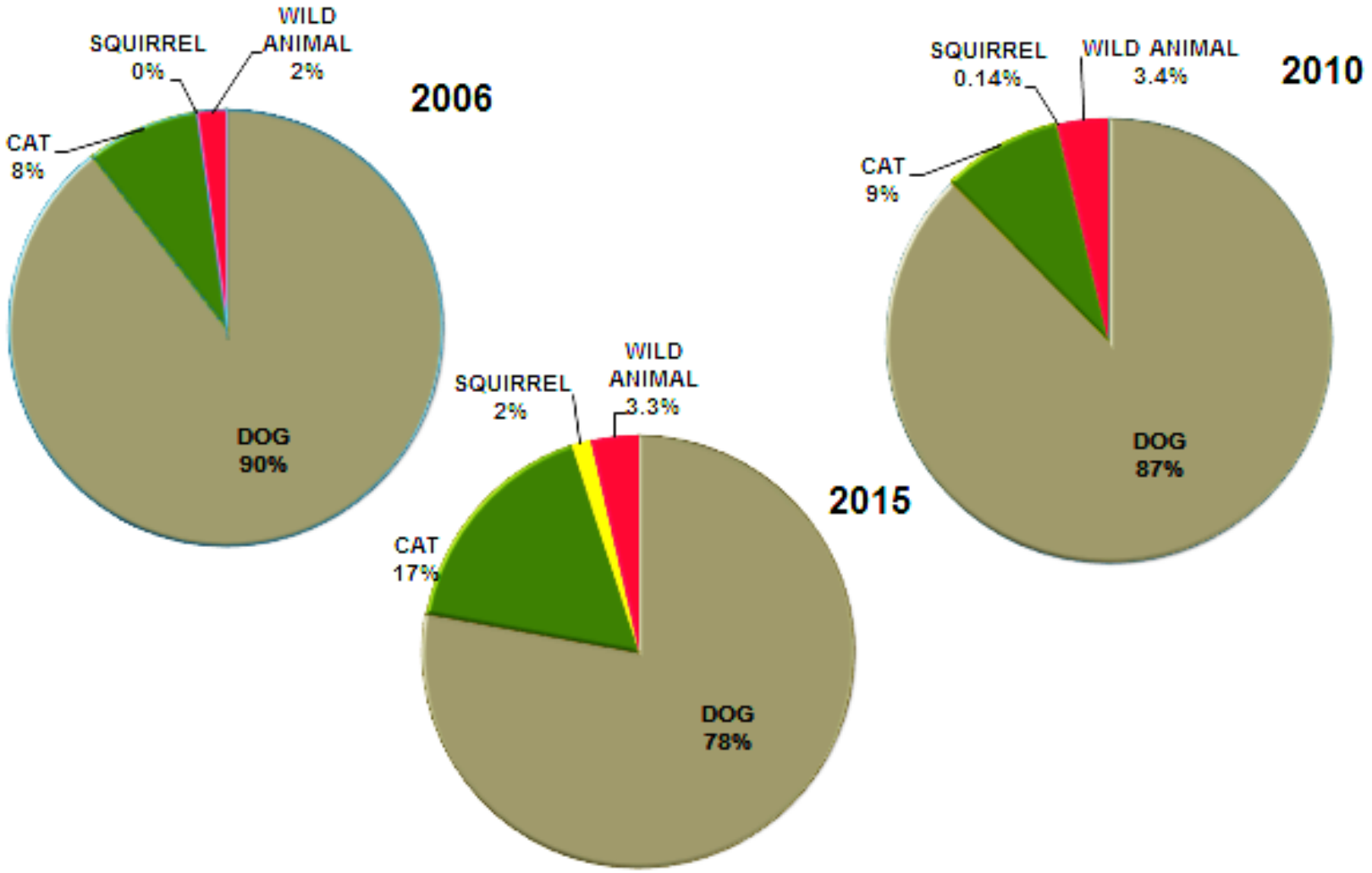
# Human Rabies deaths in Sri Lanka 2000 - Feb. 2018



# Human rabies deaths from 2015 - to date

| Feature | 2015 | 2016 | 2017 | 2018 up to Feb. |
|---|---|---|---|---|
| No of Lab confirmed /total received | 24/26 | 20/25 | 23/34 | 6/8 |
| No of children affected | 3/24 | 5/20 | 3/23 | 2/6 |
| Male : Female ratio | 19 : 5 | 13 : 7 | 18 : 5 | 4 : 2 |
| Deaths due to dog bites | 18/24 | 17/20 | 18/23 | 5/6 |
| Deaths due to puppy bites | 5/24 | 7/20 | 3/23 | 1/6 |
| **PET not taken** | **22/24** | **18/20** | **20/23** | **4/6** |

# Changing pattern of animal samples received



# Laboratory diagnostic services

- National/Reference laboratory at MRI
- Two peripheral laboratories
- Over the last 10 years,

    Average annual samples : 1500 (1350-1800)

    Average positivity rate 45 % (40-60%)

**Tests performed**

- Direct smear for Negri bodies for animal samples
- Direct fluorescent antibody test (DFAT) - Confirmatory test
- Immuno-chromatography test (ICT)
- Rabies molecular diagnosis by - real time RT-PCR
- Mouse inoculation test (MIT)

# Prevention & control of rabies

- Prevention/control activities for both humans and animals were handled by **the Ministry of Health** until recently.

- Now prevention/control activities for animal rabies is the responsibility of the **Department of AP&H under the Ministry of Agriculture and Rural Development**

- Presently we are in a transition phase

# Our Goal

Elimination of human rabies by 2020

# Preventive Strategies

- Minimizing risk of human exposure by **controlling dog rabies**

- **Pre and post-exposure anti rabies prophylaxis for humans**

- Promoting **confirmation of rabies by laboratory diagnosis**

# Controlling dog rabies…

- Promoting responsible pet ownership
- Public awareness campaigns on dog vaccination
- Free dog vaccination campaigns organized by Public Health Inspectors (Rabies) in collaboration with the MOH and Regional Epidemiologists
- Free dog vaccination clinics by government veterinary clinics

# Controlling dog rabies *cont..*

- Community/stray dog vaccination programmes – using auto plunger
- Support extended by several NGOs for dog vaccination and sterilization
- More enthusiasm towards female dog sterilization
- Better environment control – proper garbage removal
- ‘No kill policy’ from 2007 with dog vaccination and sterilization

# Medical management

- **Rabies PET given free of charge** in most tertiary care government hospitals - island wide
- **Over 95% of PET is by ID Anti Rabies Vaccine (ARV)** schedules ± anti rabies serum (ARS) according to protocol
  - Rabies information centre at MRI
  - **Regular training workshops** for medical officers and nurses working in Rabies treatment units

# Challenges

- Vaccination targets to control canine rabies is yet to be achieved (coverage in most areas only around 40 -50%)
- Human rabies – still occur in significant numbers
  - Most affected group is the **uneducated adult males**

  (Reaching population on move- masons, drivers, vendors, labourers …. is very difficult)
- Huge expenditure on post exposure prophylaxis (10 -15% of the drug budget)
- Rational use of PET according to guideline – Proper treatment of patients on time, preventing unnecessary vaccinations and wastage


Thank You !