

# **Annual Report 2013**

# Rabies Control & Control of Other Zoonotic Diseases

## **Public Health Veterinary Services**

Ministry of Health Sri Lanka

# **Annual Report 2013-Public Health Veterinary Services** (Rabies Control Programme)

Public Health Veterinary Services of Ministry of health has been entrusted with the national responsibilities in preventing the human and animal rabies and controlling other zoonotic diseases in Sri Lanka.

Rabies control programme is the main zoonotic control programme in Sri Lanka and it had been decentralized since 1990. Provincial health services are responsible for implementation of the programme.

There is a strong evidence to suggest that the menace of rabies had been in existence in Sri Lanka for centuries. The Colonial Rulers had been compelled to adopt legislation to combat the disease. The Rabies Ordinance of 1893 and the Dog Registration Ordinance of 1904 are clear indicators of this.

Official statistics are not available to gauge the rabies situation that prevailed in the country till 1970s. Existing records indicate that rabies had been recognized as an important public Health problem in Sri Lanka from early 1950s.

Rabies is a zoonotic viral disease which infects domestic and wild animals. It is transmitted to other animals and humans through close contact with saliva from infected animals (i.e. bites, scratches, licks on broken skin and mucous membranes). World wide the dog is the principal vector in transmitting rabies to man. Once the symptoms of the disease develop, rabies is fatal to both animals and humans.

#### Vision:

Assure maximum protection to public from deadly rabies and other zoonotic diseases causing disability.

#### **Mission:**

Monitor, promote and facilitate implementation of Rabies control strategies stipulated by the Ministry of Health to reach high coverage involving provincial health services whilst ensuring high community effort and promotion of rabies post exposure treatment involving government hospitals whilst ensuring cost effectiveness

#### Policy goal:

Elimination of Rabies from Sri Lanka by 2020

#### **National Program objectives:**

- 1. To ensure protection for those exposed to suspected rabies infection
- 2. To ensure protection for those who are at a higher risk of contacting rabies
- 3. To establish herd immunity in animal reservoirs with special emphasis on dogs
- 4. To control the population of animal reservoirs with special emphasis on dogs through appropriate methods
- 5. To remove all rabies suspected dogs humanely

#### **Strategies:**

- 1. Proper screening of animal bite victims for decision making on post exposure management.
- 2. Provide appropriate post exposure treatment equitably to the population of Sri Lanka.

- 3. Encourage pre exposure prophylaxis for those engaged in occupations at higher risk of exposure rabies infections
- 4. Immunize all dogs (domestic, community and stray) through mass vaccination campaigns to achieve 75% coverage.
- 5. Encourage the participation of both private and public sector veterinary services in providing vaccinations to dogs.
- 6. Sterilize dogs through appropriate chemical and surgical methods.
- 7. Control of environmental conditions in public places conducive to propagation of dogs.
- 8. Removal of nuisance dogs by proper authorities in a humane manner
- 9. Develop a mechanism to identify and dispose of all suspected or rabid animals.
- 10. Strengthen the Rabies surveillance system
- 11. Enact appropriate legislation to implement the national rabies policy.
- 12. Strengthen the governance and stewardship for Rabies elimination
- 13. Control of Japanese Encephalitis among pigs

#### **Activities:-**

Activities are implemented by the Line Ministry & Provincial Health Authorities.

Activities pertaining to policy development, strategy development, training (curative and preventive staff), mass awareness campaigns, supply of drugs, vaccines and other major inputs, research and supervision are carried out by the PHVS office of the Ministry of Health.

Provincial Health Services are responsible for implementation of awareness programmes, vaccination (Anti Rabies) of dogs and Animal birth control programmes with regard to rabies elimination. Provision of Post Exposure Treatment is carried out by both line ministry and provincial hospitals

#### Surveys on dog population size and structure

Dog population surveys were conducted in Four Divisional secretary areas and Data analysis is being done.

#### **Status of Human Rabies**

Rabies control measures launched in Sri Lanka since 1975 have had a tremendous effect on the incidence of human rabies. The number of human rabies deaths declined from 377 in 1973 to 28 rabies deaths in the country in 2013.

#### **Status of Animal Rabies**

The dog is the main reservoir as well as the transmitter of rabies in Sri Lanka. Total number of animal rabies reported during the year 2013 was 762. Majority 87% (664) of animal rabies was reported among dogs, 10.1% (77) cats ,1.2% (9) cows, 0.4% (3) goats, 0.3% (2) squirrels, 0.5%(4) Mongoose and 0.1% (1) each among rock squirrels, Buffalos and pole cat.

Mainly the dogs have transmitted the disease to humans. Dog was responsible for 100% of human rabies deaths investigated in 2013 (n17) while the responsible animal for the other deaths were not identified.

#### Milestones

- National Strategic plan for rabies elimination was finalized and published in 2013 enabling major partners such as ministry of livestock and ministry of local government to take part in rabies elimination mission
- Department of Animal Production and Health also commenced dog vaccination and 51,984 dogs were vaccinated in 2013
- Expansion of Rabies diagnostic facilities initiated with training of Staff of Deportment of Animal Production and health on Direct rapid immunochemistry test.(dRIT)

#### Achievements in 2013

Activity	Indicator	Achievements / performance
Maintain the human rabies free status	Number of districts without human rabies deaths	9 districts (Kaluthara, Kegalle, Kandy, MathaleHambanthota, Nuwaraeliya, Badulla, Mannar, Ampara. Kalmune districts)
Prevent human rabies deaths	Number of deaths	28 deaths
Surgical dog sterilization	Number of dogs sterilized surgically	163,852
Chemical dog sterilization	Number of dogs sterilized chemically	36,372
Dog vaccination against rabies	Number of dogs vaccinated against rabies	1,340,199 stray dogs and domestic dogs
Provision of Human rabies vaccines	Number of vaccine vials provided for human rabies prevention	317,782 Human rabies vaccines vials were provided
Provision of rabies serum	Number of serum vials provided for human rabies prevention	93,133serum (ERIG) vials and 6,994 Human serum (HRIG) vials
Conduct training programmes for preventive and curative health staff	Number of training programmes conducted	Thirty training programmes
Conduct Mass awareness programmes to increase awareness among public	Number of Mass awareness programmes conducted	Fifteen exhibitions, more than 0.1 million Posters, banners were distributed
vaccination against Japanese Encephalitis Infection	Number of pigs vaccinated against JE	80,000 pigs were vaccinated against Japanese Encephalitis

#### **Control of Japanese Encephalitis (JE)**

This programme was implemented in collaboration with the department of Animal Production and Health. During 2013, Eighty Thousand (80,000) pigs were vaccinated against JE. Vaccines were provided by Health Services and Department of Animal Production and Health provided the human resources.

#### WHO contribution

WHO allocated Rs. 4.45 million for Public Health Veterinary Services in 2013 and it was used for staff training, conduct advocacy meetings to prepare national strategic plan for rabies elimination, purchase dog collars, print IEC materials and dog population surveys.

#### **Statistical Bulletin**

Annual statistical bulletin was prepared. (Attached)

#### Major Expenditures by government of Sri Lanka.

Major Expenditures by Soveriment of Str Euman.				
Item	Million			
Import of Dog Rabies vaccine	Rs 31			
Dog sterilization	Rs.125			
Human Rabies vaccine	Rs 231			
Human Rabies Immunoglobulin (HRIG)	Rs 74			
Horse rabies immunoglobulin (ERIG)	Rs 45			
Total	Rs.506			





world rabies day meeting with health authorities





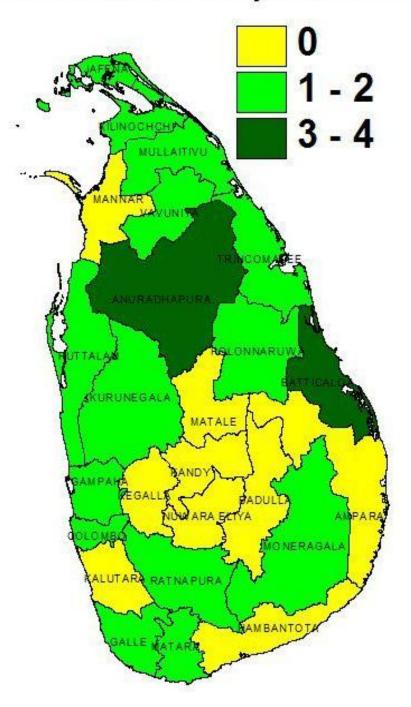
Community participation for mass vaccination campaign



Training programme on Rabies diagnosis new technique (dRIT) with collaboration of PHVS,WHO,AP&H and Faculty of veterinary Medicine

## **Statistical bulleting**

## **Human Rabies Distribution By Districts-2013**



### **Human Rabies Deaths 2013**

Province	District	2012	2013
Western	Colombo	6	1
	Gamphaha	2	1
	Kaluthara	2	0
Western Total		10	2
North Western	Kurunegala	4	1
	Puttalam	2	2
North Western Total		6	3
Sabaragamuwa	Rathnapura	3	2
_	Kegalle	0	0
Sabaragamuwa Total		3	2
North Central	Anuradhapura	2	3
	Polonnaruwa	1	1
North Central Total		3	4
Central	Kandy	0	0
	NuwaraEliya	0	0
	Matale	2	0
Central Total		2	0
Southern	Galle	0	2
	Matara	1	2
	Hambanthota	0	0
Southern Total		1	4
Uva	Badulla	1	0
	Monaragala	2	2
Uva Total		3	2
Nothern	Jaffna	1	2
	Vavuniya	1	2
	Killinochchi	1	1
	Mulathive	0	1
	Manna	0	0
Nothern Total		3	6
Eastern	Trincomalee	0	1
	Ampara	2	0
	Kalmune	1	0
	Batticaloa	4	4
Eastern Total		7	5
<b>Grand Total</b>		38	28

## Human Rabies Vaccine Vials (1 ml) Distributed from M.S.D

	2012 Human ARV	2013 Human ARV
Central	27544	32061
Kandy	16944	17583
Matale	4884	5460
Nuwaraeliya	5716	9018
Eastern	27570	37607
Ampara	14006	13658
Batticaloa	10792	16317
Trincomalee	2772	7632
North Central	16605	17024
Anuradhapura	15180	14014
Polonnaruwa	1425	3010
North Western	28901	31154
Kurunegala	22911	23456
Puttalam	5990	7698
Nothern	26600	37456
Jaffna	7788	9850
Kilinochchi	7328	9660
Mannar	3432	4096
Mulathive	4620	6240
Vavuniya	3432	7610
Sabaragamuwa	23632	29944
Kegalle	6276	9994
Ratnapura	17356	19950
Southern	34254	40335
Galle	13846	16216
Hambantota	11088	13193
Matara	9320	10926
Uva	26530	28356
Badulla	15087	17314
Monaragala	11443	11042
Western	56891	63845
Colombo	28451	29879
Gampaha	15638	18264
Kalutara	12802	15702
Grand Total	268527	317782

### **Dogs & cats Vaccination**

(This includes vaccination done by DAPH & it is 51,984.Please see next page for district wise details)

	2012			2012	2013			2013
	Cats	Domestic	Stray	Total	Cats	Domestic	Stray	Total
<b>Central Province</b>		174878	12457	187335	89	179591	15392	195072
Kandy		82756	7781	90537	54	83696	8943	92693
Matale		45171	3009	48180	21	42785	5023	47829
NuwaraEliya		46951	1667	48618	14	53110	1426	54550
Eastern Province	2720	63505	4008	70233	55	69901	10405	80361
Ampara	2720	17473	1150	21343	55	10922	9540	20517
Batticaloa		24997	2604	27601		28188	865	29053
Kalmunei		2268		2268		5782		5782
Trincomale		18767	254	19021		25009		25009
North Central								
Province		106096	19106	125202		118918	44065	162983
Anuradhapura		65556	8666	74222		84740	29497	114237
Polonnaruwa		40540	10440	50980		34178	14568	48746
North Western								
Province	4495	209303	20263	234061	21869	190154	19899	231922
Kurunegala		143515	6558	150073	15884	125907	4579	146370
Puttalam	4495	65788	13705	83988	5985	64247	15320	85552
Northern								
Province		68867	1209	70076		103521	75	103596
Jaffna		47902	161	48063		61056	70	61126
Killinochchi		4460		4460		12071	5	12076
Manna		8588		8588		11017		11017
Mulathive		559		559		3353		3353
Vavuniya		7358	1048	8406		16024		16024
Sabaragamuwa								
Province	2901	92234	6929	102064	3948	106206	12589	122743
Kegalle		66806	1679	68485		66846	4455	71301
Rathnapura	2901	25428	5250	33579	3948	39360	8134	51442
Southern		124606	20756	152262		116054	20700	155654
Province		124606	28756	153362		116954	38700	155654
Galle		49419	15022	64441		49978	17966	67944
Hambanthota		31053	7914	38967		21897	10131	32028
Mathara		44134	5820	49954		45079	10603	55682
Uva Province	459	83025	2810	86294	131	90732	3914	94777
Badulla		59014	2554	61568		50699	2379	53078
Monaragala	459	24011	256	24726	131	40033	1535	41699
Western		107443	24044	222254		472744	20742	202452
Province		197413	34941	232354		172711	30742	203453
Colombo		43096	9412	52508		31978	11117	43095
Gampaha		125341	17923	143264		109555	9350	118905
Kaluthara		28976	7606	36582		31178	10275	41453
<b>Grand Total</b>	10575	1119927	130479	1260981	26092	1148688	175781	1350561

# Dog Rabies Vaccination by Dept. of Animal Production & Health (DAPH) 2013

Central Province	3874
Kandy	2627
Matale	337
NuwaraEliya	910
Eastern Province	8004
Ampara	4000
Batticaloa	2089
Trincomale	1915
North Central Province	4621
Anuradhapura	4049
Polonnaruwa	572
North Western Province	8712
Kurunegala	6492
Puttalam	2220
Northern Province	8076
Jaffna	687
Killinochchi	1332
Manna	2298
Mulathive	2000
Vavuniya	1759
Sabaragamuwa Province	6085
Kegalle	1284
Rathnapura	4801
Southern Province	4108
Galle	1704
Hambanthota	1532
Mathara	872
Uva Province	8504
Badulla	6482
Monaragala	2022
Grand Total	51984

## **Dog Population Control in 2013**

Province	District	Sterilization (	Surgical)	Chemical (Dipo)	
		2012	2013	2012	2013
Western	Colombo	5566	4832	5233	4072
	Gamphaha	9758	0	8678	4819
	Kaluthara	1760	1974	2856	3564
Western Total		17084	6806	16767	12455
North Western	Kurunegala	14131	13660	2364	1508
	Puttalam	9551	8252	3840	4915
North Western Total		23682	21912	6204	6423
Sabaragamuwa	Rathnapura	4128	9268	208	0
	Kegalle	7649	11161	411	0
Sabaragamuwa Total		11777	20429	619	0
North Central	Anuradhapura	11868	19875	4776	2989
	Polonnaruwa	12037	0	1437	0
North Central Total		23905	19875	6213	2989
Central	Kandy	0	0	499	367
	NuwaraEliya	4454	0	0	0
	Matale	0	0	538	325
Central Total		4454	0	1037	692
Southern	Galle	4144	6106	2130	327
	Matara	4209	7394	2049	1439
	Hambanthota	1495	8563	4267	1440
Southern Total		9848	22063	8446	3206
Uva	Badulla	6529	6613	5463	5132
	Monaragala	0	5289	2153	2689
Uva Total		6529	11902	7616	7821
Nothern	Jaffna	3328	4113	1882	254
	Vavuniya	0	1538	390	2268
	Killinochchi	633	1409	0	0
	Mulathive	490	1441	0	0
	Manna	1702	1562	39	0
Nothern Total		6153	10063	2311	2522
Eastern	Trincomalee	8080	10920	26	0
	Ampara	0	10006	454	0
	Kalmune	2096	4232	0	0
	Batticaloa	4041	8229	245	264
Eastern Total		14217	33387	725	264
<b>Grand Total</b>		107473	146437	49938	36372

# Laboratory Surveillance Results of Medical Research Institute of Animal Head Positives 2012 & 2013

Animal	2012		2013		
	No: Received	No: Received No: Positive		No: Positive	
Dog	909	608	973	664	
Cat	431	78	370	77	
Mongoose	1	1	10	4	
Cow	22	18	11	9	
Squirrel	20	1	60	2	
Rock					
Squirrel	6	2	6	1	
Pole Cat	5	1	4	1	
Goat	2	2	8	3	
Monkey	1	1	5	0	
Rock					
Mongoose	1	1	4	0	
Pig	2	2	1	0	
Buffalo	0	0	2	1	
<u>,                                    </u>					
Total	1400	715	1454	762	

# **Laboratory Surveillance Results of Faculty of Veterinary Medicine - 2013**

Animal	No: Received	No: Positive
Dog	80	17
Cat	29	2
Cattle	3	2
Squirrel	3	0
Rabbit	2	0