Veterinary
Epidemiological Bulletin
Sri Lanka

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Introduction

Epidemiological Bulletin of the Animal Health Division comes to you every six months from this year onwards.

Main objective of the bulletin is to disseminate information on disease incidences and their occurrence pattern to end-users and expose the reader to the global trends in disease situation.

Animal Health Division maintain a data base on all the reported diseases to the DAPH by field Veterinarians, using a special software known as 'TAD-Info' which has been developed jointly by the OIE-FAO and introduced to many countries in the region.

Currently all the data collected on monthly basis using monthly reports and incase of notifiable diseases weekly reports sent by field Veterinarians are fed to this system to generate disease occurrence reports.

Therefore all Government Veterinarians are requested to give priority to their primary duty of disease surveillance and report all the diseases promptly to the AH division and get laboratory confirmation by sending samples to nearest VIC and to the VRI to ensure the diagnosis more reliable. It is also intended to incorporate wild life and abattoir disease surveillances into the system in near future.

Highly Pathogenic Avian Influenza (HPAI) surveillance programme.

National animal disease surveillance programme against HPAI has been developed in Sri Lanka in 2006 in accordance with the guiding principles of HPAI Surveillance in non-infected countries outlined by the OIE.

This programme has been implemented during the year 2007 with the financial support from FAO under the Technical Project namely Highly Pathogenic Avian Influenza Emergency Preparedness Project. (OSRO/SRL/602/USA). The field level implementation succeeded in many parts of the country and supported by appropriate laboratory investigations resulted in generation of significant information not only to ensure the freedom from infection but also to make necessary modification to the original plan to certify the freedom status continuously. Sero-Surveillance is designed to detect one percent prevalence of positive flocks at 95% C.I.(within flock prevalence = 5%). Six hundred sampling sites are identified in the country and 15 samples will be collected at each site from eligible birds. In total 9000 serum samples will be collected in the country during the year 2008.

2.1.1 Reported cases of Foot and Mouth Disease: January – June 2008

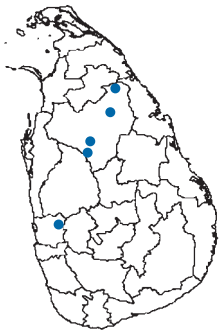


Fig: 4 January

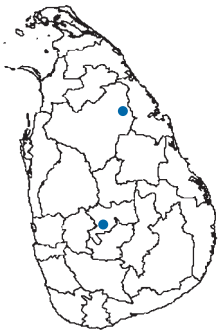


Fig: 5 February

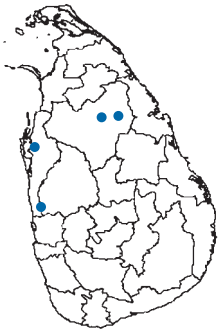


Fig: 6 March

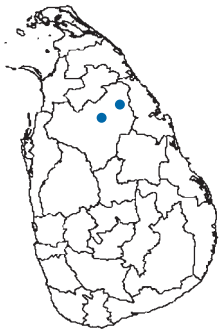


Fig: 4 April

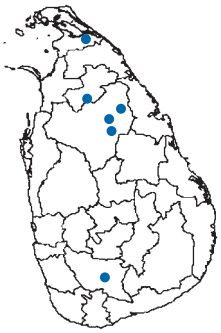


Fig: 5 May

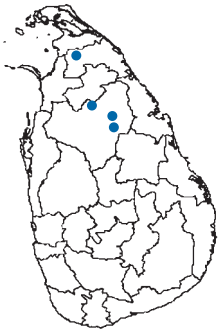


Fig: 6 June

District	VS Range	Species	Cases	Deaths	Month
Anuradhapura	Thirappane	Buffalo	20	2	January
	Padawiya	Bovine	975		
		Buffalo	300		
	Kahatagasdigiliya	Buffalo	10		
Gampaha	Meerigama	Bovine	11		
Anuradhapura	Horowupothana	Bovine	14		February
	Rambewa	Bovine	40		
		Buffalo	10		
Puttalam	Wanathavillu	Bovine	5	1	
Kurunegala	Udubaddawa	Swine	10		
		Bovine	20		
Anuradhapura	Horowupothana	Caprine	2		March
Kandy	Gampola	Bovine	12		
Anuradhapura	Horowupothana	Bovine	4		April
	Kahatagasdigiliya	Buffalo	88		
		Bovine	44		
		Caprine	8		
Mullaitivu	Tunukkai	Bovine	4		May
Anuradhapura	Kahatagasdigiliya	Buffalo	3		
		Bovine	14		
	Galenbindunuwewa	Bovine	14		
	Medawachchiya	Bovine	4		
Anuradhapura	Galenbindunuwewa	Bovine	5		June
	Horowupothana	Bovine	110	4	
	Kahatagasdigiliya	Buffalo	8		
Ratnapura	Weligepola	Buffalo	21	13	
Kilinochchi	Karachchi	Bovine	87	65	
Vavuniya	Vavuniya South	Bovine	40	2	
Sri Lanka	16 Rranges/23 outbreaks	Bov,Cap,Sui	1883	87	

The only sero type of Foot and mouth virus believed to be existing in Sri Lanka is the Serotype "o". However, it has to be confirmed in all outbreaks by laboratory in order to ensure the existence of this serotype exclusively.

2.1.2 Reported cases of Black Quarter: January – June 2008

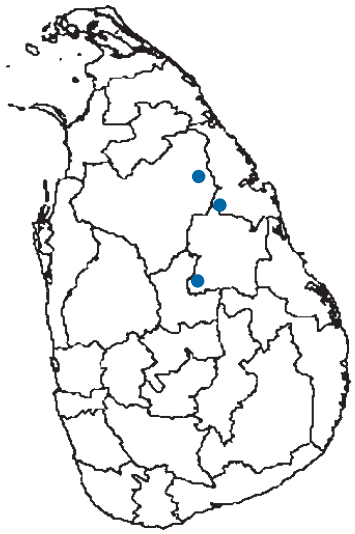


Fig:7

Table: 02 : Distribution of Reported BQ Cases

District	VS Range	Species	Cases	Deaths	Month
Polonnaruwa	Bakamuna	Bovine	2	2	February
Anuradhapura	Horowupothana	Bovine	1		April
Trincomalee	Kantale	Bovine	7	5	June
3	3	Bovine	10	7	

2.1.3 Infectious Reproductive Diseases in Cattle

Bovine Brucellosis and Leptospirosis have been detected causing abortions in cattle.

Bovine brucellosis among cattle have been detected in Nachchaduwa (2 cases) and CNP Nuwaragam Palatha Central (1 cases) Veterinary ranges in Anuradhapura District during the month of April while Leptospirosis was detected in Galnewa (6 cases ; 3 deaths) in Jan .& Feb. and Bibile (2cases) in April.

2.1.4 Reported cases of Bovine Babesiosis : January – June 2008

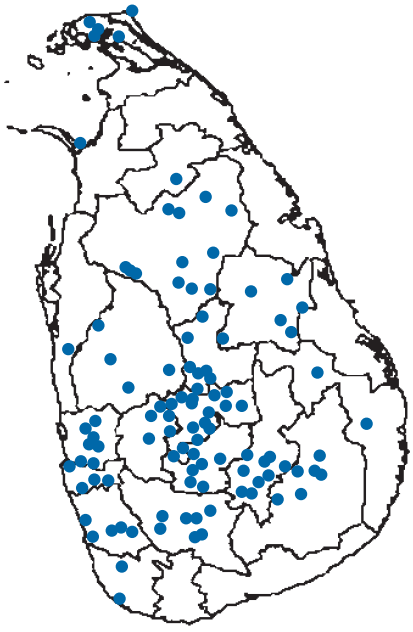


Fig:8 Bovine Babesiosis

Table 03 : Monthly distribution of Bovine Babesiosis

Month	Cases	Deaths
January	127	6
February	126	2
March	108	3
April	184	9
May	111	1
June	161	4

These data suggest Bovine Babesiosis, the disease of Hill country animals is now spreading in other low line areas too. Is it due to the change in behavior of the Babesia parasite or the change in the susceptibility of cattle because of the genetic improvement?.

2.2.1 Reported cases of Infectious Bursal Disease: January – June 2008

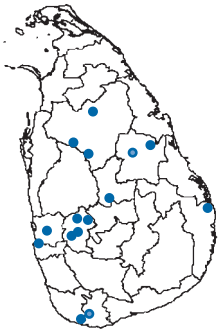


Fig : 9 January

Cases	371
Deaths	115

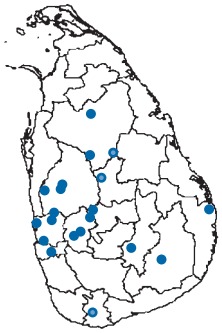


Fig : 10 February

Cases	987
Deaths	336

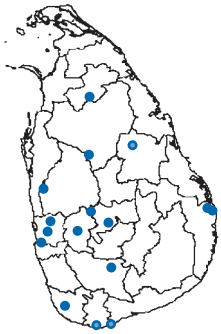


Fig: 11 March

Cases	2024
Deaths	447

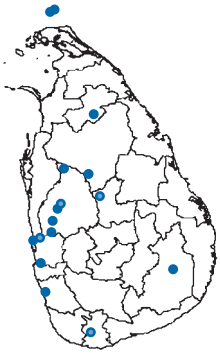


Fig: 12 April

Cases	559
Deaths	236

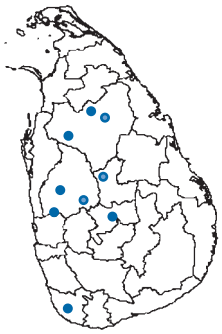


Fig: 13 May

Cases	1363
Deaths	355

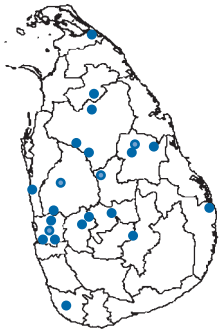


Fig: 14 June

Cases	1545
Deaths	1247

Infectious Bursal Disease (Gumboro disease) remains the major disease affecting poultry population in the country. Though there is high incidence in defined period, the occurrence is reported throughout the year in significant level. The outbreaks are reported mostly in poultry belt area in the North-Western and Western Provinces. However, the clinical cases are recorded in the North-Central Province during the period of six months continuously

2.2.2 Reported cases of Newcastle Disease: January – June 2008

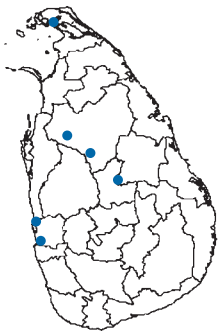


Fig: 15 January

Cases	39
Deaths	28

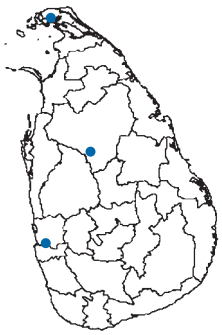


Fig:16 February

Cases	33
Deaths	28

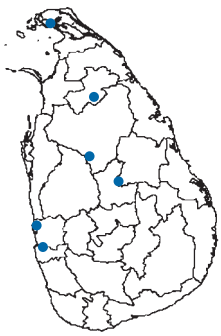


Fig:17 March

Cases	75
Deaths	61

2.2.2 Reported cases of Newcastle Disease: January – June 2008

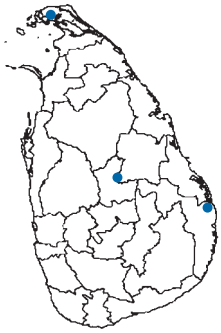


Fig:18 April

Cases	54
Deaths	36

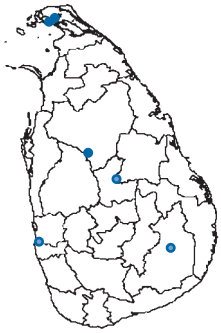


Fig:19 May

Cases	32
Deaths	22

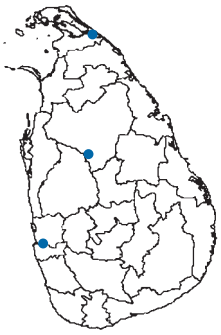


Fig:20 June

Cases	108
Deaths	19

Newcastle disease (Raniket disease) appears to be effectively controlled among commercial poultry population due to stringent vaccination regime adhered in commercial farms. The incidence in backyard poultry in which the preventive vaccination is rarely carried out remains threat to the entire poultry population.

Clinical cases of Newcastle disease need to be investigated and confirmed by laboratory testing since it is essential to prove the disease and rule out any possible evidence of suspected Avian Influenza infection especially in backyard population

2.2.3 Reported Cases of Fowl Pox : January – June 2008

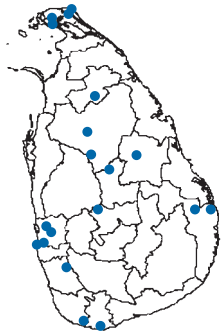


Fig:21 January

Cases	236
Deaths	44

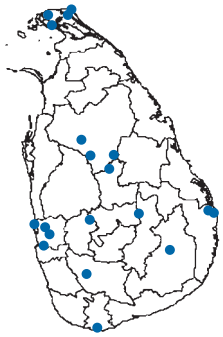


Fig:22 February

Cases	256
Deaths	43

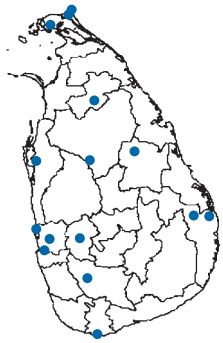


Fig:23 March

Cases	142
Deaths	11

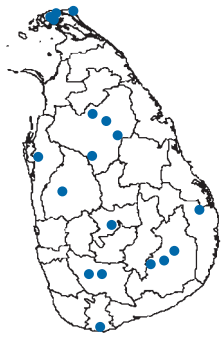


Fig : 24 April

Cases	185
Deaths	17

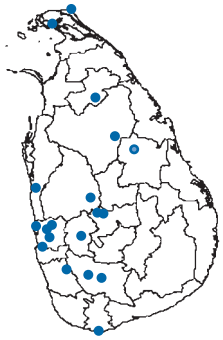


Fig: 25 May

Cases	253
Deaths	22

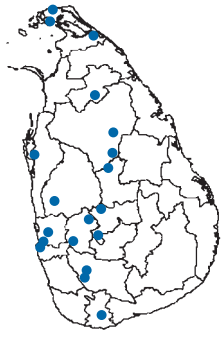
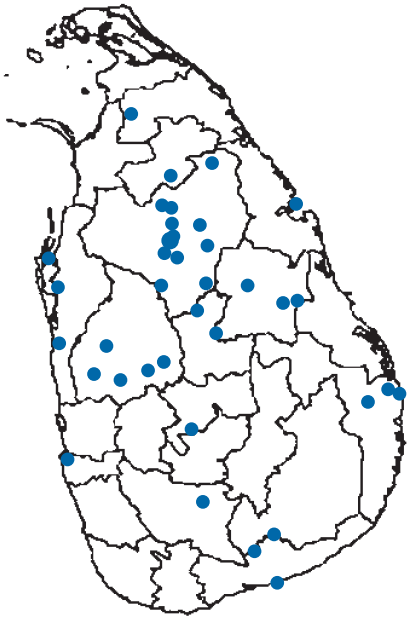


Fig: 26 June

Cases	175
Deaths	25

2.3.1 Reported cases of Contagious Pustular Dermatitis: January – June 2008



District	Cases	Deaths
Ampara	29	2
Anuradhapura	204	5
Colombo	4	
Hambanthota	10	
Kandy	25	
Kurunegala	65	
Matale	86	12
Monaragala	1	
Monaragala	13	
Mullaitivu	1	
Polonnaruwa	98	5
Puttalam	81	
Ratnapura	4	
Trincomalee	20	
Vavuniya	10	
Total	651	24

Contagious Pustular Dermatitis (CPD) is a major infectious disease among goats and reported mostly in Anuradhapura and Polonnaruwa Districts where goat raring activities are popular and promoted. Auto vaccine is prepared in the Veterinary Investigation centers and it contributes to arrest the spread of this infection

3. AVIAN INFLUENZA - what is happening around us?

Global Situation: January – June 2008

District	No: of Location Targeted	No: of samples collected	No: of samples tested	Testing in progress	No: of +ve Reactors
Colombo	45				
Gampaha	36	105		105	
Kalutara	32				
Kandy	42	120		120	
Matale	16				
Nuwaraeliya	7	30	30		0
Galle	11				
Matara	8	120		120	
Hambantota	9	90		90	
Jaffna	21				
Kilinochhi	7				
Mannar	5				
Vavuniya	5				
Mullativu	6				
Batticaloa	12				
Ampara	13				
Trincomalee	8				
Kurunegala	157	390	390		184
Puttalam	69	205		205	
Anuradhapura	21	93	60		12
Polonnaruwa	7	120	120		6
Badulla	8	45	45		7
Monaragala	4	30		30	
Ratnapura	18	105		105	
Kegalle	13	60	15	45	15
Total	**580**	**1513**	**660**	**805**	

. *Serum samples are screened for Avian Influenza type, A virus antibodies by Enzyme linked immunosorbent assay (*ELISA*). Samples which develop positive reaction are further subjected to Agar gel precipitation test (*AGPT*) to detect antibodies against H5. H7 or H9 antigen. There has been no sample found to be positive for AGPT and as such it reveals that there is no adequate evidence to support the circulation of Avian Influenza virus among the chicken population

HPAI Outbreaks in the neighbourhood

Highly pathogenic avian influenza - India

Information received on 14/07/2008 from Dr Pradeep Kumar, Secretary to the Government of India, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, New Delhi, India

HPAI broke out in India (West Bengal and Tripura States) in the Border of Bangladesh in January 2008. In a population of 8.6 million poultry in these areas, 127,912 cases were detected with 1005 case-fatality rate. Further 4.33 million birds were destroyed in the operation of stamping out of all domestic poultry in an approximately 5-km-radius area around these 42 outbreaks followed by compensation of the owners. However, the disease lingered on for almost five months and H5N1 serotype of Avian Influenza type A virus has been confirmed by real-time PCR at High Security Animal Disease Laboratory, Bhopal (National laboratory of India).

Measures applied in control / eradication Operation

- Stamping out
- Quarantine
- Movement control inside the country
- Screening
- Disinfection of infected premises/establishment(s)
- Dipping / Spraying
- No vaccination
- No treatment of affected animals

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Dr.H.M.A.Chandrasoma

Chief Epidemiologist
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