WEEKLY EPIDEMIOLOGICAL REPORT

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Application of the One Health Approach for Leptospirosis Control and Prevention: Strengthening What Already Exists in Sri Lanka - Part II

This is the second article of two in a series on "Application of the One Health Approach for Leptospirosis Control and Prevention: Strengthening What Already Exists in Sri Lanka"

Path Forward: Operationalising One Health for Leptospirosis Control

For Sri Lanka to fully benefit from the One Health approach, it is essential to move beyond conceptual endorsement toward **full-scale operationalisation and institutionalisation**.

1. Strengthen Intersectoral Coordination Mechanisms

Existing national and district-level coordination committees should be empowered and formalised as **One Health coordination platforms**. These platforms must facilitate regular, structured meetings involving key actors from health, agriculture, wildlife, and local government sectors. Memoranda of Understanding (MOUs) can help clarify roles and responsibilities and promote accountability.

2. Develop and Implement Integrated Surveillance Systems

A robust surveillance framework that integrates data from human, animal, and environmental sources is critical. Surveillance tools should be harmonised across sectors, with **digital platforms** supporting real-time data exchange, risk mapping, and early warning systems. Sentinel sites in high-risk areas can serve as focal points for coordinated data collection and response.

3. Targeted Risk Reduction Interventions

Integrated surveillance should inform localised interventions. For example:

- **Rodent control** in endemic districts,
- **Livestock vaccination** in areas with known reservoirs,
- **Environmental cleanup and drainage improvement** in flood-prone zones,
- **Safe water promotion and personal protective measures** for farmers.

These actions require the collaboration of municipal councils, agriculture extension services, health staff, and community-based organisations.

4. Community Engagement and Education

Sustained community participation is key to long-term impact. **Behaviour change communication** should focus on risk perception, occupational safety, and post-exposure actions. Joint outreach campaigns involving medical officers, veterinary officers, school programs, and farmer associations can promote prevention practices and timely healthcare seeking.

5. Capacity Building and Joint Training

Joint capacity building can foster mutual understanding between professionals of different sectors. **Training modules** on One Health principles, disease ecology, and outbreak response should be included in the curricula of medical, veterinary, and public health training institutions. Field-level officers should be equipped with **Standard Operating Procedures (SOPs)** for joint outbreak investigations and coordinated response activities.

Opportunities and Challenges

Opportunities:

- National recognition of leptospirosis as a **notifiable disease** with high priority status.
- Functioning **district-level health and agriculture offices** with the potential for coordination.
- Availability of **local epidemiological data** to support evidence-based planning.
- Recent investments in **One Health capacity development** through international support.

Challenges:

- **Fragmented data systems** impede timely sharing and analysis.
- **Inconsistent funding** and resource allocation across sectors, particularly for veterinary and environmental interventions.
- Lack of **formal coordination mechanisms** at the divisional or local government level.
  Cultural and institutional barriers to **interdisciplinary collaboration**.

What can be achieved?

By implementing a robust One Health-based approach, Sri Lanka can expect several benefits in the control and prevention of leptospirosis:

- **Improved early detection** and timely outbreak response, reducing delays and case fatality.
- **More effective resource utilisation**, preventing duplication and ensuring coordinated action.
- **Reduction in disease incidence and mortality**, particularly in high-risk populations.
  Improved national resilience to other zoonotic threats, utilising the same systems and capacities.

Sri Lanka is well-positioned to leverage the One Health approach for leptospirosis control. The required knowledge, stakeholder engagement, and institutional frameworks are already in place. The task ahead lies in translating these into routine practice through sustained coordination, operational investments, and community participation. Strengthening what already exists, with clear focus and strategic integration, can transform the country's approach to leptospirosis and serve as a scalable model for the prevention and control of other emerging and re-emerging zoonotic diseases.

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Table 1: Selected notifiable diseases reported by Medical Officers of Health 12th–18th Apr 2025 (16th Week)

RDHS	Dengue Fever		Dysentery		Encephalitis		En. Fever		F. Poisoning		Leptospirosis		Typhus F.		Viral Hep.		H. Rabiies		Chickenpox		Meningitis		Leishmania-		Tuberculosis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	230	3799	0	15	0	3	0	4	0	5	1	154	0	4	0	6	0	0	3	189	1	23	0	1	19	632	94	100
Gampaha	171	2398	0	20	0	18	0	1	0	45	8	231	0	7	0	5	0	0	3	301	0	45	0	16	9	356	93	100
Kalutara	42	604	0	12	0	3	0	5	0	13	4	219	0	0	0	3	0	0	8	258	1	17	0	1	26	198	100	75
Kandy	53	999	0	25	0	2	0	4	0	8	3	104	0	23	0	5	0	0	3	148	0	11	0	27	3	252	96	100
Matale	28	538	0	8	0	1	0	0	2	28	2	70	0	3	0	5	0	0	1	45	0	2	0	83	6	56	100	100
Nuwara Eliya	3	67	1	29	0	3	0	4	0	44	0	45	0	24	0	0	0	0	3	91	1	9	0	0	2	93	85	100
Galle	23	646	0	19	0	3	0	0	0	28	8	283	1	31	0	4	0	0	12	277	2	63	0	1	5	154	95	100
Hambantota	12	295	0	9	0	3	0	0	0	3	4	146	0	14	0	2	0	0	9	158	2	8	5	97	1	54	100	100
Matara	35	581	0	5	0	2	0	1	0	3	6	174	0	8	0	2	0	0	5	139	1	18	1	36	3	61	100	100
Jaffna	18	510	2	37	0	1	2	5	2	19	0	114	13	291	0	2	0	1	6	160	1	12	0	0	5	65	100	93
Kilinochchi	1	43	1	6	0	0	0	4	0	4	0	48	0	11	0	1	0	0	0	1	0	0	0	0	0	17	100	100
Mannar	2	86	1	3	0	0	0	0	0	1	1	15	3	9	0	0	0	0	0	13	0	10	0	0	0	13	100	100
Vavuniya	5	33	0	5	0	0	0	1	2	22	1	43	2	5	0	0	0	0	0	17	1	11	0	7	1	17	100	100
Mullaitivu	1	29	0	1	0	0	0	1	0	2	1	40	0	5	0	0	0	0	0	11	0	4	0	0	0	10	100	100
Batticaloa	62	898	5	75	0	9	0	0	0	70	7	37	0	1	0	10	0	0	1	82	0	19	0	2	0	46	100	100
Ampara	6	68	2	8	0	5	0	0	0	3	3	71	0	1	0	2	0	0	2	58	1	12	1	10	0	19	100	100
Trincomalee	44	463	0	24	0	2	0	0	0	21	1	70	0	7	0	4	0	0	6	49	1	9	0	3	0	34	100	100
Kurunegala	13	373	0	11	0	8	0	1	0	19	2	279	0	18	0	1	0	1	10	277	0	52	2	187	1	123	92	99
Puttalam	7	299	0	9	0	1	0	0	0	4	2	124	0	24	0	1	0	0	0	55	0	34	0	12	0	48	100	100
Anuradhapura	4	271	1	20	1	6	0	3	7	15	8	178	0	12	1	7	0	0	9	133	2	37	7	262	3	87	83	100
Polonnaruwa	5	88	0	8	0	3	0	1	0	2	5	87	0	0	0	12	0	0	1	67	0	7	2	140	1	24	100	91
Badulla	11	268	0	13	1	5	0	3	0	0	1	128	1	11	0	16	0	0	2	149	3	31	0	12	6	78	100	100
Monaragala	27	329	0	8	0	3	0	0	0	4	20	272	0	20	0	6	0	0	2	60	0	19	3	58	0	33	90	100
Ratnapura	146	1015	10	55	0	4	0	3	1	17	22	565	0	14	0	3	0	1	4	170	0	52	18	68	4	144	90	100
Kegalle	13	434	4	32	0	4	1	2	1	21	7	219	0	7	0	6	0	0	10	302	1	39	0	12	0	87	91	100
Kalmunai	7	186	2	13	0	0	0	0	5	12	0	46	0	1	0	1	0	0	4	65	1	10	0	0	1	45	92	100
SRILANKA	**969**	**15320**	**29**	**470**	**2**	**89**	**3**	**43**	**20**	**413**	**117**	**3762**	**20**	**551**	**1**	**104**	**0**	**3**	**104**	**3275**	**19**	**554**	**39**	**1035**	**96**	**2746**	96	99

Source: Weekly Returns of Communicable Diseases (esurvillance.epid.gov.lk). T=Timeliness refers to returns received on or before 18th Apr, 2025 Total number of reporting units 361 Number of reporting units data provided for the current week: 353 **C****-Completeness

A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP 12th - 18th Apr 2025 (16th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2025	Number of cases during same week in 2024	Total number of cases to date in 2025	Total number of cases to date in 2024	Difference between the number of cases to date in 2025 & 2024
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	01	00	00	0	00	01	00	02	00	21	28	-25%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	01	00	00	00	00	00	00	00	00	01	08	72	88	-18.2 %
Measles	00	00	00	00	00	00	00	00	00	00	07	01	191	-99.4%
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	01	-100%
CRS**	00	00	00	00	00	00	00	00	00	00	00	01	00	0 %
Tetanus	00	00	00	00	00	00	00	00	00	00	01	02	02	0 %
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Japanese Enceph-alitis	00	00	00	00	00	00	00	00	00	00	00	04	01	300 %
Whooping Cough	00	00	00	00	01	00	00	00	00	01	01	12	03	300 %

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

RDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS =**Congenital Rubella Syndrome

NA = Not Available

Take prophylaxis medications for leptospirosis during the paddy cultivation and harvesting seasons.

It is provided free by the MOH office / Public Health Inspectors.

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

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