



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health

231, de Saram Place, Colombo 01000, Sri Lanka
Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@slt.net.lk
Epidemiologist: +94 11 2681548, E mail: chepid@slt.net.lk
Web: <http://www.epid.gov.lk>

Vol. 51 No. 52

21st – 27th Dec 2024

Rift Valley Fever: A zoonotic threat linking animal and human health globally - II

This is the second article of two in a series on "Rift Valley Fever: A zoonotic threat linking animal and human health globally"

Impact on animals

RVF causes high mortality rates in newborn livestock, particularly sheep and goats, and leads to significant economic losses. Pregnant animals are particularly vulnerable, and RVF can cause abortion waves during outbreaks. The virus is transmitted through mosquito-host interactions, and infected livestock can serve as a source of virus transmission, especially during movement or trade.

Diagnosis

Accurate diagnosis of RVF is essential for effective treatment and control, as its symptoms often overlap with those of other diseases. Early clinical diagnosis is challenging due to the non-specific nature of RVF symptoms, which can resemble other viral hemorrhagic fevers, malaria, or typhoid fever. Definitive diagnosis of RVF involves laboratory methods such as RT-PCR, ELISA, and virus isolation.

Treatment

Most human cases of RVF are mild and self-limiting, requiring no specific treatment. For severe cases, supportive therapy is the primary approach to managing the disease.

An inactivated vaccine for human use has been developed, but it is not yet licensed or commercially available. It has been utilized experimen-

tally to safeguard veterinary and laboratory personnel at high risk of RVF exposure. Research is ongoing to develop additional vaccine candidates.

Prevention and Control

During outbreaks of RVF, close contact with infected animals and their bodily fluids is the primary risk factor for human transmission. The risk of infection can be minimized through safe practices in animal husbandry, avoiding unsafe slaughtering methods, maintaining proper hygiene, and refraining from consuming fresh blood, raw milk, or animal tissues in affected areas.

Key strategies for prevention and control include:

- **Animal vaccination:** Conduct preventive vaccination campaigns for livestock during non-outbreak periods to reduce the spread of the virus among animals.
- **Public health education:** Train at-risk groups on safe handling of animal products, proper use of personal protective equipment, and measures to prevent mosquito bites.
- **Vector control:** Manage mosquito populations by eliminating breeding sites.
- **Surveillance:** Implement continuous monitoring systems to track animal health and environmental conditions, including rainfall patterns, to predict and mitigate potential outbreaks.

Contents	Page
1. Rift Valley Fever: A zoonotic threat linking animal and human health globally - II	1
2. Summary of selected notifiable diseases reported (14 th – 20 th Dec 2024)	3
3. Surveillance of vaccine preventable diseases & AFP (14 th – 20 th Dec 2024)	4

VEER SRI LANKA 2024

Public health education and risk reduction

Raising awareness about RVF risk factors and protective measures is essential to minimize infections. Key public health actions include:

- **Reducing animal-to-human transmission:** Encourage the use of gloves, personal protective equipment, and safe animal husbandry. Promote proper hand hygiene.
- **Safe consumption practices:** Advice against consuming fresh blood, raw milk, or raw animal tissues. Ensure animal products are thoroughly cooked in endemic regions.
- **Preventing mosquito bites:** Promote mosquito protection with insecticide-treated nets, repellents, light-coloured clothing, and limiting outdoor activities during peak mosquito times.
- **Targeted vector control:** Identify and treat mosquito breeding sites, though efforts may need adaptation during extensive flooding.

Infection control in healthcare settings

Although human-to-human transmission of RVF has not been documented, there remains a theoretical risk of transmission to healthcare workers through exposure to infected blood or tissues. To mitigate this risk, healthcare and laboratory personnel managing suspected or confirmed RVF cases should adhere to standard precautions when handling patient specimens.

RVF forecasting and climatic models

Forecasting models help predict climatic conditions linked to RVF outbreaks, especially during periods of above-average rainfall, such as during the El Niño–Southern Oscillation. Early warning systems using satellite and climate data can detect animal cases early, enabling timely preventive actions to reduce epidemic risks.

Global collaboration and the one health approach

International organizations such as the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the World Organization for Animal Health (WOAH) promote the One Health approach as a comprehensive strategy to address Rift Valley Fever (RVF). This approach emphasizes the integration of human, animal, and environmental health sectors to effectively manage and prevent RVF outbreaks.

Compiled by:

Dr Aruni Hathamuna
Senior Registrar
Epidemiology Unit

References:

1. CDC. (2024, May 14). About Rift Valley Fever (RVF). Rift Valley Fever. <https://www.cdc.gov/rift-valley-fever/about/index.html>
2. Facts about Rift Valley fever. (n.d.). European Centre for Disease Prevention and Control. <https://www.ecdc.europa.eu/en/rift-valley-fever/facts>
3. Rift Valley fever. (n.d.). WOAAH - World Organization for Animal Health. <https://www.woah.org/en/disease/rift-valley-fever/>
4. World Health Organization. (2018, February 19). *Rift Valley fever*. Who.int; World Health Organization: WHO. <https://www.who.int/news-room/fact-sheets/detail/rift-valley-fever>

Table 1: Selected notifiable diseases reported by Medical Officers of Health 14th–20th Dec 2024 (51st Week)

RDHS	Dengue Fever		Dysentery		Encephalitis		En. Fever		F. Poisoning		Leptospirosis		Typhus F.		Viral Hep.		H. Rabies		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	220	11348	3	49	0	11	0	49	0	25	11	623	0	10	0	9	0	0	9	603	2	60	0	2	42	2165	100	100	
Gampaha	103	5729	2	52	1	42	1	16	5	88	28	1034	1	15	1	14	0	0	18	537	6	153	0	33	25	1176	80	100	
Kalutara	49	2708	0	37	0	3	0	38	1	41	35	1012	0	10	0	12	0	1	15	698	1	68	0	2	29	656	87	100	
Kandy	57	4505	1	44	0	7	0	10	0	75	10	302	3	43	0	15	0	3	11	424	1	16	0	66	38	629	100	100	
Matale	52	1042	1	21	0	4	0	8	0	32	13	144	0	6	0	11	0	0	3	155	0	24	7	384	0	127	100	100	
Nuwara Eliya	3	343	0	157	0	8	0	12	2	228	5	179	0	54	1	11	0	0	9	300	0	19	0	2	3	272	100	100	
Galle	27	2121	0	64	0	22	0	12	1	114	27	1051	2	130	1	13	0	2	14	897	3	111	0	5	18	461	95	100	
Hambantota	22	863	1	30	0	4	0	7	0	50	28	563	1	49	1	12	0	2	3	317	2	36	5	497	4	162	100	100	
Matara	12	1159	0	15	0	7	0	4	0	38	13	694	0	30	1	28	0	0	1	387	0	79	3	125	0	170	94	100	
Jaffna	76	5625	2	79	0	2	1	32	1	49	119	188	37	626	0	7	0	1	12	241	1	34	0	1	10	260	86	93	
Kilinochchi	6	319	1	19	0	0	1	3	0	2	7	37	1	16	0	0	0	2	1	17	0	7	0	3	0	34	100	100	
Mannar	8	331	0	18	0	0	0	1	0	7	4	41	0	14	0	1	0	0	0	12	3	17	0	4	0	66	100	100	
Vavuniya	4	192	0	13	0	1	0	2	2	24	10	127	0	6	0	4	0	0	1	48	2	28	1	13	4	50	75	100	
Mullaitivu	2	224	0	12	1	1	0	0	0	28	17	96	0	11	0	0	0	3	0	13	1	8	0	18	0	35	100	100	
Batticaloa	35	1627	2	136	0	19	0	7	1	67	6	102	0	3	2	26	0	2	8	186	0	55	0	4	3	158	100	100	
Ampara	1	266	0	42	0	4	0	0	0	24	3	237	0	2	0	7	0	1	5	144	0	42	0	28	0	108	100	100	
Trincomalee	19	752	1	25	0	1	0	3	0	15	7	167	0	15	0	4	0	0	4	118	0	23	0	19	2	137	92	100	
Kurunegala	25	2198	0	59	0	40	0	3	0	373	55	1122	1	45	0	11	0	4	20	660	4	283	16	672	8	465	100	100	
Puttalam	39	1250	0	20	0	4	0	4	0	4	15	319	2	44	0	5	0	1	1	144	2	88	1	38	0	236	85	100	
Anuradhapura	22	787	0	38	0	8	0	3	1	54	25	492	0	33	1	18	0	1	8	320	0	74	12	897	5	286	87	100	
Polonnaruwa	3	412	0	29	0	3	0	1	0	33	8	325	0	3	3	69	0	1	7	168	0	35	10	509	1	114	89	100	
Badulla	20	885	3	46	0	11	0	9	0	58	13	497	1	56	2	58	0	0	10	417	1	42	2	47	3	245	94	100	
Monaragala	13	1016	0	22	0	5	0	3	1	98	18	732	0	37	1	74	0	1	4	194	2	103	7	263	4	133	80	100	
Ratnapura	20	2868	2	137	0	14	1	10	16	51	44	2180	4	39	1	34	0	4	3	381	4	149	2	182	19	395	90	100	
Kegalle	17	1959	3	36	1	18	0	11	0	16	42	974	2	35	1	16	0	1	16	959	1	96	3	34	8	361	73	100	
Kalmunai	5	716	1	22	0	1	0	2	1	31	5	90	0	5	0	4	0	0	2	244	0	36	0	0	1	140	100	100	
SRI LANKA	860	51245	23	1222	3	240	4	250	32	1625	568	13328	55	1337	16	463	0	30	185	8584	36	1686	69	3848	227	8975	93	99	

Source: Weekly Returns of Communicable Diseases (esurveillance.epid.gov.lk). T=Timeliness refers to returns received on or before 20th Dec, 2024. Total number of reporting units 358. Number of reporting units data provided for the current week: 358. C**=Completeness. A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

14th – 20th Dec 2024 (51st Week)

Disease	No. of Cases by Province									Number of cases during current week in 2024	Number of cases during same week in 2023	Total number of cases to date in 2024	Total number of cases to date in 2023	Difference between the number of cases to date in 2024 & 2023
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	01	00	01	01	00	01	00	04	01	76	95	-20%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	01	00	00	01	00	02	01	01	01	07	02	282	226	24.7 %
Measles	00	00	00	00	00	00	00	00	00	00	08	297	788	-62.3 %
Rubella	00	00	00	00	00	00	00	00	00	00	00	02	09	-77.7%
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	02	-100 %
Tetanus	00	00	00	00	00	00	00	00	00	00	00	05	06	-16.6 %
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	00	14	06	133.3 %
Whooping Cough	00	00	00	00	01	00	00	00	00	01	00	72	07	928.5 %

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**

ON STATE SERVICE

Dr. H. A. Tissera
 Actg. CHIEF EPIDEMIOLOGIST
 EPIDEMIOLOGY UNIT
 231, DE SARAM PLACE
 COLOMBO 10