

# WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
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One Health Approach: Working together for the health of humans, animals, plants and the environment

This is the first article of two in a series on "One Health Approach: Working together for the health of humans, animals, plants and the environment"

#### Introduction

One Health is "an integrated, unifying approach which aims to sustainably balance and optimize the health of humans, animals, plants, and ecosystems". It recognizes that the health of these entities is closely linked and interdependent. This approach mobilizes multiple sectors, communities and disciplines at different levels of society to work together. It aims to tackle health threats while addressing broader concerns such as food security, antimicrobial resistance (AMR), and climate change. The Quadripartite organizations; the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Organization for Animal Health (WOAH), and the World Health Organization (WHO) have developed the One Health Joint Plan of Action (OH JPA) 2022-2026, providing a framework for collaboration and coordination in tackling health challenges at the human-animal-plant-environment interface

#### The Need for One Health

The OH JPA aims to enhance global capacity to prevent, predict, detect, and respond to health threats, improving the well-being of humans, animals, plants, and the environment while supporting sustainable development. The increasing frequency and severity of global health challenges highlight the urgency of adopting a One Health approach. Several key drivers emphasize this necessity:

- 1. Emerging and re-emerging zoonotic diseases: Over 60% of human infectious diseases originate from animals. The COVID-19 pandemic, Ebola, and avian influenza emphasize the need for a coordinated response.
- Antimicrobial Resistance: The overuse and misuse of antimicrobials in humans, animals, and agriculture contribute to a growing AMR crisis, affecting global health security.
- Environmental degradation: Deforestation, habitat destruction, and pollution facilitate the spillover of pathogens from animals to humans.
- 4. Food and water safety: Contaminated food and water remain major sources of disease outbreaks, necessitating improved surveillance and management.

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Figure 1. Links between the health of the environment, humans, animals and plants (One Health Joint Plan of Action (2022–2026): Working Together for the Health of Humans, Animals, Plants and the Environment, 2022)

- 1. One Health Approach: Working together for the health of humans, animals, plants and the environment - I
- 2. Summary of selected notifiable diseases reported ( $11^{th} 17^{th}$  Jan 2025)
- 3. Surveillance of vaccine preventable diseases & AFP (11th 17th Jan 2025)

The OH JPA is guided by a 'Theory of Change' which emphasizes the potential of the *One Health* approach to address health challenges through a multisectoral, integrated, and holistic approach. The framework aims to overcome technical, institutional, and coordinative barriers to achieve sustainable health outcomes for humans, animals, plants, and the environment.

The theory of change is supported by three key pathways to change:

- 1. Policy, legislation, advocacy, and financing: Focuses on policy development, political will, regulatory frameworks, investment, and the institutionalization of intersectoral governance.
- Organizational development, implementation, and sectoral integration: Focuses on scaling up capacity development, community engagement, multisectoral coordination, and equitable sector integration.
- 3. Data, evidence, and knowledge: Strengthens scientific evidence, and knowledge translation, and enhances data systems, protocols, and surveillance.

The OH JPA (2022-2026) is structured around six key action tracks aimed at strengthening health systems and preventing health threats:

- 1. Enhancing one health capacities to strengthen health systems (Eg: Establishing governance structures and multisectoral collaboration, strengthening workforce capacities in surveillance and diagnostics.)
- 2. Reducing the risks from emerging and re-emerging zoonotic epidemics and pandemics. (Eg: Improving early warning systems and rapid response mechanisms, Strengthening intersectoral collaboration for outbreak detection and control.)
- 3. Controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases (Eg: Implementing integrated disease control strategies, Enhancing vaccination programs and public health interventions.)
- 4. Strengthening the assessment, management, and communication of food safety risks (Eg: Reducing contamination risks along the food chain and enhancing foodborne disease surveillance and response.)
- 5. Curbing the silent pandemic of AMR (Eg: Promoting responsible use of antimicrobials in human and animal health, strengthening regulatory frameworks to monitor antimicrobial use.)
- 6. **Integrating the environment into One Health** (Eg: Addressing environmental health determinants such as pollution, biodiversity loss, and climate change, Promoting sustainable land-use practices.)

### Compiled by:

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#### **References:**

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- 4. ZERO BY 30 THE GLOBAL STRATEGIC PLAN HU-MAN DEATHS FROM DOG-MEDIATED RABIES BY 2030 TO END. (n.d.). Retrieved December 4, 2023, from

Table 1: Water Quality Surveillance Number of microbiological water samples December 2024												
District	MOH areas	No: Expected	No: Received									
Colombo	18	108	20									
Gampaha	15	90	3									
Kalutara	13	78	126									
Kalutara NIHS	2	12	5									
Kandy	23	138	0									
Matale	13	78	1									
Nuwara Eliya	13	78	4									
Galle	20	120	123									
Matara	17	102	120									
Hambantota	12	72	8									
Jaffna	14	84	130									
Kilinochchi	4	24	32									
Mannar	5	30	0									
Vavuniya	4	24	39									
Mullatvu	6	36	19									
Batticaloa	14	84	24									
Ampara	7	42	5									
Trincomalee	12	72	0									
Kurunegala	29	174	0									
Puttalam	13	78	9									
Anuradhapura	23	138	NR									
Polonnaruwa	9	54	46									
Badulla	16	96	101									
Moneragala	11	66	78									
Rathnapura	20	120	69									
Kegalle	11	66	3									
Kalmunai	13	78	8									

\* No of samples expected (6 / MOH area / Month)

NR = Return not received

Table 1: Selected notifiable diseases reported by Medical Officers of Health 11th-17th Jan 2025 (03rd Week)

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Viral Hep.	В	0	0	0	0	က	0	0	0	~	0	0	0	0	0	2	0	0	0	~	4	4	4	~	0	0	0	23
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Source: Weekly Returns of Communicable Diseases (esurvillance.epid.gov.ik). T=Timeliness refers to returns received on or before 17th Jan, 2025 Total number of reporting units 358 Number of reporting units data provided for the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

11th - 17th Jan 2025 (03rd Week)

Disease	No.	of C	ases	by P	rovin	ice				Number of cases during current	Number of cases during same	Total number of cases to date in	Total num- ber of cases to date in	Difference between the number of cases to date	
	W	С	S	N	Ε	NW	NC	U	Sab	week in 2025	week in 2024	2025	2024	in 2025 & 2024	
AFP*	01	00	00	00	01	00	00	00	00	02	00	04	03	33.3%	
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Mumps	01	00	03	00	00	01	00	01	00	06	06	06	13	53.8 %	
Measles	00	00	00	00	00	00	00	00	00	00	47	04	72	-94.4 %	
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	00	00	0 %	
Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
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	01	01	00	02	00	0 %	
Whooping Cough	02	00	00	00	00	00	00	00	00	02	00	02	00	0 %	

#### 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.

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## ON STATE SERVICE

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