

Influenza Surveillance in Sri Lanka

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Successes

Sentinel sites

- human influenza surveillance has been initiated in 20 hospitals identified as sentinel sites
- training of staff and stockpiling of PPE has been carried out at these sites
- specimens from at least 30 patients from the OPD and wards with influenza like illness (ILI) are expected to be sent to diagnostic laboratories each month

Laboratory capacity

- 3 laboratories have been identified as *reference laboratories* to which samples are sent
- these laboratories will identify circulating strains of influenza virus in humans and animals, acting as an early warning system
- Available tests:
 - Direct Fluorescence Test
 - Virus isolation [Egg inoculation, Tissue culture (MDCK cell line)]
 - Virus identification [FAT, HAI test using WHO panel]
 - Molecular Techniques [RT PCR]
- Human resources
 - virologists – 1
 - medical officers – 3
 - veterinary research officers – 2
 - veterinary surgeons – 2
 - research assistants/technicians – 13

National influenza programme

- development and island-wide circulation of guidelines on AI preparedness and response
- Officers attended regional workshops on communication and rapid response to a potential pandemic of influenza
- joint national plan produced in collaboration with the Department of Animal Production and Health
- Human resources
 - Epidemiologist and the team – central co-ordination and monitoring
 - Regional Epidemiologists – 26
 - Medical Officers of Health – 300
 - Public Health Inspectors (over 1000)
 - trained veterinary staff (central, provincial, district level staff)

Virus isolation & information sharing

• Jan 2006 – Apr 2007 data, MRI

	No. tested	AdenoV	Influenza A	Influenza B	Para-Influenza	RSV
2006						
Virus isolation	539	4	63	9	10	23
PCR	33	-	32	1	-	-
2007						
up to April						
Virus isolation	358	2	6	3	5	3

- 27 virus isolates shipped to Melbourne and Hong Kong in 2006
- Virus isolation by ECE – from 283 samples in Jan-Feb 2007, all were negative for AI

Future plans

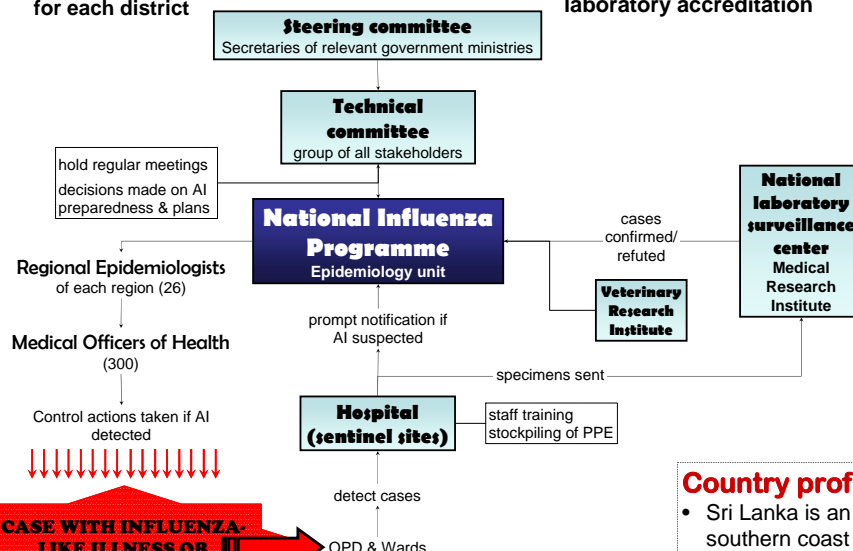
- development of further diagnostic laboratories to detect and identify strains of influenza virus
- upgrading of molecular, respiratory and high-risk diagnostic laboratories (application submitted to JICA)
- establishment of isolation units, intensive care facilities and upgrading laboratories in the sentinel sites (budget proposals already approved by World Bank)
- development of emergency response teams for each district

Challenges

- establishment of respiratory laboratories at sub-national levels
- regular collection of specimens for patients with ILI
- identifying circulating viral strains
- upgrading of data communication system

Areas needing support from the WHO

- exchange of skills, training of staff, introduction of new methodologies
- purchasing of PPE and laboratory equipment
- development of isolation units and intensive care units
- establishing a regional database for sharing information at SEARO level
- regional stockpiling of anti-viral drugs and PPE
- establishment of a fund for purchasing urgent equipment
- quality control by regular EQA system and laboratory accreditation



Country profile

- Sri Lanka is an island off the southern coast of India
- Area: 65,654 km²
- Estimated population: 19.5 million