

## 1.1 Establishment of H1N1 diagnostic Laboratory at DMRC-*Vinod Joshi, Bennet Angel, Himmat Singh, Anil Purohit and Manju Singhi*

**Commencement:** November, 2009

**Duration:** One Year

**Status:** Ongoing

### Objectives

1. To provide Diagnostic support to the suspected cases of H1N1 at Jodhpur hospitals and adjoining areas.
2. Study of epidemiological trends of swine flue cases.
3. Study of incidence of viral genes vis-à-vis ecotypes and clinical conditions of patients.

### Progress of Work

On the request of the State Health Department, diagnostic support to the patients of Swine flu reported in different hospitals of Jodhpur from, Jodhpur, Pali, Barmer, Osayan, Jaisalmer and other places, have been provided. Following steps have been taken as the progress and proper functioning of the laboratory:

- The existing laboratory has been modified into designated areas such as Sample aliquoting, RNA extraction, Reagent preparation, Positive Control loading and PCR.
- A financial support, under extra mural funds head has been sanctioned by the ICMR.
- The standard protocol as developed by CDC, Atlanta and endorsed by WHO has been adopted. The PI and research student have been trained at National Institute of Virology, Pune. The diagnostic kits are being supplied by NIV, Pune.
- The diagnostic work of H1N1 virus is being regularly done for about three months in DMRC.

### Findings:

So far (Up to 18.01.10), 1247 swab samples have been tested for the molecular diagnosis of H1N1 virus in human suspected cases of Swine flu. Of these 463 (37.1 %), have been observed positive (Table 1). Month-wise distribution of cases, their origin and types have been shown in Tables 2-4.

**Table 1. Consolidated status of Swine flu incidence in Jodhpur hospitals**

Samples tested	+ve for H1N1 virus	% Positive
1247	463	37.1

**Table 2. Month-wise incidence of Swine flu cases in cases reported in Jodhpur hospitals**

Month	Samples tested	+ve for H1N1 virus	% Positive
November '09	262	103	39.3
December' 09	812	346	42.6
January'10	287	68	23.6

**Table 3. Month-wise cases of Swine flu cases reported in Jodhpur hospitals according to their residence.**

Month	Rural area			Urban area		
	Ex	+ve	%	Ex	+ve	%
November	41	15	36.5	221	88	39.8
December	275	125	45.4	403	164	40.6
January	118	36	30.5	161	33	20.4

**Table 4. Month-wise cases of Swine flu cases reported in Jodhpur hospitals According to their types**

Month	+Ve cases	Sw A	Sw H1	SwA+SwH1
November	103	60 (58.2 %)	30 (29.1 %)	13 (12.6 %)
December	346	203 (58.6%)	35 (10.1%)	108 (31.2 %)
January	68	43 (63.2%)	5 (7.4%)	20 (29.4 %)