# Outbreak Investigation Report of Influenza like Illness (ILI) in Jajarkot District in 2015 (2015)

**Background**

The World Health Organization defines influenza like illness (ILI) as an acute respiratory infection with measure fever of ≥38 C◦, cough and with onset within the last 10 days. This year onset of ILI outbreak in Jajarkot district was reported on 1April (18 Chaitra) 2015 when it came in media that 20 students of Archane VDC were ill and some deaths in next day. By the third week of April, diseases had already noted in Paink, Sakla, Nayabada, Telegaun, Rami Danda, Rokayagaun, Laha, Kortang and Majkot and could spread to all 30 VDCs of the district and surrounding districts like Kalikot, Rukum, Salyan, Dolpa, Jumla, Surkhet and Dailekh in the absence of strong public health response and early treatment indicating the rapid spread of disease.

**Methods**

We carried out planning meeting at central and district level for collecting data for the study. Record of death cases were collected from District Public Health Office and outpatient visit line list was obtained from health facilities and camps of three VDCs: Talegaun, Archane and Pajaru. The death cases reported from these three VDCs was verified by our team using verbal autopsy questionnaire. The probable cause of reported death was confirmed by an independent team of expert. In-depth interviews were conducted with health professionals and patients. Records of laboratory confirmed influenza A or swine flu cases was obtained from National Public Health Laboratory and were followed up via home visit and telephone conversation to assess current situation after treatment. Exit client interviews were also conducted in three VDCs.

**Results**

During the outbreak March-April 2015, more than 10,000 people received treatment and 35 deaths from various diseases were reported. Among the death cases, only 6 deaths (17%) were chronic obstructive pulmonary disease (COPD) with ILI symptoms, 10 (29%) cases were COPD with complications (without symptoms 0f ILI), 1 death was suspected ILI, causes of 7 deaths could not be identified bases on reported signs and symptoms and rest cases were of rabies, neonatal infection, neonatal sepsis, tuberculosis, drowning, severe malnutrition, breast cancer, Gullain Barre Syndrome (GBS) illness etc. A total of 16 cases were found confirmed cases of swine flu or H1N1 out of total 49 samples tested. Out of 3001 patients visited for treatment in health camp and health institutions of Talegaun, Pajaru and Archane, only 233 (7.8%) were suspected cases of ILI including common cold. The probable major factors behind frequent outbreak of communicable diseases in Jajarkot district were influx of migrating workers from India, poor hygiene and environmental sanitation, low nutrition status of people, low educational level as well as economic status, low awareness for prevention and control of different health problems and diseases, unavailability of health professionals at peripheral level health facilities, lack of medicine compliance as well as high level of antibiotics supply from pharmaceutical shop resulting drug resistance and high prevalence of smoking and alcoholism.

**Conclusions**

Majority of cases visited for treatment were chronic patients of respiratory illness, gastrointestinal problems as well as minor illness such as fever and headache (>58%) and only few were ILI (8%). Most of the problems are related to poor economic status of people, poor nutrition status, poor practice of hygiene and sanitation, alcoholism and smoking.

**Keywords:** influenza like illness; investigation; outbreak; respiratory illness.