The objective of syndromic surveillance is to identify illness clusters early and to mobilise a rapid response, thereby reducing morbidity and mortality.

**Objective** To describe the system named Bonis, which uses Information and Communication Technology to prevent, warn, monitor and control the spread of febrile syndromes and influenza like illness (ILI) at the community level.

**Methods** Bonis has a kernel free software application; Asterisk, a phone center with VoIP service, PHP as Script language and Mysql as database management. The system was implemented in a primary healthcare.

**Results** The developed system has the ability to record, classify, and prioritise automatically through the Interactive Voice Response the suspected cases. It has been programmed in a PHP language script AGI to improve the functionality of the Asterisk, in a way that during the user call to report a possible case, the system feeds a database, through the manager module based in a web application developed in PHP. The system, to which the users access from a mobile or fixed telephone, automatically receives the call with 9 questions on signs and symptoms. The system is working since May 2010 and records the phone calls correctly; follow-ups of these patients are performed by the teams within a period of 24 h.

**Conclusion** The developed system is allowing the community to notify and register events that require surveillance, and the community health agents is prioritising visits to those homes from where fever cases are reported for sooner and more appropriate interventions.

**P1-105 INCIDENCE OF SEVERE ACUTE RESPIRATORY INFECTIONS (SARI) AND DEATHS ASSOCIATED WITH INFLUENZA**

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**Background** Respiratory infections are one of the leading causes of morbidity and mortality worldwide: influenza is one of the predominant pathogens responsible. During 2010, Paraguay actively sought for pH1N1 case-patients to estimate the incidence of severe acute respiratory infections (SARI) and deaths associated with influenza.

**Objective** To determine the contribution of Influenza in patients hospitalised with clinical evidence of severe acute respiratory infections (SARI).

**Methods** During 1 January 2010–31 December 2010, hospital staff identified all case-patients who met the SARI definition of sudden onset fever, and cough or sore throat, with shortness of breath requiring hospitalisation. Physicians obtained nasal and pharyngeal swabs from case-patients and sent the samples to the Paraguay National Influenza Center for influenza testing by immunofluorescence and reverse transcriptase polymerase chain reaction.

**Results** Hospital staff identified 2145 SARI cases of which they tested 1551 (74%) for influenza. Of these 284 cases (18%) were positive for influenza. The most frequently subtypes identified viruses were Influenza A H3N2 71% (202/284), influenza A H1N1 14% (41/284), influenza B 14% (41/284). We estimated that the rate of influenza-associated mortality was 2.5/100 000 persons-year (py).

**Conclusion** Out findings suggest that influenza caused a significant burden and may warrant further investments in its control and prevention.

**P1-106 CAPTURE-RECAPTURE ANALYSIS OF ALL-CAUSE MORTALITY DATA IN BOHOL, PHILIPPINES**

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**Introduction** Worldwide, the prevalence of childhood obesity has not abated, indicating that prevention strategies, traditionally implemented at the individual-level, may not be effective. Conceptualising childhood obesity within multiple levels of influence, specifically within residential communities and over the life course, is necessary to design effective prevention strategies that shift the distribution of risk downward.

**Methods** Participants of the Québec Longitudinal Study of Child Development (n=1588) comprised the sample for analysis. Standardised BMI measurements from 4 to 10 y of age and a semi-parametric mixture modelling method were used to estimate developmental trajectories of weight change. The influence of the residential environment on weight trajectories was estimated after controlling for social and early life factors, such as SES and birthweight.

**Results** Four distinct weight trajectory groups were estimated: (1) Low- increasing (7.1%), (2) Low/medium-increasing (55.2%), (3) Medium/high- increasing (47.4%), and 4) High-stable (10.3%). Switching from urban to rural living decreased weights in Group 1, but increased weights in Group 4. In Group 2, changing from urban to medium density living increased weights. For Group 1, moving to a more cohesive neighbourhood increased weights, and moving to a more highly disordered neighbourhood decreased weights. Compared to the other three groups, Group 4 children were more likely to be overeaters and have obese mothers.

**Conclusion** The characteristics of residential environments may play a role in childhood weight status beyond social and early life factors. These characteristics may have differing effects within the population, so a ‘one-size fits all’ strategy for intervention may not be appropriate.