(53.7, 52.2 and 19.1% each). Age was negatively associated with polyconsumption, adjusted OR=0.94 (0.90–0.98) and history of physically abused and friend with drug problems were identified as risk factors, 2.12 (1.15–3.9) and 2.38 (1.29–4.42), respectively. Neither education, marital and employment status, sexual abuse history, legal or medical problems, drug user partner or relative, nor depression were associated.

Conclusion Polyconsumption risk factors must be addressed to potentially improve the outcome of rehabilitation programs.

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P1-386 INVESTIGATION OF UNEXPLAINED SPORADIC DEATHS IN AJAH-ILAJE COMMUNITY: LAGOS, JULY 2008

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Introduction Following a community report of unexplained sporadic deaths in immigrants of a particular Nationality X in Ajah- Ilaje Community, an investigation was conducted to determine the extent and cause.

Methods Descriptive study and laboratory analyses were done, Caregivers interviewed and hospital records reviewed. Community search and tracing was conducted. A suspect was defined as any person with Abdominal pains and vomiting resulting in death within 72 h of symptoms onset, with any of the following: impaired vision, breathlessness, spasm, foaming in the mouth, coma. Samples of suspected alcoholic gins were collected and tested for potential contaminants.

Results Between 3rd and 23rd July 2008, 21 deaths were reported to have occured among persons of Nationality X. However, only 16 were identified. Mean age was 48 years (range 27–65). Of these, 14 victims had clinical history documented; the major symptoms were Abdominal pains (11, 79%), Vomiting (6, 43%), Impaired vision (4, 36%). All 16 (100%) identified cases had consumed alcohol prior to their illness and all (100%) died. Laboratory analyses of the illicit (local) gin consumed by the victims showed presence of a number of harmful chemicals including Chloroform, 1,1,1, Trichloroethane, Cyclohexanol, Arsenous acid, Pentanol and 1,2,2 Trichloro- 1,1, Difluoro ethane.

Conclusion The source of outbreak was local illicit gin contaminated with varying concentrations of toxic agents. The outbreak was interrupted by confiscation and destruction of sources, closure of sales outlets and mass enlightenment campaigns to dissuade consumption. Indiscriminate preparation and sale of illicit gins must be disallowed.

P1-387 TIME SERIES ANALYSIS PERFORMED ON NEPHROPATHIA EPIDEMICA IN BELGIUM

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Introduction Nephropathia epidemica is a Rodent-borne disease. Changing climate has been suggested as a triggering factor of recently observed epidemiologic peaks in reported (NE). We aimed at investigating whether there is a connection between the temporal pattern in NE occurrence in Belgium and specific trends in remotely sensed phaenology parameters of broad-leaved forests together with the oak and beech seed categories and the North Atlantic Oscillation (NAO).

Methodology The NE cases are higher in summer time than in winter time and it has a clear seasonal component. In order to the two environmental variables to quantify the dynamics of NE cases we used a dynamic harmonic Regression (DHR) model of the time series of monthly NE cases from 1996 to 2008. The selected variables were then used in a next step as inputs in multiple-inputs single-output (MISO) transfer function model to describe the NE dynamics as a function of climate and vegetation dynamics.

Results Based on the seasonal and cyclic component of NE the NAO index and oak and beach seed production categories were selected as an inputs for the MISO model. The MISO model was built to describe the incidence of NE cases from 2005 to 2008 (R^2 of 0.89).

Conclusion The results of the present study support defining the significant environmental factors explaining the spread and dynamics of the disease. In this way, a first step is made towards a tool that allows monitoring and predicting the NE cases.

P1-388 TRANSMISSION OF PANDEMIC INFLUENZA A (H1N1) ON A PASSENGER AIRCRAFT

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Introduction Screening for influenza in arriving airline passengers and follow-up of people seated near passengers with suspected infection was used in New Zealand during the containment stage of the H1N1 pandemic in 2009. However, there is little evidence for in-flight transmission of influenza in modern commercial aircraft. This investigation aimed to assess the risks of such transmission from a school group of infected passengers who arrived in New Zealand on 25 April 2009.

Methods We interviewed and obtained nasopharyngeal swabs and/or serological specimens from the school group. Passengers in the same section of the aircraft were interviewed and nasopharyngeal swabs collected from those who were symptomatic.

Results All 24 members of the school group were interviewed and had nasopharyngeal swabs and/or serological specimens collected. We obtained interview information from 97 out of 102 other passengers in the rear section of the aircraft. Nine laboratory-confirmed symptomatic cases of H1N1 infection occurred in the school group. Two other passengers seated within two rows of the infected passengers developed confirmed infection, 12 and 48 h following the flight, implying an infection risk of 3.5% for the 57 susceptible passengers in those rows. Follow-up by public health workers located 93.1% of passengers, but only 52.2% within 72 h of arrival.

Conclusions This investigation suggests a small but definite risk of pandemic influenza transmission during modern commercial air travel. This risk was concentrated close to infected symptomatic passengers. It is slow and difficult to follow-up and screen exposed passengers once they have left the airport.