

charts for all injuries reported to SINAN, and you can also use for the SIM (Mortality Information System) and SINASC (Born Alive Information System). The Endemic Map was able to show dynamically the progress of cases occurring in the territorial space, classifying the neighborhoods by the number of cases or incidents and building reports of events, thus identifying the neighborhoods with problems in the area of epidemiological surveillance. **E-mail:** jairocalado@terra.com.br

Epidemcontrol006- Spatial analyses of the occurrence of envenomations in the state of Rio Grande do Norte.

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Introduction: Studies addressing the spatial pattern of occurrence of envenomations may aid dynamic understanding and support important health surveillance actions. The clusters occurrence identification of these accidents can be of great relevance for decision and measures implementation in different magnitudes compared to the factors predisposing to its occurrence. **Methods:** An ecological study using secondary data on cases of envenomations recorded in the Information System for Notifiable Diseases (SINAN) for the 167 municipalities in the state of Rio Grande do Norte (RN) in the period 2001 to 2010. Data were obtained from the website of DATASUS. The study included the 22,242 recorded accidents whose municipality of residence is located in the RN. From these data, we calculated the mean incidence rate per 100,000 inhabitants in ten years by municipality. To observe the existence of spatial autocorrelation of the cases of envenomations in the state of the RN, was calculated global Moran index (I) and to analyze the pattern of spatial distribution and intensity of the clusters (cluster, random or dispersed) according to cities using the local Moran index (Ii) (ranging from -1 to 1), both considering the statistical significance of $p < 0.05$. For the production of thematic maps of the average incidence rate, BoxMap, Scatter plot, LisaSig Map and calculate the Moran Global and local index, Terraview 4.1.0 and GeoDa 0.9.9.14 were employed. **Results:** The incidence mean map showed that municipalities with higher incidences are those located in the eastern state (on the coast or near the coast), with predominantly wet tropical climate with higher rainfall and more regular rainfall throughout the year. In the west of the state, in the driest areas in semi-arid climate, the envenomations incidences observed were lower (Figure 01). The cartogram shows areas with high outliers (Figure 02). To the average rate of accidents with poisonous animals in RN state, the rate of global Moran (I) was found to be 0.408088 (p -value = 0.01), showing the spatial autocorrelation occurrence of these accidents, with the formation of clusters. By Moran Local Index (Ii) (Figure 03 and 04), can be observed by MoranMap's, 16 municipalities forming clusters High-High (Metropolitan area and Trairi's region) and 25 municipalities forming clusters Low-Low (Seridó region and Upper West), both with statistical significance (p -value < 0.05) (Figure 05). **Conclusions:** In the Rio Grande do Norte state, the envenomations have public health importance for the high rates recorded, identifying significant clusters of occurrence of these accidents. The study reaffirms the importance of spatial analysis and use of GIS as tools for the characterization of planning and management services and health systems, and strong ally for making decisions based on evidence. **E-mail:** isabelleribeiro@oi.com.br

Epidemcontrol007- Spatial analysis of the waterborne diseases and their risk factors in one location of Ananindeua, Pará, Brazil

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Environment, social and economy issues in addition to the disorganized usage of geographic space have been related, in the last decade, to influential and determining variables which affect the epidemiological scenarios in the Amazon, with outcomes that cause concern. These issues can be observed, considering

the health conditions of human populations exposed to risks of diseases due to the usage of inappropriate water, caused by many different reasons such as garbage that infect the soil as well as the water tables. In this context this paper aims to present the characteristics of this epidemic situation and the relations with the risky factors to the infections that come as a result of this water problem, observed in the community named Parque Clube, located in Ananindeua District, in Para. Researches were developed using documents, charts and forms from the Health Department – Secretaria Municipal de Saude de Ananindeua – and the water in question was analyzed .Physical, chemical and microbiological analyses were held. Next, the data related to the quality of the water being used and all the results of the analyses in addition to the epidemiological aspects of the population were analyzed using the Kernel Method, that allowed to measure how related all of these variables are, taking in consideration all the collected data. The results of the study are: 45,5 % of the population do not treat the water at all, 55,6 % of micro area IV, do not take care of the garbage at all, leaving it outdoors, next in micro area II with 44,4 %. According to the water analyzed 57,1 % tested positive to total coliforms and 39,3 % to Escherichia coli, distributed in micro areas 2, 3 and 4. The physical and chemical parameters such as nitrate, ammonia, ph, fluoride, their relation and intensity were visualized in micro areas 1, 2, 3 and 4. Because of the bad quality of the water, diseases were observed such as: dermatitis, intestinal parasites and diarrhea that were found in areas 2, 3 and 4. The Moran's coefficient, came out positive, showing that all the variables were highly related. Using geo-technology in eco-epidemiological studies, proved to be very efficient when the goal is to express how the sanitary and the environmental conditions are related considering the diseases transmitted by non treated water, pointing out that this relation was more evident in micro area 2, 3 and 4. **E-mail:** cileidegomes@oi.com.br

Epidemcontrol008- Food insecurity in Assis Brasil – AC, 2011

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Introduction: The use of the Brazilian Scale of Measure of Alimentary Insecurity (EBIA) is increasing since its validation (2003). It was adapted from the North American Household Food Security Survey Module- HFSSM (Segall-Correa, 2007). It is a direct method of measurement of the food security, classifying it in food security, or food insecurity (low, moderate, high). In 2009, The Household National Survey Program (PNAD,2009), using the EBIA, showed 43.4% as the prevalence of food insecurity to the Brazilian children between 0 and 5 years old, 26.1% as low food insecurity, 10.1% as moderate food insecurity and 7.5% as high food insecurity. In Acre the food insecurity found was 47.5%, 25.4% as low food insecurity, 11.7% as moderate food insecurity and 10.4% as high food insecurity. **Material and methods:** The municipal district of Assis Brasil is in the border between Brazil, Peru and Bolivia and it possesses 6,020 people's population (IBGE, 2010). In the year of 2011, we accomplished a cross-sectional study in the urban area of Assis Brasil, applying the EBIA interview in all the homes that had children between 0 to 5 y. o. A household questionnaire and a personal questionnaire for each child of the residence were also applied, together with weight and height measurements for anthropometric evaluation. Data analysis was performed using the software SPSS 13.0. The calculation of the anthropometric values was made using the Anthro software (WHO). The scoring system of EBIA attributes 1 point for each positive answer, being nutritionally safe homes with a score equal to 0, low food insecurity those with scores from 1- 5, moderate food insecurity those with scores from 6 to 10, and high food insecurity those with scores from 11 - 15. **Results:** We found a prevalence of 43.0% of food insecurity (n=440) for the children from 0 to 5 years in Assis Brasil. This value is compatible with the Brazilian reality shown by PNAD (43.4%). Of those children bearing food insecurity, 21.1% presented stunting, while only 9.9% of those children without food insecurity presented stunting ($p=0.002$, Pearson's chi-square). Of those children living in households with no more than four inhabitants, only 33.6% were living in conditions of food insecurity, while those that live in homes with more than 4 people, 50.8% had food insecurity ($p=0.000$, Pearson's chi-square). **Main Conclusions:** The results showed that the food insecurity level in Assis Brasil in the moment of the collection of data is similar to the found by for the Brazilian children. However, stunting is much higher in Assis Brasil (14,3%) than the average levels for