diagnosis of AGE. Stool samples were obtained for rotavirus testing and genotype investigation using ELISA and multiplex RT-PCR.

**Results** The prevalence of rotavirus infection was 27.3% (95% CI 23.6–31). Infants < 2 years of age were most frequently affected (91.6%). The most dominant rotavirus genotype was G3F[8], which accounted for 40.4% of cases. On multivariate analysis, rotavirus was significantly associated with the episode occurring in the winter season (aOR 6.73; 95% CI 3.45–3.31), vomiting (aOR 3.05; 95% CI 1.37–6.75), fever (aOR 1.84; 95% CI 1.10–3.07) and dehydration (aOR 8.20; 95% CI 3.45–19.47).

**Conclusion** The determination of rotavirus infection prevalence and its risk factors will help us to better understand the epidemiology of the disease in our country in order to develop effective preventive measures, including vaccines.

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**Abstracts**

**EVALUATION OF MEASLES OUTBREAK DURING 2010/2011 IN SKOPJE, MACEDONIA**

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**Background** Due to low rates of vaccination coverage, in mostly rural in Skopje and as a result of military conflict in 2001, lead to spillover of the measles from neighboring countries, where outbreak of measles was already declared.

**Methods** and materials: Measles reporting is mandatory in Macedonia. Cases analyzed had to meet the national case definition. Case-series investigation was conducted, surveys of rates of vaccination coverage.

**Results** From 07.09.2010 to 22.07.2011, we have registered 596 cases of measles. Of these 596, twenty five case after getting a negative test from laboratory testing were discarded, so the number of cases of measles in the area of Skopje was 572 (Mb = 97.0/100.000). The first case was during a 13 months old unvaccinated child. Out of 572 cases of measles 235 (41.0%) were hospitalized, mostly with severe clinical symptoms. According to the patients vaccination status the conclusion was that: 517 (90.4%) persons were vaccinated, of which 59 not subject to the vaccination, 19 (3.3%) persons no data, 36 (6.3%) persons were vaccinated, of which a portion of MMR are 30 and 6 with two doses. During the outbreak, laboratory confirmed 84 cases out of 103 taken materials, were positive.

**Conclusions** The high rate of vaccine coverage in most municipalities in Skopje, unvaccinated children with a high and absence of the second dose in the first grade in elementary school, mostly in rural areas affected by the military conflict in 2001, were the cause of measles in epidemic form.

**STUDY OF DETECTION VIBRIO CHOLERAE O1 FROM KAROON RIVER WATERS AHVAZ AND ROLE IN THE PUBLIC HEALTH**

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**Background** The watershed of Dez and Karoon rivers located in middle Zagrous mountain with area about 68481-, Thus watershed is a part of Persian gulf watershed. Cholera, an acute intestinal infection caused by the bacterium Vibrio cholerae (V. cholerae) is a historically feared epidemic diarrheal disease that remains a major public health problem in many parts of Africa, Asia, and Latin America. V. cholerae O1 exists as two major serotypes, Inaba and Ogawa, a member of the family Vibrionaceae is transmitted through Fresh water contaminated with fecal matter. Foodborne infections have been traced to raw. The target of study the Segregate V. cholerae O1 (Vibrioaceae) in the Karo-on Ahvaz River.

**Methods** In four stages (April, to July 2010), a total 100 samples of water from Karo-on River Ahvaz were collected. During the study period the recorded river temperature was about 25–28°C and pH ranged from 7 to 8. Swabs were cultured onto thiosulphate citrate bile sucrose and MacConkey, and morphological colonies compatible with Vibrio were characterized by oxidase test and agglutinated with antisera for serotype determination. Also V. cholerae biochemical tests with API 20E.

**Results** From 100 samples of water Karoon River in Ahvaz, Iran, 8 (8%) sample were positive for Vibrio cholerae strains. The isolated strains from water Karoon River in Ahvaz, Iran, were Vibrio cholerae O1 (inaba).

**Conclusion** The priorities for cholera control remain public health interventions through improved water and sanitation, improved surveillance and access to health care facilities, and further development of appropriate vaccines.