decisions about control measures, resource allocation, and risk communication in real time.

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40.006

Epidemiology of varicella among passengers and crew on international conveyances, United States, 2005-2008

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Background: Although the incidence of varicella in the United States has decreased markedly since a national vaccination program was implemented in 1995, CDC Quarantine Stations continue to receive frequent reports of varicella among international travelers. However, few published reports are available on the epidemiology of varicella in travelers. Our objective was to describe the epidemiology of varicella on international conveyances and to identify risk factors associated with illness.

Methods: We reviewed reports of varicella captured by the CDC Quarantine Activity Reporting System (QARS) from June 2005 - December 2008. A stepwise backward elimination logistic regression model (inclusion criterion: alpha <0.05) was used to compare risk factors for varicella with those for all other illnesses in travelers during the same time period, including demographic characteristics, conveyance time (maritime versus air or land [pedestrian, car, bus, train]), season and year of report, and type of traveler (passenger or crew).

Results: Of 3908 illness reports during the study period, 446 (11.4%) met the case definition for varicella. Odds of reported varicella were higher on maritime conveyances (odds ratio [OR] = 38.3; 95% confidence interval [CI], 22.0 - 66.5) and in travelers born in tropical countries (OR = 2.3; CI, 1.4 - 3.6), males (OR = 1.5; CI, 1.02 - 2.3), and younger travelers (for a 1-year decrease in age, OR = 1.08; CI, 1.06 - 1.10). Odds of varicella reporting were lower in the fall (OR = 0.30; CI, 0.16 - 0.54). There were no statistical differences between varicella and non-varicella illnesses by type of traveler (crew member, passenger), race and ethnicity (Hispanic, non-Hispanic), or year of report.

Conclusion: The higher incidence of varicella reporting by maritime conveyances compared with other conveyances may be due to the large number of unvaccinated crew members originating from tropical countries where varicella commonly occurs in adults. Maritime vessels, compared with other conveyances, may also achieve more complete case finding because of the extended periods of time crew live aboard the vessels. The availability of a vaccine for varicella means that most cases could be prevented, and vaccination should be considered for crew members on maritime conveyances without documented immunity to varicella.

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Dengue fever outbreak in Lima, Peru 2009: Epidemiological changes in urban areas

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Background: Dengue fever is endemic in Peru. The epidemic potential for dengue transmission north of Lima city has spread alarmingly in the last four years. A dengue outbreak occurs during March to June 2009 in three districts of Lima. The 2005 and 2007 outbreaks of dengue fever occurred in these districts only one circulating serotype in each outbreak. Epidemiological investigation was conducted to determine the distribution of cases, serotype circulation, symptoms and signs of dengue fever in order to identify transmission and epidemic control measures.

Methods: Analysis of cases of the outbreak investigation conducted by the network of epidemiology at the Department of Health V Lima City. The information was collected and processed through software NotiSp. Suspected case was considered a person with a history of fever for 2 to 7 days and two or more of the following symptoms: headache, retroocular, myalgia, arthralgia, rash and hemorrhagic manifestations residing in the districts of Carabaylo, Comas and Independence. The cases were registered in epidemiological records, blood samples were taken to determine seroconversion and identification of circulating serotypes.

Results: Of 552 cases suspects, 148 (26.8%) were positive for IgM antibody detection of specific dengue indicating primary infection and 99 cases were obtained by PCR serotypes: DEN-3 (74%), DEN-1 (24%) and DEN-4 (2%). Most cases (45%) were adults between 20 and 59 years of age. The median age was 34 years. Women were more affected than men (56% and 44% respectively). The most frequent symptoms were fever (95%), headache (90%), body ache (86%), bone pain (75%) and pain retroocular (70%). The outbreak investigation revealed a cluster of four clusters that could be because they have areas favourable for breeding of the vector, such as presence of disposable plastic containers, clearing rocks, water shortages and the migration of people to Lima from dengue endemic areas.

Conclusion: The outbreak investigation confirmed the presence of dengue as an emerging public health problem in Lima, identifying the co-circulation of three serotypes, demonstrating dengue epidemiological changes, so it is important to strengthen surveillance actions epidemiological and vector control in these areas during the coming years.

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