## 814

HEPATITIS A VACCINATION AND ITS IMPACT ON HEALTH CARE UTILIZATION FOR PRIVATELY INSURED PERSONS. \*F Zhou, A Shefer, and M McCauley (Centers for Disease Control and Prevention, 1600 Clifton Rd NE, MS E-52, Atlanta, GA 30333)

In 1999, it was recommended that children aged 2 years living in 11 states with the highest historic incidence of hepatitis A be routinely vaccinated, and that children aged 2 years living in 6 additional states with incidence above the national average be considered for routine vaccination. Comprehensive data regarding medical care visits have not been reported. Our goal was to analyze a health insurance claims database to estimate in-plan vaccination coverage and to examine impacts of the hepatitis A vaccination program on medical care visits (including hospitalizations, emergency department visits and office visits). We conducted a retrospective study of the 1996-2003 Medstat MarketScan databases, which include enrollees of more than 100 health insurance plans each year, using 1996 and 1997 as prevaccination baseline. Hepatitis A vaccination coverage was estimated and trends in rates of medical care visits were analyzed using Poisson regression method. By 2003, based on vaccinations administered within health insurance plans, hepatitis A vaccination coverage among children aged 24 to 35 months was 10.5% (95% confidence interval = 10.2%-10.7%). From prevaccination era to 2003, overall medical visits due to hepatitis A declined by 25.6% (13.5 to 10.1 per 100,000 population, P < 0.001). Declines were greater among enrollees resided in 17 vaccinating states (40.3 per 100,000 population) than those in non-vaccinating states (20.8, P < 0.001). Since the introduction of the hepatitis A vaccination program, medical visits due to hepatitis A disease have declined substantially in the US. The greatest impact was seen in states in which routine vaccination was recommended or suggested.

## 816

RACIAL DIFFERENCES IN UNDERLYING HEALTH PROBLEMS AMONG PERSONS WITH TRAUMATIC BRAIN INJURY IN SOUTH CAROLINA, 1997–2001. \*L Lineberry, A Selassie, P Ferguson, E Pickelsimer (Department of Bioinformatics, Biostatistics, and Epidemiology, Medical University of South Carolina, Charleston, SC)

Purpose: Underlying health conditions can predispose a person to Traumatic Brain Injury (TBI), and are increasing disparities in TBI-related health outcomes among population groups. Our objectives are to 1) describe the major differences in underlying health problems, causes of injury, and payer status as a function of race, and 2) examine the relationship between sustaining TBI and race in a multivariable log-linear model controlling for other covariates. Methods: Persons with TBI were identified from the South Carolina Traumatic Brain Injury Surveillance System using CDC's case definition of TBI. A total of 73,428 persons with TBI were discharged from the hospital or were treated and released from one of the 64 Emergency Departments between 1997 and 2001. We identified underlying chronic health problems using the ICD-9-CM diagnosis codes and classified the comorbid conditions by the Centers for Medicare and Medicaid Services Comorbidity Index. Estimates of the odds of chronic diseases between the two race groups were calculated using multivariable logistic regression techniques. Results: African-Americans (AA) were at a higher risk for many comorbid conditions that could predispose them to sustaining a TBI, including seizures (OR = 1.3, CI = 1.1, 1.6), drug abuse (OR = 1.3, CI = 1.1, 1.5), and alcohol abuse (OR = 1.2, CI = 1.01, 1.43). The proportion of AA being injured either by violence or by being a pedestrian were almost double that of Whites. Twenty-eight percent of AA versus 42% of Whites had commercial insurance at time of injury. More AA were covered by Medicaid (21% to 9%) or uninsured (42% to 32%). Conclusion: The proportion of TBI associated with underlying chronic health problems is significantly higher among AA. The finding suggests that the higher odds of underlying health problems among AA may be mediated by inadequate health insurance.

## 815

OUTBREAK OF SCABIES AT GERIATRIC LONG-TERM CARE FACILITIES IN KOREA. \*M Ki, H Moon, H Cho (Eulji University, Daejeon, 301–832, South Korea)

Objectives: To investigate an outbreak of scabies occurred in geriatric facilities located in Kyounggi-province, Korea, between September 2004 and September 2005. Methods: We carried out epidemiologic investigation on scabies outbreak. The whole workers except two were interviewed and charts of patients were reviewed. Results: Among workers, the attack rate was 58.6% (17/29). It was 86.0% (37/43) in patients. Secondary cases also occurred among the family members of workers, with the secondary attack rate of 15.8% and the 95% confidence interval was 6%~31.3%. The transmission of scabies began from one index case who had scabies and moved from other facilities. She was hospitalized in the 4th floor of this facilities where dependent patients resided. After the ward rotation of care-givers between 3rd and 4th floor in July 2005, the incidence of scabies was rapidly increased. The last cases occurred in Sep. 2005. Conclusions: This outbreak investigation has meaning that this is the first report of the scabies outbreak in geriatric long-term care facilities in Korea. Recently, the reports on scabies epidemic are increasing with the augmentation of geriatric longterm care facilities. Korea is 'aging society' and we face problems of the aged as community problems. More facilities for senile people and dementia hospitals will be held and this is the time that we need to look into contagious diseases in long-term care facilities. If they don't use appropriate treatment, prevention and management to scabies, it is difficult to stop the outbreak. Therefore it is important to educate and inform the workers or staffs in long-term care facilities about scabies and other contagious skin

## 817

PERSUASION AND LICENSURE: A RANDOMIZED CONTROLLED TRIAL TO INCREASE LICENSURE RATES AMONG MOTORCYCLISTS. \*E Braver, J Kufera, K Volpini, M Alexander, J Joyce, S Lawpoolsri, and P Ellison-Potter (University of Maryland School of Medicine, Baltimore, MD, 21201)

Unlicensed motorcyclists are overrepresented in motorcycle crashes. A randomized controlled trial tested a persuasive educational intervention designed to increase licensure. Linking Maryland records of registered motorcycles with license files, 8,500 unlicensed owners who had no licensed co-owners were identified. Half were randomized to receive a mailing in early June, 2005 from Maryland Motor Vehicle Administration (MVA). Motorcycle licenses can be attained by passing an accredited motorcycle training class or passing MVA-administered knowledge and skills tests. Licensure rates and motorcycle class enrollment were followed for 6 months post-intervention. As of 12/16/2005, 277 intervention group owners had obtained Class M motorcycle licenses and 157 had obtained Class R motorcycle learner's permits. The comparison group obtained 207 M licenses and 122 R permits. The overall success rate in the intervention group, defined as obtaining Class M or R, was 10.2% compared with 7.7% in the comparison group (Licensure ratio (LR) = 1.32; 95% confidence interval (CI) = 1.16-1.52). The intervention was most successful among men, whose LR for obtaining M licenses was 1.46 (95% CI = 1.22-1.76). LRs were higher among owners ages 41-48 and 49+ receiving the intervention compared with younger groups. Motorcycle class enrollment rates were higher in the intervention group, particularly among men taking an advanced course (Enrollment ratio = 2.18; 95% CI = 1.38-3.47). The intervention appeared to increase licensure, yet the success rate was less than optimal. Potential risks and benefits of increasing the percent of motorcyclists who are licensed need to be studied.