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CONGENITAL SYPHILIS SURVEILLANCE 1991-1996. JMH Risser,* R. Moody, L. Hollins, J. Paffel, and L-Y Hwang (University of Texas School of Public Health, Houston, TX 77030, USA).

Using data supplied by the Houston Department of Health and Human Services, we examined changes in rates of congenital syphilis in Houston from 1991 through 1996. During this time, rates among women for primary and secondary (P&S), and early latent syphilis declined 86% and 69% respectively; however, rates for late latent syphilis increased 162%. Congenital syphilis rates peaked in 1992 for Blacks and Hispanics with 11.5 and 1.7 cases per 1,000 live births, respectively. Rate ratios, comparing 1996 rates to 1992 rates were 0.65 (95% CI 0.49 to 0.86) among Blacks and 0.71 (95% CI 0.43 to 1.18) among Hispanics. Rates among Whites have remained unstable, with 1993-1996 rates of 0.4, 0.2, 0.4, and 0.6, respectively; the 1996 to 1993 rate ratio was 1.76 (95% CI 0.70 to 4.67). Rates among all race/ethnicity groups increased from 1995 to 1996. We are unsure why congenital syphilis rates are not falling as expected. In Houston, women, especially Hispanic and White women, are less likely to be diagnosed with P&S syphilis than men, and are therefore less likely to be treated early in their infection. There may have been changes in the way congenital syphilis surveillance case definitions were applied; some institutions may have failed to do complete the infant work-ups, resulting in increased surveillance cases due to incomplete findings. In almost half of the cases (47.8%) there were no serologic tests for syphilis (STS) during the third trimester; in 43.4% of cases, first STS was less than 30 days prior to delivery. It is essential to perform STS early enough in pregnancy for an adequate response to treatment, and to retest women early in the third trimester, to identify new infections.

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CHARACTERISTICS OF INJURIES TO RETAIL MERCHANDISE WORKERS. LI Gardner* (National Institute for Occupational Safety and Health, Morgantown, WV 26505, USA).

Retail merchandise workers make up an increasing share of the workforce, and because their work is considered non-hazardous, most attention has focused on the risks of musculoskeletal injuries to these workers. An important unanswered question is whether these workers report significant numbers of traumatic injuries and how these injuries compare in severity to musculoskeletal injuries from lifting and manual handling. The study was a dynamic historical cohort of 61,179 workers employed during 1996-97 in stores of a large retail chain. Data consisted of company workers compensation records and payroll records. Injury rates were calculated per 100 workers/year. The authors compared traumatic and musculoskeletal sources of injury for all injuries and lost workday injuries. Source of injury refers to the object or exposure which directly produced the injury. The traumatic sources of injury were struck, caught, or contact with an object or substance at work (SCC); and slips, trips and falls (STF). The musculoskeletal injuries were material handling-related muscle strain injuries, which were divided into back strains and all-other strains. Over 12 months, 2657 injuries were reported (13.2/100 workers/yr). 530 required at least one lost workday (2.6/100/year). The 1225 SCC injuries (6.1/100/yr) represented 46% of all injuries, but only 163/1225 or 13% were lost workday injuries. The 454 STF injuries (2.3/100/yr) resulted in 124 lost workday injuries or 27% of reported injuries. The 437 back strain injuries (2.2/100/yr) resulted in 126 requiring a lost workday, or 29%. The 541 other strain injuries (2.7/100/yr) resulted in 117 lost workday injuries or 22%. Conclusions: The traumatic injuries, SCC and STF, accounted for 287 lost workday injuries, compared with 243 lost workday injuries whose source was material handling-related strains. Workers in the retail merchandise industry are not exposed to life threatening traumatic injuries, however the impact of traumatic injuries to this worker population was significant.**

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ENVIRONMENTAL RISK FACTORS FOR WORK-RELATED ASSAULT INJURIES AMONG NURSES: PART I. SECURITY MEASURES, ADMINISTRATIVE POLICIES, AND ASSAULT PREVENTION TRAINING. S Lee,* SW Gerberich, G Maldonado, L Waller, A Anderson, and P McGovern (University of Minnesota, Minneapolis, MN 55455, USA).

Work-related violence is a major public health problem. The purpose of this case-control study was to identify environmental risk factors for work-related assault injuries among nurses. The target population for this study was all registered nurses (RN) and licensed practical nurses (LPN) who worked in the state of Minnesota between January 1, 1995 and June 30, 1996. Cases were recruited from members of the target population who filed a workers' compensation claim due to work-related assault injuries that resulted in more than three days of lost work time during the study period. Controls were randomly sampled, according to practice type (RN or LPN), from the target population. A conceptual model, based on previous knowledge on assault injuries, was developed for this study to guide data collection, analysis, and interpretation. Unconditional logistic regression was used to model the dependence of workplace assault injury on each exposure of interest and confounders. A decreased rate was observed for the presence of security personnel (rate ratio (RR)=0.40, 95% CI, 0.19-0.82). Increased rates were observed for perceptions that administrators and co-workers considered assault to be part of the job (RR=8.14, 95% CI, 3.76-17.60 and RR=5.23, 95% CI, 2.38-11.47, respectively), having ever received any assault prevention training (RR=2.57, 95% CI, 1.34-4.95), and having received assault prevention training from the current workplace (RR=4.64, 95% CI, 2.33-9.23).

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ENVIRONMENTAL RISK FACTORS FOR WORK-RELATED ASSAULT INJURIES AMONG NURSES: PART II. STAFFING PATTERNS AND PATIENT CHARACTERISTICS. S Lee,* SW Gerberich, G Maldonado, L Waller, A Anderson, and P McGovern (University of Minnesota, Minneapolis, MN 55455, USA).

The purpose of this case-control study was to identify environmental risk factors for work-related assault injuries among nurses. The target population for this study was all registered nurses (RN) and licensed practical nurses (LPN) who worked in the state of Minnesota between January 1, 1995 and June 30, 1996. Cases were recruited from members of the target population who filed a workers' compensation claim due to work-related assault injuries that resulted in more than three days of lost work time during the study period. Controls were randomly sampled, according to practice type (RN or LPN), from the target population. A conceptual model, based on previous knowledge of assault injuries, was developed to guide data collection, analysis, and interpretation. Unconditional logistic regression was used to model the dependence of workplace assault injury on each exposure of interest and confounders. Increased rates were observed for a ratio of greater than five patients/personnel (rate ratio (RR)= 2.54, 95% CI=1.13-5.70, compared to less than three), being involved in greater than 80% time in direct patient contact (RR=4.45, 95% CI=2.01-9.87, compared to less than 70% time), working alone (RR=2.59, 95% CI=1.06-6.34), working predominantly with mentally ill patients (RR=3.53, 95% CI=1.41-8.85) and working with patients who had longer periods of stay in the institution (RR for 2-4 weeks = 8.85, 95% CI=1.58-49.52 and greater than four weeks = 4.25, 95% CI=1.17- 15.39, compared to less than one day).

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