night shift work, frequency of night duties, total duration of rotating night shift work and lifestyle factors, i.e. a) smoking cigarettes, b) alcohol consumption, c) physical activity and d) BMI were examined with logistic regression and linear regression analyses adjusted for age.

Results Smoking cigarettes was associated significantly with current rotating night shift work (OR=1.4), frequency of night shifts (OR= 1.5 and OR=1.7 among women with 5–7 and ≥8 night duties/month, respectively) and longer duration of the night shift work (OR=2.1 for duration ≥25 yrs). The total physical activity was higher among rotating night shift nurses (242 vs. 203 MET*h/week), but OR of recreational inactivity was significantly increased among rotating night shift workers (OR=1.6). Mean BMI was significantly higher among postmenopausal women working night shifts when compared to day workers (BMI= 28.9 vs. 27.6 kg/m²), with increased OR of obesity (OR=2.8). No significant associations were observed between night shift work and alcohol consumption.

Conclusions The results of our study indicate that rotating night shift work may be associated with poorer lifestyle, which may contribute to chronic diseases.

LEVELS OF IDEAL, INTERMEDIATE AND POOR CARDIOVASCULAR HEALTH BY EMPLOYMENT CHARACTERISTICS IN 2005–06 NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY

Tara Harley, Cecil Burchfield, Ja Gu, Michael Andrew. National Institute for Occupational Safety and Health, Morgantown, WV, USA

Objectives Employed persons are considered healthier than the general population. Yet, between 5–18% of all coronary heart disease deaths can be attributed to occupational exposures, ranging from noise to job stress. Cardiovascular health (CVH) is based on seven modifiable characteristics (i.e. cigarette smoking, body mass index (BMI), physical activity, diet, blood pressure, and levels of total cholesterol and fasting glucose) used to categorise individuals as having poor, intermediate and ideal CVH. In this study, we compared levels of CVH among employed and unemployed participants in the 2005–2006 National Health and Nutrition Examination Survey (NHANES).

Method The study population included 935 cardiovascular disease-free participants age 20 and older (731 employed, 204 unemployed). Employment status and work characteristics were derived from self-report questionnaires. Poor, intermediate and ideal levels of CVH and its components were defined using American Heart Association criteria. Weighted means and percentages were calculated using SUDDAN 10.0; models were adjusted for age, sex and ethnicity.

Results Mean number of ideal CVH components was significantly higher for employed compared to unemployed participants; 17.7% of those employed had ideal CVH compared to 12.2% of those unemployed. Ideal CVH was significantly lower for those in construction, manufacturing and transportation industries (8.6%) and in precision, product and transportation occupations (4.4%). Ideal CVH was significantly higher for afternoon shift (26.7%) compared to night/rotating (10.9%) and day (18.2%) shift workers.

Conclusions Understanding unique stressors and exposures for persons working in manufacturing, transportation and construction industries would be an important next step in designing interventions to improve their CVH.

ASSOCIATIONS OF SYMPTOMS OF DEPRESSION AND POSTTRAUMATIC STRESS DISORDER WITH PERITRAUMATIC DISSOCIATION, AND THE ROLE OF TRAUMA PRIOR TO POLICE WORK

1Erin McCarrie, 1Khachatour Sarkisian, 1Michael Andrew, 1Cecil Burchfield, 1John Violanti. 1National Institute for Occupational Safety and Health, Morgantown, WV, USA; 2University at Buffalo, State University of New York, Buffalo, NY, USA

Objectives Our objective was to determine if symptoms of depression and posttraumatic stress disorder (PTSD) are associated with peritraumatic dissociation, and if this association is modified by trauma prior to police work.

Method Symptoms of depression, PTSD symptoms, peritraumatic dissociative experience (PDE), and trauma before police work were measured using the Centre for Epidemiologic Studies Depression scale, PTSD Check List-Civilian Version, PDE questionnaire, and the brief trauma questionnaire, respectively in 328 police officers. Separate regression models were used to assess if either symptoms of depression or symptoms of PTSD were associated with PDE stratified by prior trauma. Means were adjusted for race, number of drinks per week, and smoking.

Results PDE was significantly positively associated with symptoms of PTSD and depression (β = 0.642, p = 0.0001 and β = 0.276, p = 0.0002, respectively). PDE was positively associated with symptoms of PTSD regardless of trauma before police work (β = 0.599, p < 0.0001 (without prior trauma), 0.750, p < 0.0001 (with prior trauma). In contrast to PTSD, depression symptoms were significantly associated with PDE scores in individuals with prior trauma (β = 0.466, p = 0.0001), but not in individuals without prior trauma (β = 0.130, p = 0.153).

Conclusions The results indicate that an increase in PDE is associated with an increase in symptoms of depression and PTSD. The results also show that PDE is associated with symptoms of PTSD regardless of prior trauma. In contrast, PDE was associated with depression symptoms only in individuals with prior trauma, indicating prior trauma may modify this relationship.

PSYCHOSOCIAL WORK FACTORS, OCCUPATIONAL NOISE EXPOSURE, COMMON MENTAL DISORDERS, AND THE RISK OF TINNITUS

1Thomas Vinther Frederiksen, 2Cecilia H Ramnau-Hansen, 2Zara A Stokholm, 3Jesper M Vestergaard, 1Henrik A Kolstad. 1Department of Occupational Medicine, Danish Ramazzini Centre, Aarhus University Hospital, Aarhus, Denmark; 2Department of Otolaryngology, Head and Neck Surgery, Hospitalsheden Vest, Holstebro, Denmark; 3Department of Public Health, Section for Epidemiology, Aarhus University, Aarhus, Denmark

Objectives Tinnitus is common, can be disabling, and may impair concentration, hearing and sleep. Noise induced hearing loss, other subtypes of hearing loss and ototoxic drugs are well-documented risk factors for tinnitus. Psychosocial work factors, depression and anxiety may exacerbate tinnitus, cause tinnitus, or both. The objective is to investigate the relationship between noise exposure, psychosocial work factors, common mental disorders, and tinnitus.

Method A total of 554 workers within 10 manufacturing trades and children day-care participated in this cross-sectional study from 2009–2010. The study database contained information on individual short-term and long-term noise exposure levels, hearing levels and questionnaire information on common mental disorders and psychosocial work factors. Associations between...