buses regarding construction workers in Korea will be shown.

**Oral Presentation**

**Other**

**0236** **DID A LEGISLATIVE CHANGE ENABLING USE OF PART-TIME SICK LEAVE AT AN EARLY STAGE OF WORK DISABILITY ENHANCE WORK PARTICIPATION IN FINLAND?**

1Svetlana Solovieva*, 2Lauri Virta, 1Johanna Kausto, 3Ilona Autil-Rämö, 4Kari-Pekka Marimo, 3Mikko Laaksonen, 1Taina Leinonen, 5Kirsti Huisman-Pursiainen, 6Alex Burdorf, 7Eira Vilki-Juntura. 1Finnish Institute of Occupational Health, Helsinki, Finland; 2The Social Insurance Institution of Finland, Helsinki, Finland; 3Finnish Centre for Pensions, Helsinki, Finland; 4Erasmus MC, University Medical Centre Rotterdam, Rotterdam, The Netherlands

Background The introduction of part-time sick leave to enhance work participation has been adopted in several countries, including all Nordic countries.

Objectives To assess the effectiveness of the use of part-time sick leave at the early stage (first 12 weeks) of work disability due to mental disorder or musculoskeletal disease on work participation.

Method In a nation-wide register-based quasi-experimental study we compared sustained return to work (RTW) and 2 year work participation between the part-time and full-time sick leave group compared with the full-time sick leave group and the control group. Persons who received partial or full sickness absence benefit during the first 12 weeks were defined as cases. Persons who did not receive such benefit during the first 12 weeks were defined as controls. Propensity score matching was calculated as the proportion of time within 2 years when participants were gainfully employed and did not receive either partial or full ill-health-related or unemployment benefits.

Results Sustained RTW was observed more frequently in the part-time than in the full-time sick leave group. A difference was seen in both genders, those aged 45–64 years and especially in mental disorders. Overall work participation during the 2 year follow-up was at a higher level in the part-time sick leave group compared with the full-time sick leave group. The difference was larger in men than women and in mental disorders than in musculoskeletal diseases.

Conclusion The use of part-time sick leave during the first 12 weeks of work disability enhances overall work participation during a two-year period. The prescription of part-time sick leave can be recommended at an early stage of work disability.

**Poster Presentation**

**Cardiovascular Disease**

**0237** **THE RELATIONSHIP BETWEEN HEART RATE VARIABILITY AND 5 YEAR RISK OF CARDIOVASCULAR DISEASE: EVIDENCE FROM THE TAIWAN BUS DRIVER COHORT STUDY**

1Chung-Ching Wang*, 1Ying-Chuan Wang, 2Wei-Te Wu, 1Sheng-Ta Chiang, 3Saou-Hsing Liu. 1Division of Family Medicine, Department of Family and Community Medicine, Tri-Serive General Hospital, National Defense Medical Centre, Taipei, Taiwan; 2National Institute of Environmental Health Sciences, National Health Research Institutes, Miaoli, Taiwan; 3Department of Public Health, National Defense Medical Centre, Taipei, Taiwan

Background We conducted a cohort study to evaluate the effectiveness of heart rate variability (HRV) to assess for the 5 year risk CVD event. The aim of our study is to find the association between HRV indices and the risk factors of reduced HRV, the association between HRV indices and CVD.

Methods The Taiwan Bus Driver Cohort Study recruited 1650 professional drivers from a large bus company in Taiwan since 2005. We only selected professional drivers whose total driving period exceeded 100 days during the 3 years. The remaining 1149 drivers completed the survey.

Results We found drivers whose driving duration more than 8 years showed the lowest risk of CVD (HR: 0,25, 95% CI 0,12 to 0,51, p<0,001). Drivers who had the drinking habits had higher CVD risk (HR: 2,19, 95% CI 1,38 to 3,50, p=0,038). BMI, SBP, DBP, Total cholesterol, Triglycerides were significantly associated with decreased HRV variables. When we compare HRV components between subjects with CVD and non-CVD group, decreased LF is found in CVD group (p=0,028), especially for hypertensive disease (p=0,039).

Conclusions This study concludes that among several HRV indices LF is an independent predictor of CVD. Moreover, there is much overlap in modifiable biological risk factors between reduced HRV and CVD. Therefore, we need to find whether a factor affect reduced HRV more or CVD risk more. Further research should be conducted regarding measures to change the modifiable risk factors of reduced HRV, and to investigate whether these interventions could reduce CVD risk in professional drivers.

**Oral Presentation**

**Cancer**

**0239** **RADON EXPOSURE AND LUNG CANCER MORTALITY IN THE GERMAN URANIUM MINER COHORT – RESULTS FROM THE EXTENDED FOLLOW-UP TO 2013 IN THE WISMUT STUDY**

Christina Sabotzki*, Nora Fenske, Maria Schnelzer, Michaela Kreuzer. Federal Office for Radiation Protection, Neurheime, Germany

Background The Wismut study is a national register-based cohort study with the purpose to assess the effectiveness of heart rate variability (HRV) to assess for the 5 year risk CVD event. The aim of our study is to find the association between HRV indices and the risk factors of reduced HRV, the association between HRV indices and CVD.

Methods The Wismut study is a national register-based cohort study with the purpose to assess the effectiveness of heart rate variability (HRV) to assess for the 5 year risk CVD event. The aim of our study is to find the association between HRV indices and the risk factors of reduced HRV, the association between HRV indices and CVD.

Results We found drivers whose driving duration more than 8 years showed the lowest risk of CVD (HR: 0,25, 95% CI 0,12 to 0,51, p<0,001). Drivers who had the drinking habits had higher CVD risk (HR: 2,19, 95% CI 1,38 to 3,50, p=0,038). BMI, SBP, DBP, Total cholesterol, Triglycerides were significantly associated with decreased HRV variables. When we compare HRV components between subjects with CVD and non-CVD group, decreased LF is found in CVD group (p=0,028), especially for hypertensive disease (p=0,039).

Conclusions This study concludes that among several HRV indices LF is an independent predictor of CVD. Moreover, there is much overlap in modifiable biological risk factors between reduced HRV and CVD. Therefore, we need to find whether a factor affect reduced HRV more or CVD risk more. Further research should be conducted regarding measures to change the modifiable risk factors of reduced HRV, and to investigate whether these interventions could reduce CVD risk in professional drivers.