

regarding the risk factors and symptoms of hypertension, had 24 hour heart rate and blood pressure monitoring. The subjects were asked to write all the stressful situations at work while the monitoring of the haemodynamic functions was proceeding.

**Results** Seventy-five conditions with different level of stressogenicity were identified and appropriate BP and HR values from the monitoring records were assigned. The statistical methods included analysis of variance and logistic regression model. The results revealed that in subjects with untreated arterial hypertension, the cardiovascular response to stressogenic conditions consisted in a higher increase in systolic BP (180/113 mm Hg) than in those with normal BP (144/94 mm Hg) or receiving hypotensive treatment (153/101 mm Hg); ( $p < 0.01$ ).

**Discussion** The bus drivers' job was characterised by a high level of work-related stress. Therefore, it's necessary to undertake preventive measures to reduce the level of stress, e.g. by training in stress coping and conflict solving strategies and to periodically perform long-term monitoring of arterial blood pressure in the workers at risk. The study points to a high significance of the hypotensive therapy which, when combined with a healthy lifestyle, ensures a better tolerance of stressogenic conditions of the bus driver's job.

#### 500 HIGH CARDIOVASCULAR RISK IN BELGIAN WORKERS: PREVALENCE ACROSS ECONOMIC SECTORS

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**Introduction** Cardiovascular disease (CVD) remains the leading cause of mortality and morbidity in Europe. Addressing the modifiable health factors and health behaviours that are associated with CVD is needed to keep workers at work longer and healthier.

The aim of this study was to assess the prevalence of high cardiovascular risk in Belgian workers and its relationship with demographic characteristics and economic sectors.

**Methods** A cross-sectional study was conducted on data from 132,199 workers under medical surveillance of group IDEWE, External Service for Prevention and Protection at work in 2016. 55,2% were male, mean age was 38 years.

Four cardiovascular health metrics (smoking, body mass index, physical activity and blood pressure) were categorised as 'ideal', 'intermediate' or 'poor' according to the American Heart Association (AHA) criteria. A 'high cardiovascular risk' group was defined as those workers meeting 3 or 4 'poor' cardiovascular health metrics.

**Results** Overall 7% of workers met 3 or 4 'poor' cardiovascular health metrics and were labelled high cardiovascular risk, 9,2% of men and 4,3% of women. The prevalence of high cardiovascular risk increased with age from 3,5% in the age group under 25 years to 10,1% in those 55 years or older. Transportation and Construction had the highest prevalence of high cardiovascular risk, 17,3% and 12,4% respectively. The lowest prevalence, 3,4%, was observed in Education. The differences remained statistically significant after adjustment for age and gender.

**Conclusion** A considerable number of workers are at risk for CVD. Significant differences exist between sectors. Risk factors for CVD are modifiable and the benefits of investing in workplace health promotion are clear. Especially workers in Transportation and Construction could benefit from customised worksite wellness programs. Additional research is needed about the relationship between occupation and cardiovascular risk factors and cardiovascular health.

#### 1359 MORNING WALK AS EXERCISE – VARIATION WITH AGE, SEX AND HEALTH STATUS

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**Introduction** Exercise is the best risk and health modulator in Industrial setup but is ill-used.

The purpose of the study is to find out, the influence of age, sex, health status, changes in blood pressure, various metabolic parameters (glucose and lipids), consequent to morning walk used as a tool of exercise vis-à-vis ICMR (Indian Council of Medical Research) reference man and woman.

**Methods** It is prospective study conducted on 58 males and females each, with active work from 1 st Jan 2017 to 30th Jun 2017. The reasons for variation in systolic blood pressure, diastolic blood pressure, BMI, fasting blood sugar, Post prandial blood glucose, total cholesterol, HDL Cholesterol, LDL Cholesterol, VLDL Cholesterol are collated. The data is analysed using mean, standard deviation and percentage.

**Results** The mean age of men is ( $n=58$ )  $42.34 \pm 15.27$  and the mean age of women is  $43.06 \pm 9.77$ . Findings are shown in table 1.

Abstract 1359 Table 1

	Men	Women
BMI	25.9±4.49	27.32±3.77
HDLC	40.86±8.86	45.72±13.4
LDLC	100.67 ±30.70	111.01 ±35.29
VLDLC	27.81±17.01	31.29±18.32
TC	163.43 ±33.63	185±35.13
FBS	99.94±30.19	102.60 ±33.27
PPS	123.20 ±17.80	127.05 ±54.83
SBP	123.13±178	123.93 ±16.87
DBP	75±8.2	79.51±10.43

**Conclusion** Exercise has more beneficial effects in man compared to woman. It influences systolic blood pressure more than the diastolic blood pressure. Effects on HDL Cholesterol is more in woman than in men. Other cholesterol parameters, like LDL and VLDL and Total cholesterol has more impact on men compared to woman. On glucose parameters, it has equal responses.