to determine the main risk factors for workers. The objective of this study was to model the risk of LBP in the male general working population.

**Methods** A random sample of 2161 men working in various occupations and industry sectors in the Pays de la Loire (West France) participated in a first survey in 2002. In 2007, 1313 of these (60.8%) participated in a second survey. The association between 21 biomechanical, organisational, psychosocial and individual risk factors (assessed in the first survey) and the prevalence of LBP (during the week preceding the second survey) was studied, using multi-step logistic regression models.

**Results** 394 men reported LBP in the second survey (prevalence: 30.0%). The final multivariate model highlighted four risk factors for subsequent LBP: frequent bending (ORs 1.45; 95% CIs 1.07 to 1.97 for bending forward only, and 2.13; 1.52 to 3.00 for bending both forward and sideways), driving industrial vehicles (1.35; 1.00 to 1.81), working more hours than officially planned (1.38; 1.05 to 1.81), and reported low support from supervisors (1.35; 1.02 to 1.79).

**Conclusions** Whereas current research on LBP mostly focuses on psychosocial issues, these results emphasise that biomechanical factors remain worth considering. Some methodological limitations are discussed, but the prospective analysis of numerous factors in a varied range of workers provides an original contribution to preventive strategies.

## Poster-discussion: Musculoskeletal disorders in specific occupations

P109

BIOMECHANICAL CONSTRAINTS REMAIN MAJOR RISK FACTORS FOR LOW BACK PAIN: RESULTS FROM A PROSPECTIVE COHORT STUDY IN FRENCH MALE EMPLOYEES

Aline Ramond-Roquin, Audrey Petit Le Manac'h, Julie Bodin, Céline Sérazin, Isabelle Richard, Yves Roquelaure Laboratory of Ergonomy and Epidemiology in Occupational Health, Angers, France

10.1136/oemed-2011-100382.323

**Objectives** Low back pain (LBP) has a major impact on work. Prospective data dealing with a wide range of jobs are needed