duration. In the current study, we aimed to relate periods of high peak exposure during computer use with the occurrence of neck-shoulder (NS) and arm-wrist-hand (AWH) symptoms.

Methods A prospective cohort study among 1951 office workers was carried out for 2 years (the PROMO-study), with periodical questionnaires and continuous measurements of computer input use by means of the software program WorkPace version 3.0. Peak exposure during computer use was defined as the number of days or weeks (containing at least 3 days) with long duration of computer use or mouse use, or with high frequency keyboard use or mouse use. For each parameter, peak exposure was defined using two separate thresholds, one at the 75th and one at the 90th percentile value. Rate Ratios (RRs) were obtained from Poisson regression using Generalised Estimating Equations. Univariate and multivariate logistic regression analyses were performed with the independent variables (number of days/weeks) analysed as continuous variables.

Results Valid data were available for 774 office workers. No relation was found between any of the peak exposure parameters and AWH symptoms; all RRs were close to one. Some frequency-related peak exposure parameters showed a statistically significant relation with NS symptoms. However, these relations were small, not consistent throughout the two thresholds and in the opposite direction as expected.

Conclusions We found no indications that high peaks in computer use were related to the occurrence of neck-shoulder or arm-wrist-hand symptoms.

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ARE PEAKS IN COMPUTER USE A RISK FACTOR FOR NECK AND UPPER EXTREMITY SYMPTOMS?

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Objectives Epidemiologic studies on physical exposure during computer use have mainly focused on average exposure