Pneumoproteins concentrations were determined by ELISA in samples collected post shift.

**Results** The exposure to dust ranged from 0.02 to 9.3 mg/m³, bacteria 0.3 to 4900x10³ bacteria/m³ and endotoxins from 1 to 3160 EU/m³. The workers had lower CC-16 (p<0.001) and a close to significantly lower SP-D (p=0.07) concentrations compared to the referents. Exposure to bacteria was positively associated with CC-16 (p<0.05) in multiple regression analyses. Exposure to bacteria was also positively associated with SP-D and negatively associated with atopy (p<0.05).

**Conclusions** This study showed that exposed subjects had lower serum concentrations of CC-16 and SP-D compared to the referents. Recent exposure to airborne bacteria were positively associated with the serum levels of CC-16 and SP-D.