trustworthiness of the study was examined using Lincoln and Guba (1985) principles.

**Results** Seventeen health care workers participated in our study. There are five main themes generated, including (1) Emotional loading: shock and collapse, fear of being seroconverted to infectious diseases, worry about family members, and damage of the professional image. (2) Disappointment on the working environment: lack of manpower support, feel isolated and helpless. (3) Disapproving eyes: invasion of privacy, fear of being labelled. (4) Impact on life: feelings of life-threatening, prophylaxis of physical discomfort, impact on professional ambitions. (5) Self-adjustment: efforts to recover from the event.

**Conclusions** A needlestick injury not only causes risk of infection, but has great psychosocial impact to the victims. Intervention should cover psychosocial support to the health care workers in addition to prophylaxis of infection.

**Objectives** Exposure to noise has been associated with cardiovascular disease, but the mechanism related to cardiac activity is unknown. This repeated-measure study aimed to investigate effects of occupational noise exposure on 24-hour ambulatory cardiac parameters among aviation industry workers.

**Method** We recruited 75 volunteers in an aircraft-manufacturing industrial cohort in 2009. Individual noise exposure and personal cardiac parameters, including left ventricular contractility (LVC) and stroke volume (SV), were measured simultaneously over 24 h on working and non-working days. Linear mixed-effects regressions were used to determine transient and sustained effects on ambulatory LVC and SV among high-exposure (≥ 80 A-weighted decibel [dBA]), low-exposure (< 80 dBA) and office workers by controlling for potential confounders.

**Results** Per 1-dBA increase was significantly associated with the transient effects of -1.30 (95% confidence interval [CI]: -2.166, -1.024) ml/beat in SV and -1.75 (-2.95, -1.03) L/sec in LVC at work on working day only among high-exposure workers. Such decreasing effects on SV (-1.18 [-2.86, -1.09] ml/beat) and LVC (-2.22, [-4.43, -1.11] L/sec) still persisted in the 30-min time-lagged occupational noise exposure. We also found that 1-dBA increment in 24-hour average noise exposure was significantly associated with a sustained decrease of -1.19 (-1.25, -1.13) ml/beat in SV on working day among high-exposure workers. No significant effects were found among other groups on working day and among all groups on non-working day.

**Conclusions** Occupational noise exposure may have acute effects on 24-hour ambulatory cardiac parameters among workers. Such effects may be associated with the development of cardiovascular disease.

**Objectives** Using TCA in urine is suitably used as a biological indicator of exposure to TCE in underground water.

**Methods** We collected 50 urine samples from workers who were occupationally exposed to TCE in underground water. Consumption of underground water was positively correlated with urinary MDA levels. However, TCA levels were dose-dependent negatively with MDA levels (r = -0.193). Urinary TCA levels classified into three groups was dose-dependent positively associated with urinary TCA levels (r = 0.554). Urinary TCA levels related with urinary MDA levels. The correlation coefficient was 0.693. Urinary TCA levels were dose-dependent positively with MDA levels which explained by that many factors of life-style may affect to urinary MDA levels.

**Results** Consumption of underground water was positively correlated with urinary TCA levels (r = 0.534). Urinary TCA levels was positively associated with NAG levels (r = 0.180), but it negatively associated with MDA levels (r = -0.193). Urinary TCA levels classified into three groups was dose-dependent positively with NAG levels, indicating exposure to TCE in underground water is results in the abnormal renal function. However, TCA levels were dose-dependent negatively with MDA levels which explained by that many factors of life-style may affect to urinary MDA levels.

**Conclusions** Using TCA in urine is suitably used as a biological indicator of exposure to TCE in underground water, we found a dose-dependent positively with NAG levels.