Objectives To evaluate the mortality experience among all workers (n = 3199) employed at a phosphate fertiliser plant in central Florida beginning 1953 and followed through 2005.

Method All-cause, all-cancers, and cause-specific standardised mortality ratios (SMRs) were calculated with the U.S. population as referent. Lung cancer and leukaemia risks were further evaluated using conditional logistic regression. Employment duration was used as an exposure surrogate for dose-response analyses.

Results The mortality due to all causes combined (SMR=1.07, 95% confidence interval (CI)=1.01–1.13, observed deaths n = 1124), lung cancer (SMR=1.25, 95% CI=1.04–1.49, n = 122), leukaemia (SMR=1.76, 95% CI=1.02–2.81, n = 17), and chronic obstructive pulmonary disease (SMR=1.45, 95% CI=1.09–1.89, n = 54) were significantly elevated. All-cancer mortality was elevated (SMR=1.09, 95% CI=0.97–1.22, n = 303) but not statistically significant for the cohort. Dose-response modelling with adjustments for gender and race did not show statistically significant associations between employment duration (in years) and lung cancer (Odds Ratio (OR) =0.99, 95% CI=0.97–1.02) or leukaemia (OR=1.01, 95% CI=0.96–1.06) mortality.

Conclusions Findings are suggestive of increased lung cancer and leukaemia mortality from exposures encountered in the phosphate fertiliser industry. Increased employment duration, however, did not have significant associations with increased lung cancer or leukaemia mortality.

Objectives To investigate and manage subway drivers’ mental health, we conducted a temporary mental health checkup on the subway drivers of one transportation company, and analysed the relationship between the suicide ideation and occupational stress factors.

Method The subway drivers (n = 995) were asked to fill out a questionnaire and individual interviews were conducted afterwards. Interviews were performed using Korean Composite International Diagnostic Interview (K-CIDI). Participants were classified into two groups; suicide ideation group (SIG) and non suicide ideation group (NSIG). Socio-demographic factors, health information, occupational characteristics, Korean Occupational Stress Scale (KOSS), Davidson Trauma Scale (DTS) and Centre for Epidemiological Studies-Depression Scale (CES-D) were included in the questionnaire. Relationship between occupational stress and the suicide ideation within a year were analysed using multiple logistic regression.

Results Logistic regression model after adjusting the age showed that domains of Job demand, Insufficient job control, Interpersonal conflict, Lack of reward, Occupational climate had significant relationship with suicidal ideation. Another model that adjusted factors that was significant in descriptive statistics revealed that domains of Insufficient job control (OR=2.223), Interpersonal conflict (OR=2.478), Lack of reward (OR=2.701) had significant relationship with suicidal ideation.

Conclusions Three occupational stress domains of KOSS had statistically significant relationship with the suicidal ideation within a year after adjusting occupational factors that was related to it. To prevent subway drivers’ suicide ideation, stress management program should be applied to this group.