Background  Road traffic injury (RTI) is the leading cause of death and disability in the world. Drink-driving is one of risk factor of fatal injury related traffic road in the world and in Viet Nam.

Objectives and Methods  Determine blood alcohol concentration (BAC) of RTI patients in 2 phases in 5 hospitals. Phase 1 (5 months) with 1453 patients, phase 2 (6 months) with 2640 patients was conducted pre and post-intervention of IEC campaign on drinking-driving. RTI patients was taken blood for BAC testing.

Results  RTI patients in phase 2 with high BAC in tendency decrease, BAC<50 mg/dl in phase 1 with rate of 16.5% to 33.8% in phase 2, and BAC≥50 mg/dl in phase 1 of 83.5% to 66.2% in phase 2. Rate of motorbike drivers with BAC≥50 mg/dl pre-intervention lower 7.2% than post-intervention. Rate of motorbike drivers with BAC≥50 mg/dl had RTIs from 16:30–19:30 lower 9.1% than pre-intervention. Rate of 20–29 of age drink-driving exceeded the limit of legal and with BAC≥50 mg/dl had RTIs from 19:30 were not decreased.

Significance  It is vital to continue strengthening interventions; developing regulations of using and selling alcohol, focusing on age of 20–29; monitoring and checking random alcohol on the highways, from 19:00; conducting researches on RTIs and drinking for recommendations.