

Abstract

Air Quality in urban area is generally poor at especially at traffic intersection roadsides due to continuous vehicular emissions comprising of heavy metals, benzene, diesel soot, poly aromatic hydrocarbon etc. traffic police are identified to be at a high risk of exposure to air pollution and its contaminants such as Zn, Pb, Cd, Cr, Ni, Fe, Mn, Cu, Au, and Ag). This study was aimed to investigate the impact of heavy metal and trace element on health of traffic wardens working in an urban area with high traffic density.

A cross sectional survey of traffic wardens working within Lahore city of Pakistan, a high traffic density area was conducted. Toxic heavy metals were measured using wet-acid digestion method and Flame Atomic Absorption Spectrophotometer (FAAS). An interviewer administered questionnaire was used for target history and examination. The results of this study showed a significant higher amount of Zn and iron calculated from sample of blood, hair, of traffic as compared to Recommended Dietary Allowance (RDA) and World Health Organization. (WHO). This study can be used as a foundation and reference for future studies. This investigation revealed that biological samples serve as good tools to bio-monitor the environmental pollution in urban areas.