

ABSTRACT

CORRELATION BETWEEN MOTOR VEHICLE'S SMOKE EXPOSURE AND LEVELS OF LEAD IN BLOOD ON TRAFFIC POLICE IN BANDAR LAMPUNG POLICE

by
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Today, many sources that contribute to the problem of air pollution in cities around the world. Heavy traffic, poor engine maintenance vehicles, and the use of gasoline containing high levels of lead, also contribute to the air pollution problem. One of the pollutants, especially in motor vehicle exhaust gases are lead (Pb). Lead is a heavy metal particles that have chronic effects for human health. This study aimed to determine the relationship of motor vehicles's smoke exposure and levels of lead in the traffic police blood in Bandar Lampung.

In this study used an observational study design with cross sectional method with a sample of 54 people and took place in October-December 2014. The study begins with the observation, then filling out the questionnaire and blood sampling for lead content inspection. Results were analyzed using the Spearman test. In the Spearman test found positive relationship between the length of work with blood lead level ($r = 0.404$; $p < 0.05$) and years of service with blood lead level ($r = 0.355$; $p < 0.05$).

It can be concluded length of work and years of service have significant positive correlation with blood lead levels in the traffic police in Bandar Lampung Police.

Keywords: *air pollution, pb, lead, traffic police.*