The Effect of Road Traffic Noise on Psychological Health Disorders of School Children at Cipinang Muara Elementary School, Jatinegara Sub District, East Jakarta City, DKI Jakarta Province, 2005. The traffic noise is the main issue of the community who live in urban area because it may cause an adverse human health and psychological effects. The purpose of this study is to describe the effect of road traffic noise to psychological health disorders on school children of Cipinang Muara elementary school at Jatinegara Sub District, and other risk factors such as distance, length of exposure, learning period in school, and age. This research applied a case-control study with sample population of elementary school students from grade 4 to 6. Total samples were 240 children, including 80 cases and 160 controls. Data were collected through a multistage of random sampling. Data analysis used a computer program of univariate, bivariate and multivariate. Road traffic noise data measure in the classroom using noise logging dosimeter Q-400/500. Bivariate analysis (Chis-Square) and multiple logistic regression analysis are applied in the analysis. Bivariate analysis showed that there were a significantly effect of traffic noise, distance of seat, and length of exposure towards psychological health problems. On the other side, the length of school period and age of respondents did not have any significantly effect to the psychological health problems on the elementary school students. Multivariate analysis indicated that the elementary school students exposed to traffic noise more than 61.8 dBLAeq in the school area having a risk of psychological health problem 10.9 higher than those who were exposed to traffic noise less than 61.8 dBLAeq, along with the distance variable and the length of noise exposure. It is required to socialize and apply the regulation on noise control and its impact in a consistently manner. Also, it is necessary to conduct health promotion and integrated monitoring both with inter-sector and inter-program. At last, to ensure the presence of inferential causal temporality, it is required to conduct further study with design of cohort or experimental study. This includes the increase of variable number and location of study in order to describe the real condition.

**Keywords:** The road traffic noise, elementary school children, psychological health disorders, distance of seat, the length of exposure, and multiple logistic regression analysis