The objective of this research was to analyze risk factors of dehydration among adolescents and adults. The research was carried out through analyzing data set of THIRST (The Indonesian Regional Hydration Study) collected in 2008 and 2009 by applying a cross-sectional study design among 604 adolescents (male and female aged 15-18 yrs) and 582 adults (male and female aged 25-55 yrs) in North Jakarta, Lembang, Surabaya, Malang, Makasar and Malino. Data processing and analysis were conducted in Bogor in April-June 2011. The results show that the mean fluid intake among all subjects is $2750 \pm 753$ mL/d, and among adolescents and adults is $2773 \pm 439$ mL/d and $2730 \pm 456$ mL/d respectively. Based on the urine specific gravity, 46.3% of the subject categorized as dehydration, and among adolescents and adults is 44.5% and 48.1% respectively. The results of logistic regression analysis showed that the dehydration risk factors in adolescents are ecological areas, gender, body temperature, hydration knowledge, and fluid intake. Dehydration risk factors in adults are ecological areas and body temperature. Dehydration risk factors in all subjects are ecological areas, body temperature, hydration knowledge, and fluid intake.

Keywords: dehydration, risk factors, fluid intake, ecology.