

## ABSTRACT

Impaired lung function is one of the common health problems experienced by workers, especially workers who are exposed to hazardous vapors or dust from the workplace. Various individual factors may influence the occurrence of Impaired lung function. This study was conducted to determine what individual factors associated with impaired lung function.

The Study was conducted with cross-sectional design using a quantitative approach. To determine whether there was interference lung function with a spirometer examination. Interviews were conducted on 24 workers from hot dip galvanizing department PT. Timur Megah Steel. Subjects were the total population. Interviews were conducted to obtain in-depth information about the variables studied. The independent variables were age, years of work, smoking habits, the habit of wearing respiratory protective equipment, exercise habits, and medical history.

Worker that impaired lung function as much as 29.8%. Contingency coefficient test to assess the relationship indicates that there is relationship ( $p < 0.05$ ) between the variables years of work and exercise habits variables with the occurrence of impaired lung function. The years of work variable have moderate relationship ( $c = 0.581$ ), whereas the exercise habits variable also have moderate relationship ( $c = 0.463$ ).

The conclusion that can be drawn is that workers have a longer years of work have higher risk for impaired lung function. Workers who have bad exercise habits also have a higher risk of impaired lung function. This company suggested to rotate the workers who have been working for years, and arrange an exercise activities periodically to diminish the risk of impaired lung function.

**Keywords :** impaired lung function, spirometer, risk factors, hot dip galvanizing.