

**DETECTION OF *Legionella pneumophila* IN THE WATER FROM SWIMMING POOLS IN THE CITY OF SURABAYA BY Nested Polymerase Chain Reaction (PCR) METHOD**

Ana Adelina Farahdiba

**ABSTRACT**

*Legionella pneumophila* is a Gram-negative bacillus that causes nosocomial and community-acquired pneumonia. The main aim of this research was to detect the presence of bacteria of *Legionella pneumophila* species in the water from swimming pools in the city of Surabaya by using Nested Polymerase Chain Reaction (PCR) assay, *mip* is a specific gene for *Legionella pneumophila*. This study used Purposive Sampling method. Ten samples taken from five swimming pools which were taken about 200 ml from the pools and showers of each swimming pools. The results of 10 samples tested by PCR assay, 1 was positive for *Legionella pneumophila*, and 9 showed negative results. *Legionella pneumophila* were found in pool water samples with a higher temperature (>30°C). This study will increase the awareness of physicians and microbiologists spreading of *Legionella pneumophila* and this will be useful for control of Legionellosis agents.

**Key words** : *Legionella pneumophila*, swimming pools, *mip* gene, PCR.