

**DETECTION OF COLIFORM BACTERIA AND ESCHERICHIA COLI IN  
REFILLED DRINKING WATER SOLD AROUND THE MINISTRY OF  
HEALTH POLYTECHNIC OF MALANG CAMPUS USING THE  
MEMBRANE FILTER METHOD**

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**ABSTRACT**

*Refill drinking water, based on the Minister of Health Regulation Number 2 of 2023, must be free from physical, chemical, and microbial contamination. However, not all refill water depots guarantee quality because many refill water depots have not implemented depot hygiene and sanitation. Therefore, research is needed to detect Coliform and Escherichia Coli bacteria in refill drinking water. The purpose of this study was to determine the presence of Coliform and Escherichia Coli bacteria in refill drinking water sold on campuses around the Ministry of Health Polytechnic. The method used was a membrane filter using Compact Dry EC media. The results of the colony count test at depot A replication 1 were 4 CFU/100ml of Coliform bacteria and 3 CFU/100ml of Escherichia Coli bacteria, at depot A replication 2 were 3 CFU/100ml of Coliform bacteria and 1 CFU/100ml of Escherichia Coli bacteria. At Depot B, replicate 1, the results were 10 CFU/100 ml of coliform and 85 CFU/100 ml of Escherichia coli bacteria. At Depot B, replicate 2, the results were 7 CFU/100 ml of coliform and 65 CFU/100 ml of Escherichia coli bacteria. Based on these results, the refilled drinking water sold from the two depots all contained coliform and Escherichia coli bacteria and was declared non-compliant.*

**Keywords:** *Refill Drinking Water, Coliform and Escherichia Coli Bacteria, Membrane Filter Method, Compact Dry EC.*