

**UJI BAKTERIOLOGIS PADA DEPOT AIR MINUM ISI ULANG DI  
KELURAHAN BANDAR BUAT**



**FAKULTAS KEDOKTERAN  
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## **ABSTRACT**

### **BACTERIOLOGICAL TEST IN REFFIL DRINKING WATER COUNTER IN BANDAR BUAT VILLAGE**

**By**  
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#### **ABSTRACT**

*Drinking water is basically a water that is used for human consumption. Some criteria that must be fulfilled by drinking water to meets health standards are : the inexistence of pathogenic bacteria, chemical containment that could alter the body function and economical disadvantageous. Therefore, the health standards achieved by drinking water product are essential in determining the health quality of a community. Considering water is one of the media which allows the spread of infectious diseases, especially gastrointestinal infections. One of the popular drinking water products in Padang city is issued by DAMIU and mostly consumed by people in households or students that needs a guarantee in hygiene and sanitation. This condition triggered the implementation of the Coliform test because the consumer background was dominated by students especially for DAMIU in Bandar Buat Village. The purpose of this study was to determine bacteriological DAMIU quality in the aforementioned village based on the MPN index.*

*This study is descriptive with experimental treatment to a drinking water product in Bandar Buat Village. Drinking water samples used in this study were taken from 14 DAMIU which were carried out directly with sterile bottles. After testing was conducted in the laboratory, the data analysis is performed using MPN table 5-I-1.*

*The results of this study showed that 11 samples out of 14 were contaminated by Colifom bacteria with the highest MPN index of 240. On the other hand, 5 samples out of 14 were also contaminated with Eschericia coli bacteria. Additionally, 6 samples out of 14 were contaminated with Klebsiella sp.*

*Keywords:* Drinking water, Eschericia coli, MPN

## **UJI BAKTERIOLOGIS PADA AIR MINUM ISI ULANG DI KELURAHAN BANDAR BUAT**

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### **ABSTRAK**

Air minum adalah air yang digunakan untuk konsumsi manusia. Air tidak boleh mengandung kuman patogen, mengandung zat kimia yang dapat mengubah fungsi tubuh, dan merugikan secara ekonomis. Kualitas air dapat dikatakan sangat menentukan kesehatan masyarakat, karena air merupakan salah satu media penyebaran penyakit menular, terutama infeksi saluran pencernaan. Konsumen DAMIU di kota Padang berasal dari masyarakat kalangan rumah tangga dan mahasiswa, sehingga dibutuhkan higienisasi dan sanitasi yang terjamin khususnya DAMIU di kelurahan Bandar Buat. Peneliti tertarik untuk melakukan pemeriksaan uji *Coliform* dengan latar belakang konsumennya yang kebanyakan mahasiswa untuk mengetahui kualitas DAMIU secara bakteriologis. Tujuan penelitian ini untuk mengetahui kualitas bakteriologis DAMIU di kelurahan Bandar Buat berdasarkan indeks MPN.

Penelitian ini bersifat deskriptif dengan perlakuan eksperimental terhadap air minum di Kelurahan Bandar Buat Kota Padang. Sampel air minum yang digunakan dalam studi ini diambil dari 14 DAMIU yang dilakukan secara langsung dengan botol steril. Setelah dilakukan pengujian, analisis data dilakukan dengan menggunakan tabel MPN 5-1-1.

Hasil penelitian menunjukkan bahwa 11 sampel terkontaminasi oleh bakteri *Coliform* dengan nilai tertinggi indeks MPN 240 dan didapatkan 5 sampel terkontaminasi bakteri *Escherichia coli*, 6 sampel terkontaminasi bakteri *Klebsiella sp.*.

Kata kunci: Air minum, *Escherichia coli*, MPN