

**FAKTOR RISIKO KEBERADAAN BAKTERI *ESCHERICHIA COLI*
PADA AIR SUMUR GALI DI DUSUN PROKETEN KALURAHAN
TRIMURTI KECAMATAN SRANDAKAN KABUPATEN BANTUL
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Mohammad Ikmal Alif Najmi¹, Haryono², Tri Mulyaningsih³, Bambang Suwerda⁴
^{1,2,3,4} Jurusan Kesehatan Lingkungan Poltekkes Kemenkes Yogyakarta,
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman, Yogyakarta 55293
Email : aikmal109@gmail.com

INTISARI

Latar Belakang : Masyarakat Dusun Proketen menggunakan air yang bersumber dari sumur gali. Namun mayoritas sumur gali warga terletak dekat dengan sumber pencemar seperti *septic tank*, kandang ternak, serta memiliki konstruksi yang tidak sesuai standar, hal ini dapat menyebabkan kontaminasi *Escherichia coli*.

Tujuan : Mengetahui faktor risiko keberadaan bakteri *Escherichia Coli* pada air sumur gali di Dusun Proketen Kalurahan Trimurti Kecamatan Srandakan Kabupaten Bantul.

Metode : Jenis penelitian ini adalah penelitian deskriptif yang menggunakan metode sampling yaitu *simple random sampling* yang diperoleh 30 sampel sumur gali. Pemeriksaan keberadaan bakteri *Escherichia coli* dilakukan melalui uji laboratorium yang mengacu pada Permenkes No. 2 Tahun 2023. Pengukuran jarak sumur gali dengan sumber pencemar dilakukan menggunakan roll meter, sedangkan penilaian kondisi konstruksi sumur gali menggunakan lembar *checklist*.

Hasil : Dari 30 sumur gali, sebanyak 11 sumur gali (36,7%) mengandung bakteri *Escherichia coli*, 19 sumur gali (63,3%) jarak dengan *septic tank* tidak memenuhi persyaratan, dan sebanyak 21 sumur gali (70%) jarak dengan kandang ternak tidak memenuhi persyaratan. Berdasarkan kondisi konstruksi sumur gali, sebanyak 19 sumur gali dengan risiko pencemaran rendah (63,3%) dan 11 sumur gali dengan risiko pencemaran sedang (36,7%).

Kesimpulan : Sumur gali yang dekat dengan sumber pencemar berisiko tercemar bakteri *Escherichia coli*, namun konstruksi sumur yang baik dapat mencegah kontaminasi meskipun jaraknya tidak memenuhi syarat.

Kata Kunci : Air bersih, sumur gali, *Escherichia coli*

**RISK FACTORS FOR THE PRESENCE OF *ESCHERICHIA COLI*
BACTERIA IN DUG WELL WATER IN PROKETEN HAMLET,
TRIMURTI VILLAGE, SRANDAKAN SUBDISTRICT, BANTUL
REGENCY IN 2025**

Mohammad Ikmal Alif Najmi¹, Haryono², Tri Mulyaningsih³, Bambang Suwerda⁴
^{1,2,3,4} Department of Environmental Health, Poltekkes Kemenkes Yogyakarta,
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman, Yogyakarta 55293
Email : aikmal109@gmail.com

ABSTRACT

Background : The community of Proketen Hamlet uses water sourced from dug wells. However, most of the residents dug wells are located close to sources of contamination such as septic tanks and animal pens, and they often have substandard construction. This condition can lead to contamination by *Escherichia coli*.

Objective : To determine the risk factors associated with the presence of *Escherichia Coli* bacteria in dug well water in Proketen Hamlet, Trimurti Village, Srandakan Subdistrict, Bantul Regency.

Method : This research is a descriptive study using a simple random sampling method, resulting in 30 dug well samples. The presence of *Escherichia coli* bacteria was examined through laboratory testing based on Regulation of the Minister of Health No. 2 of 2023. The distance between dug wells and sources of contamination was measured using a measuring tape, while the condition of the well construction was assessed using a checklist form.

Results : Out of 30 dug wells, 11 wells (36.7%) were found to contain *Escherichia coli* bacteria. 19 dug wells (63.3%) had insufficient distance from septic tanks, and 21 dug wells (70%) were too close to animal pens. Based on the construction conditions of the wells, 19 wells (63.3%) were categorized as having a low risk of contamination, while 11 wells (36.7%) had a moderate risk of contamination.

Conclusion : Dug wells located near sources of contamination are at risk of *Escherichia coli* contamination; however, good well construction can prevent contamination even if the distance does not meet the required standards.

Keywords : Clean water, dug wells, *Escherichia coli*.