

**PROGRAM STUDI S1 ILMU KESEHATAN MASYARAKAT FAKULTAS
KESEHATAN & INFORMATIKA INSTITUT KESEHATAN PAYUNG NEGERI
PEKANBARU**

Penelitian, Juni 2026

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**Hubungan Lingkungan Kerja dan Penggunaan APD dengan Keluhan Kesehatan
pada Pekerja Bengkel Las di Kecamatan Sukajadi Kota Pekanbaru 2026**

xiii+95 halaman+12 tabel+9 lampiran

ABSTRAK

Pekerja bengkel las sektor informal berisiko mengalami keluhan kesehatan akibat kondisi lingkungan kerja fisik yang tidak memenuhi standar dan rendahnya kepatuhan penggunaan Alat Pelindung Diri (APD). Penelitian ini bertujuan mengetahui hubungan intensitas pencahayaan, intensitas kebisingan, dan penggunaan APD dengan keluhan kesehatan pada pekerja bengkel las di Kecamatan Sukajadi, Kota Pekanbaru. Penelitian kuantitatif ini menggunakan desain cross-sectional. Populasi dan sampel berjumlah 30 pekerja dari 6 bengkel las yang dipilih dengan teknik total sampling. Data dikumpulkan melalui pengukuran intensitas pencahayaan dan kebisingan, observasi penggunaan APD, serta kuesioner keluhan kesehatan. Data dianalisis secara univariat dan bivariat menggunakan uji Fisher's Exact Test. Hasil menunjukkan bahwa intensitas pencahayaan ($p=0,001$; $OR=25,667$) dan kebisingan ($p=0,001$; $OR=25,667$) berhubungan signifikan dengan keluhan kesehatan, sedangkan penggunaan APD tidak berhubungan signifikan ($p=0,492$). Temuan ini menunjukkan bahwa kondisi lingkungan kerja fisik, khususnya pencahayaan dan kebisingan, merupakan faktor penting yang perlu diperhatikan dalam upaya perlindungan kesehatan pekerja bengkel las. Oleh karena itu, perbaikan pencahayaan sesuai standar, pengendalian sumber kebisingan, serta pemantauan kondisi lingkungan kerja perlu dilakukan secara berkala. Meskipun penggunaan APD tidak menunjukkan hubungan signifikan, kepatuhan penggunaan APD tetap perlu ditingkatkan sebagai langkah pencegahan terhadap risiko bahaya kerja. Edukasi keselamatan kerja juga diperlukan untuk meningkatkan kesadaran pekerja terhadap pentingnya perlindungan diri secara konsisten.

Kata Kunci : keluhan kesehatan, pencahayaan, kebisingan, APD, bengkel las

Daftar Bacaan: 20 (2015–2025)

**UNDERGRADUATE PROGRAM IN PUBLIC HEALTH, FACULTY OF
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Research, June 2026

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**The Relationship between Work Environment and Use of Personal Protective
Equipment (PPE) with Health Complaints among Welding Workshop Workers in
Sukajadi District, Pekanbaru City 2026**

xiii+95 pages+12 tables+9 appendices

ABSTRACT

Welding shop workers in the informal sector are at risk of experiencing health complaints due to substandard physical working conditions and low compliance with the use of Personal Protective Equipment (PPE). This study aims to determine the relationship between lighting intensity, noise intensity, and PPE use with health complaints among welding shop workers in Sukajadi District, Pekanbaru City. This quantitative study employed a cross-sectional design. The population and sample consisted of 30 workers from 6 welding shops selected using total sampling. Data were collected through measurements of lighting and noise levels, observations of PPE use, and a health complaint questionnaire. Data were analyzed univariately and bivariate using Fisher's Exact Test. The results showed that lighting intensity ($p=0.001$; $OR=25.667$) and noise levels ($p=0.001$; $OR=25.667$) were significantly associated with health complaints, whereas PPE use was not significantly associated ($p=0.492$). These findings indicate that physical work environment conditions, particularly lighting and noise, are important factors that need to be addressed in efforts to protect the health of welding shop workers. Therefore, improvements to lighting in accordance with standards, control of noise sources, and regular monitoring of work environment conditions need to be carried out periodically. Although the use of PPE did not show a significant association, compliance with PPE use still needs to be improved as a preventive measure against occupational hazards. Workplace safety education is also necessary to raise workers' awareness of the importance of consistently protecting themselves.

Keywords: health complaints, lighting, noise, PPE, welding workshop

References: 20 (2015–2025)