

Occupational Health Issues Among Taxi Drivers in Baguio City

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Abstract

Taxi driving plays a crucial role in urban transportation by supporting the daily mobility needs of residents and visitors. However, this profession exposes drivers to a range of occupational health risks that can negatively affect their physical well-being and overall quality of life. This study investigates the occupational health issues faced by taxi drivers in Baguio City, focusing on identifying common health concerns and evaluating their awareness and adoption of preventive measures. Using a descriptive quantitative research design, data were collected through surveys administered to a sample of active taxi drivers in the city. The results show that most drivers are middle-aged, with varying levels of driving experience and monthly income. The most common health issues reported were musculoskeletal pain, respiratory conditions, and cardiovascular concerns. Despite limited formal health training, most drivers expressed awareness of the importance of preventive practices. Based on the findings, it is recommended to implement health education campaigns, regular medical check-ups, ergonomic training, and collaborative intervention programs involving local authorities and health professionals to address and reduce occupational health risks among taxi drivers.

Keywords: Taxi Drivers, Occupational Health Issues, Preventive Measures

Introduction

Taxi driving plays a vital role in maintaining urban mobility, especially in highly urbanized areas like Baguio City. As key players in the transportation system, taxi drivers navigate through traffic-congested and often hazardous environments, working long hours and dealing with physical and psychosocial demands. Globally, studies have highlighted various occupational health risks among taxi drivers—such as musculoskeletal disorders, chronic stress, fatigue, and exposure to air pollution—caused by factors like prolonged sitting, irregular schedules, and continuous interaction with passengers. In the Philippines, similar findings have emerged, particularly in Metro Manila and other urban centers, with studies revealing sleep disorders, back pain, and mental health issues among public utility drivers. However, while research on occupational health exists in the broader national context, specific data and studies focusing on taxi drivers in Baguio City are notably lacking. The city's distinct topography, traffic conditions, and environmental factors—such as steep roads, frequent rainfall, and fluctuating climate—may introduce unique occupational challenges not adequately captured in national studies.

This study is motivated by the urgent need to understand and address the occupational health issues of taxi drivers in Baguio City—a population largely underrepresented in current research. Existing government

reports and city health data lack specific focus on occupational hazards for this group, limiting the ability of policymakers to implement targeted interventions. The absence of localized data represents a critical gap in the literature, especially given the city's reliance on taxi transport. Therefore, this research seeks to identify the most common health problems experienced by taxi drivers in Baguio, examine contributing workplace factors, and capture drivers' personal perspectives regarding their well-being and working conditions. The paper is organized as follows: the next section reviews related literature to contextualize the study; this is followed by a methodology section detailing the research design; the results section presents the key findings, which are then discussed in relation to existing literature; finally, the paper concludes with recommendations for policy and future research based on the data gathered.

Literature Review

Occupational health among taxi drivers has garnered significant global attention due to the inherently demanding and sedentary nature of the profession. Several international studies have documented a consistent pattern of health problems associated with prolonged sitting, environmental exposure, and irregular working hours. For instance, Chen et al. (2023) emphasized that musculoskeletal disorders—particularly lower back and neck pain—are prevalent among Taiwanese taxi drivers, attributing these issues to extended driving periods and ergonomically unfavorable seating positions. In Sweden, Karlsson and Lundberg (2022) established a link between long hours behind the wheel and elevated stress levels, which not only impair driver health but also increase the risk of vehicular accidents. Furthermore, Dubois et al. (2024) found that chronic exposure to urban air pollution significantly contributes to respiratory and cardiovascular conditions among drivers in metropolitan France. These studies collectively portray taxi driving as a high-risk occupation requiring focused health monitoring and intervention.

Within the Philippines, a growing number of researchers have explored similar occupational challenges in the transport sector, offering insights that parallel international findings while reflecting unique local contexts. Reyes and Cruz (2023) highlighted the impact of irregular schedules on sleep quality and work-related stress among Metro Manila taxi drivers, identifying sleep deprivation as a critical health issue. Santos et al. (2024) studied musculoskeletal complaints among urban public utility drivers, revealing that prolonged static postures result in chronic pain, especially in the lower back and shoulders. Bautista and Lim (2021) also explored the psychosocial stress experienced by ride-hailing service drivers, noting that frequent interactions with demanding passengers and inconsistent income create psychological burdens similar to those faced by traditional taxi drivers. While these studies provide foundational understanding, they are centered on densely populated metropolitan areas, potentially overlooking geographic and occupational differences present in smaller, yet equally urbanized cities.

Despite Baguio City being a significant hub of urban transport in Northern Luzon, the literature reveals a critical research void regarding the health of its taxi drivers. Unlike Metro Manila, Baguio's unique topography—including steep inclines, narrow roads, and cooler climate—introduces distinct occupational hazards. However, local data between 2021 and 2025 remains fragmented and general. Reports from the Baguio City Health Office (2024) and the Baguio City Police Office (2023) include broad health and accident statistics, but they lack occupation-specific insights. Similarly, while environmental reports (DENR, 2022) and city ordinances (Baguio City Government, 2021) discuss factors like pollution levels and transport regulation, they fall short in addressing the occupational well-being of taxi drivers. This absence of localized, profession-specific data presents a significant limitation in the broader occupational

health literature in the Philippines. It is within this gap that the present study is situated, aiming to provide a focused analysis of the occupational health risks faced by taxi drivers operating within Baguio City.

Methodology

This study utilized a descriptive-comparative quantitative research design to assess the occupational health issues among taxi drivers in Baguio City, as this approach allows for objective measurement and comparison of health conditions across different driver demographics. The study was conducted in various parts of Baguio City, selected for its unique urban layout, challenging road conditions, and high demand for taxi services, which together create a distinct occupational environment. The participants included 200 taxi drivers selected through simple random sampling from five taxi organizations—MAMASITA, POLARIS, ERMADRADA, TWIN STAR, and Independent Operators—using Slovin's formula to ensure an adequate and representative sample. Data were collected through a structured questionnaire adapted from Murray et al. (2017) and Bayanes et al. (2016), covering respondent profiles, reported occupational health issues (musculoskeletal, respiratory, cardiovascular, and genitourinary), and preventive measures practiced. The instrument was validated and tested for reliability, yielding a coefficient of 0.97, indicating very high reliability. The researcher secured approval from the Head of the Health Services Office and obtained informed consent from all participants, ensuring voluntary participation and the right to withdraw at any time. Data collection took place in high-traffic taxi areas, with questionnaires administered personally by the researcher, who ensured participants' understanding and provided necessary support. Ethical considerations, including confidentiality, anonymity, and adherence to institutional research ethics protocols, were strictly observed. The methodology was chosen for its ability to generate reliable, quantifiable insights and ensure the ethical and respectful treatment of participants throughout the research process.

RESULTS AND DISCUSSIONS

Profile of the Respondents

As shown in Table 1, the demographic and occupational profile of the 200 taxi driver respondents reflects a predominantly middle-aged workforce. The largest age group was 31–40 years old (32%), followed by 41–50 (26%) and 18–30 (23.5%), with only 18.5% aged 51 and above. In terms of driving experience, 30% had been in the profession for 7–10 years, 28.5% for 1–3 years, 27% for over 11 years, and 14.5% for 4–6 years, indicating a mix of veteran and newer drivers. Educational attainment varied, with most having completed high school (39.5%), followed by those with college-level education (24.5%), vocational training (23%), and elementary-level education (13%).

Table 1 also reveals significant variation in income and working hours. A third of the drivers earned PHP 10,001–15,000 monthly (33%), while 21.5% earned PHP 5,001–10,000, and 19.5% earned PHP 15,001–20,000. However, 13.5% earned less than PHP 5,000, and 12.5% earned PHP 20,000 or more, reflecting considerable income disparity. Regarding working hours, 40% reported driving 8–12 hours daily, and a concerning 31.5% worked 22–24 hours. Only 4% worked less than 8 hours a day. These figures highlight the physically demanding nature of the job and the potential occupational health risks faced by taxi drivers in Baguio City.

Table 1. Profile of the Respondents

Profile	f	%
Age		
18–30	47	23.50%
31–40	64	32.00%
41–50	52	26.00%
51 and above	37	18.50%
Years as Taxi Driver		
1–3 years	57	28.50%
4–6 years	29	14.50%
7–10 years	60	30.00%
11 years or more	54	27.00%
Monthly Income (PHP)		
Below 5,000	27	13.50%
5,001–10,000	43	21.50%
10,001–15,000	66	33.00%
15,001–20,000	39	19.50%
20,000 and above	25	12.50%
Educational Attainment		
Elementary Level	26	13.00%
High School Level	79	39.50%
Vocational	46	23.00%
College Level	49	24.50%
Number of Hours Driving/Day		
Less than 8 hours	8	4.00%
8–12 hours	80	40.00%
13–16 hours	37	18.50%
17–21 hours	12	6.00%
22–24 hours	63	31.50%
Total	200	100%

Level of Occupational Health Issues Among Taxi Driver in Terms of Musculoskeletal

Table 2 presents the level of musculoskeletal health issues among taxi drivers in Baguio City, showing a moderate prevalence of discomfort with an overall mean of 2.26, indicating that symptoms occur “Sometimes.” The most commonly reported issues were back pain (2.62), hip pain (2.52), and irregular sleep patterns (2.56), all occurring “Often.” These findings align with Al-Mousa et al. (2023), who emphasized the effects of prolonged sitting and poor posture on musculoskeletal health, and with Lee et al. (2021), who linked irregular sleep patterns among drivers to extended working hours and occupational stress.

In contrast, the least reported concerns—knee stiffness (1.97), back stiffness (1.99), and numbness or tingling in the extremities (2.07)—were still present but occurred less frequently. These issues, though categorized as “Sometimes,” reflect cumulative physical strain, consistent with findings by Hossain et al.

(2021) on the effects of prolonged driving. As shown in Table 2, these patterns highlight the need for ergonomic interventions and health monitoring to address musculoskeletal discomfort and promote the well-being of taxi drivers in the city.

Table 2. Level of Occupational Health Issues Among Taxi Drivers in Terms of Musculoskeletal

A. Musculoskeletal System	Mean	Descriptive Equivalent (DE)
1. Pain in my:		
a. Back	2.62	Often
b. Neck	2.20	Sometimes
c. Shoulder	2.37	Sometimes
d. Arm	2.33	Sometimes
e. Hand and wrist	2.22	Sometimes
f. Hip	2.52	Often
g. Leg	2.45	Sometimes
h. Knee	2.28	Sometimes
i. Foot	2.26	Sometimes
2. Developed numbness or tingling sensations in my extremities (arms and legs)	2.07	Sometimes
3. Stiffness in my:	1.99	Sometimes
a. Back		
b. Neck	2.06	Sometimes
c. Shoulder	2.01	Sometimes
d. Knees	1.97	Sometimes
4. Trouble sleeping due to discomfort in my muscles caused by work. This includes:	2.04	Sometimes
a. Inability to fall asleep		
b. Not feeling rested after sleep	2.46	Sometimes
c. Irregular sleep patterns	2.56	Often
Average Mean	2.26	Sometimes

Level of Occupational Health Issues Among Taxi Driver in Terms of Respiratory

Table 3 presents the level of respiratory health issues experienced by taxi drivers in Baguio City, revealing an overall average mean of 1.89, interpreted as “Sometimes.” This suggests that respiratory symptoms are not constant but occur with moderate frequency, indicating a persistent exposure to urban pollutants. Notably, all items fall within the “Sometimes” category, except for chest tightness, which had the lowest mean. The findings imply that taxi drivers regularly encounter respiratory discomfort due to prolonged exposure to vehicle emissions and roadside air pollutants. This supports previous research by Kim et al. (2022) and Lee & Park (2023), which linked long-term exposure to urban air pollution with increased respiratory symptoms among professional drivers.

Among the most commonly reported symptoms were coughing or wheezing episodes and nasal congestion (both 2.01), followed by runny nose symptoms (1.97). These issues are often associated with airway

inflammation and irritation caused by particulate matter, as highlighted by Chen et al. (2021). Nasal symptoms, in particular, are typical responses to airborne irritants such as dust and exhaust fumes, as supported by Garcia & Rodriguez (2023). On the other hand, the least reported symptoms were chest tightness (1.68), shortness of breath (1.81), and throat irritation (1.85). While these symptoms occur less frequently, their presence still points to significant occupational health risks. According to Patel et al. (2021), chest tightness is often indicative of more severe respiratory strain, whereas throat irritation, as noted by Wilson & Brown (2022), may be a milder but still meaningful reaction to polluted air. As shown in Table 3, these findings emphasize the ongoing need to mitigate environmental exposure and implement health protection strategies for taxi drivers regularly operating in urban traffic.

Table 3. Level of Occupational Health Issues Among Taxi Driver in Terms of Respiratory A. Respiratory System

		Mean	DE
1	I experience shortness of breath or difficulty breathing.	1.81	Sometimes
2	I encounter coughing or wheezing episodes.	2.01	Sometimes
3	I experience nasal congestion.	2.01	Sometimes
4	I suffer from throat irritation or a sore throat.	1.85	Sometimes
5	I experience sneezing frequently.	1.95	Sometimes
6	I experience runny nose symptoms.	1.97	Sometimes
7	I encounter chest tightness.	1.68	Never
	Average Mean	1.89	Sometimes

Level of Occupational Health Issues Among Taxi Driver in Terms of Cardiovascular

Table 4 outlines the level of cardiovascular health issues among taxi drivers in Baguio City, showing an overall average mean of 1.86, which falls under the “Sometimes” category. This indicates a recurring but moderate level of cardiovascular discomfort among the respondents, reflecting the physical and mental strain associated with prolonged driving. Most of the items received a “Sometimes” rating, except for chest pain and swelling (edema), which were marked as “Never.” These patterns are consistent with findings by Martinez et al. (2022), who noted that sedentary work, combined with stress and irregular routines, contributes significantly to cardiovascular strain in professional drivers. Nguyen & Tran (2023) further emphasized that extended work hours, heavy traffic exposure, and job-related stressors increase cardiovascular risk factors.

The most commonly reported symptoms were fatigue or “getting tired easily” (2.12), dizziness or lightheadedness (1.98), and palpitations (1.88). These symptoms may point to elevated stress levels, insufficient rest, or poor circulation—all of which are common in the nature of driving occupations. Silva et al. (2021) noted that fatigue is particularly widespread among drivers due to long hours, poor sleep, and repetitive physical posture. Dizziness and palpitations, as reported by Kumar & Sharma (2023) and Rodriguez & Perez (2022), respectively, are often linked to hypertension and stress-induced hormonal responses. Meanwhile, the least reported issues were swelling in the feet (1.65), chest pain (1.69), and high blood pressure (1.86). Though less frequently experienced, these symptoms still warrant attention. Edema, as per Gupta & Desai (2021), may arise from prolonged immobility, though it appears less common in this group. The relatively low reporting of chest pain may suggest underreporting or delayed recognition of serious symptoms, as highlighted by Chen & Liu (2022). As shown in Table 4, these

findings underscore the need for cardiovascular health monitoring and preventive measures tailored to the specific occupational demands of taxi drivers.

Table 4. Level of Occupational Health Issues Among Taxi Driver in Terms of Cardiovascular

A. Cardiovascular System

		Mean	DE
1	I experience dizziness or lightheadedness.	1.98	Sometimes
2	I had developed high blood pressure.	1.86	Sometimes
3	I experienced palpitation.	1.88	Sometimes
4	I am experiencing chest pain.	1.69	Never
5	I noticed swelling or edema in my feet.	1.65	Never
6	I find myself getting tired easily.	2.12	Sometimes
	Average Mean	1.86	Sometimes

Level of Occupational Health Issues Among Taxi Driver in Terms of Genitourinary

Table 5 presents the level of occupational genitourinary health issues among taxi drivers in Baguio City, with an average weighted mean of 1.64, interpreted as “Never.” This suggests that, overall, genitourinary problems are not commonly experienced by the respondents. However, it is important to consider the possibility of underreporting due to the sensitive and personal nature of these issues. Despite the low overall mean, one particular symptom—urinary urgency or frequency—received a “Sometimes” rating (mean = 2.11), indicating that it is a relatively common concern among drivers. This may be attributed to long hours on the road, limited restroom access, and irregular hydration, as supported by Kim & Lee (2022), who found similar patterns among professional drivers.

Conversely, the least reported symptoms include genital itching or irritation (1.43), presence of blood in urine (1.47), and pain or burning during urination (1.54), all falling under the “Never” category. These findings suggest that more severe or alarming symptoms are rare among the participants, which may point to a generally low occurrence of acute genitourinary conditions. Nonetheless, research by Ito & Tanaka (2023) emphasizes that prolonged sitting and inadequate fluid intake—common in the taxi driving profession—can still contribute to chronic or subclinical issues over time. Therefore, while Table 5 indicates a low prevalence of genitourinary complaints, ongoing monitoring and health promotion related to hydration and urinary health should still be encouraged.

Table 5. Level of Occupational Health Issues Among Taxi Driver in Terms of Genitourinary

A. Genitourinary System

		Mean	DE
1a	Pain in the Pelvic	1.74	Never
1b	Pain in the Genital area	1.58	Never
2	Urinary urgency or frequency.	2.11	Sometimes
3	Encountering pain like burning and stinging sensation or discomfort during urination.	1.54	Never
4	I notice the presence of blood in my urine.	1.47	Never
5	Genital itching or irritation.	1.43	Never

6	Difficulty controlling my bladder.	1.63	Never
7	Encountering urinary retention or difficulty in fully emptying my bladder.	1.66	Never
	Average Mean	1.64	Never

Summary Table on the Level of Occupational Health Issues of Taxi Drivers

Table 6 presents a summary of the occupational health issues experienced by taxi drivers in Baguio City across four key areas: musculoskeletal, respiratory, cardiovascular, and genitourinary. The overall average mean of 1.91, interpreted as “Sometimes,” indicates a moderate but recurring presence of health issues related to their work. This general pattern suggests that while the drivers are not constantly affected by health problems, they do experience them frequently enough to warrant concern. The findings align with existing literature, reinforcing the idea that taxi driving, due to its sedentary nature, extended work hours, and environmental exposures, poses notable occupational health risks.

Among the four health domains, musculoskeletal issues recorded the highest mean of 2.26, highlighting them as the most prevalent concern—largely due to prolonged sitting and poor ergonomics. This is followed by respiratory (1.89) and cardiovascular (1.86) concerns, both still within the “Sometimes” range, reflecting exposure to air pollution and work-related stress. In contrast, genitourinary issues had the lowest mean at 1.64, interpreted as “Never,” suggesting these are less frequently reported. However, as noted in studies by Adebayo et al. (2021) and Ito & Tanaka (2023), this may be influenced by the sensitive nature of the topic and potential underreporting. Overall, Table 6 underscores the need for targeted interventions to mitigate health risks and promote well-being among taxi drivers in the city.

Table 6. Summary Table on the Level of Occupational Health Issues of Taxi Drivers

Competencies	Mean	Qualitative Description
1. Musculoskeletal	2.26	Sometimes
2. Respiratory	1.89	Sometimes
3. Cardiovascular	1.86	Sometimes
4. Genitourinary	1.64	Never
Average Mean	1.91	Sometimes

F-test Results on the Significant difference between the Level of Occupational Health Issues Among Taxi Drivers and Their Profile

Table 7 displays the F-test results examining the significant differences between the level of occupational health issues and various profile characteristics of taxi drivers in Baguio City, such as age, years of service, monthly income, educational attainment, and hours spent driving. The analysis revealed no statistically significant differences ($p > 0.05$) across all demographic variables, indicating that the level of occupational health issues remains generally consistent regardless of these factors. For instance, all age groups, income brackets (except for the highest), education levels, and years of experience reported “sometimes” experiencing health issues. This suggests that the health risks encountered by taxi drivers are widespread and not limited to specific subgroups within the population.

The findings emphasize that occupational health concerns—such as musculoskeletal, respiratory, and cardiovascular issues—are common across the profession, likely due to shared working conditions including long hours, sedentary work, and environmental exposure. Research by Lee & Kim (2021) supports this, noting that certain job-related health risks can affect workers similarly, regardless of

personal demographics. However, slight variations emerged: drivers earning ₱20,000 and above and those driving 22–24 hours daily reported “never” experiencing health issues. This anomaly may be attributed to underreporting, coping mechanisms, or increased access to healthcare. As suggested by Nguyen & Tran (2022), factors such as income and work intensity may influence the perception or reporting of health concerns. These patterns highlight the need for deeper investigation into how economic and work-related pressures might shape health outcomes and self-reporting among drivers.

Table 7. F-test Results on the Significant Difference Between the Level of Occupational Health Issues and Their Profile

Profile	Mean	Qualitative Description	f-value	p-value	Remarks	Decision
Age			0.19	0.90	Not Significant	Accept Ho
18–30	1.96	Sometimes				
31–40	1.86	Sometimes				
41–50	1.94	Sometimes				
51 and above	1.92	Sometimes				
Years as taxi driver			1.14	0.34	Not Significant	Accept Ho
1–3 years	1.87	Sometimes				
4–6 years	2.05	Sometimes				
7–10 years	1.99	Sometimes				
11 years or more	1.81	Sometimes				
Monthly Income			1.98	0.10	Not Significant	Accept Ho
Below 5,000	1.90	Sometimes				
5,001–10,000	2.06	Sometimes				
10,001–15,000	1.98	Sometimes				
15,001–20,000	1.83	Sometimes				
20,000 and above	1.61	Never				
Educational Attainment			0.13	0.95	Not Significant	Accept Ho
Elementary Level	1.98	Sometimes				
High School Level	1.92	Sometimes				
Vocational	1.90	Sometimes				
College Level	1.88	Sometimes				
Number of hours driving			1.14	0.34	Not Significant	Accept Ho
Less than 8 hrs	2.34	Sometimes				
8–12 hrs	2.01	Sometimes				
13–16 hrs	1.97	Sometimes				
17–21 hrs	1.86	Sometimes				

22–24 hrs	1.71	Never				
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Level of Practice of Preventive Measures on Musculoskeletal

Table 8 presents the level of practice of preventive measures on musculoskeletal issues among taxi drivers in Baguio City, with an average weighted mean of 3.20, indicating that drivers “agree” with practicing such measures. This reflects a generally positive attitude toward musculoskeletal health and a conscious effort to reduce physical strain caused by prolonged driving. The top three practiced measures are adjusting seating position (3.53), taking short breaks to stretch (3.42), and practicing proper lifting techniques (3.28). These practices suggest that drivers are aware of the importance of maintaining proper posture, movement, and lifting habits to avoid common musculoskeletal problems. These findings are supported by studies such as those by Hernandez et al. (2022) and Kim & Park (2021), who found that ergonomic awareness among drivers can significantly reduce physical discomfort.

On the other hand, the least practiced preventive measure is the use of lumbar support (2.51), which, while still within the “agree” range, indicates a lower level of usage compared to other practices. This may be due to lack of proper lumbar devices, discomfort, or limited understanding of their benefits. Additionally, investing in supportive footwear (3.26), although moderately practiced, ranked lower than posture-related behaviors, possibly due to cost or lack of perceived urgency. As noted by Lee & Kim (2021), the effectiveness of lumbar support varies with its fit and consistent use, which could explain the lower mean. These insights suggest that while taxi drivers demonstrate a fair level of preventive practice, targeted interventions and education are needed to encourage full adoption of musculoskeletal health measures.

Table 8. Level of Practice of Preventive Measures on Musculoskeletal

A. Musculoskeletal	Mean	Qualitative Description
1. I take short breaks to stretch my legs	3.42	Strongly Agree
2. I use lumbar support to maintain proper posture	2.51	Agree
3. I practice proper lifting techniques when loading and unloading luggage or other items in my taxi	3.28	Strongly Agree
4. I adjust my seating position to maintain proper posture and reduce pressure on my spine	3.53	Strongly Agree
5. I invest in supportive footwear with cushioning and arch support to reduce foot fatigue	3.26	Strongly Agree
Average Mean	3.20	Agree

Level of Practice of Preventive Measures on Respiratory

Table 9 illustrates the extent to which taxi drivers in Baguio City practice preventive measures against respiratory issues, with an average weighted mean of 3.34, indicating a “strongly agree” response. This reflects a high level of awareness and proactive behavior in addressing respiratory health risks, likely influenced by daily exposure to air pollutants and concerns about infectious diseases. The top three practiced measures include regular vehicle interior cleaning (3.60), maintaining air filtration systems (3.54), and practicing proper hand hygiene (3.50). These findings align with studies such as Chen et al. (2022) and Kim & Lee (2023), which emphasize that consistent hygiene practices and air quality maintenance significantly reduce respiratory symptoms among professional drivers. The data suggests that

taxi drivers are actively taking steps to protect their respiratory health, showing a solid understanding of how their environment affects their well-being.

Conversely, the least practiced measures—wearing a protective face mask (3.02) and keeping windows closed in traffic (3.05)—still fall under the “agree” category but suggest room for improvement. The slightly lower adherence may be attributed to factors such as discomfort, heat, or a desire for better ventilation inside the vehicle. Studies by Lee & Park (2021) and Garcia & Rodriguez (2021) have shown that while these practices are effective, their implementation can be inconsistent due to personal or environmental challenges. Nonetheless, the fact that all preventive practices still rank within “agree” or “strongly agree” reflects a commendable level of commitment among drivers to maintaining respiratory health. Further education and support can help address the barriers to these lower-ranked practices and encourage even stronger adherence across the board.

Table 9. Level of Practice of Preventive Measures on Respiratory

A. Respiratory	Mean	Qualitative Description
1. I wear a protective face mask	3.02	Agree
2. I regularly maintain and clean the vehicle’s air filtration system to reduce air pollution inside the cab	3.54	Strongly Agree
3. I practice proper hand hygiene and use hand sanitizer regularly to reduce the risk of infectious diseases	3.50	Strongly Agree
4. I regularly clean the interior of my vehicle to minimize dust and allergen buildup	3.60	Strongly Agree
5. I keep windows closed in heavy traffic to reduce exposure to exhaust fumes	3.05	Agree
Average Mean	3.34	Strongly Agree

Level of Practice of Preventive Measures on Cardiovascular

Table 10 outlines the extent of practice of preventive measures on cardiovascular issues among taxi drivers in Baguio City, with an average weighted mean of 2.77, indicating a general “agree” response. While this shows a moderate level of awareness, it is notably lower than the means observed in respiratory and musculoskeletal health practices. This suggests that although drivers are taking steps to address cardiovascular risks, there is less consistency and engagement in these preventive behaviors. The most practiced measures include maintaining a healthy diet (3.21), practicing stress-reduction techniques (3.15), and regular blood pressure monitoring and alcohol avoidance (both at 2.54). These results align with findings from Martinez et al. (2021) and Nguyen & Tran (2022), who emphasized the role of lifestyle choices—particularly diet, stress management, and routine check-ups—in promoting cardiovascular health among drivers exposed to high job-related stress.

On the other hand, the least practiced measure is avoiding excessive caffeine intake (2.43), which falls into the “disagree” range. This suggests that drivers may rely heavily on caffeinated beverages to stay alert during long shifts, possibly underestimating its negative cardiovascular effects. As noted by Kumar & Sharma (2022), high caffeine consumption can elevate blood pressure and heart rate, contributing to long-term cardiovascular strain. While most measures fall within the “agree” range, the relatively lower means across the board indicate a need for better education and support regarding heart health. Encouraging

healthier routines, offering accessible medical check-ups, and promoting alternatives to caffeine for energy may help improve the cardiovascular well-being of taxi drivers.

Table 10. Level of Practice of Preventive Measures on Cardiovascular

A. Cardiovascular	Mean	Qualitative Description
1. I pay attention to my diet and try to maintain a healthy eating habit.	3.21	Agree
2. I avoid excessive consumption of caffeinated beverages like coffee and energy drinks	2.43	Disagree
3. I practice stress-reduction techniques such as deep breathing	3.15	Agree
4. I have my BP taken at a regular interval	2.54	Agree
5. I don't drink alcohol	2.54	Agree
Average Mean	2.77	Agree

Level of Practice of Preventive Measures on Genitourinary

Table 11 presents the extent of practice of preventive measures related to genitourinary health among taxi drivers in Baguio City, showing an average weighted mean of 3.03, which falls under “agree.” This indicates a moderate level of awareness and adherence to genitourinary health practices. The highest-rated preventive action was “drinking enough water during the day” (3.60), reflecting a strong understanding of the importance of hydration in maintaining urinary tract health. This aligns with findings by Ito & Tanaka (2023) and Kim & Lee (2022), who emphasized that proper hydration can significantly reduce the risk of genitourinary complications. Another preventive practice, “visiting the restroom promptly” (2.99), also reflects a good level of awareness, suggesting that drivers recognize the risks associated with delaying urination.

On the other hand, the least practiced preventive measure was “attending regular medical check-ups” (2.49), which falls under the “disagree” category. This suggests that while drivers may be proactive in daily habits like hydration, they are less likely to seek professional medical care or screenings. Factors such as time constraints, financial challenges, or a lack of access to health services may contribute to this trend. This is a significant concern, as early detection through regular check-ups can prevent the development of more serious genitourinary issues. As highlighted by Nguyen & Tran (2021), proactive medical care is essential in occupational health settings, especially for workers exposed to conditions that may subtly impact genitourinary function over time.

Table 11. Level of Practice of Preventive Measures on Genitourinary

A. Genitourinary	Mean	Qualitative Description
1. I make it a habit to visit the restroom as soon as possible without waiting for my bladder to be full before going.	2.99	Agree
2. I make sure to drink enough water during the day to keep myself hydrated.	3.60	Strongly Agree
3. I attend regular medical check-ups and screenings to monitor my health and address any health issues early.	2.49	Disagree

Average Mean	3.03	Agree
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Summary Table on the Preventive Measures

Table 12 provides a summary of the extent of practice of preventive measures across four key occupational health competencies among taxi drivers in Baguio City. With an overall average mean of 3.09, the findings indicate that drivers generally “agree” with practicing preventive health measures, trending positively toward “strongly agree.” This suggests that taxi drivers are making a conscious effort to maintain their health despite the demands of their work environment. The highest-rated competency is Respiratory (3.34), indicating a strong commitment to respiratory health, which is likely influenced by the direct exposure to air pollution and potential infectious diseases while driving. The Musculoskeletal (3.20) and Genitourinary (3.03) categories also fall within the “agree” range, reflecting a moderate to high level of awareness and effort toward prevention. These findings align with literature that emphasizes the value of combining preventive measures to holistically address occupational health risks.

The lowest mean was found in the Cardiovascular category (2.77), which, although still within the “agree” range, lags behind the other health areas. This suggests that while drivers may understand the importance of cardiovascular health, implementing consistent preventive measures such as healthy eating, stress reduction, and reducing caffeine intake may be more difficult due to their lifestyle or lack of access to healthier options. Research by Kumar & Sharma (2022) and Nguyen & Tran (2022) highlights these challenges and stresses the importance of education and support in helping workers make heart-healthy choices. The lower mean in this area underscores the need for targeted interventions that are realistic and tailored to the taxi drivers’ working conditions, enabling them to better manage cardiovascular risk factors.

Table 12. Summary Table on the Preventive Measures

Competencies	Mean	Qualitative Description
1. Musculoskeletal	3.20	Agree
2. Respiratory	3.34	Strongly Agree
3. Cardiovascular	2.77	Agree
4. Genitourinary	3.03	Agree
Average Mean	3.09	Strongly Agree

F-test Results on the Significant difference between the Level of Preventive Practices Among Taxi Drivers and Their Profile

Table 13 presents the F-test results on the significant difference between the level of preventive practices and the taxi drivers’ profile, including variables such as age, years of driving experience, monthly income, educational attainment, and hours spent driving per day. The statistical analysis revealed no significant differences ($p > 0.05$) across all demographic factors, with all groups consistently reporting “agree” with practicing preventive measures. Mean values for all demographics clustered closely, ranging from approximately 3.02 to 3.15, reflecting a uniform awareness and application of health-related preventive strategies. These results suggest that regardless of background, most drivers are implementing preventive practices to manage occupational health risks.

This consistency across demographic groups may point to the effectiveness of general occupational health awareness efforts or shared experiences in the taxi driving profession that prompt drivers to adopt similar preventive behaviors. Research by Okada & Sato (2023) and Hernandez et al. (2022) supports the idea

that preventive strategies such as ergonomic practices and stress management are universally beneficial and widely applicable among drivers. However, the fact that no group reported “strongly agree” indicates that while drivers are aware and accepting of these practices, there may still be barriers to full implementation. This highlights the need for more targeted education, support, or incentives to encourage stronger commitment to preventive health practices across the taxi driving population.

Table 13. F-test Results on the Significant Difference Between the Level of Preventive Practices and Their Profile

Profile	Mean	Qualitative Description	f-value	p-value	Remarks	Decision
Age			1.29	0.28	Not Significant	Accept Ho
18–30	3.02	Agree				
31–40	3.11	Agree				
41–50	3.07	Agree				
51 and above	3.15	Agree				
Years as taxi driver			1.12	0.34	Not Significant	Accept Ho
1–3 years	3.13	Agree				
4–6 years	3.04	Agree				
7–10 years	3.03	Agree				
11 years or more	3.11	Agree				
Monthly Income			1.63	0.17	Not Significant	Accept Ho
Below 5,000	2.98	Agree				
5,001–10,000	3.06	Agree				
10,001–15,000	3.08	Agree				
15,001–20,000	3.18	Agree				
20,000 and above	3.10	Agree				
Educational Attainment			0.77	0.51	Not Significant	Accept Ho
Elementary Level	3.04	Agree				
High School Level	3.06	Agree				
Vocational	3.12	Agree				
College Level	3.11	Agree				
Hours Driving			1.12	0.34	Not Significant	Accept Ho
Less than 8 hrs	2.97	Agree				
8–12 hrs	3.07	Agree				
13–16 hrs	3.11	Agree				
17–21 hrs	3.07	Agree				
22–24 hrs	3.09	Agree				

Conclusion

Based on the findings, it can be concluded that taxi drivers in Baguio City are a demographically diverse group facing significant occupational health challenges, particularly in the musculoskeletal, respiratory, and cardiovascular domains. While most health issues were rated as occurring “sometimes,” the consistent presence of discomfort suggests chronic exposure to risk factors inherent in their occupation. Despite these challenges, drivers show a commendable level of awareness and practice in adopting preventive measures, especially concerning respiratory and musculoskeletal health. Genitourinary issues were least reported, yet drivers still demonstrated strong hydration-related habits. However, preventive practices concerning cardiovascular health were notably lacking, revealing a gap in awareness or feasibility of implementing lifestyle changes. Interestingly, the uniformity of responses across demographic profiles suggests that occupational health issues and preventive practices are not isolated to specific subgroups but are experienced and addressed collectively within the industry.

In light of these conclusions, several recommendations are proposed. Health education initiatives tailored to the educational levels of taxi drivers should be developed, incorporating visual aids and practical demonstrations for better engagement. Regular, accessible health check-up programs must be established, ideally in partnership with local healthcare providers, and should include ergonomic assessments and screenings for respiratory and cardiovascular conditions. Emphasis must also be placed on improving cardiovascular health awareness, highlighting the risks of excessive caffeine and promoting stress-reduction strategies. A structured, mandatory training program covering ergonomic safety, respiratory protection, and cardiovascular health is highly recommended. Additionally, a city-wide campaign that underscores the importance of preventive practices should be launched, in collaboration with local health agencies. Lastly, the formation of a multi-sectoral task force involving government, taxi associations, and health professionals is advised to develop, implement, and evaluate comprehensive intervention programs, ensuring long-term support and improvement in drivers’ occupational health and well-being.

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