



## POLICY BRIEF

# Road Safety

Findings and policy recommendations from the second round of the Health Promotion and Literacy Longitudinal Study (HPLS)



Photo by Jilson Tiu/IDinsight

## Summary

The Health Promotion and Literacy Longitudinal Study provides regular data to track trends in health literacy and knowledge, attitudes, practices (KAP) for a nationally representative sample of Filipino adults.

IDinsight conducted two rounds of nationally-representative data collection in Phase 1 of HPLS. Round 1 was conducted in April-June 2023, while Round 2 was conducted in October-November 2023. Questions on road safety focused on attitudes and practices towards unsafe driving behaviors: drinking and driving, and distracted driving.

IDinsight found that roughly 1 in 4 Filipinos drivers have lenient attitudes towards drinking and driving and distracted driving. Further, we found that 3 in 10 drivers admitted to drinking and driving at least sometimes, and 2 in 10 reported using their phones while driving at least sometimes.

IDinsight recommends a multi-stakeholder approach to road safety, and potential collaborations with the Department of Transportation (DOTr) on road safety initiatives. We also recommend developing stronger messaging to help shift attitudes against drinking and driving and distracted driving. Further research may look into the most common behaviors behind motor vehicle-related injury in the Philippines, as well as attitudes towards unsafe driving practices.

We also note that behavioral campaigns need to be complemented by strong legislation around unsafe driving practices like drinking and driving and distracted driving. We recommend an assessment of existing legislation around these practices - both in terms of the comprehensiveness of legislation and its corresponding enforcement.



## Background and introduction

In the Philippines, deaths related to road traffic have increased by 39%, from 7,938 deaths in 2011 to 11,096 deaths in 2021, with around 1 in 3 attributed to alcohol-related crashes (WHO, 2023a). Transport accidents accounted for 1.7% of deaths in the Philippines in 2022 (PSA, 2023). At the same time, reckless driving was consistently the third most common traffic violation in 2022 and 2023 as reported by the LTO (LTO, 2023).

Although only 6% of households own 4-wheeled motor vehicles (SWS, 2023), most Filipinos are still road users of some kind – whether as passengers on public transport, cyclists sharing the road with motor vehicles, or pedestrians – making them vulnerable to harm when roads are unsafe. This is particularly relevant for urban and rapidly urbanizing areas, such as Metro Manila, where there is high population density and heavy vehicular and pedestrian traffic. A study that assessed pedestrian fatalities in road crashes in Metro Manila found that most pedestrian fatalities occur on high-speed, high-traffic-volume, multi-lane roadways, which are common throughout the urban center (Verzosa and Miles, 2016).

Reducing vehicular accidents is an important first step to ensuring that roads are safer for both motor vehicles and other road users, which supports DOH HPB's aims to reduce injury, and promote active transport among Filipinos.

In Rounds 1 and 2 of HPLS, we assess Knowledge, Attitudes, and Practices (KAP) on road safety as part of the pillar on Violence and Injury Prevention. Specifically, we focus on attitudes and practices towards drinking and driving<sup>1</sup> and distracted driving.

## Findings

**31.5% of Filipino adults who drive admitted to driving after consuming alcohol at least sometimes.**<sup>2</sup> Drinking and driving was more common among men, with 37.2% self-reporting drinking and driving compared to only 11.4% of women.

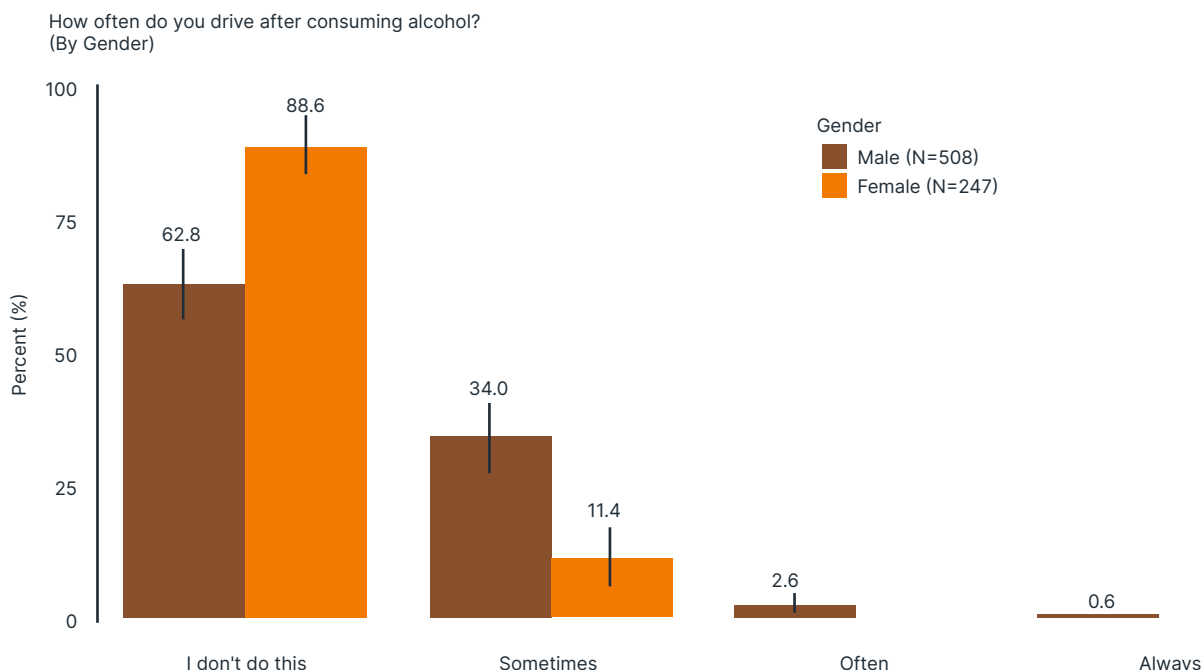
Attitudes on drunk driving may be a factor in the prevalence of this behavior; 1 in 4 respondents mentioned that they felt it was okay to drive after consuming 3 alcoholic drinks as long as they felt they were not yet drunk.

In the Philippines, a non-professional driver is considered to be driving under the influence of alcohol if their blood alcohol content (BAC) exceeds 0.05%. Research shows that it takes at least four drinks for the average 170-pound male to exceed 0.05 BAC in 2 hours (three drinks for the 137-pound female) (Fell and Voas, 2013). Professional drivers are considered to be driving under the influence if their BAC is above 0.0% (Republic Act No. 10586, 2013).<sup>3</sup>

1 Drinking and driving refers to the act of driving a vehicle after consuming any amount of alcohol

2 Round 1

3 The HPLS survey only asks about drinking alcohol after consuming 3 beers, and is unable to assess if respondents actually exceeded these recommended BAC limits.



Between the two rounds of the study, the proportion of Filipino adults that self-reported driving after consuming alcohol increased to 41.3%. This increase was statistically significant at a 5% significance level, among the balanced panel of n=521 respondents who drive.<sup>4</sup> We note that it is possible that the increase in drinking and driving is driven by seasonality (i.e. generally higher alcohol consumption closer to the holiday season) but data from future rounds of HPLS is necessary in order to confirm any trends.

Almost 1 in 5 (19.0%) of Filipino adults reported using their phones while driving at least sometimes.<sup>5</sup> Attitudes toward phone use while driving may also be a factor in this behavior. 1 in 3 (33.4% in Round 1, 22.4% in Round 2) respondents believed that it is okay to use their phone while at a red light.

### Interpretation and Recommendations

The WHO’s Global Status Report on Road Safety (2023) recommends a multi-sectoral approach to ensure the success of national road safety initiatives. In the Philippines, road safety strategy is led by the Department of Transportation (DOTr), and the Philippine Road Safety Action Plan 2023–2028 provides a roadmap to reduce road traffic deaths by 35% by 2028 (WHO, 2023a). The plan includes 5 pillars - one of which focuses on Safer Road Users, which emphasizes public awareness and support for road safety, and stricter implementation of road safety laws. This is a promising opportunity for DOH HPB to **collaborate with DOTr to craft messaging on safe road practices.**

4 Respondents who were surveyed in Round 1 but were not surveyed in Round 2 due to unavailability, refusal, or accessibility have been excluded from this analysis.  
5 Round 1

Drinking and driving is associated with increased accidents and injuries, and its prevalence is particularly risky for vulnerable road users such as pedestrians, cyclists, and motorcyclists, who have higher fatality rates in road accidents caused by drinking and driving (Lin et al, 2022). Distracted driving, on the other hand, presents a growing threat to road safety as mobile phone possession and use continues to increase. Evidence shows that mobile phone use impairs driving ability, and increases the risk of road accidents (WHO, 2015).

Given the prevalence of phone use while driving and the observed increase in drinking and driving within the year, we recommend **developing stronger messaging to help shift attitudes against drinking and driving and distracted driving.**

We also found prevalent lenient attitudes towards drunk driving and phone use while driving. HPLS touches on attitudes and practices, however it would be beneficial to do a **deep dive on unsafe driving practices** in a future round of HPLS. This can provide additional information on social norms and cultural factors related to drinking and driving, or exposure to road safety campaigns. Road safety campaigns may consider targeting men more specifically, given that men were statistically more likely to drive in general and more likely to engage in drunk driving compared to women.

We note that **there are a multitude of driving practices that can lead to accidents and injury**, and HPLS only looks at drinking and driving and phone use. Others include: high-speed driving, non-use of motorcycle helmets,<sup>6</sup> non-use of seat-belts,<sup>7</sup> and the non-use of child restraint systems, among others.<sup>8</sup> **We recommend further research into the most common behaviors behind motor vehicle-related injury in the Philippines to identify other key focus areas for campaigns.** This can be achieved through deep dives in future rounds of HPLS.

Finally, we note that **campaigns need to be complemented by strengthening legislation and enforcement around unsafe driving practices.** There are regulations that have been proven to improve road safety, but are not legislated; for example, the Seat Belts Use Act of 1999 does not require back seat passengers to wear seat-belts, even though seat-belts reduce serious injuries and fatalities by 25% for rear-seat occupants (GRSP, 2015). At the same time, enforcement continues to be a challenge - in 2021, the LTO reported 110,000 violations of the Seat Belts Use Act (GMA News, 2022).

We recommend an assessment of existing legislation around these practices - both in terms of the comprehensiveness of legislation and its corresponding enforcement. Evidence suggests that enforcement of legislation is critical to its effectiveness, and the combination of strong campaigns and strict enforcement has led to promising results in terms of changing behaviors (WHO, 2023b).

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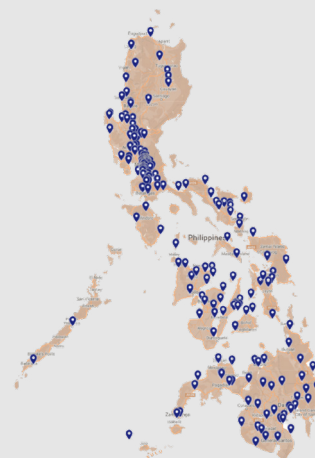
6 The WHO recommends implementing laws on helmet use that cover all riders, on all road types, and all engine types. The law should require that the helmet is fastened and meet a certain standard (WHO, 2023b). The most effective helmet type, according to recent research, is the full-face helmet (WHO, 2023c).

7 The WHO recommends that seatbelt laws apply to all seating positions in vehicles (WHO, 2023b).

8 WHO names speeding, drink driving, motorcycle helmet use, seat-belt use, and child restraint system use as the five key risk factors for road user behavior. Recommendations for best practices can be found in the Global status report on road safety 2023 (WHO 2023b).

## Methodology

The HPLS survey is nationally representative of Filipino adults aged 18 years old and above. Data collection was conducted in-person across the Philippines from April to June 2023 (Round 1), and through a combination of phone and in-person surveys across the country in October-November 2024 (Round 2). We interviewed a total of 2074 adult Filipinos aged 18 years old and above ('adult Filipinos') in Round 1, and 1,617 adult Filipinos in Round 2.



## Survey Design

The survey design for HPLS comprised the following modules: comprehensive health literacy (CHL), functional health literacy (FHL), Health-Seeking Behavior (HSB), Barangay Health Workers (BHW), and Knowledge, Attitudes, and Practices (KAP) modules for each of the seven (7) pillars of Healthy Pilipinas (diet and physical activity, environmental health, vaccinations, substance abuse, mental health, sexual and reproductive health, and violence and injury prevention). The questionnaire for Round 2 included a deep dive on nutrition based on policy priorities being considered by DOH HPB.

## Sampling

The HPLS survey took a two-stage clustered sampling approach. In the first stage, we drew a random selection of Primary Sampling Units (PSUs) with probability proportional to estimated population size from a sampling frame comprising mutually exclusive and collectively exhaustive geographic clusters across the entire Philippines. This sampling frame was created from Meta's "Data for Good" publicly-available high resolution population density maps for the Philippines. Clusters that fall in Least-Accessible Barangays (LABs) and barangays with Peace and Order Problems (POPs) were excluded from the sampling frame. For second stage sampling, we conducted a full household listing of each selected PSU (cluster), then randomly selected households to survey from the prepared list. One respondent is then selected per sampled household.



## Analysis and Weighting

Sampling weights are applied to all estimates and comprise: i) base weights reflecting probability of selecting household, ii) unit non-response weights to account for systematic non-response, iii) and post-stratification weights to allow our sample to reflect up-to-date population distributions along gender, age-group, region and city/municipality categories, based on Census 2020 data.



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