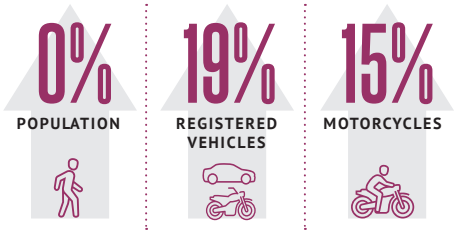
Risky Road Behaviors in Bangkok

Burden of Road Traffic Injuries

Thailand has one of the highest road traffic death rates in the world, with motorcyclists accounting for most of these deaths. Bangkok is Thailand's capital and its largest city, with a population of 5.7 million. The number of registered vehicles in the city continues to grow at a rapid rate, including motorcycles which make up 36% of all vehicles. In 2016, more than 850 people died on Bangkok's roads.

Bangkok's Growth, 2013-2017

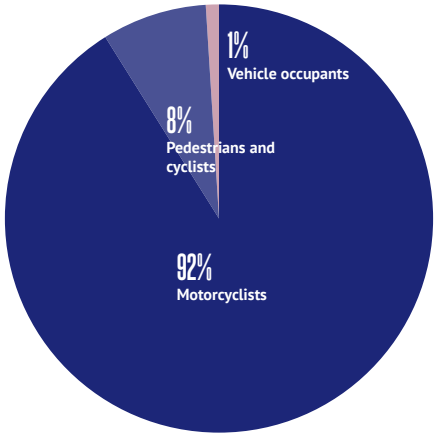


Impact of Road Crashes, 2016

852 DEATHS

39,850 INJURIES

Most road traffic deaths in Bangkok are among motorcyclists, 2018*



Disaggregated pedestrian and cyclist data are not available; these groups, as well as vehicle occupants, may be significantly underreported.

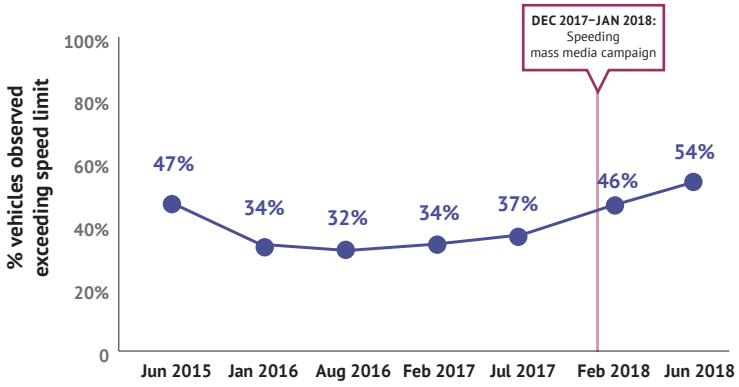
Road crashes are largely preventable. Globally, four risk behaviors contribute most to serious road injuries and deaths: speeding, drink driving, not using seat-belts or child restraints, and not using motorcycle helmets correctly.

In 2015, the city of Bangkok joined the Bloomberg Philanthropies Initiative for Global Road Safety, which aims to reduce road injuries and deaths. As part of this initiative, the Johns Hopkins International Injury Research Unit, in collaboration with the ThaiRoads Foundation, assesses key road user behaviors twice a year. This report primarily highlights results based on the latest round of road user behavior surveys (June 2018), and, where noted, compares the results to six previous survey rounds. Recommended actions are also presented.

KEY MESSAGES

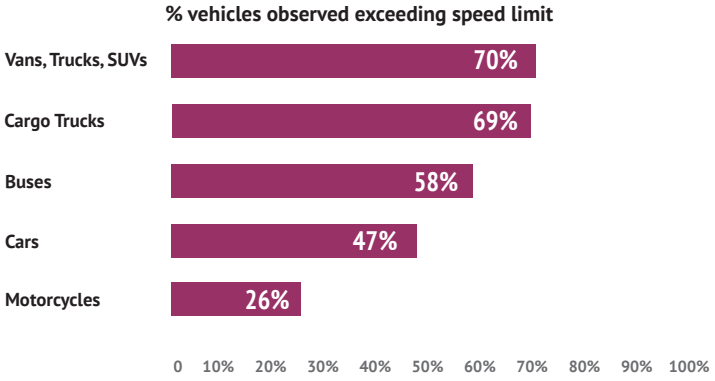
- The speeding rate has increased to its highest level since 2015, underscoring the importance of implementing speed reduction strategies.
- Large vehicles such as cargo trucks, vans and SUVs were the vehicles most likely to be observed exceeding the speed limit.
- Drink driving was very high.
- Drivers of sedans were the most likely to be driving above the alcohol limit.
- Correct helmet use has improved since 2015, but remained low among motorcycle passengers, highlighting the importance of promoting correct helmet buckling for all motorcycle riders.
- Seat restraint use among rear seat passengers and children was very low.

Speeding rate has increased, remained very high



- Speeding was at the lowest rate in August 2016 (32%), but has since increased to the highest rate (54%) in June 2018.
- Speeding was most common on weekdays (77%); of the vehicles speeding on weekdays, speeding was observed most frequently between 3:00 p.m. and 4:30 p.m.
- The proportion of vehicles speeding more than 15 km/h above the speed limit (58%) was much higher than vehicles speeding 15 km/h or less above the speed limit (42%).

Speeding was highest among trucks, vans and SUVs



- Large vehicles such as vans, trucks, SUVs and cargo trucks were most likely to speed (>60%); motorcycles were the least likely (26%).
- Drivers of vans, trucks and SUVs made up the largest proportion (64%) of vehicles exceeding limits by 20 km/h or more.

CONTEXT

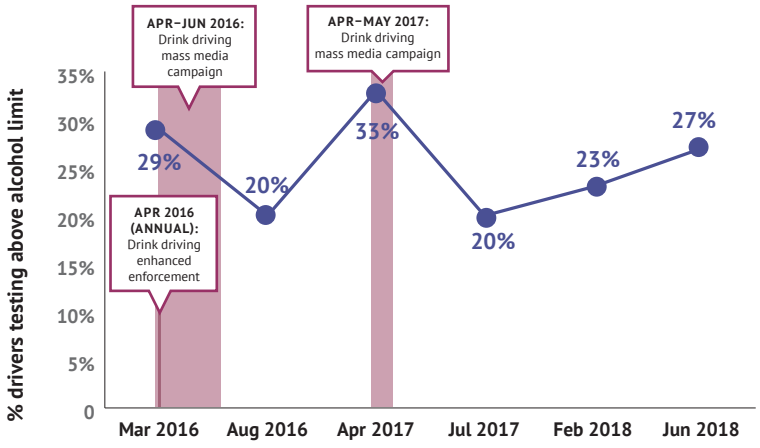
- Higher speed raises both the risk of crashes and the severity of injuries in case of a crash. Even small increases in speed are particularly dangerous for vulnerable road users: pedestrians, cyclists and motorcyclists.
- A 1% increase in average speed leads to a 3% increase in the risk of injury when there is a crash, and a 5% increase in the risk of serious injury or death.
- Pedestrians have a 90% chance of surviving a crash at 30 km/h or below but less than 50% at 45 km/h or above.
- Multiple interventions are needed to reduce speeding. These include lowering speed limits in areas with more pedestrians, enforcing speeding laws, conducting mass media campaigns, and implementing road features such as narrower lanes and raised pedestrian crossings.

Use of seat restraints was very low among adults and children in rear seats

8%
seat-belt use among rear seat passengers

6%
restraint use among children under 11

Drink driving was high and has increased



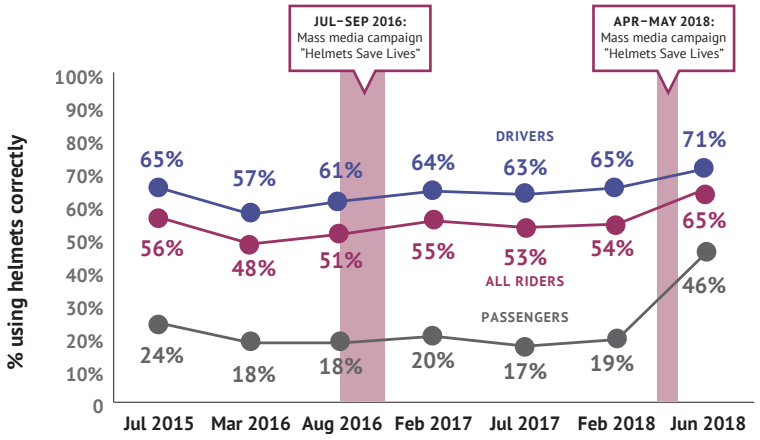
There was a methodology change between round 1 and subsequent rounds. Therefore, data from the first observation period (July 2015) has been excluded

- Despite decreasing since April 2017, drink driving increased from 20% to 27% from July 2017 to June 2018.
- The decrease in drink driving in August 2016 and July 2017 followed mass media campaigns and enhanced enforcement and may be attributed to these interventions.
- The majority of drivers testing above the legal alcohol limit were men (91%) between the ages of 25 and 59 (89%).
- Motorcyclists (50%) were most likely to be driving above the legal alcohol limit compared to drivers of cars (29%) and light trucks (17%).

CONTEXT

- The risk of crash increases with any alcohol found in the blood and increases significantly starting at a blood alcohol level of 0.04 g/dL.
- Young and inexperienced drivers have an even higher crash risk at the same blood alcohol levels as older, experienced drivers.
- A low expectation of getting caught for drink driving leads to an increased risk of crash; both media campaigns and enforcement change this expectation.

Correct helmet use among all motorcycle riders has increased since 2015



- Correct helmet use among all motorcycle riders increased from 56% in July 2015 to 65% in June 2018.
- Correct helmet use among motorcycle drivers (71%) was much higher than among passengers (46%).
- Passengers' correct helmet use more than doubled between February 2018 and June 2018.
- Male motorcycle drivers were more likely to use helmets correctly than female drivers (60% versus 40%), but male motorcycle passengers were less likely than female passengers to wear helmets correctly (15% versus 16%).
- Motorcycle drivers (71%) and passengers (51%) above 18 wore helmets correctly more frequently than motorcycle drivers (34%) and passengers (10%) under 18.

- Seat-belt use was highest among drivers (86%) and front seat passengers (71%).
- Female vehicle drivers were more likely to wear seat-belts than males (91% versus 85%).
- No differences in seat-belt use were observed between weekdays and weekend days.

Implications for action in Bangkok

FOR POLICE

- Increase enforcement for correct helmet wearing, including for motorcycle passengers.
- Target young riders for helmet enforcement.
- Intensify enforcement for speeding.
- Increase drink driving checkpoints throughout the year.

FOR LOCAL GOVERNMENT

- Continue to conduct mass media campaigns, coordinated with enforcement efforts, to promote correct helmet use.
- Target helmet messaging toward young riders and passengers in particular.
- Continue media campaigns against drink driving, including at times outside the normally targeted holiday periods.

FOR RESIDENTS

- Motorcyclists: always wear a correctly buckled helmet every time you ride, including when you are a passenger.
- Never drink and drive.
- Slow down to respect speed limits and pedestrian crossings.
- Wear a seat-belt, whether you are a driver or a passenger.

Methods

See "Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS) 2015-2019 Data Technical Report-Round 7, June 2018" for full details. The methods for these findings were developed by the Johns Hopkins International Injury Research Unit (JH-IIRU) and implemented in collaboration with the ThaiRoads Foundation. This report provides results from observational surveys that represent population-level (citywide) prevalence of the four main road safety risk factors (speed, drink driving, helmet use, seat-belt and child restraint use), and shows changes over time. Observations were conducted twice yearly starting in 2015 with seven rounds completed to date. For drink driving there were 100–4,900 observations per round; for helmet use 41,400–76,500 observations per round; speeding 120,900–197,700 observations per round; seat-belt and child restraint use 22,000–52,600 observations per round. All percentages presented in this report have been rounded to the nearest ones unit.

Observation sites were randomly selected except for drink driving, conditional on the safety of observers, and included six to eight sites per risk factor. Measurements correspond to population-level measurements and cannot provide insights into interventions conducted in specific locations in the city. In general, these surveys are not designed to determine the causes of changes in behaviors. Observations were performed between 11:00 p.m. and 3:00 a.m. for drink driving and between 7:00 a.m. and 6:00 p.m. for the other risk factors; both weekend days and weekdays were included. Drink driving observation sites were determined in collaboration with local traffic agents.

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