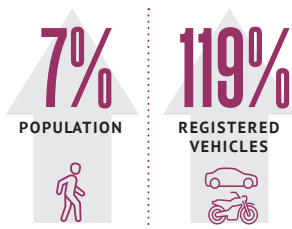


Risky Road Behaviors in Addis Ababa

Burden of Road Traffic Injuries

Addis Ababa is Ethiopia's largest city with 3.4 million people and nearly 25,000 road crashes per year. The number of vehicles has more than doubled in the past five years. Road crashes in the city are a major public health concern: more than 450 people die every year on the roads, with pedestrians being the most vulnerable group.

Addis Ababa's Growth, 2013-2017

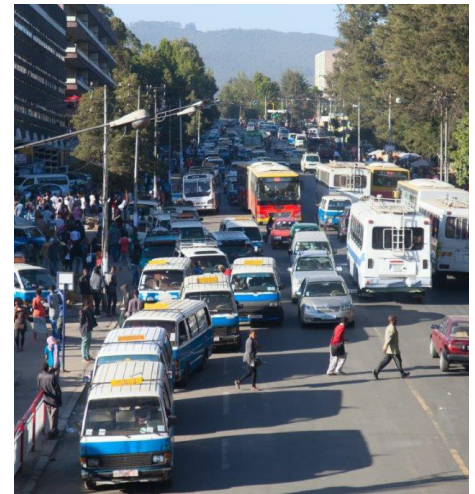
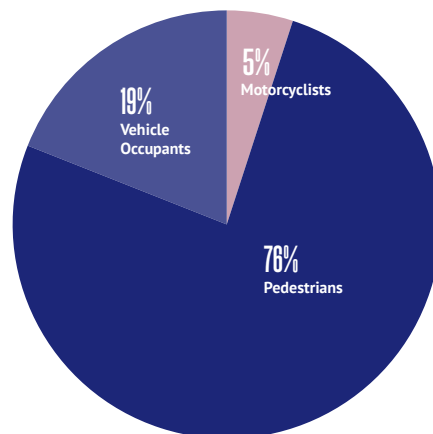


Impact of Road Crashes, 2017-2018*



*From July 2017 to June 2018

Most road deaths in Addis Ababa are among pedestrians, 2018



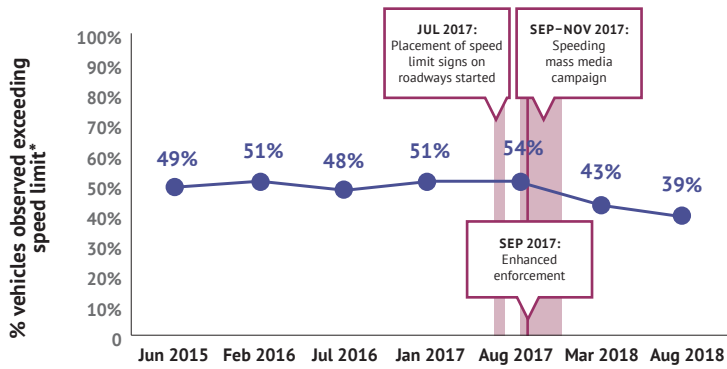
KEY MESSAGES

- Speeding has decreased following speed limit reductions, new signage and enhanced enforcement; however, speeding is still common.
- Cargo trucks and buses are the vehicles most often observed exceeding speed limits.
- Drink driving continued to drop, highlighting the effects of successful enforcement and media campaigns.
- Correct helmet use improved among passengers but decreased among drivers; correct helmet use for all riders requires further enforcement and promotion.
- Seat-belt use and child restraint use was very low among passengers.

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

In 2015, the city of Addis Ababa 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 Addis Ababa University School of Public Health, assesses key road user behaviors twice a year. This report updates the previous report, and primarily highlights results based on the latest round of road user behavior surveys (August 2018) and, where noted, compares the results to six previous survey rounds. Recommended actions are also presented.

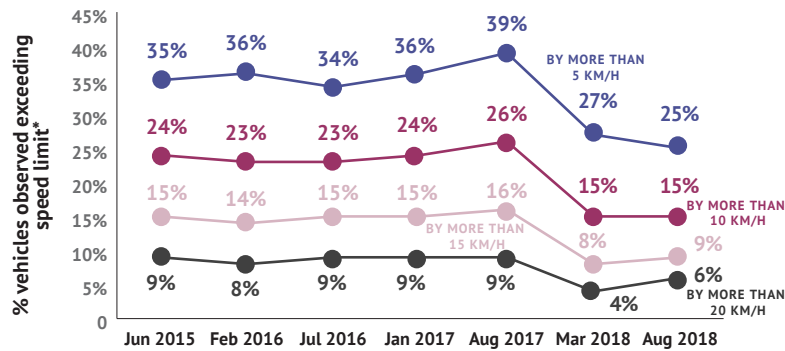
Speeding decreased but remained high



*The new 2017 speed limit definitions were applied to earlier survey periods (June 2015-Aug 2017) to allow comparison over time.

- The overall speeding rate decreased from 49% to 39% from June 2015 to August 2018.
- Between March and August 2018, speeding rates dropped after speed limits were reduced and new speed limit signage was placed on highways.
- Speeding was common across all vehicle types (>30%) but was highest among cargo trucks (58%) and buses (47%).
- Speeding was more common during weekends than weekdays (49% versus 34%) and in the early mornings than in the evenings (43% versus 35%).

The rate of speeding more than 10 km/h above the limit dropped even more sharply



*The 2017 speed limit definitions were applied to earlier survey periods (June 2015-Aug 2017) to allow comparison over time.

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.
- 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.
- 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.
- The Addis Ababa Road Safety Strategy focuses on speed management as a high priority for protecting road users.
- In 2017, speed limits were reduced on many roads and new signage installed; speed radar guns were acquired and police were trained on procedures to enforce speed limits. Design standards and model intersection transformations have also been put in place to reduce speed and overall risk to pedestrians.

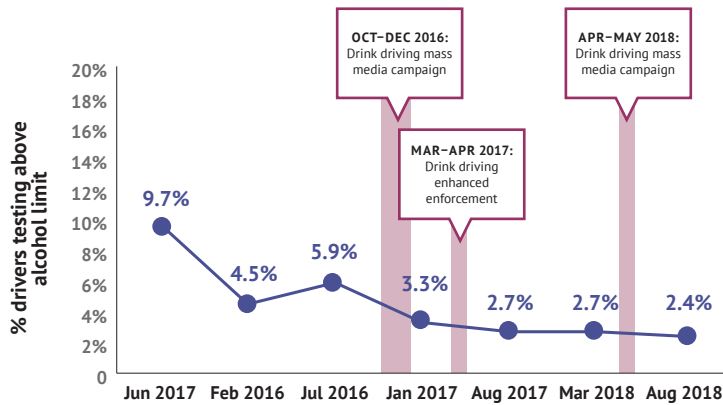
Seat-belt and restraint use was low among passengers and children



5%
seat-belt use
among passengers

3%
seat-belt use
among children under 5

Drink driving continued to decline

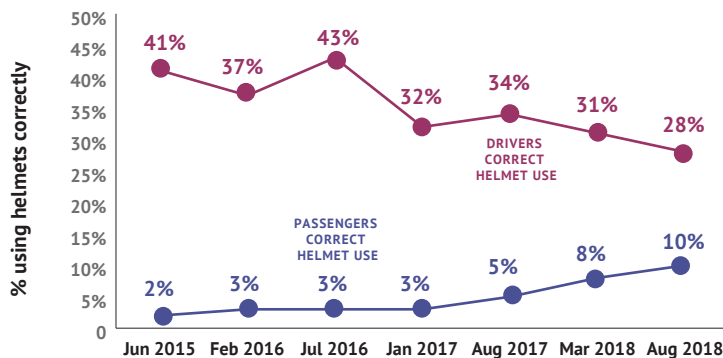


- The proportion of drivers testing above the legal alcohol limit decreased to 2.4% in August 2018; decreases in drink driving were observed after mass media campaigns and enhanced enforcement efforts.
- Males were more likely than females to be driving above the alcohol limit (2.4% versus 0.5%).
- Drink driving occurred more frequently during the weekends (3%) than on weekdays (2%).

CONTEXT

- The risk of crash increases with any blood alcohol and increases significantly starting at a blood alcohol level of 0.04 g/dL.
- Young and inexperienced drivers have 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.
- The legal blood alcohol limit in Ethiopia is 0.08 g/dL, which is higher than the global best practice of 0.05 g/dL or less. There is no lower limit as recommended for younger and novice drivers.
- Until 2017 police had little breathalyzer equipment available to conduct enforcement. With new breathalyzers and procedural training, large-scale enforcement started in April 2017 and has been sustained, in conjunction with mass media campaigns.

Correct motorcycle helmet use was low among both drivers and passengers



- Correct helmet use among drivers decreased from 41% to 28% from June 2015 to August 2018.
- Correct helmet use among passengers was lower among drivers but has increased from June 2015 (2%) to August 2018 (10%).
- The proportion of males who used helmets correctly (24%) was higher than females (9%).

• Overall seat-belt use among adults dropped from 54% to 50% from June 2015 to August 2018; the drop was mainly among front seat passengers.

• Despite high seat-belt use among drivers (99%), passengers' use of seat-belts was very low (5%).

• Between June 2015 and August 2018, seat-belt use decreased among front seat passengers (8% to 5%) but increased among rear seat passengers (1% to 5%).

• Children under 5 years old were rarely protected by child restraints (3%).

Implications for action in Addis Ababa

FOR POLICE AND LAW ENFORCEMENT

- Sustain drink driving enforcement efforts, including periodic heightened operations and maintaining breath testing supplies.
- Maintain focus on enforcement of speeding, including the use of fixed and mobile speed cameras and radar.
- Concentrate speed enforcement at identified high-risk locations.
- Increase helmet enforcement efforts as the number of motorcyclists rapidly increases.
- Include front seat passengers in seat-belt checks.

FOR LOCAL GOVERNMENT

- Continue to place improved speed limit signage.
- Accelerate the implementation of traffic calming and pedestrian safety measures (e.g., narrower lanes, raised crossings, refuge islands).
- Continue to coordinate and support drink driving and speed reduction media campaigns to coincide with heightened enforcement operations.
- Promote helmet use to the growing number of motorcyclists.
- Recommend key updates to national traffic control regulations, including lower urban speed limits, a lower blood alcohol limit, and child restraint laws according to international standards.

FOR RESIDENTS

- Slow down to respect speed limits and pedestrian crossings.
- Never drink and drive.
- Motorcyclists: always wear a helmet and buckle it correctly.
- Wear a seat-belt, whether you are a driver or a passenger.

Methods

See "Bloomberg Initiative for Global Road Safety (BIGRS) 2015-2019 Data Technical Report-Round 7, August 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 Addis Ababa University School of Public Health. 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 approximately 2,000–17,100 observations per round; for helmet use 2,400–8,000 observations per round; speeding 23,500–51,600 observations per round; seat-belt and child restraint use 29,900–97,500 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. There were six to eight observation 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 7:30 a.m. and 7:00 p.m. for drink driving and between 10:00 a.m. and 10:00 p.m. for the other risk factors; both weekend days and weekdays were included. Drink driving observation sites were managed by police and data collectors from Addis Ababa University.