NATIONAL DISTRACTED DRIVING COALITION

Youth Distracted Driving Survey

Teen Smartphone Use While Driving: Age Comparisons of Risky Behaviors, Perceptions & Attitudes

February 2026

TRAFFIC INJURY RESEARCH FOUNDATION USA, INC.

TIRF USA Inc.

PREPARED BY

Milad Delavary | Traffic Injury Research Foundation (TIRF)

Robyn D. Robertson | Traffic Injury Research Foundation (TIRF)

Hannah Barrett | Traffic Injury Research Foundation (TIRF)

Karen Bowman | Traffic Injury Research Foundation (TIRF)

Rachel Hamel | Traffic Injury Research Foundation USA, Inc. (TIRF USA)

Acknowledgements

The **National Distracted Driving Coalition (NDDC)** gratefully acknowledges the contribution of the authors who shared their expertise and time to prepare this report. The NDDC also extends its appreciation to all the members of the Youth sub-committee who provided input regarding the scope of knowledge included in this report.

Sub-committee members

Robyn Robertson
Traffic Injury Research Foundation (TIRF)

Karen Bowman
Traffic Injury Research Foundation (TIRF)

Joel Feldman
EndDD

Kelly Browning
Impact Teen Drivers

Bryan Delaney
National Transportation Safety Board

Steering Committee

A list of NDDC Steering Committee members is available at:

https://usnddc.org/about/

Table of contents

List of figures

Introduction

Distracted driving remains one of the most persistent and dangerous forms of driver error accounting for one in four road deaths. This behavior substantially contributes to road trauma in both the U.S. and globally. Despite decades of enforcement and education efforts, distracted driving has not abated; rather, its nature has evolved in tandem with advances in mobile technologies and vehicle automation. In 2023 alone, there were 3,275 fatalities and over 324,800 injuries in crashes involving distraction in the U.S., representing approximately 8% of all road deaths (NHTSA, 2025). The National Highway Traffic Safety Administration (NHTSA) re-analysed 2019 crash data using a validated imputation model to correct for underreporting. Concerningly, it estimated distraction contributed to 12,405 traffic deaths, accounting for 29% of all U.S. fatalities that year and costing society an estimated $98 billion (Blincoe et al., 2023). Youth drivers are at particularly high risk, as drivers aged 15–20 had the highest proportion of distraction involvement in fatal crashes among all age groups in the United States in 2023 (NHTSA, 2025).

A similar picture emerges in Canada from an analysis of data collected from medical examiners and coroners across the country. The percentage of fatalities that were distraction-related increased from 19.1% in 2000 to 25.5% in 2022 according to the Traffic Injury Research Foundation's (TIRF) National Fatality Database (Brown et al., 2024; TIRF, 2026). At the same time well-recognized challenges in identifying distraction as the source of the crash (e.g., no surviving victims) suggests the true scale of distraction-related fatalities is likely underestimated.

While the burden of distracted driving is global, North American data provides a compelling illustration of how rapidly the prevalence of the problem has escalated. Between 2019 and 2021, distracted-driving fatalities increased 12% in two years, rising from 3,142 to 3,522 in the U.S. (NDDC, 2025). Self-report and observational data confirm these patterns. In the E-Survey of Road Users' Attitudes (ESRA1) conducted across 25 countries, nearly 50% of Americans, 38% of Europeans, and 25% of Canadians admitted to talking on a handheld phone while driving. In addition, 35% of Americans and 27% of Europeans reported texting or emailing behind the wheel, while just under one-quarter of Canadians did so (Woods-Fry et al., 2018). Follow-up national TIRF USA Road Safety Monitor surveys showed similar results, when comparing 2021 to 2019, two behaviors (talking handheld while driving and texting while driving) increased (from 11.7% to 14.1% and from 9.7% to 13.1% respectively) (Robertson et al., 2022). The consistency across data sources

underscores the normalization of distraction in everyday driving, particularly among younger cohorts who report the highest prevalence of digital engagement while driving (Robertson et al., 2022).

This heightened prevalence is concerning because the age gradient in distraction risk is striking. NHTSA Fatality Analysis Reporting System (FARS) data showed 9% of fatal crashes involving teen drivers in 2019 were attributed to distraction; the largest proportion of any age group (NHTSA, 2022). Naturalistic data revealed newly licensed teens engage in secondary tasks more than half (58%) of their driving time. They most often interact with passengers (33%), followed by external distractions (7%), and manual phone use (4%) (Gershon et al., 2017). The likelihood of distraction was higher among teens with primary access to a vehicle (OR = 1.50, 95% CI [1.05–2.14]) and those driving alone (OR = 2.13, 95% CI [1.58–2.89]), whereas environmental conditions such as road type or traffic density had little influence. These findings suggest young drivers fail to modulate their attention in complex settings, and further highlight how exposure, driving independence, and social norms, rather than environmental factors, shape their distraction risk (Gershon et al., 2017).

Subsequent analyses demonstrated not all distractions were equally associated with risk. In a study involving real-world driving videos, manual cellphone use (OR = 2.7, 95% CI [1.1–6.8]) and reaching for or handling objects (OR = 6.9, 95% CI [2.6–18.6]) were most strongly associated with crashes (Gershon et al., 2019). Visual inattention explained 41% of the crash risk from manual phone use and 10% from reaching for objects, confirming that eyes-off-road time is a critical mediator of crash risk. Consistent with this, Simons-Morton et al. (2014) demonstrated each additional second of gaze diversion markedly increased the odds of a crash or near-crash, irrespective of task type. Broader research also showed these attentional failures were tied to executive function: difficulties in cognitive control predicted more frequent engagement in distracted driving across age groups, even after accounting for age differences (Pope, Bell, & Stavrinos, 2016). Although middle-aged and young adults reported similar distraction levels, older adults with fewer cognitive control deficits engaged less frequently. Collectively, these studies revealed distraction arises from intertwined behavioral, social, and cognitive mechanisms including inexperience, social pressure, and limited executive control. These factors undermine the ability to sustain attention which highlight the need for interventions that build both self-regulation and awareness of attentional limits behind the wheel.

Distracted driving is increasingly normalized among young drivers, with crash risk linked to attention lapses rather than environmental factors.

Distraction is not a single behavior. Instead, it is a spectrum of attentional lapses shaped by driver traits, task demands, and context. The integration of smartphones, infotainment systems, and automation has made competition for attention common among drivers. Young drivers are especially vulnerable due to high smartphone dependence, limited hazard perception, and strong social influences, making distraction both more prevalent and more dangerous. Yet most prior studies isolate single behaviors or crash types, overlooking how distraction clusters with other risks and evolves during adolescence. This study addresses that gap by examining risky behaviors, perceptions, and attitudes toward smartphone use while driving among teens aged 14–15, 16–17, and 18–20. Linking behavioral prevalence with exposure factors can help clarify how distraction becomes normalized and increased understanding of social and individual factors that sustain it. This knowledge is essential to guide the development of age-specific interventions to promote safer and more attentive driving habits.

Data for this report were drawn from a 2025 national online survey of youth aged 14–20 years conducted by the Traffic Injury Research Foundation, USA, Inc. on behalf of the U.S. National Distracted Driving Coalition. The survey captured driving exposure, risky driving behaviors, smartphone use while driving, perceptions, social influences, and self-regulation strategies. A total of 1,217 young drivers responded to the survey from 26 states, with 95 respondents opting not to disclose their state. Individual links were provided to US-based youth organizations to distribute the anonymous survey to teens aged 15 to 19 years. It was comprised of 23 questions about their use of electronic devices while driving, the frequency of use, the types of activities they engaged in and their motivations for doing so. Information about perceptions and strategies they relied on to avoid distractions, including speaking up, was collected in addition to basic demographic information. Responding states included: AL, AZ, CA, CO, DE, FL, GA, IL, IN, KS, MD, MA, MI, MO, NE, NJ, NY, OH, OK, PA, TN, SC, TX, VA, DC, WY.

In this report, descriptive statistics were used to compare teens aged 14–15, 16–17, and 18–20 years, and a multivariable logistic regression model identified factors associated with self-reported smartphone use while driving in the past 30 days. A brief description of the survey design and national-level findings was shared in the companion national report (Robertson et al., 2025). The present report builds on that foundation by examining age-related differences among youth drivers in greater analytical detail.

Respondent demographics

Among the 1,217 respondents who completed the survey (average age 16 years), 289 were aged 14–15, 731 were aged 16–17, and 197 were aged 18–20. The vast majority of teens aged 14–15 (85%) held only a learner's permit. Fewer than half (43%) of teens aged 16–17 and 25% of teens aged 18–20 held only a learner's permit. In contrast, full driver's licenses were least common among teens aged 14–15 (1%), and most common among teens aged 18–20 (54%). Consistent with their learner permit status, daily or almost daily driving was least common among teens aged 14–15 (29%), but driving was more prevalent among teens aged 16–17 (51%) and was most frequent among teens aged 18–20 (62%). Less frequent driving (e.g., a few times per month or less) was concentrated in the youngest group (14% to 37%), reflecting their limited license status and exposure.

The purpose and setting of driving also differed by age. School and extracurricular activities were the most common reasons for driving across all groups, particularly among teens aged 14–15 (55%). Social driving (e.g., visiting friends) was most common among teens aged 14–15 (27%), while work-related driving increased with age, peaking at 26% among teens aged 18–20. Younger teens aged 14–15 were more likely to drive in suburban (19%) and city areas (29%), while rural road use was highest among teens aged 18–20 (52%).

Nearly all participants owned a smart device, with ownership exceeding 94% across all age groups, and visual social platforms like Snapchat, Instagram, and TikTok were the most popular in use across all age groups. Differences in social media preferences and driving exposure help contextualize risk behaviors described in later sections.

General risky driving behaviors

Teens who reported using smartphones while driving in the past 30 days were more likely to engage in a variety of risky driving behaviors compared to teens who did not report smartphone use while driving. These patterns varied in frequency across age groups.

Speeding was the most common risky driving behavior reported by all three age cohorts. Driving more than 5 mph over the speed limit was increasingly reported always/often as teens aged; 28% of teens aged 14–15 engaged in this behavior and this rose to 48% of teens aged 16–17, and 56% of teens aged 18–20. A similar but less frequent pattern emerged for driving more than 10 mph over the limit: 8% of teens aged 14–15, 19% of teens aged 16–17, and 25% of teens aged 18–20 reported doing so always/often. The findings confirm speeding becomes more common as teens age, particularly at lower excess speed thresholds.

Driving while tired or drowsy also revealed a concerning pattern. Although 6% of teens aged 14–15 reported doing this always or often, the rate increased to 14% among teens aged 16–17 and remained elevated at 11% among teens aged 18–20. The sharp rise at ages 16–17 may be partly explained by adolescent biological sleep needs. During this stage, teens experience a biologically driven circadian phase delay, meaning their natural sleep–wake cycle shifts later, while early school start times and increasing academic and social demands require earlier waking. This mismatch leads to circadian misalignment, which have been shown to affect alertness and risk-related behavior during adolescence (DePoy et al., 2024).

Seatbelt non-use was uncommon but still notable and surprisingly was most prevalent among the youngest age cohort. A total of 8% of teens aged 14–15 reported driving without a seatbelt always/often, followed by 7% of teens aged 16–17 and 6% of teens aged 18–20.

Driving under the influence of alcohol remained rare across all age groups which is consistent with zero tolerance laws for young drivers which have been in place for many years. Less than 1% of teens aged 14–15 reported doing this always/often, compared to 1.1% of teens aged 16–17 and 0.7% of teens aged 18–20. Similarly, driving after drug use (including cannabis) was infrequent. Less than 1% of teens aged 14–15 reported this behavior as always/often compared to 2% of teens aged 16–17, and 0.7% of teens aged 18–20.

Aggressive driving behaviors, such as tailgating or failing to signal, were reported more frequently as teens aged. Frequent engagement (always/often) rose from just 3% among teens aged 14–15 to 5% among teens aged 16–17 and 6% among teens aged 18–20. Responses indicating sometimes were considerably higher, ranging from 10% among the youngest drivers to 18% among those aged 18–20, suggesting occasional low-level aggression on the road was somewhat normalized, at least among a proportion of teen drivers.

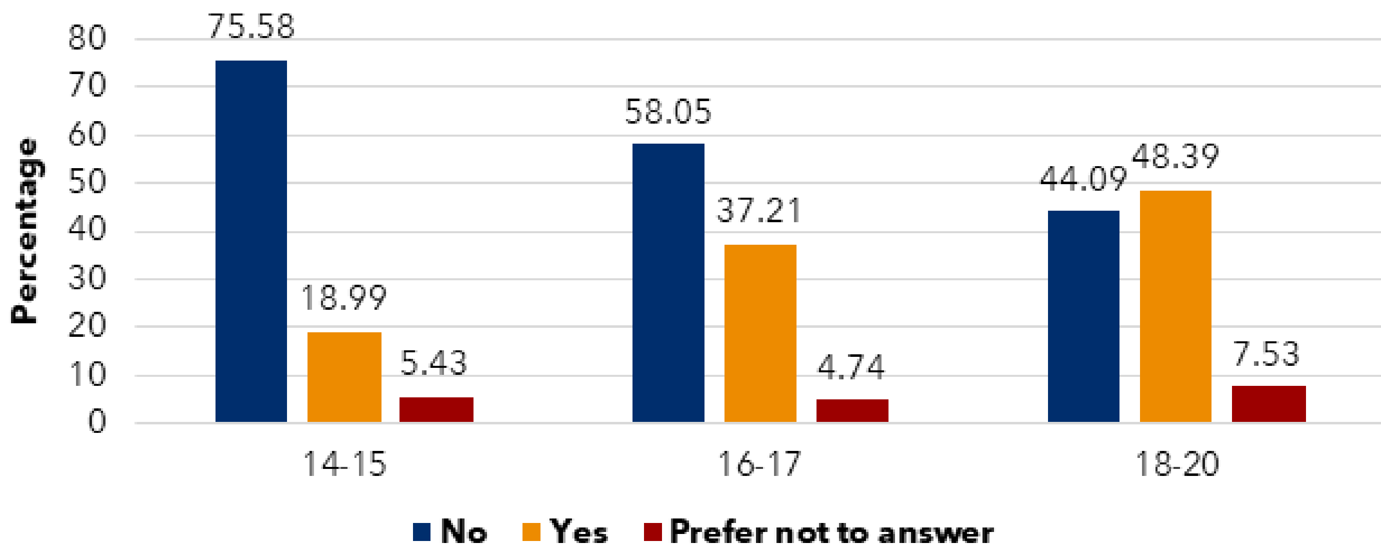
Participation in sideshows or street racing was relatively uncommon across all age groups, with frequent engagement (always/often) reported by 2% of teens aged 14–15, 3% of teens aged 16–17, and 3% of teens aged 18–20.

An analysis of smartphone-related distractions across the different age cohorts is explored in the next section.

Risky driving & distraction trends

Teens frequently engaged in a variety of smartphone-related distractions while driving. Figure 1 shows self-reported smartphone use while driving during the past 30 days, categorized by age group. Overall, phone use while driving increased with age. In the past 30 days, less than one in five (19%) teens aged 14–15 reported using a phone while driving, compared to one in three (37%) teens aged 16–17 and almost half (48%) of teens aged 18–20.

Figure 1 | Self-reported smartphone use while driving in the past 30 days by age group



When examining driving-related smartphone tasks, patterns varied by age and task type with some behaviors showing mixed age trends and others increasing steadily across adolescence.

- Navigation/GPS use was reported daily or almost daily by 21% of teens aged 14–15, 14% of teens aged 16–17, and 26% of teens aged 18–20.
- Social media use while driving showed moderate engagement, with daily use ranging from 19% to 26% across groups.
- Live streaming while driving was most common among teens aged 14–15, with 14% reporting daily use. In contrast, 72% of teens aged 16–17 said they never engaged in this behavior.
- Texting while driving also increased with age, with daily use rising from 18% among teens aged 14–15 to 36% among teens aged 18–20. Notably, nearly half (44%) of the youngest group reported rarely or never texting while driving.
- Phone calls while driving increased most clearly with age; 41% of teens aged 14–15 reported frequent (a few days a week or more) calling, compared to 70% of teens aged 18–20.

Content-related smartphone behaviors (i.e., watching or creating content) showed a consistent pattern with each behavior being most prevalent among the youngest teens and declining sharply with age. This highlights how visually and manually demanding entertainment-based distractions are concentrated early in adolescence. These behaviors were most prevalent among the youngest drivers and declined with age:

- Watching content daily was highest among teens aged 14–15 (55%), compared to 18% of teens aged 16–17 and 23% of teens aged 18–20.
- Creating content (e.g., typing or posting) showed a similar trend: 40% (14–15), 16% (16–17), and 14% (18–20).
- Reading content daily was most common among teens aged 14–15 (35%), followed by 13% (16–17) and 16% (18–20).
- Sharing content was most prevalent among the youngest group at 32% (14–15).
- Listening to content (e.g., music, podcasts) while driving was also highest among teens aged 14–15 (75% daily/almost daily), followed by 53% (16–17) and 34% (18–20).

An analysis of the cohort of teens who reported using their phones while driving and the prevalence of other high-risk driving behaviors in this population revealed a concerning pattern of compounding risks with respect to speeding, driving while too tired or drowsy, and non-use of seatbelts:

- Always speeding by more than 5 mph over the limit was reported by 31% of teens aged 14–15, 42% of teens aged 16–17, and 47% of teens aged 18–20 who used their phones while driving.
- Driving while too tired or drowsy was relatively common and increased with age. Among teens aged 14–15, about 18% reported driving tired often (none always), and an additional 32% did so sometimes. Among teens aged 16–17, 28% reported driving tired always or often and 49% sometimes. The trend continued among teens aged 18–20, with 20% reporting driving tired always or often and 55% sometimes.
- Approximately one in four respondents who reported using their phones while driving (27%) across all age groups admitted to driving without a seatbelt at least sometimes, including 8% who did so always and 5% often. By age, 18% of teens aged 14–15, 22% of teens aged 16–17, and 24% of teens aged 18–20 reported some level of non-use.

In summary, smartphone-using teens exhibited a distinct risk profile in which distraction was paired with a higher likelihood of other hazardous driving behaviors, indicating that these behaviors tended to cluster within the same individuals rather than occur in isolation.

Teens who reported using their phones while driving were also likely to report extreme behaviors. Notably, the proportion who reported always/often street racing declined with age (8% of teens aged 14–15; 7% of 16–17; and 6% of 18–20) whereas always/often aggressive driving increased with age (10% of teens aged 14–15 and teens aged 16–17, and 12% of teens aged 18–20). Such overlap between distraction and non-seatbelt-use behaviors suggests that teens who forgo seatbelts were also more likely to engage in other unsafe driving practices. Consequently, non-seatbelt-use may serve as an indicator of higher-risk drivers (i.e., those more prone to engaging in multiple risky behaviors).

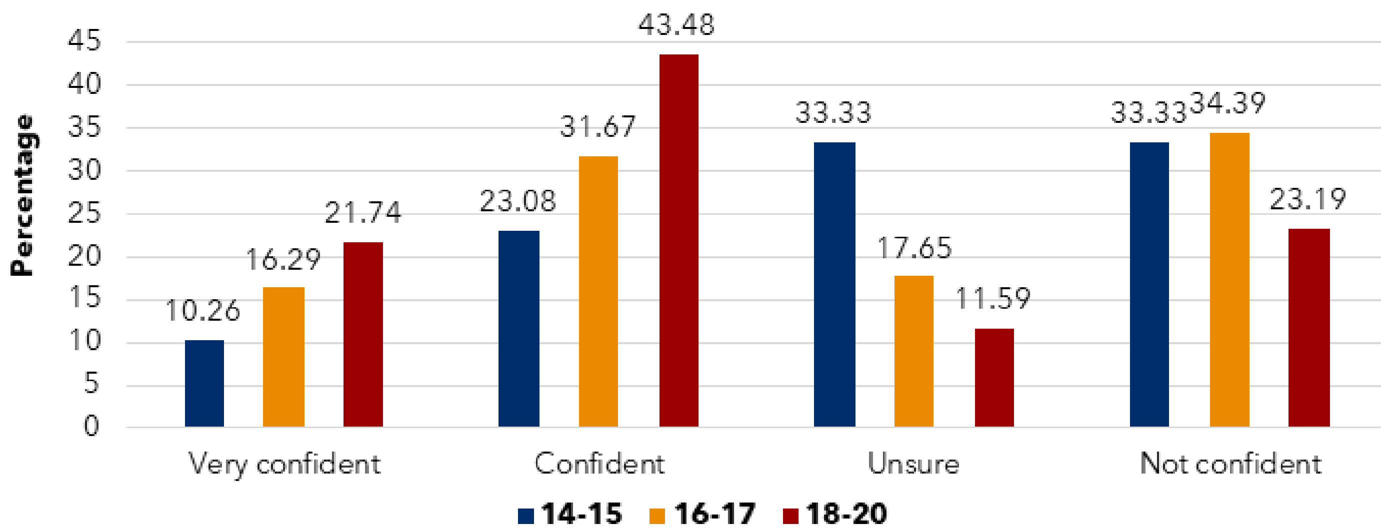
Teen perceptions of peer beliefs & attitudes

Teens' beliefs about peer approval of smartphone use while driving shaped their own engagement in cellphone use with perceptions appearing to become more pronounced with age. Among teens aged 14–15, about one in ten (12%) believed all or most of their friends approved of smartphone use while driving, compared to approximately one in six (15%) of teens aged 16–17 and one in four (27%) of teens aged 18–20.

This perception was further examined specifically among teens who recently self-reported using a smartphone while driving. Within this group, older teens aged 18–20 were the most likely to believe their friends approved of this behavior, with 34% saying most of their friends and 12% saying all of their friends thought it was acceptable. In comparison, teens aged 14–15 reported 18% for both most and all, while teens aged 16–17 reported 21% most and 8% all. At the other end of the scale, teens aged 14–15 were most likely to believe that few or none of their friends approved (21% a few; 13% none), followed by teens aged 16–17 (25% a few; 9% none) and teens aged 18–20 (16% a few; 7% none). Overall, the proportion of teens who felt their friends disapproved shrank with age, while perceptions of peer acceptance of smartphone use while driving grew increasingly prevalent among older teens.

Moreover, confidence in multitasking behind the wheel increased markedly with age (see Figure 2). Only 23% of teens aged 14–15 felt confident using a smartphone while driving. This rose to 32% among teens aged 16–17 and 44% among teens aged 18–20. Also, 22% of the oldest group felt very confident, indicating the highest percentage of self-assurance among all age groups. These age-related increases mirror themes from the national report, where teens' open-ended responses revealed that their confidence often stems from a skewed perception of experience, believing that a relatively small amount of driving without negative consequences signals competence. In effect, very limited exposure behind the wheel appears sufficient for many teens to feel capable of multitasking, reinforcing an inflated sense of control over smartphone use while driving.

Figure 2 | Perceived confidence in ability to drive while using a smartphone



Perceptions & the link to risk-taking

Teens identified some distracting behaviors as more dangerous while driving than others, but their risk judgments were not always aligned with the research on this topic.

Texting while driving was consistently rated the most dangerous behavior across all age groups, cited by 18% of teens aged 14–15 and teens aged 16–17, and 16% of teens aged 18–20. Other risky behaviors consistently ranked as dangerous included:

- Handheld phone use (11% of teens aged 14–15 and 16–17; 10% of teens aged 18–20).
- Social media use (15% across all age groups).
- Taking selfies or using the camera (12% among teens aged 14–15, increasing to 15% among teens aged 18–20).
- Reaching for items, such as a phone or bag, was also viewed as risky by about 10–11% across groups.
- Fewer teens identified phone calls (4–5%), loud music (1-3%), or passenger interaction (2–5%) as dangerous.
- Very few considered hands-free calling or GPS navigation to be risky, with fewer than 2% selecting these behaviors.

However, many cognitive distractions were significantly underestimated by teens.

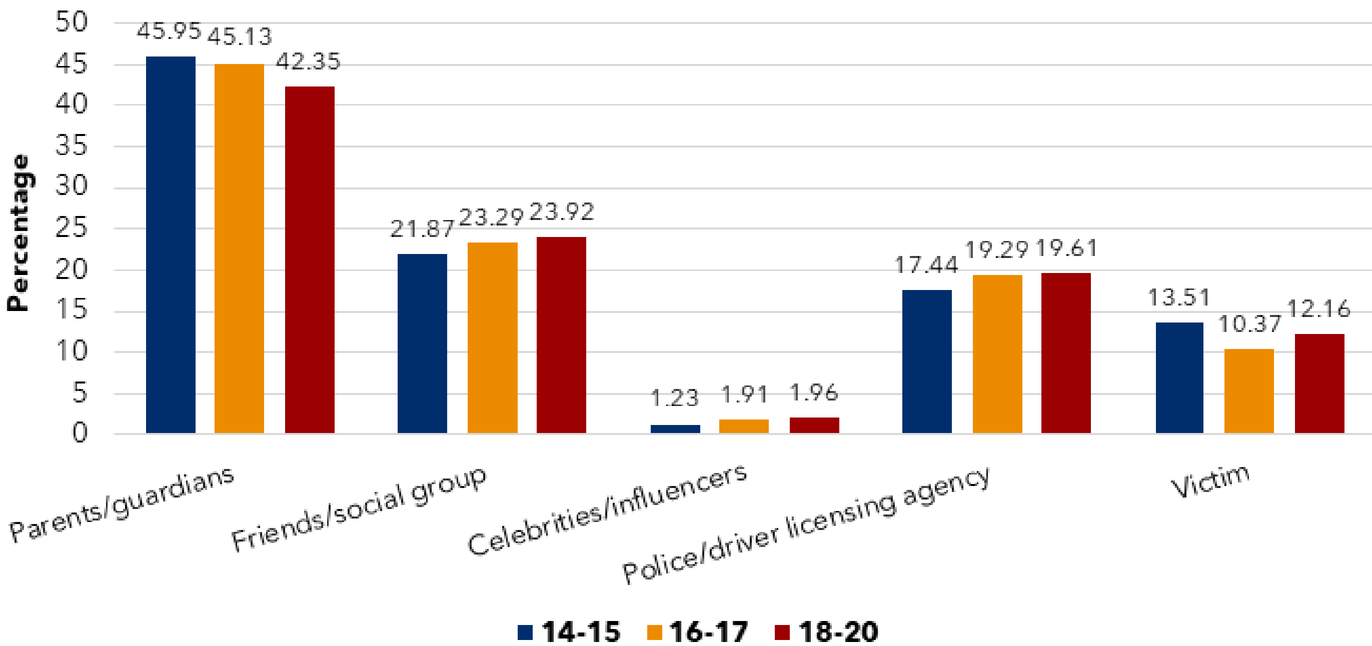
- Navigation/GPS use was the most frequently rated as least dangerous across all age groups, selected by 24% of teens aged 14–15, 23% of teens aged 16–17, and 22% of teens aged 18–20.
- Phone calls were also commonly viewed as low-risk, with 16% of both teens aged 14–15 and teens aged 16–17, and 15% of teens aged 18–20 selecting them.
- Loud music and eating or drinking were consistently rated as less dangerous by 16–18% of teens across all age groups.

This pattern is noteworthy because tasks like navigation and GPS use can draw attention away from the driving environment, yet teens consistently rated them as among the least risky.

Factors influencing risky smartphone behaviors

Across all ages, teens reported parents and friends had the most influence on their driving behavior. As illustrated in Figure 3, parents or guardians were the most commonly cited influence noted by almost half of all age cohorts (46% of teens aged 14–15; 45% of teens aged 16–17; and 42% of teens aged 18–20). Friends or social groups ranked second and substantially lower although influence increased slightly with age, from 22% among teens aged 14–15 to 24% among teens aged 18–20. Other reported influences included police or driver licensing agencies, which gained importance with age (17% to 20%), and stories or firsthand experiences involving crash victims, cited by 10–14% across groups. Celebrities and social media influencers had minimal impact, with just 1–2% of teens identifying them as top influencers.

Figure 3 | Top influencers on driving or riding choices



Adding to this, the survey results showed speaking up to drivers to discourage distracted driving from others remains uncommon. Approximately three-quarters of all participants reported not being asked to stop using their smartphone while driving, including 76% of teens aged 14–15, 79% of teens aged 16–17, and 75% of teens aged 18–20. But notably, the proportion of teens saying they had been asked to stop increased with age from 9% (14–15) to 19% (18–20), a statistically significant difference. This perhaps suggest teens may gain confidence to speak up with age and driving exposure as they accrue heightened awareness of risks.

Teens also observed frequent smartphone use by the people who influence them most, including parents and friends. Nearly half of teens across all age groups reported the adults who most often drive them used their smartphone sometimes while driving (49% of teens aged 14–15, 49% of teens aged 16–17, and 50% of teens aged 18–20). About 1 in 10 teens said adults almost always used a phone while driving, with teens aged 16–17 (14%) reporting this most often. Just 16% to 17% of respondents said their adult drivers never used a smartphone while driving.

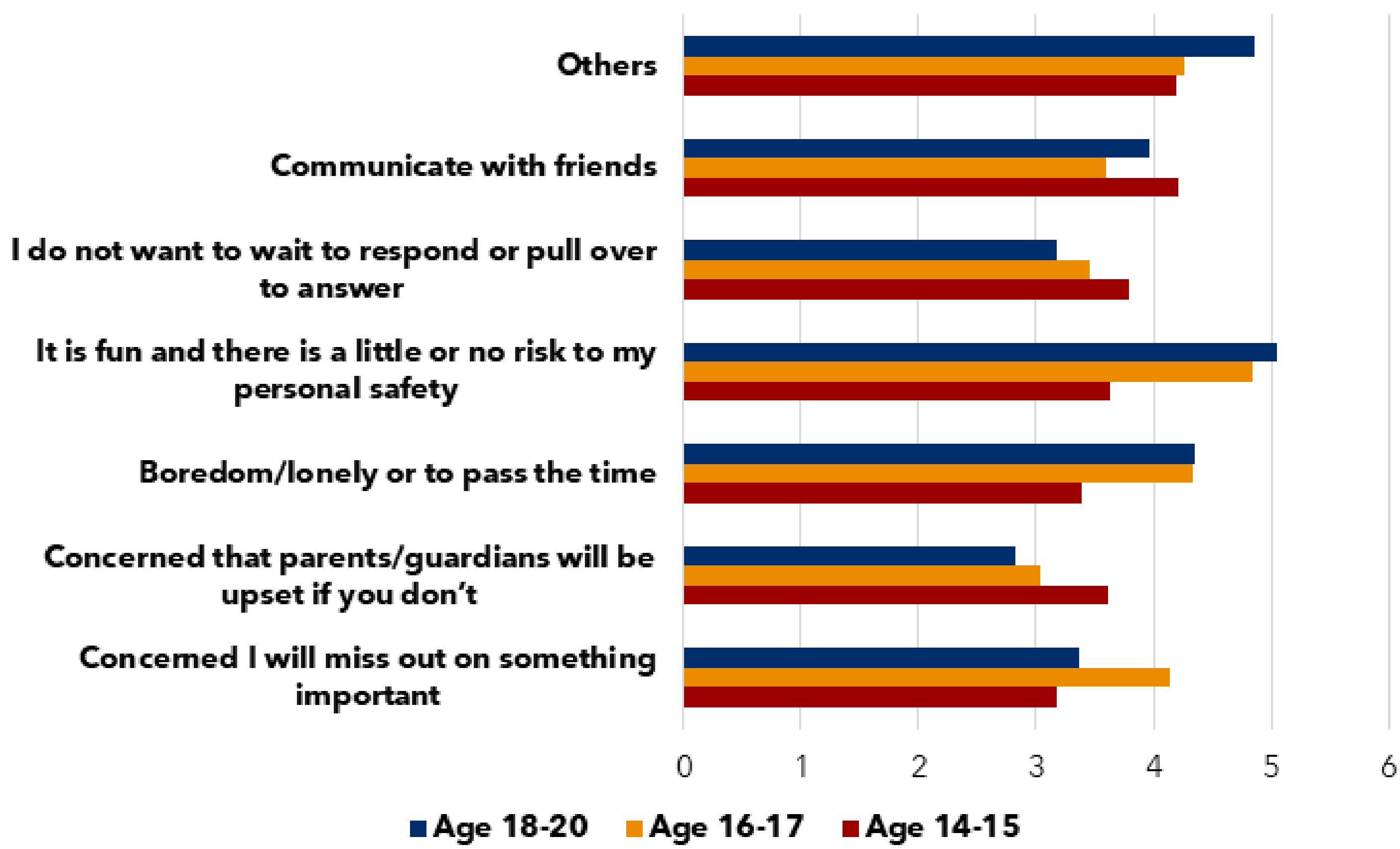
Similarly, teens frequently observed friends using smartphones while driving, with 43% to 46% saying this happens sometimes. Reports of frequent friend use (always or almost always) increased with age, from 9% among teens aged 14–15 to 16% among teens aged 18–20. A larger proportion of teens aged 14–15 (35%) reported their friends never used a phone while driving, compared to only 22% of teens aged 18–20.

Motivators of risky behaviors among teens

Teens engaged in risky driving behaviors using smartphones for a variety of emotional, social, and practical reasons, with some motivations changing with age, as shown in Figure 4. The results below are grouped to reflect motivations that were consistent across age groups, followed by those that showed increasing or decreasing patterns with age. On a scale of one to seven (with one being the lowest risk and 7 being the highest risk):

- Staying in touch with friends was consistently important across all ages (avg. score = 4), but slightly higher among the youngest and oldest groups.
- Boredom or loneliness showed a clear upward trend, increasing significantly from an average score of 3.4 among teens aged 14–15 to 4.4 among teens aged 18–20.
- Using the phone for fun with little sense of risk increased with age, peaking at 5.1 among teens aged 18–20.
- Fear of missing out (FOMO) was least influential for teens aged 14–15 (avg. score = 3.2) and most pronounced among teens aged 16–17 (avg. score = 4.1).
- Concern parents/guardians would be upset was a stronger deterrent for younger teens, especially teens aged 14–15 (avg. score = 3.6) and gradually declined with age.
- Avoiding delays in responding to messages was a more prominent concern for teens aged 14–15 (avg. score = 3.8), while its importance dropped to 3.2 among the oldest group.

Figure 4 | Reasons for using a smartphone or smart device while driving (average score)



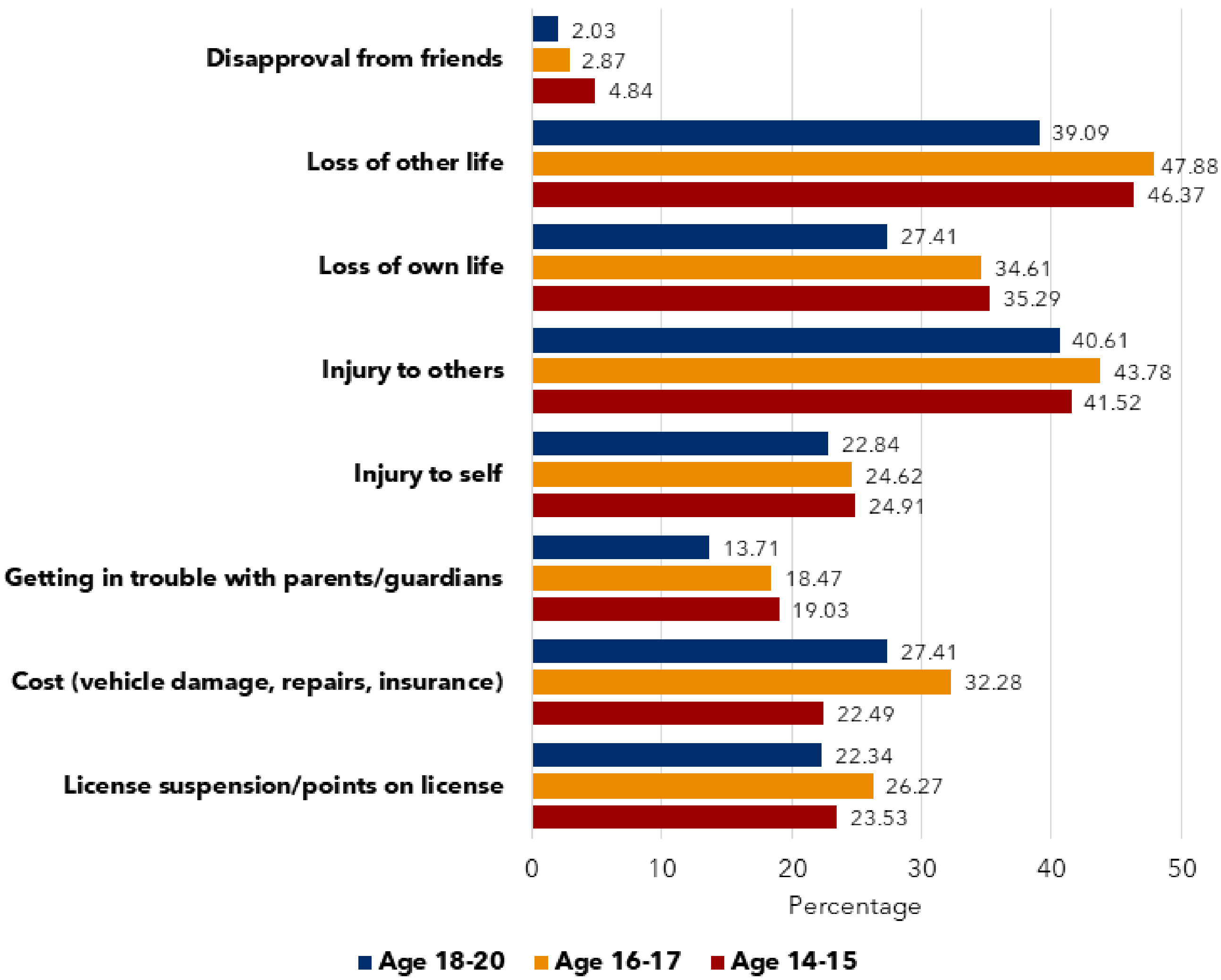
Notably, other reasons for phone use while driving became more prominent among teens aged 18–20 (avg. score = 4.9) compared to others, suggesting reasons that extend beyond typical explanations.

Motivators to reduce distractions

As shown in Figure 5, teens reported that emotional consequences were the most powerful motivators to discourage distracted driving.

- The most cited concern was injuring others, selected by approximately two in five teens of all ages (42% of teens aged 14–15; 44% of teens aged 16–17; and 41% of teens aged 18–20).
- The youngest age cohorts expressed higher levels of concern about losing a life, whether their own or someone else's, with 46% worried about causing someone else's death and 35% about their own.
- Practical consequences such as cost (e.g., damage or insurance), license suspension, or demerit points were less influential, though costs were more salient among teens aged 16–17 (32%).
- Peer disapproval remained the least motivating factor across all groups, especially among teens aged 18–20 (2%).

Figure 5 | Reasons encouraging teens to stop using smartphones while driving



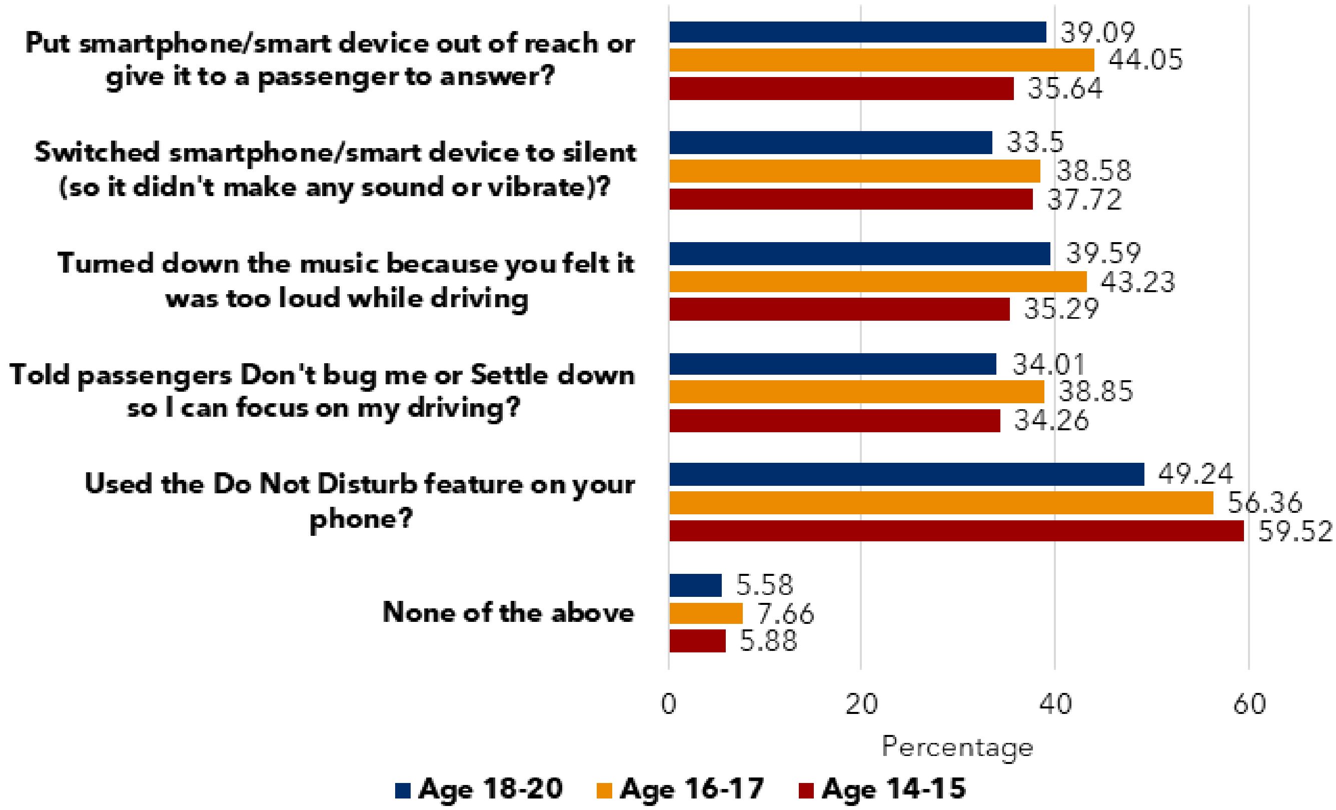
Encouragingly, many teens reported adopting at least some self-regulation strategies to avoid distractions while driving (see Figure 6). The most common strategy was enabling Do Not Disturb mode which had the highest usage reported among teens aged 14–15 (60%) and declined slightly with age (49% of teens aged 18-20). Other frequently used strategies included:

- turning down loud music, with the highest usage among teens aged 16–17 (43%)

- switching phones to silent mode, with the greatest prevalence reported by 38% of both teens aged 14–15 and teens aged 16–17
- placing phones out of reach or handing them to a passenger, most common among teens aged 16–17 (44%)

However, overall usage of these strategies tended to decrease slightly with age, indicating a potential gap in sustained safety habits among older teens.

Figure 6 | Actions teens have taken to avoid distraction while driving



Predictors of distracted driving

A logistic regression analysis revealed several key predictors of distracted driving among youth who reported using smartphones while driving. Age was a significant factor as teens aged 18–20 were 2.8 times more likely to report distracted driving compared to teens aged 14–15, after controlling for other variables. The strongest predictor was driving frequency, with teens who drove more days per week being 3.4 times more likely to report distraction.

Other notable predictors included speeding behavior, driving while tired, aggressive driving and peer approval of smartphone use. Speeding also emerged as a behavioral predictor: teens who reported driving 5 mph or 10 mph over the speed limit were 2.4 to 4 times more likely to report distracted driving. Teens who frequently drove when too tired or drowsy were 2.4 times more likely to report distraction. Aggressive driving behaviors, such as tailgating or failing to signal, were also associated with elevated risk which had 2.5 times higher odds of distracted driving. Finally, those who believed their friends approved of smartphone use while driving were 2.4 to 2.7 times more likely to engage in it. Collectively, these findings highlight the interplay of behavioral, social, and exposure-related factors in shaping distracted driving risk among youth.

Conclusions

Findings from this study underscore that distracted driving among teens remains a complex and evolving issue influenced by developmental, behavioral, and social factors. Although smartphone ownership and access were nearly universal among respondents, patterns of risk varied significantly across age groups. Younger teens (14–15) reported limited driving exposure and experience but demonstrated higher engagement in visually and manually demanding distractions, such as watching videos, creating or sharing content, and live streaming. In contrast, older teens (18–20) were more likely to use smartphones for navigation and phone calls; behaviors that, while perceived as routine or low-risk, can still create substantial cognitive distraction. These results highlight the importance of tailoring interventions to different developmental stages, emphasizing early prevention for younger teens and sustained reinforcement of safe habits among teens as they age.

Across all ages, risky driving behaviors tended to appear in clusters. Teens who reported smartphone use while driving were also more likely to speed, drive while tired, or neglect seatbelt use, indicating that distracted driving rarely occurs in isolation. Logistic regression results confirmed that driving frequency, speeding, being too tired or drowsy, aggressive driving, and peer approval were strong predictors of distraction, suggesting that risk-taking and social influence are deeply intertwined. As such, strategies addressing distracted driving should adopt a multi-behavioral approach that also considers overlapping risks and the peer dynamics that normalize them.

Social context played a central role in shaping behavior. Peer acceptance of smartphone use while driving increased with age, and confidence in multitasking rose sharply among older teens despite relatively limited driving experience. This indicates a rapidly growing sense of overconfidence and normalization of risky habits among teens as they age. At the same time, parental influence remained a dominant factor, both as a motivator and a risk. Many teens observed parents or guardians using smartphones while driving. These findings reinforce the need for interventions that target not only teen drivers but also parents, guardians, and other adult role models who shape norms through their own driving behaviors.

Encouragingly, teens demonstrated awareness of the dangers of highly visual distractions such as texting, social media use, and handheld phone operation. However, cognitive distractions, such as navigation or hands-free calling, were consistently underestimated. This disconnect between perceived and actual risk suggests a critical opportunity for education to help teens recognize that even safe or everyday distractions which are perceived to be safe can compromise attention and decision-making. This may suggest a greater emphasis on the cognitive demands is needed as opposed to a more primary focus that exists on the visual and motor control aspects of the driving task.

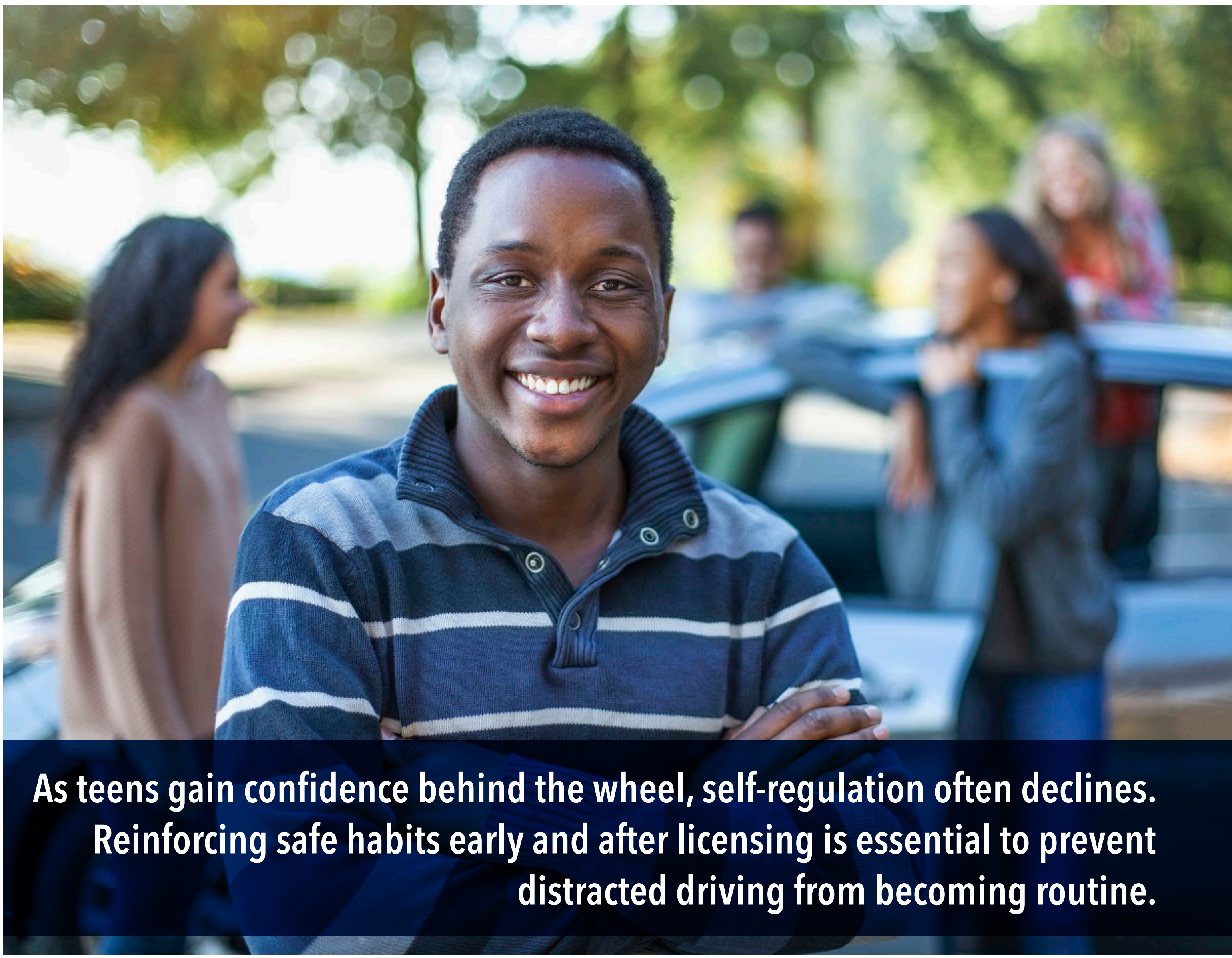
Emotional motivators, particularly the fear of causing harm or loss of life, were among the strongest deterrents to distracted driving, surpassing concerns about fines, license suspension, or peer disapproval. Prevention programs should build on this finding by creating emotionally resonant, evidence-based messaging that connects the real-life consequences of distraction to teens' personal values and social circles. Of course, emotionally resonant messaging should align with existing research demonstrating graphic, fear-based appeals are less effective with younger and male drivers, and that humor creates more compelling and non-confrontational engagement.

Finally, although many teens reported using strategies to reduce distraction, such as enabling Do Not Disturb mode, placing phones out of reach, or asking passengers not to distract them, these practices declined with age. This suggests a gradual erosion of self-regulation as teens gain driving experience and confidence, underscoring the importance of reinforcing safe habits during the licensing, and post-licensing process, as well as providing context for the length and breadth of experience needed to become a safe driver.

In summary, distracted driving among youth is sustained by a combination of exposure, perceived control, peer acceptance, and observed adult behavior. Preventing these risks requires a multi-pronged approach:

- Early, age-tailored education that discourages high-risk, entertainment-based smartphone use among younger teens.
- Sustained messaging for older teens emphasizing that navigation, calls, and everyday distractions still carry significant risk, highlighting the cognitive demands of tasks.
- Parental engagement and modeling, ensuring parents understand their influence and consistently demonstrate distraction-free driving.
- Peer-to-peer empowerment, encouraging teens to speak up, challenge unsafe norms, and model safe driving within their social circles.
- Integration into driver education, using realistic simulations and hands-on demonstrations to help teens experience the cognitive limits of multitasking behind the wheel.

Together, these strategies can help reshape attitudes, strengthen self-regulation, and reduce the normalization of smartphone use while driving, ultimately fostering a generation of safer, more mindful young drivers.



References

Blincoe, L., Miller, T., Wang, J.-S., Swedler, D., Coughlin, T., Lawrence, B., Guo, F., Klauer, S., & Dingus, T. (2023, February). The economic and societal impact of motor vehicle crashes, 2019 (Revised) (Report No. DOT HS 813 403). National Highway Traffic Safety Administration. Accessed at **https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813403.pdf**

Brown, S., Vanlaar, W. G. M., & Robertson, R. D. (2024). Distraction-Related Fatal Collisions in Canada, 2000-2021. Traffic Injury Research Foundation. Accessed at **https://tirf.ca/download-page/?dlm-dp-dl=13360**

DePoy, L. M., Vadnie, C. A., Petersen, K. A., Scott, M. R., Zong, W., Yin, R., Matthaei, R. C., Juarez Anaya, F., Kampe, C. I., Tseng, G. C., & McClung, C. A. (2024). Adolescent circadian rhythm disruption increases reward and risk-taking. Frontiers in Neuroscience, 18. **https://doi.org/10.3389/fnins.2024.1478508**

Gershon, P., Sita, K. R., Zhu, C., Ehsani, J. P., Klauer, S. G., Dingus, T. A., & Simons-Morton, B. G. (2019). Distracted driving, visual inattention, and crash risk among teenage drivers. American Journal of Preventive Medicine, 56(4), 494–500. Accessed at **https://www.ajpmonline.org/article/S0749-3797(18)32450-4/abstract**

Gershon, P., Zhu, C., Klauer, S. G., Dingus, T., & Simons-Morton, B. (2017). Teens' distracted driving behavior: Prevalence and predictors. Journal of Safety Research, 63, 157–161. https://doi.org/10.1016/j.jsr.2017.10.002. Accessed at **https://www.sciencedirect.com/science/article/abs/pii/S002243751730097X?via%3Dihub**

National Distracted Driving Coalition. (2022). Distracted driving prevalence data: Sources, challenges, and technological solutions. Washington, DC. Accessed at **https://usnddc.org/downloads/**

National Distracted Driving Coalition. (2025). A comprehensive approach to distracted driving enforcement. Washington, DC. Accessed at **https://usnddc.org/downloads/**

National Highway Traffic Safety Administration. (2022). Traffic safety facts 2020: Distracted driving (Report No. DOT HS 813 309). Washington, DC. Access at **https://crashstats.nhtsa.dot.gov/Api/Public/Publication/813309**

National Highway Traffic Safety Administration. (2025). Distracted driving. Washington, DC. Accessed at **https://www.nhtsa.gov/risky-driving/distracted-driving**

National Highway Traffic Safety Administration. (2025). Distracted Driving in 2023. Traffic Safety Facts Research Note (Report No. DOT HS 813 703). Washington, DC. Accessed at h**ttps://crashstats.nhtsa.dot.gov/Api/Public/Publication/813703**

Pope, C. N., Bell, T. R., & Stavrinos, D. (2016). Mechanisms behind distracted driving behavior: The role of age and executive function in the engagement of distracted driving. Accident Analysis & Prevention, 92, 107–112. https://doi.org/10.1016/j.aap.2016.09.030. Accessed at **https://www.sciencedirect.com/science/article/abs/pii/S0001457516303608?via%3Dihub**

Robertson, R. D., Delavary, M., Wicklund, C., & Bowman, K. (2025). Youth Distracted Driving Survey: National Results. National Distracted Driving Coalition. Accessed at **https://usnddc.org/wp-content/uploads/2025/04/NDDCYSNational-Results_15.pdf**

Robertson, R. D., Simmons, S. M., Woods-Fry, H., & Vanlaar, W. G. M. (2022). Road Safety Monitor 2021: Distracted driving attitudes and practices, 2004–2021. Traffic Injury Research Foundation. Accessed at **https://trid.trb.org/view/1986902**

Simons-Morton, B. G., Guo, F., Klauer, S. G., Ehsani, J. P., & Pradhan, A. K. (2014). Keep your eyes on the road: Young driver crash risk increases with glance duration. Journal of Adolescent Health, 54(5), S61–S67. https://doi.org/10.1016/j.jadohealth.2013.11.021. Accessed at **https://pmc.ncbi.nlm.nih.gov/articles/PMC3999409/**

Traffic Injury Research Foundation. (2026). TIRF National Fatality Database. Accessed January 15, 2026.

Transport Canada. (2025). Canadian motor vehicle traffic collision statistics: 2023. Ottawa, ON. Accessed at **https://tc.canada.ca/en/road-transportation/statistics-data/canadian-motor-vehicle-traffic-collision-statistics/2023/canadian-motor-vehicle-traffic-collision-statistics-2023**

Woods-Fry, H., Vanlaar, W.G.M., Robertson, R.D., Torfs, K., Kim, W., Van den Berghe, W., and Meesmann, U. (2018). Comparison of Self-Declared Mobile Use While Driving in Canada, the United States, and Europe: Results from the European Survey of Road Users' Safety Attitudes. Transportation Research Record Journal of the Transportation Research Board 07/2018.
https://journals.sagepub.com/doi/abs/10.1177/0361198118787631

With support from State Farm®

State Farm®

Partnering for a Focused Future
Driving Distraction-Free

The **National Distracted Driving Coalition (NDDC)** was formed in March 2021 to address distracted driving, which is a contributing factor to road deaths and injuries. This road safety issue is a priority concern shared by many organizations across many sectors. A diverse cross-section of entities, representing academia, non-profits, government, advocacy, and industries, including insurance, transportation, automotive and technology, have come together to create a National Action Plan to tackle this important issue. Visit **usnddc.org**

The mission of the **Traffic Injury Research Foundation USA, Inc. (TIRF USA)** is to develop and share the knowledge that saves – preventing injuries and loss of life on American roads, reducing related social, health and insurance costs, and safeguarding productivity. TIRF USA is an independent road safety research institute that obtained 501(c)3 non-profit status in the US in 2014. Visit **tirf.us**