What you should know about…

Passenger Restrictions

Graduated Driver Licensing

A major risk factor for teen drivers is the presence of teen passengers. How do peer passengers relate to crash rates?

While teenage driver crashes and casualties decreased in the past decade, and in spite of recent attention to the issue, teens are still high risk drivers and unintentional injury from motor vehicle crashes remains the number one cause of death among teens in the United States. In absolute numbers, 3,889 teens aged 16-19 – more than 10 every day – died in passenger vehicles driven by a teen in 2005. Per population, teen drivers age 16-19 are involved in about twice as many crashes, fatal and non-fatal, as drivers aged 30-59 (Ferguson, Teoh, & McCartt, 2007).

Teen drivers in fatal crashes were more likely to make driver errors, speed, or carry passengers than drivers age 26-49. In particular, teen or peer passengers increase crash risk, with each additional passenger adding to the risk (Ferguson, Teoh, & McCartt, 2007; Williams, 2007). The majority of crashes occur during daytime and passenger presence for teenagers elevates crash risk both day and night (Williams, 2007).

In addition, 40% of 16-19 year olds killed in passenger vehicles in 2005 were riding as passengers. The largest proportion of these deaths, 51%, were 16-year-olds (Ferguson, Teoh & McCartt, 2007).

A few factors seem likely to be the cause of increased passenger and driver injuries and deaths associated with peer passengers:

- Passengers can cause distractions.
- Passengers may influence risk-taking behaviors of young and inexperienced drivers (and teen drivers may overestimate their driving ability).
- Alcohol and other drug use may be more likely to impact attention and decision-making when one or more passengers are present.

As the number of teen passengers increases, fatal crashes among 16- and 17- year-old drivers are more likely to involve a single vehicle, speeding, and driver error (Table 2). With three or more teenage passengers, 85% of crashes involved driver error, almost 50% involved speeding, and almost 70% involved a single vehicle (Ferguson, Teoh & McCartt, 2007).

Table 1. Characteristics of Fatal Crashes by Driver Age (Percent), 2005 FARS

	Driver Age					
	16	17	18	19	20-25	26-49
Driver error	74	73	71	68	64	51
Speeding	34	32	33	33	30	19
Single vehicle	49	47	44	46	45	38
3+ occupants	29	24	23	24	19	17
Driver killed with positive BACs	15	23	30	32	53	48

Table 2. Characteristics of Fatal Crashes among 16-17 Year-Olds When Driving Alone or When Carrying Teenage Passengers (Percent), 2005 FARS

	Driver alone	Driver +1 teen passenger	Driver +2 teen passengers	Driver & 3+ teen passengers
Driver error	71	75	78	85
Speeding	30	34	42	46
Single vehicle	41	45	57	69
Driver killed with positive BACs	12	15	12	16

Data from the Fatality Analysis Reporting System (FARS), 2005 (Ferguson, Teoh, & McCartt, 2007).

This fact sheet reflects current information presented at the International Symposium on Novice Teen Driving: GDL and Beyond – Research Foundations for Policy and Practice held in Tucson, Arizona on February 5-7, 2007. **For more information, go to *www.nsc.org/gdl/*.**

Passenger Restrictions

Evidence from Current Research on the Effectiveness of Passenger Restrictions

Passenger restrictions are a key feature of Graduated Driver Licensing (GDL) systems. Restrictions limit the number of passengers a teen driver may have in the vehicle to reduce distractions. In 2006, 37 states and the District of Columbia restricted passengers in some manner, from no passengers to no more than three passengers, for some period of time.

Several studies have found that passenger restrictions reduce crashes (Williams, 2007). However, fatal crash and survey data confirm that compliance is lower for passenger restrictions than for nighttime restrictions. According to Williams, in reviewing the effectiveness of passenger restrictions:

- Four studies of California's strong restriction (no passengers under age 20) have indicated positive effects (Cooper, Atkins, & Gillen, 2005; Masten & Hagge, 2004; Rice, Peek-Asa, & Kraus, 2004; Zwicker et al., 2006). For example, in the Zwicker study, there was a 38% reduction of 16-year-old drivers in crashes in which teen passengers were injured or killed.
- Positive effects of passenger restrictions in California, Massachusetts (no passengers younger than 16), and Virginia (no more than one passenger younger than 18) are being reported in a forthcoming study (Chaudhary, Williams, & Nissen, in press).
- In North Carolina, multiple passenger crashes declined by 32% among 16-year-old drivers, and by 15 percent among 17-year-old drivers since a passenger restriction was enacted (Highway Safety Research Center, Research Directions, 2006).
- National studies of GDL systems also are showing evidence of positive effects due to passenger restrictions (Chen, Baker, & Li, 2006; Morrisey et al., 2006; Williams, Ferguson, & Wells, 2005).
- New Zealand reported mildly positive effects of their restriction (Begg & Stephenson, 2003).

Attempts to Increase Compliance & Next Steps

Despite the presence of passenger restrictions in more than two-thirds of U.S. jurisdictions and evidence of positive effects, teens driving with teens is still a major problem. According to Williams, 2007:

- Attempts have been made to increase compliance with passenger restrictions through systems involving parents. These efforts have achieved modest success.
- More experimentation is needed, including programs targeting parents and police in combination.
- Programs would benefit from more thorough information than presently available on attitudes and practices of teens, parents, and police in regard to passenger restrictions and how they vary depending on the specific rules in force.

It is not currently clear whether dangerous types of passenger travel are more likely to be reduced by laws allowing one young passenger, or by more restrictive laws allowing none, which may be more likely to be ignored and create disrespect for the law (Williams, 2007).

References

Ferguson, S.A., Teoh, E.R., & McCartt, A.T. (2007). Progress in teenage crash risk during the last decade. Journal of Safety Research, 38(2), 137-145.

Williams, A.F. (2007). Contribution of the components of graduated licensing to crash reductions. Journal of Safety Research, 38(2), 177-184.

NOTE: James Hedlund summarizes information presented and discussed at the Symposium. This summary contains a complete listing of secondary references. See: Hedlund, J. (2007). Novice teen driving: GDL and beyond. Journal of Safety Research, 38(2), 259-266.

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