BRIEF REPORT

Graduated licensing comes to the United States

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Abstract**Objective**—To describe the young driver problem and the emergence of graduated licensing as a way to address it.**Methods**—Literature review and commentary.**Results**—Twenty four states in the United States adopted versions of graduated licensing in 1996–98; initial results show positive effects.**Conclusions**—A major public health movement is under way that can be expected to produce significant reductions in crashes and injuries involving young drivers.

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Every motorized society in the world has a young driver problem. The problem is of epidemic proportions in the United States for two main reasons. First, we have allowed licensure at age 16 in most states, whereas in many other countries licenses are withheld until age 17 or, more typically, 18.¹ Crash risk is increased by factors related to the stage of adolescent development of 16 year olds involving risk behavior and decision making.^{2–3} Second, young beginners are by definition inexperienced drivers. Inexperience is a crash risk factor, the effects of which have been increased by allowing a quick and easy path to licensure. For example, in 1995 only 30 states required drivers to obtain learner's permits, only 11 of these states required permits to be held for a minimum period of time, and minimum holding periods were short, typically 30 days.⁴ Thus it has been possible for very young, inexperienced people to obtain licenses that in most states allow full driving privileges immediately.

This combination of factors is reflected in the high crash risk of 16 year olds. Based on data from a probability sample of police reported crashes in the United States⁵ and a national survey of transportation patterns,⁶ 16 year old drivers sustained 35 crashes per million miles in 1995–96, compared with 20 per million for 17 year olds, 13 per million for 18–19 year olds, and four crashes per million for drivers ages 30–59. That is, 16 year olds have almost three times the crash risk of older teenagers and almost 10 times the crash risk of

middle aged drivers. Studies suggest that young age and driving inexperience contribute about equally to this increased crash risk.⁷ In practice, young beginners engage in more risky driving than adults (speeding, tailgating, etc) and, because of their inexperience, are less able to recognize and respond to hazards.^{8–11}

What options exist for dealing with the young driver problem? One is to raise the licensing age. In the one state in the United States (New Jersey) that licenses at age 17, this higher age has been accepted and teenagers have accommodated. Sixteen year olds in New Jersey spend about the same amount of time at paying jobs, homework, dating, parties, being with friends, and participating in sports or school activities as 16 year olds in neighboring states.^{12–13} Public opinion surveys indicate considerable support among parents for a higher licensing age; 40%–60% endorse age 17 or 18.^{14–16} However, raising the licensing age is not a popular option, and although it has been suggested in some states, it receives little public or political support and is unlikely to happen.

Instead, states are introducing graduated licensing, a system designed to address driving inexperience. Recognizing that driving is a complex skill that takes time and practice to master, graduated systems phase in full driving privileges. They require beginners to obtain initial experience in lower risk settings, introducing in three stages more complex driving situations: a learner's phase of at least six months during which supervised driving is allowed and encouraged; once the driving test has been passed, an intermediate phase (generally 6–12 months) that prohibits unsupervised driving in high risk situations; and full privilege licensure once requirements of the first two stages have been met. Two major crash risk factors for young drivers—late night driving and transporting passengers, especially teenagers (17–19)—are addressed in the intermediate stage. In effect, the addition of this intermediate phase raises the age of full privilege licensure, generally from 16 to 17 or 18.

Laws in a few states have included elements of graduated licensing—notably night driving restrictions—for years. However, the first multistage system was not introduced until 1987 in New Zealand. In 1994, Canada began to introduce graduated systems, and in 1996 the process began in the United States. Since 1996, 24 states have introduced one or more elements of graduated licensing. Of these, 18

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states have multistage systems—all with night driving restrictions in the intermediate stage, and six with passenger restrictions. Six states have introduced partial systems—five with mandatory permit holding periods, and one with a night driving restriction only.

The introduction of such requirements is a recent phenomenon, but graduated licensing is not a new idea. It was discussed in the United States in the early 1970s, and during the 1970s the National Highway Traffic Safety Administration (NHTSA) developed a model law and offered states financial incentives to implement it.²⁰ California and Maryland changed their systems to include some elements of graduated licensing. Although these changes reduced young driver crash involvement somewhat, they fell far short of NHTSA's recommendations.^{21–22} Two principal objections kept graduated licensing from catching on in the United States in the 1970s and 1980s. One objection was that it applied to everyone of a certain age, punishing many responsible young people in the process. The preferred approach, it was argued, was to identify and address only young drivers likely to pose a problem on the road. The second, related objection was the perceived unfairness of graduated licensing to young people in restricting their mobility. It was thought they were being "picked on."²³ Reasonable responses were issued to these objections, but they did not overcome the general resistance to graduated licensing. In fact, most teenagers in fatal crashes do not have prior violations or crashes on their records, so potential problem drivers are not readily identifiable. Some teenagers are indeed at lower crash risk than others, but they all start out as inexperienced drivers who can benefit from a graduated entry into the driving population. Whereas inexperience is a risk factor at any age (a person beginning to drive at 30 years old, for example, has greater crash risk than an experienced 30 year old),⁷ the combination of young age and inexperience greatly magnifies crash risk, making teenagers a prime target group.

Although in the United States the vast majority of beginners are 17 and younger, arguably all beginners should be subject to graduated licensing. New Zealand applies its graduated system to beginners up to age 25, and in Canada graduated licensing applies to all beginners regardless of age. In the United States, all but two states (Maryland and New Jersey) apply graduated licensing only to beginners younger than age 18, the legal age of adulthood.

The question then becomes why graduated licensing is catching on now. Why the shift in attitude toward the licensing of young people? The young driver problem has been acknowledged as serious for many years, so it is not that we are just now recognizing it. The successful introduction of graduated licensing in New Zealand may have contributed. Endorsements by all the major safety organizations in the United States have provided some impetus. And it appears there is greater recognition in the 1990s that driver education—the principal means by which we have tried to prepare young

drivers—is not doing the job adequately. Formal driver education may be a good way to learn basic driving skills, but it does not produce drivers less likely than those without formal training to be in motor vehicle crashes, and it can have an unintended negative effect through encouraging earlier licensure and increasing exposure.^{24–27} But we really do not fully know the reasons for the powerful trend toward graduated licensing that now is unfolding.

Whatever the reasons, graduated licensing is a major public health movement that seems likely to continue until it has been adopted in a large majority of states. It has much support and no organized opposition. The issue of increased administrative costs has been raised but has not seriously hampered passage of legislation. Another issue frequently raised involves the inconvenience of restricting unsupervised late night driving, especially in rural areas where long distances often are traveled and cars are the only transportation alternative. States have allowed exemptions for essential nighttime driving such as to or from work or school, but clearly graduated licensing represents a trade-off between safety and mobility.

The movement to graduated systems comes at a propitious time. The teenage population decreased in the 1970s and 1980s, but began increasing in the early 1990s. For example, the population of 16 year olds—the primary target of graduated licensing—decreased by 22% between 1975 and 1992 but increased 18% between 1992 and 1998. It is projected to increase 13% between 1998 and 2010. Moreover, during the past 20 years, the driver death rate per 100 000 licensed 16 year olds increased from 19 to 35, whereas death rates among drivers of other ages, including 17–19 year olds, decreased slightly. The reasons for these divergent paths are not clear, but the trend among 16 year olds adds to an already serious problem.

The extent to which graduated licensing will reduce the young driver problem will not be known immediately. Evaluations of some of the early systems are in progress, but 10 of the 24 new systems do not go into effect until 1999 or later; eight went into effect in 1998. It is known that standard components of graduated licensing such as night driving restrictions are highly effective.¹⁷ The New Zealand system was estimated to reduce injuries by at least 7%,²⁸ and early results in Canada are promising.²⁹ In Florida, the first of the 24 states to adopt graduated licensing, there was a 9% reduction in the fatality and injury crash involvement rates among 15–17 year olds during 1997, attributable to the new licensing system.³⁰ The effectiveness of graduated systems in reducing injuries will depend on several factors, including the amount of driving experience young people get before graduation from the system, compared with their predecessors over the same time period; the extent to which young people delay the start of the licensing process because the initial license is less attractive; and the extent to which the restrictions of graduated systems are violated. It is known from the

New Zealand experience and from studies of night driving restrictions that violations do occur, but overall compliance is reasonable.³¹⁻³³ Parents, not the police, are chief enforcers, and they strongly support graduated licensing.³⁴ It is common to hear both from young people and parents that many parents impose, or try to impose, their own versions of graduated licensing with tougher restrictions than states require. The extent to which the state or the parent is responsible for guiding a young person through this high risk period can be debated. However, it is certainly much easier for parents to do so if states back them up with the kinds of restrictions many parents have tried to impose on their own.

In short, a profound change is occurring in the way we license young drivers in the United States. This change can be expected to yield significant reductions in crash injuries.

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