

**The Questionable Foundation for the
“Dangerous Unlicensed Driver” Stereotype
Russell Trenholme August 27, 2010**

There is a near-universal stereotype of the “dangerous unlicensed driver.” Unlicensed drivers, today mostly undocumented immigrants ineligible for drivers licenses in California, are treated by police throughout the state as equally or more dangerous than those driving on suspended or revoked drivers licenses. This latter group consists of proven dangerous drivers, since the licenses (in most cases) were taken away because of DUI or some other serious driving offense. There are a number of studies that show that suspended/revoked drivers are disproportionately involved in traffic accidents.

However, the situation is much less clear in the case of unlicensed drivers. Richard Hagge, Research Manager, Driver Competency and Safety Section of the DMV’s Research and Development Branch, states that “we have no data on the make-up of the unlicensed driver population, the representation of undocumented drivers in that group, or the crash risk posed by undocumented drivers specifically. ... We have not done any research on unlicensed drivers since DeYoung’s studies in the 1990s.” (email dated August 18, 2010).

David DeYoung, a researcher in the DMV, published a report in 1997 in which he anticipated Hagge’s remarks:

While the vehicle impoundment and forfeiture laws apply to both S/R and unlicensed drivers, there are serious problems in identifying and studying unlicensed drivers, so the current study is limited to an examination of the effects of impoundment and forfeiture on S/R drivers. (“An Evaluation of the General Deterrent Effect of Vehicle Impoundment on Suspended and Revoked Drivers in California,” 1997)

A second 1997 report, also by DeYoung, is constantly cited in justification of impoundments. That report, which estimated the relative fatal crash rates (“overinvolvement” rates) of licensed, unlicensed, and revoked/suspended drivers based on data from 1987-1992, is entitled “Estimating the Exposure and Fatal Crash Rates of Suspended/Revoked and Unlicensed Drivers in California.” The key assertion that has been repeatedly quoted or paraphrased is presented in the introduction to the report:

The results show exposure rates of 8.8% and 3.3% for suspended/revoked and unlicensed drivers, respectively, and that, compared to validly licensed drivers, the former are overinvolved in fatal crashes by a factor of 3.7:1 and the latter 4.9:1.

This statement has been used again and again to justify the emphasis on impoundment of vehicles driven by unlicensed drivers. For example, here is a quote from a recent article in the publication *The Police Chief* (“The Professional Voice of Law Enforcement,” August 2010): “Although drivers with suspended licenses are more likely to be on the roads than unlicensed drivers (8.8 percent versus 3.3 percent), an unlicensed driver is more dangerous. A 1997 study found that persons who have never had driver's licenses were 4.9 times more likely than licensed

drivers to be involved in fatal collisions.” The title of the article is “Reduce Traffic Collisions by Targeting Unlicensed Drivers.” This is one example of how the outdated (and somewhat speculative) DeYoung results are being used today to urge a crackdown on unlicensed drivers. The same data and similar conclusions were also used (prior to publication) to justify the inclusion of unlicensed drivers in CVC 14602.6 and CVC 14607.6 (respectively used to justify 30-day vehicle impoundment and vehicle forfeiture). These laws are part of the Safe Streets Act passed in 1993. CVC 14607.4 states: “of all drivers involved in fatal accidents, more than 20 percent are not licensed to drive” and “a driver with a suspended license is four times as likely to be involved in a fatal accident as a properly licensed driver.”

It is significant that the study that is used to justify treating unlicensed drivers as harshly as drivers whose licenses have been suspended for serious offenses (principally DUI), only deals with fatal collisions. Other DMV studies of driver safety look at a variety of indicators of bad driving: moving citations, DUI arrests, involvement in accidents in which there were injuries, etc. Fatal collisions represent the smallest data set, and occur under rather special conditions—late night, high speed driving, often involving alcohol. Moreover, DeYoung acknowledges making a number of problematic assumptions in arriving at his conclusions—these are discussed in a technical note at the end of this report.

The most important fact that is universally ignored by those who cite DeYoung’s study is that *the study is limited to data on fatal two-car crashes that occurred between 1987 and 1992*. During this entire period, undocumented immigrants could obtain drivers licenses like anyone else who met the driving-related qualifications. In the 1987 to 1992 period, the unlicensed driver population consisted almost entirely of persons who, for reasons of physical or mental impairment, or being underage, were deemed too potentially dangerous to be given drivers licenses. In 1993, a law was passed denying undocumented immigrants the right to drivers licenses. As the licenses of previously-licensed undocumented immigrants expired, without possibility of renewal, these immigrant drivers became newly unlicensed drivers. In addition, after NAFTA, a flood of new undocumented immigrants arrived in California to swell the ranks of the unlicensed.

DeYoung’s estimate that 8.8% of drivers in 1987-92 were suspended/revoked (S/R) and 3.3% unlicensed (U) implies that the ratio of S/R to U drivers at that time was 2.7:1. No one knows the current ratio, but it is universally recognized that today the overwhelming majority of unlicensed drivers are undocumented immigrants. For example, the SBPD citation data for the period January 2007-August 2009, shows 2,911 citations for unlicensed driver but only 599 for suspended/revoked, yielding a ratio of 1:4.9 (instead of 2.7:1). If the number of S/R drivers were still 8.8%, then the number of U drivers on the road would be 43.12%—which is absurd. The reasons why more unlicensed drivers than S/R are cited and impounded are discussed in my report on police impoundments in the City of Santa Barbara.

A somewhat better idea of the frequency of unlicensed immigrant drivers comes from the ratio of 3:1 (unlicensed to S/R) found at recent Santa Barbara checkpoint stops where officer discretion is eliminated. (The nighttime exposure rates found at checkpoints are very low, but there is no reason to doubt that the same 3:1 ratio holds for daytime exposure rates as well. But if we were to use DeYoung’s estimate of 8.8% as the frequency of S/R drivers, we would still end up with

an obviously exaggerated frequency (26.4%) for unlicensed drivers on the road. All this suggests that the estimate of 8.8% for (active) S/R drivers is far too high. In fact, the strict impound policy implemented since 1995, has probably significantly reduced the frequency of S/R drivers on the road.

Note that there are estimated to be approximately 3 million (2.6 million according to figures recently given in USA Today—see below) undocumented immigrants in California out of a year-2000 population of about 30,000,000 (I use the year-2000 population because it is most relevant to the AAA report to be discussed below.) This suggests an upper bound of 10% for the frequency of unlicensed immigrant drivers, and if the ratio to S/R drivers is 3:1 as indicated at checkpoint stops, then, working backwards, the upper bound on S/R drivers would be about 3.3% rather than 8%. (DeYoung noted in his report that the percentage California drivers known to be S/R is 5.5%, considerably lower than the 8.8% calculated by the report's procedure). Assuming 75% of S/R drivers continue to drive (as stated in his report), this would yield about 4% which is not far from the 3.3% frequency of S/R drivers just estimated.

But the 75% (or 70%) figure quoted in various DMV studies is undoubtedly large. This estimate is based on studies in British Columbia and in Australia where the penalties for driving on a suspended or revoked license are quite different from those currently obtaining in California. Given the 1994 impoundment law, 70% seems far too high, at least as an exposure rate. Even if a high percentage of S/R drivers occasionally drive (e.g. to get to work), their frequency on the road is probably far lower (probably far less than the 3.3% upper bound mentioned above). But this means that their rate of involvement in fatal accidents is probably far higher than supposed due to the probable overestimation of their frequency in DMV reports.

It would be worthwhile to learn more about drivers involved in fatal accidents, for example, their age distribution. In a 2004 report entitled *Characteristics of Negligent Operators in California* (Michael Gerbs and Robert Roberts, May 2004), the authors correlate drivers in the Negative Operator Treatment System (NOTS), with a number of characteristics that shed light on the bad driver population. (There are four NOTS levels, based on the frequency and type of offense. Level III drivers are subject to a suspension or revocation hearing, and Level IV drivers are those who violate probation requirements and whose licenses are actually suspended or revoked.)

Level I NOTS drivers had about 7 times as many prior countable accidents; Level IV NOTS drivers had about 11.5 as many prior countable accidents. The report concluded:

Youthful drivers, especially young male drivers, account for the majority of NOTS actions. More than 60% of all drivers subject to the NOTS program were 35 years old or younger. Approximately 50% were under 30 years of age, and the highest risk group was the 18- to 24-year olds.

Another DMV report (*Teen and Senior Drivers*, July 2003, Mary K. Janke, et al.) talks about the risk-taking behavior of teen drivers, especially speeding and heavy drinking or drug use, and poor night driving skills. Thus we would like to know for the 1987-92 period covered by DeYoung's data how many of the unlicensed drivers were teens who failed to take the required

courses to obtain their first drivers license.

Due to lack of data, much of the above discussion is speculative. What is clear is that

1. The population of unlicensed drivers today is completely different from the population of unlicensed drivers in the DeYoung study which has no bearing on today's unlicensed driver population.
2. The "dangerous" 1987-92 unlicensed driver population almost certainly forms 10% or less of the current unlicensed driver population.
3. The California DMV reports provide no basis for concluding that the current population (or at least the 90% of it consisting of undocumented immigrants) are particularly dangerous drivers.

The AAA Foundation Study, Unlicensed to Kill

The Santa Barbara Police Department (in its August 10, 2010 press release) cites a different study in justification of its mandatory tow policy, a recent study by the AAA Foundation entitled *Unlicensed to Kill*. The nomenclature of this report further confuses the issue, since the term "unlicensed driver" is used to cover not only unlicensed drivers in the usual sense but also S/R drivers who have proven high accident rates, high DUI rates, and high citation rates. The true situation is made clearer by analyzing the entry for California in Table 6 of the AAA report ("Drivers involved in fatal crashes") which covers fatal accidents from 2001-2005. In this table, unlicensed drivers, in the usual sense, are finally separated from suspended/revoked drivers . Here is the relevant table entry for California:

Valid	%	Unlic	%	Sus/Rev	%	Ex/Can/Den	%	Unk	%	Total
22,318	79.9	1,802	6.5	1,964	7	646	2.3	1,200	4.3	27,930

These numbers make it appear that unlicensed drivers are about as dangerous as suspended/revoked drivers—a 6.5% involvement rate versus 7% for the S/R drivers. But this is a mistake since these percentages fail to take account of the number of drivers in each category (if we don't take account of these numbers we might conclude that those with valid licenses are the most dangerous by far). We need to know the "exposure" or number of drivers in the category on the road. As the statements by Hagge and DeLong indicate, the DMV has little or no data on this. Santa Barbara checkpoint data indicate that there are over three times as many unlicensed drivers as suspended/revoked drivers on the road in recent years. This is hardly surprising since it has been estimated that there are 2.6 million undocumented immigrants in California (about 7% of the population).¹ Most are young adults who work and require vehicles to get to work. If the 1:3 (S/R to unlicensed) ratio held state-wide, it would suggest that the *driver-adjusted rate* for unlicensed drivers would be less than a third of that for suspended/revoked drivers. In fact, the 6.5% of the accidents involving unlicensed drivers may correspond to their frequency in the population given that automobile use (exposure) may be lower than average because the fear of impoundment limits vehicle use.

¹ *USA Today*, August 26, 2010, p. 1, attributed to Homeland Security and the Census Bureau. Three million is a commonly given estimate, although some estimates are as high as five million.

Suppose that the frequency of unlicensed drivers on the road (exposure) is 6.5%; then their fatal-accident involvement rate would be proportional to their exposure. But the 6.5% rate is actually too high for the undocumented-immigrant *subgroup* of unlicensed drivers because the overall group average has been raised by the presence of the 1987-92 dangerous unlicensed drivers (who DeYoung claimed were over-involved in fatal accidents at a rate of 4.9:1). If these “bad” unlicensed drivers represent about 10% of the entire unlicensed driver population, then unlicensed immigrant drivers even might have an involvement rate comparable to that of the validly-licensed group. This is not implausible in view of the observation that undocumented immigrant drivers are generally cautious in order to avoid police stops at which discovery of their unlicensed state would result in impoundment.²

As DeYoung noted, it is very difficult to get accurate figures on unlicensed drivers. Nevertheless, it is clear that reports such as the AAA report draw incorrect conclusions about unlicensed drivers because they fail to take account of the large size of the unlicensed driver group resulting from the flood of undocumented immigrants into the United States over the past twenty years. The DMV report quoted above (the one that stated that because it’s “very difficult to identify and study unlicensed drivers...so they were not included in this study”) noted that “flooding” of the revoked/suspended pool would invalidate the study’s results—but nowhere is this reasoning applied to the unlicensed driver population where the flooding of undocumented immigrants into the pool has completely altered its characteristics.

Thus neither the widely-quoted DeYoung study of 1987-92 drivers nor the new AAA study lends support to the stereotype of the “dangerous unlicensed driver” and in particular neither provides a basis at all for concluding that drivers who are denied licenses by virtue of their immigration status are especially dangerous.

A 2002 DMV report by Gerbers and DeYoung (discussed in more detail in the following section) emphasizes the unreasonableness of subjecting drivers whose licenses have been suspended or revoked for non-safety reasons (e.g. for non-payment of child support) to a 30-day impound under CVC 14602.6. For immigrant drivers, 30-day impounds are the real issue. The law was written to provide a strong disincentive to drive for dangerous drivers whose licenses have been suspended or revoked or who were ineligible for licenses for safety reasons. DeYoung suggests that the law be changed to remove S/R drivers who lost their licenses for non-safety reasons. But neither he nor any other official has applied this reasoning to the unlicensed driver pool.

The reality is that, throughout the state, police departments, including the Santa Barbara Police Department, continue to dogmatically insist that all unlicensed drivers are dangerous. This self-serving assumption is used to justify the massive impoundment of vehicles driven by undocumented immigrants which, through collection administrative fees, feeds money into

² On the other hand, given that undocumented immigrants are, on average, young and male, they might have a higher than average accident rate even if that rate were lower than that of the comparable demographic of licensed drivers. As the DMV reports from 2003 and 2004 demonstrated, the younger male demographic has relatively high citation, DUI, and accident rates. But if the undocumented immigrants did mirror the driving characteristics of the licensed population with similar age and sex distribution, it would be a serious injustice to single immigrants out as if they were somehow more dangerous than licensed drivers of similar age and sex. It is my believe, and that of many others, that, in fact, undocumented immigrant drivers are safer than licensed drivers with similar demographic characteristics because of their fear of police.

police coffers to fund over-time pay for police officers. The financial basis for 30-day impoundment of vehicles driven by undocumented immigrants was exposed in a deeply-researched report issued by the Berkeley Center for Investigative Reporting. (The report was picked up by the New York Times and other major media.) However, because the public has almost universally accepted the stereotype of the dangerous unlicensed driver, there has been little outcry against questionably lawful practices employed throughout the state to impound vehicles belonging the undocumented immigrants.

Categories of Drivers

It is helpful to break out the categories of drivers and then to note how heterogeneous the various categories are with respect to highway safety:

Validly Licensed Drivers		Disqualified		Drivers	
Validly Licensed		Unlicensed		Suspended/Revoked	
16-19 Years Old	Others	Refused for Safety Reasons	Refused for Immigration Status	R/S for Failure to Pay Child Support	R/S for Dangerous Driving

Some categories of validly licensed drivers have demonstrably higher accident rates; for example, drivers over under age 20. Reports issued by the California Department of Motor Vehicles in 1993 and 1997 indicate that teen drivers s are 5 times as likely to be involved in accidents involving injury or death than drivers in the 45-54 year age bracket.

DeYoung and Michael Gebers conducted a study for the DMV in 2002 (*An Examination of the Characteristics and Traffic Risk of Drivers Suspended/Revoked for Different Reasons*). This study concluded that the S/R drivers form a heterogeneous group with very different accident rates:

This law [14602.6] and others, should be modified to better reflect the nature and risk of the suspended/revoked offenders to whom they apply.... However, there are even more serious problems with the current suspension/revocation laws, as the findings on the risks of drivers suspended/revoked for failing to pay child support point out. This group, which is suspended/revoked for reasons completely unrelated to their driving, has the lowest crash risk of any suspended/revoked group, and poses little more risk on the highways than the validly licensed drivers.

They go on to recommend, *“The current vehicle impoundment law, CVC 14602.6, should be rewritten to more rationally reflect the risks of the suspended/revoked drivers it includes and excludes from its provisions.”*

The evidence presented above suggests the conclusion with respect to the vast majority of unlicensed drivers who lack licenses because of immigration status. In the meantime, the discretion granted by 14602.6 to the officer on the scene to decide whether to impound or not could be exercised selectively depending on the nature of the offense. In the case of undocumented immigrants and perhaps of S/R drivers whose offense was failure to pay child

support, temporary impoundment (generally referred to as “storage”) could be authorized by CVC 22651(p) which permits recovery of the vehicle from storage by a validly licensed driver authorized by the owner. Of course, if there are other serious offenses—such as lack of valid registration or lack of insurance—the officer could decide to proceed with the 30-day impoundment regardless of the reason for being S/R or unlicensed. In any case, the decision to impound should take account of the Miranda decision which requires that the towing and impoundment be in the interest of safety (vehicle not safely parked, no licensed driver available to remove vehicle).

Appendix: Procedures Used in DeYoung’s 1997 Report to Estimate Exposure and Crash Rates of Suspended/Revoked and Unlicensed Drivers

The findings usually cited with respect to unlicensed drivers are largely irrelevant given the complete change in the composition of the unlicensed driver population after undocumented immigrants were denied the right to a drivers license in 1993. Nevertheless, it is interesting to review the speculative methods used to arrive at estimates of the frequency of unlicensed drivers in the driving population and their relative crash rate. There is no justification for treating the estimates resulting from the procedures adopted in the report as any more than “guestimates.”

The data used by DeYoung consisted of statistics on two-car fatal crashes occurring in California for the period 1987-1992. The data pool was then further reduced by considering only crashes in which one of the two drivers was held responsible (cited), eliminating crashes in which both or neither driver was held responsible. DeYoung notes that the proportion of drivers without valid licenses is about 33% higher in this 1-driver-cited subgroup than in the total accident group suggesting an overestimation of the involvement rates of S/R and unlicensed drivers.

The 1-driver-cited group consisted of 1,034 fatal crashes. Exposure (frequency on the road) for each category of driver was (crudely) estimated by looking at the relative proportion of each category among the drivers who were *not* cited as at fault, on the assumption that these drivers represented a random sample drawn from the driver population. The concept of exposure takes account not just of the relative number of drivers in a category but also of when and where they drive and how often they drive. Fatal crashes disproportionately occur on highways at night and often involve drunk drivers, so the exposure rates calculated by DeYoung may not, in fact, provide good estimates of the frequency of the various categories of drivers in the driving population nor their overall exposure rates (averaged over all times and locations).

The results were that 917 of the “innocent” drivers (or 87.9%) were validly licensed; 92 (8.8%) were S/R, and 34 (3.3%) were unlicensed. DeYoung himself notes that these figures are suspect since, for example, in the case of S/R drivers, it is known that the total percentage is only 5.5% (additionally, many of these S/R drivers presumably choose to stop driving or greatly decrease their driving).

The higher 8.8% figure yielded by the innocent-driver proportion may indicate that S/R drivers, or rather a subgroup of S/R drivers, disproportionately drove at times and places where fatal accidents are more likely to occur. There are many plausible ways in which the exposure data could be distorted—in both directions. The only reasonable conclusion is that the exposure

estimates given by the data are suspect. (There was also a considerable variable from year to year—6.5% to 11.6% which further weakens the conclusions, since there is little reason to suppose yearly changes of that magnitude.)

Applying the 8.8% figure or even the 5.5% S/R frequency to the total driving population supports the frequently repeated assertion that there are almost one million S/R drivers on the road but these high numbers do not accord with the Santa Barbara checkpoint stop data—this was discussed above. There is also little reason to trust the figure of 3.3% for the (exposure) frequency of unlicensed drivers on the road.

The most widely quoted figures from the report are those of “overinvolvement rates” for fatal accidents (3.7:1 for S/R drivers and 4.9:1 for unlicensed drivers). If DeYoung had been able to obtain accurate figures on the percentage of unlicensed drivers in the driving population, he states he would use a method called “induced exposure” but because he lacked the needed information, he used a less accurate method called “quasi-induced exposure.” The exposure rates calculated from the relative proportion of innocent” drivers (given above) are used as estimates of the percentages of drivers in the various driver categories, and the proportion of fatal accidents caused by each category is calculated by dividing the proportion cited as at-fault in the 1-driver-cited accidents by the proportion in the innocent driver group: (proportion at fault)/(proportion innocent). This gives (for the pooled data over the 1987-92 period) an accident involvement rate of 0.73 for drivers with valid licenses, 2.68 for S/R drivers, and 3.58 for unlicensed drivers. The “overinvolvement” rates are then calculated by dividing these numbers by the rate of 0.73 given for the validly licensed drivers. This is the source of the 3.7:1 and 4.9:1 rates for S/R and unlicensed drivers, rates which are treated as proven facts in police documents justifying impoundments.

Given the year-by-year variation between the overinvolvement rates for S/R and unlicensed drivers (in some years one is higher, in other years the other), and the enormous inter-year variation (from 2 to 7), it seems unreasonable to assign values out to the first decimal place to the overinvolvement rates. DeYoung also discussed the possibility of a “negative-halo effect” whereby police disproportionately assign blame to S/R and unlicensed drivers in fatal accidents. None of these problems undermines the view that S/R drivers and drivers who were unlicensed in 1987-92 are probably, on average, dangerous drivers. But there is enormous guesswork in the numbers cited and repeatedly quoted and no one should think that the DMV has a real handle on the numbers.

I suggest that a much better idea of the relative risk of various categories of drivers can be found by examining the actual driving records of a few hundred randomly selected drivers in each of the categories shown in the table above. It is not very difficult to determine, in the case of unlicensed drivers cited for CVC 12500 at checkpoint stops, how many were denied licenses for safety-related reasons and how many were denied licenses due to immigration status, and then to examine their driving histories for past moving citations and accident involvements. This information is much more readily available for S/R drivers as shown in DeYoung’s 2002 report discussed above. However, it appears that there is little motivation within the DMV to undertake such an investigation. If the results of such an investigation confirmed those arrived at in this

report, police throughout the state would lose their principal justification for the massive impoundment of vehicles driven by undocumented immigrants.