



# Research Notes

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## Evaluation of the Oregon Medically At-Risk Driver Program

Oregon is one of six states with mandatory physician reporting requirements for drivers. Oregon's program identifies at-risk patients with functional or cognitive conditions that are considered to impair driving. The program, revised in 2003, covers a broader range of conditions than mandatory reporting programs in other states.

Dr. James Strathman, a Portland State University researcher, recently completed an assessment of the safety risk of persons whose licenses were suspended under the Oregon Medically At-Risk Driver program. The results of the analysis suggested modifications that could improve the effectiveness of the overall program.

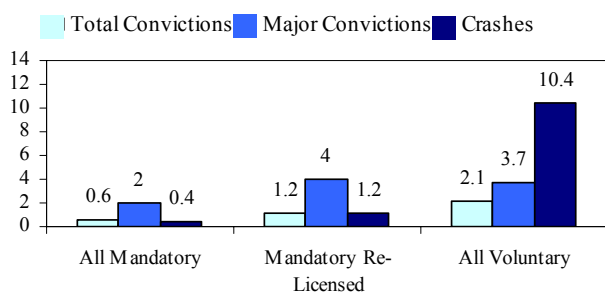
The researchers looked at the driver records of persons suspended through the program between July 1, 2004 and December 31, 2005. These records included persons suspended under the mandatory reporting requirements (1,556). Of those individuals, about 13% regained their

driving privileges. In addition to persons who were referred under the mandatory requirements, the records also included those who were voluntarily referred (910). Voluntary referral can be utilized by physicians who have patients that do not meet the mandatory reporting requirements and by family members and police, based on a medical condition or observed driving behavior.

The records included counts of the number of crashes and convictions that occurred during the 18-month period both prior to and following the suspension date. A sample of persons with active driving privileges was selected to represent the general population of Oregon drivers.

Information on the relative risk of pre-suspension and post-suspension crashes, total convictions and major convictions are summarized in the figures below. In each instance, the rate shown in the figure represents the incidence of the identified group divided by the corresponding incidence in the sample of Oregon drivers.

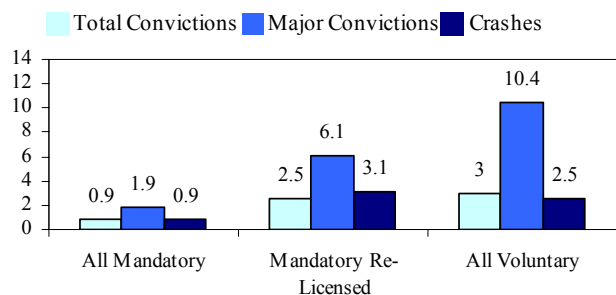
**Relative Safety Risk Prior to Suspension**



### Highlights

- The incidence of crashes among persons in the All Mandatory group is about 40% of the general driving population, while the relative incidence of convictions is 60% and major convictions is 200%.
- The comparably greater pre-suspension safety risk of the subgroup of Mandatory sample subjects who recover their driving privileges after suspension.
- The relatively high incidence of pre-suspension crashes among Voluntary sample subjects

**Relative Safety Risk Post-Suspension**



### Highlights

- The increase in the relative safety risk of the All Mandatory group.
- The growth in the relative safety risk (especially crash risk) among the subgroup of Mandatory Re-Licensed sample subjects.
- The decline in crash risk and increase in major conviction risk among Voluntary sample subjects.

The At-Risk Driver Program relies on external (outside DMV) reporting of potentially unsafe drivers. Another way to identify potential at-risk drivers is through the driver licensing system. The license renewal system currently in use in Oregon employs examination protocols that are uniformly administered to all applicants and does not provide an individualized assessment of a person's cognitive or functional abilities as they relate to safely performing driving tasks.

A pilot program in California is examining the potential benefit of identifying persons with impairments through the license renewal process. Persons with the most severe cases of impairment were reported to the California DMV, yet researchers found that the greatest safety risk was associated with persons with moderate impairments. The California DMV pilot process is three-tiered and includes: simple tests and observations by DMV field staff to assess gross cognitive and functional performance, a standard

written examination, and a driving exam (if necessary) tailored to evaluate the effects of potential impairments on driving fitness. This program is currently being evaluated.

Results from the evaluation of Oregon's Medically At-Risk program have shown interesting findings for the current program. For instance, it was found that the occurrence of a crash during the 18-month period prior to suspension is a significant predictor of the likelihood that a crash will occur after suspension. There are several possible ways this information could be employed. For example, crash history information could be used in evaluating a person's application for reinstating driving privileges. In addition, for persons whose driving privileges have been reinstated, subsequent crash occurrence could be treated as a signal that re-certification is needed and/or that the person should again be required to successfully complete DMV testing.

Information obtained from structured interviews of Medically At-Risk program stakeholders suggests that the effectiveness of the program would be improved by taking steps in the following areas:

- Outreach. More outreach work is needed since not all primary care providers are familiar with mandatory reporting requirements.
- Insurance coverage. Expanding insurance coverage to include driving assessment and rehabilitation services would increase the use of these tools which supply information to primary care providers in support of their assessment of cognitive and functional impairments.
- Data management. Since there is a tendency for drivers to "migrate" from the voluntary to the mandatory program, administration of both programs would be facilitated if the respective databases were merged.



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The final report for this project was published in March 2009 and is available on the Research Unit web page:  
[http://www.oregon.gov/ODOT/TD/TP\\_RES/docs/Reports/2009/At\\_Risk\\_FR.pdf](http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2009/At_Risk_FR.pdf)