The Impact of a Standard Enforcement Safety Belt Law on Fatalities and Hospital Charges in Ohio: An Analysis using 2003 Ohio CODES Data

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Increasing safety belt use in Ohio would substantially lower deaths, injuries, and medical costs due to motor vehicle crashes in our state. The National Highway Traffic Safety Administration (NHTSA) estimates that three-point safety belts are 45-60% effective in preventing fatalities and 50-65% effective in preventing moderate-to-critical injuries in frontal collisions.

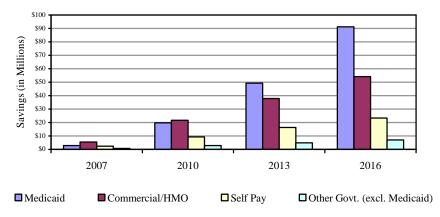
According to a 1995 NHTSA study, states with standard (or primary) enforcement safety belt laws achieved significantly higher belt use than did those with only secondary enforcement laws. In 2006, Ohio's observed safety belt usage rate was 82%. Based on the experiences of other states, it is estimated that by upgrading Ohio's safety belt law to standard enforcement in 2007, the safety belt use rate in Ohio would increase 10 percentage points, from 82% to 92%.

Using this estimation, the Ohio Crash Outcome Data Evaluation System (CODES) Program has conducted a comprehensive statistical analysis to determine the effect that enactment of a standard enforcement safety belt law in Ohio would have on hospital charges and direct medical costs due to motor vehicle crashes in Ohio, focusing on the impact to the state's Medicaid system. Due to limitations in the available data sets, our projections can be considered underestimates.

If Ohio were to adopt a standard enforcement safety belt law in 2007, the following conservative projections of fatalities prevented and medical cost savings (in 2007 dollars) can be made:

- Injuries prevented within the first year following adoption of standard enforcement would save Medicaid \$15.4 million over 10 years
- Cumulative savings to Medicaid would total \$91.2 million by 2016
- Other government payer sources, excluding Medicaid, would save \$7.0 million
- Commercial insurance and HMOs would save \$54.2 million
- Uninsured individuals paying their own medical bills directly would save \$23.3 million
- At a minimum, 18 fatalities would be prevented





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