

**Table 2** Association of variables related to sleep with risk of crash in which car occupant was injured. Figures are adjusted odds ratios and 95% confidence intervals for multivariable models\*

Whole study population	
<b>Acute sleepiness</b>	
Stanford sleepiness scale:	
1 (most alert)	1
2-3	1.7 (1.1 to 2.5)
4-7	11.0 (4.5 to 27.2)
Stanford sleepiness scale:	
1-3	1
4-7	8.2 (3.4 to 19.7)
Sleep in previous 24 hours:	
>5 hours	1
≤5 hours	2.7 (1.4 to 5.4)
Time of day:	
2-5 am	5.6 (1.4 to 22.7)
Other	1

\*Logistic regression analysis included age group, sex, educational level, ethnicity, and self reported alcohol consumption in all models. Time of day included in all models except Stanford score, for which it is a determinant.

reduction in injuries or death of up to 19%. It provides some simple evidence based messages to disseminate with regard to specific driver behaviours in place of general advice against driving while sleepy. The priority given to developing and implementing interventions to prevent crashes related to sleepiness needs to reflect the contribution of driver sleepiness to the overall burden of injury from car crashes, and any such interventions should target the specific behaviours where there is evidence of potential benefit.

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What is already known on this topic

Driver sleepiness is considered a potentially important risk factor for car crashes and related injuries but the association has not been reliably quantified  
  
Published estimates of the proportion of car crashes attributable to driver sleepiness vary from about 3% to 30%

What this study adds

Driving while feeling sleepy, driving after five hours or less of sleep, and driving between 2 am and 5 am were associated with a substantial increase in the risk of a car crash resulting in serious injury or death  
  
Reduction in the prevalence of these three behaviours may reduce the incidence of injury crashes by up to 19%

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One hundred years ago  
The problem of the premature infant

The premature infant is born with the skin and the skeleton, and the organs of a seven-months fetus. He is called upon to play the part of a newborn infant with the *personalia* of a fetus. He is admirably fitted to continue living in the uterus, but is ill provided to meet the exigencies of an extra-uterine existence. He is suddenly forced into surroundings of a kind which impose upon him urgent calls to which he is little able to respond. His tissues have not had time to mature, and he is not ready for so complete a change in environment. He is like some dweller in the hot

plains of India who has been transported in a moment of time on some "magic carpet of Tangu" to the chill summits of the "frosty Caucasus;" with no opportunity for acclimatization such as a gradual transit affords; he is suddenly submitted to the severe strain which so marked a change in surroundings entails; it is possible that the marvellous adaptive mechanisms of the human body will overcome the difficulties of adjustment of capabilities to requirements, but there will be danger till this condition of physiological equilibrium is reached. (BMJ 1902;i:1196)