ERRATA

CTBSSP Synthesis 9: Literature Review on Health and Fatigue Issues Associated with Commercial Motor Vehicle Driver Hours of Work

CTBSSP Synthesis 9 was published July 28, 2005. Some citation information and abstracts were inadvertently omitted from CTBSSP Synthesis 9. The following information should be included:

1. On page 96 of the Synthesis, there is a reference to an article as follows:


Although there is no separate summary of this article provided on page 96, the article is reviewed as part of the Primary Studies in the synthesis (#13 - along with the various Wylie studies).

The following is the abstract for this article from the New England Journal of Medicine:

Abstract:

Background Fatigue and sleep deprivation are important safety issues for long-haul truck drivers.

Methods: We conducted round-the-clock electrophysiologic and performance monitoring of four groups of 20 male truck drivers who were carrying revenue-producing loads. We compared four driving schedules, two in the United States (five 10-hour trips of day driving beginning about the same time each day or of night driving beginning about 2 hours earlier each day) and two in Canada (four 13-hour trips of late-night-to-morning driving beginning at about the same time each evening or of afternoon-to-night driving beginning 1 hour later each day).

Results: Drivers averaged 5.18 hours in bed per day and 4.78 hours of electrophysiologically verified sleep per day over the five-day study (range, 3.83 hours of sleep for those on the steady 13-hour night schedule to 5.38 hours of sleep for those on the steady 10-hour day schedule). These values compared with a mean (±SD) self-reported ideal amount of sleep of 7.1±1 hours a day. For 35 drivers (44 percent), naps augmented the sleep obtained by an average of 0.45±0.31 hour. No crashes or other vehicle mishaps occurred. Two drivers had undiagnosed sleep apnea, as detected by polysomnography. Two other drivers had one episode each of stage 1 sleep while driving, as detected by electroencephalography. Forty-five drivers (56 percent) had at least 1 six-minute interval of drowsiness
while driving, as judged by analysis of video recordings of their faces; 1067 of the 1989 six-minute segments (54 percent) showing drowsy drivers involved just eight drivers.

Conclusions: Long-haul truck drivers in this study obtained less sleep than is required for alertness on the job. The greatest vulnerability to sleep or sleep-like states is in the late night and early morning.

2. On page 97 of the Synthesis, there is reference to a Tech Brief as follows:

(FHWA-MCRT-99-008) "Effects of operating practices on commercial driver alertness."

There is no abstract of this study shown. The following is the abstract for this study from The National Transportation Library (http://199.79.179.78/ruraltransport/card_view.cfm?docid=10107):

Abstract:

This driving simulator study sought to assess truck driver fatigue or alertness as affected by non-driving, but on-duty activities, such as loading/unloading a vehicle. It also examined the effects of driver performance on extended hours of service - 14 hours on duty/10 hours off duty (12 hours daytime driving, 7 AM to 9 PM). Researchers examined driver performance over a 15-day period. In addition, the amount of nonduty time (rest and recovery) needed to reestablish baseline fitness for duty was investigated. 4 p.

3. On page 99 of the Synthesis, there is a reference to a study by Wylie, C.D., Shultz, T., Miller, J.C., Mitler, M.M., and Mackie, R.R. but the date has been omitted: The date of the study is 1996.