

Reuss, Vicki A. (CDC/NIOSH/EID)

From: fmirer@hunter.cuny.edu
Sent: Friday, November 23, 2007 9:47 AM
To: NIOSH Docket Office (CDC)
Cc: Chen, Jihong (Jane) (CDC/NIOSH/EID) (CTR); Doyle, Glenn (CDC/NIOSH/EID)
Subject: 110 - TDSH Comments

Name
Franklin E. Mirer

Organization
Hunter College, Urban Public Health Program

Email
fmirer@hunter.cuny.edu

Address
425 E 25 Street
New York, NY 10010
usa

Comments

This comment is based on the post on the Truck Stop study on the NIOSH blog. The post is notable for what it leaves out. I have not had the opportunity to do a detailed review of the study protocol.

The blog post omits mention of diesel particulate matter (DPM). Truck drivers are thought to occupy the front line of exposure to DPM, a health threat in many industries and to the general public. There is little dispute that truck drivers suffer excess mortality from lung cancer, shown in over a dozen studies. The term "suggest" in the post is a weak for discussing this substantial body of data, and lack of mention of DPM is a concern. One study by NIOSH is cited below. There remains a bit of a debate as to whether and how much of that excess is due to DPM exposure. A conclusion that the observed excess derives in any material way from DPM exposure would drive very stringent exposure limitations. A middle-of-the-road account of this information (vintage 1995) is found at

<http://www.healtheffects.org/Pubs/diesum.htm>

The emphasis on truck stops raises an interesting point. Truck drivers, if like other workers, spend about 40% of their waking hours at work, and breathe about 35% of all their air (working and non-working) in the occupational environment, meaning close proximity to operating diesel engines. However, the mention of truck stops raises the question of whether these workers also sleep in the vicinity of these engines. Based on a 5-day week, that's about 70% of sleeping hours and 20% of overall hours.

I would hope that the research team traveling to 40 truck stops would pack nephelometers and real time aerosol monitors as well as survey questionnaires. Getting there would cut the effort of an exposure project in half.

On another topic, the canonical discussion of lifestyle and health behaviors is also a concern.

First, the mention of "sedentary lifestyle" is a bit demeaning for workers who are required to sit and concentrate intensely for their workshift. For most manual occupations, the demerit of "sedentary lifestyle" assigned by investigators typically ignores the metabolic load of work, even of standing and walking for the majority of a shift. For truck drivers, the job task prevents standing and walking.

Second, I would hope that the contribution of endemic work related musculoskeletal pain to driving of adverse "health behaviors" would be taken into account. Prolonged static posture of the head and neck associated with seated work, in this case driving, is a material risk factor for neck and shoulder pain. If stress drives risk behavior, pain is a form of stress and also a driver. Hours of work likely contribute to stress and therefore

