



## DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention  
National Institute for Occupational  
Safety and Health  
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May 28, 2009

Carol Rowan, BLS Clearance Officer  
Division of Management Systems  
Bureau of Labor Statistics  
Room 4080  
2 Massachusetts Avenue, NE  
Washington, DC 20212

Dear Ms. Rowan:

The National Institute for Occupational Safety and Health (NIOSH) has reviewed the Bureau of Labor Statistics' notice of proposed collection, comment request concerning the proposed revision to the *American Time Use Survey (ATUS)* published in the *Federal Register* on March 30, 2009 [74 FR 14160]. Our comments and references are enclosed.

Please do not hesitate to contact me at 513/533-8302 if I can be of further assistance.

Sincerely yours,

Paul A. Schulte, Ph.D.  
Director  
Education and Information Division

Enclosures



## **Comments to BLS**

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**Comments of the National Institute for Occupational Safety and Health  
in Response to the Bureau of Labor Statistics (BLS) Notice of Proposed  
Collection: Revisions to the American Time Use Survey (ATUS)**

**Department of Health and Human Services  
Centers for Disease Control and Prevention  
National Institute for Occupational Safety and Health  
Cincinnati, Ohio**

The National Institute for Occupational Safety and Health (NIOSH) has reviewed the Bureau of Labor Statistics (BLS) *Federal Register* (FR) notice announced March 30, 2009 [74 FR 14160] on the proposed information collection request (ICR) with revisions to the “American Time Use Survey (ATUS).” It is the opinion of NIOSH that the addition of the well-being module will make a substantial contribution to understanding the impact of time spent working on well-being and how that relationship may vary as a function of occupation and industry. NIOSH offers the following comments intended to improve the quality of the ICR. Incorporation of some of the suggestions discussed below could make the data more useful to the occupational safety and health community. NIOSH recognizes that interview time for the survey is limited and appreciates any consideration that BLS may give to these suggestions.

### **General Comment About the ATUS**

NIOSH notes that devising questions that elicit additional information on the nature of work activities would be very useful for the study of occupational safety and health. A fundamental limitation of the ATUS with respect to examining time use associations with work is the absence of detailed information about job content. At present, the Current Population Survey (CPS) occupation and industry codes are the only information about work available in the ATUS. We recognize that addressing this limitation may not be feasible at the present time.

### **Selection of time intervals or activities for well-being questions**

NIOSH suggests that BLS clarify how activities and time intervals will be randomly selected. Page 1 of the document describing the well-being module requirements states: “Three activities from the completed 24-hour diary will be randomly selected and displayed in the form pane.” Then the description of the question flow on page 2 states: “The computer has selected 5 time intervals that I will ask about.” It is unclear if these activities/time intervals will be selected from the total number of activities in a day or based on the amount of time the activity occupies in a day. Would longer term activities (e.g., work) have a higher probability of selection (a time-based selection) or an equal probability of selection (a frequency-based selection) when compared to shorter term activities (e.g., meal preparation)?

NIOSH also suggests that BLS consider obtaining additional information about activities performed at work (e.g., time doing physical labor, time in meetings, time sitting at a computer). If work is the selected activity and the participant spent eight hours working, it appears that the well-being questions would refer to the entire eight hours. Given that activities often vary during the workday, the BLS might consider obtaining information about well-being at more discrete time intervals for activities performed over a substantial portion of the day. This additional information would allow more detailed analysis of the association of working time with well-being.

### **Feelings**

The set of feelings included in this survey is well chosen to provide summary information on the influence of activities on physical and emotional well-being. The relatively large sample of this survey and the detailed occupation and industry coding of the CPS will enable very useful analysis of the influence of time at work and occupation and industry on well-being. The feelings included in the survey are happiness, sadness, tiredness, stress, pain, and meaningfulness. Only the meaningfulness question asks respondents for an assessment of how an activity made them

feel. The other questions are structured to obtain information on how a person felt during an activity, but not necessarily about the connection between the activity and the feeling. NIOSH suggests that BLS clarify the purpose behind the different approaches to these questions.

### **Pain**

NIOSH notes that the survey could be enhanced with a follow-up question asking about which parts of the body had pain. This would produce results that would be comparable to data from the BLS annual survey of occupational injuries and illnesses, as well as workers' compensation systems, which classify injuries and illnesses by part of body. Information on pain attributable to activities by part of body would help address the long-standing problem of under-recognition and under-reporting of occupational injury and illness (Ruser 2008; Biddle and Roberts 2003; Boden and Ozonoff 2008; Rosenman et al. 2006; Morse et al. 1998; Rosenman et al. 2000). At the same time, it would help assess the relationship between pain from work and non-work activities.

### **Sleep**

NIOSH has an interest in the determinants of sleep length and quality, particularly the role of work schedules and demands. As currently structured, the survey provides a valuable but limited opportunity to address this issue by comparing sleep times among various occupational and industry groups. Because sleep can affect both mental and physical health (Durmer and Dinges 2005; Knutson and Van Cauter 2008; Spiegel et al. 1999), NIOSH suggests that BLS consider including sleep as one of the activities randomly selected for additional questions. Additional information about the quality of sleep, and feelings of being rested and refreshed upon awakening, would be particularly useful for their association with waking activities (Durmer and Dinges 2005; Spiegel et al. 1999).

### **Health**

The current draft of the survey asks about hypertension and overall health which will allow some analysis of how the general state of health affects patterns of time use. However, the survey includes no information on the timing of the onset of health problems, or on any specific health problems other than hypertension. This limits achievement of the Supporting Statement objective to examine impacts of the onset of health problems. While hypertension has associations with other physical and mental health conditions, a possible improvement might be to include a question addressing a more general indicator of health and its possible influence on activities. NIOSH suggests that BLS also consider the following general health question that would allow comparison to other national surveys:

*During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work or recreation?*

This question is part of the standard 4-item set of Healthy Days core questions (CDC HRQOL-4) that has been in the State-based Behavioral Risk Factor Surveillance System (BRFSS) since 1993 (<http://www.cdc.gov/brfss>). Since 2000, the CDC HRQOL-4 has been included in the National Health and Nutrition Examination Survey (NHANES) for persons aged 12 and older. Since 2003, the CDC HRQOL-4 has been included in the Medicare Health Outcome Survey (HOS)—a NCQA HEDIS measure.

## **Interaction**

The Supporting Statement notes that the well-being supplement will assess how often and with whom workers interact on the job. The interaction question asks whether a person was interacting with anyone during a certain activity. This question may work well for short duration activities, but the interpretation and meaning of responses could be much less clear for activities of long duration, particularly work. There is no cue in this question about how much interaction qualifies for a “yes” response. If the question is supposed to be answered in the affirmative when a person engaged in any interaction during the activity, then the answers to this question may not be useful for long term activities. To meaningfully make distinctions among jobs, NIOSH suggests the question be worded to determine the intensity of interaction using a 0-6 scale similar to other questions in the survey.

A related issue in the time diary section of the ATUS is the coding of responses to the question about who a person was with during an activity. There is a single code that encompasses “coworkers, colleagues, and clients”. Including these groups in a single code misses key distinctions that are important for determining the basic nature of the job activity and factors that may be associated with well-being during that activity. Furthermore, work that involves interacting with customers and clients may have fundamental differences from work that doesn’t, and may affect the level of stress in the work environment [NIOSH 1999]. Consequently, it would be useful to distinguish supervisors (or supervisees) from co-workers and colleagues, as well as from customers or clients. NIOSH suggests that BLS consider asking about these groups separately.

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