



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention
National Institute for Occupational
Safety and Health
Robert A. Taft Laboratories
4676 Columbia Parkway
Cincinnati, OH 45226-1998
August 29, 2012

Washington Office—Fire and Aviation Management
National Interagency Fire Center
3833 S. Development Avenue
Boise, ID 83705

Attention: Larry Sutton, Forest Service Fire Operations Risk Management Specialist

Dear Mr. Sutton:

The National Institute for Occupational Safety and Health (NIOSH) has reviewed the U.S. Department of Agriculture request for comment on *Health Screening Questionnaire* published in the *Federal Register* on July 6, 2012 [77 FR 39986]. Our comments are enclosed.

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

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Paul A. Schulte".

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

Enclosure



Comments to USDA

**Comments of the National Institute for Occupational Safety and Health
on the
U.S. Department of Agriculture
Request for Comment
Information Collection; Health Screening Questionnaire**

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

August 29, 2012

The National Institute for Occupational Safety and Health (NIOSH) has reviewed the U.S. Department of Agriculture (USDA), Forest Service request for comment entitled *Information Collection; Health Screening Questionnaire* published in the Federal Register on July 6, 2012 [77 FR 39986]. The current Health Screening Questionnaire (HSQ) is a self-reported questionnaire with nine “Yes/No” questions regarding various symptoms and medical history information [USDA FS/DOI 2009]. The purpose of the HSQ is to identify wildland fire fighters (WLFFs) who may have medical conditions that could jeopardize their safety while performing wildland fire fighting tasks. NIOSH offers the following suggestions for improving the current HSQ.

- 1) Six of the nine questions focus on heart symptoms/conditions but do not encompass all of the risk factors for coronary heart disease as defined by the American Heart Association [AHA 2012a]. NIOSH suggests using the previous version of the HSQ (revision date 12/2000) which includes most of the AHA risk information (with the exception of smoking) and provides a more logical layout—History, Symptoms, Risk Factors. If the 12/2000 version of the HSQ is used, NIOSH suggests the following changes to Section B – Cardiovascular Risk Factors.
 - a) Add *You smoked cigarettes in the past month* [AHA 2012b].
 - b) Replace 4th bullet, “You are more than 20 pounds overweight,” with *You have a body mass index (BMI) over 30*, and provide a BMI chart [NHLBI 2012].
 - c) Change the 5th bullet to *You get less than 30 minutes of physical activity less than 3 days per week*.
 - d) Change the 6th bullet to *Your blood cholesterol is greater than 200 mg/dL, or your HDL cholesterol is less than 40 mg/dL, or you do not know your cholesterol, or you take cholesterol medication* [AHA 2012b].
 - e) Change the 8th bullet to *You have diabetes mellitus, or have a blood sugar greater than 100 mg/dL* [AHA 2012b].
- 2) NIOSH suggests the HSQ be administered by a health care provider, or an individual trained in administering and interpreting the questionnaire, prior to a WLFF presenting for the work capacity test [NIOSH 2008]. Accurate reporting by WLFFs is essential for safety. Because the HSQ is self-administered, some WLFFs may not consider themselves obese despite a BMI indicating obesity [NIOSH 2005]. In addition, some WLFFs may not report accurate medical history because they may be prevented from participating in the work capacity test or in paid employment. The presence of a health care provider or trained questionnaire administrator will help to increase reporting accuracy.

Finally, NIOSH supports efforts by the Department of Interior (DOI) to resurrect its screening physical examinations program for WLFFs [DOI 2011]. This program requires a DOI medical examination for WLFF candidates for arduous duty and WLFFs for arduous duty who are age 45 and over. The program also requires medical examinations for WLFFs who have a positive response to any of the nine questions in the HSQ. NIOSH suggests this program be expanded to all federal wildland fire fighters and include a revised HSQ as suggested above.

References:

AHA [2012a]. Understand your risk of heart attack. American Heart Association, Dallas, TX. Available at: http://www.heart.org/HEARTORG/Conditions/HeartAttack/UnderstandYourRiskofHeartAttack/Understand-Your-Risk-of-Heart-Attack_UCM_002040_Article.jsp. Accessed on July 19, 2012.

AHA [2012b]. Heart attack risk calculator. American Heart Association, Dallas, TX. Available at: https://www.heart.org/gglRisk/locale/en_US/index.html?gtype=health. Accessed on July 19, 2012.

DOI [2011]. Medical standards program: Exam process 2012. Available at: http://www.nifc.gov/medical_standards/Links/index.html. Accessed on July 19, 2012.

NIOSH [2005]. Assistant chief suffers heart attack and dies after completing a walk test–Montana. Available at: <http://www.cdc.gov/niosh/fire/reports/face200441.html>. Accessed on July 19, 2012.

NIOSH [2008]. Fire fighter suffers a heart attack and dies after completing work capacity test–Idaho. Available at: <http://www.cdc.gov/niosh/fire/reports/face200734.html>. Accessed on July 19, 2012.

NHLBI [2012]. Body mass index Table 1. National Heart, Lung, and Blood Institute, Bethesda, MD. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/bmi_tbl.htm. Accessed on July 19, 2012.

USDA FS/DOI [2009]. Health Screening Questionnaire. FS-5100-31 (rev 8/2009). Available at: http://www.nifc.gov/medical_standards/documents/NewExamProcess/5100-31.pdf. Accessed on July 18, 2012.