

Steven S. Coughlin, PhD

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Re: OMB Control No. 2900-NEW, Open Burn Pit Registry Airborne Hazard Self-Assessment Questionnaire

July 10, 2013

Dear Sir or Madam,

I reviewed the above-referenced questionnaire at the request of a Veterans Healthcare Advocacy Organization. I have the following peer review comments to offer.

Overall, I could see that a lot of time and effort has gone into the development of this draft questionnaire but there are some remaining problems.

In section 1.1, I do not see branch of service. In that same section under "Deployment periods," the field "Location" is not specific enough to ascertain whether the Veteran was exposed to dusts, fumes, or smoke. The use of "MOS/Occupation Codes" for identifying potential occupational hazards during military service will likely be affected by misclassification and nonspecificity.

In section 2.1, there is no question to identify whether they were exposed to oil well fires during OIF. In that same section, question C ("were you near a burn pit...") doesn't assess intensity or duration of exposure(s) to burn pits. There is a noticeable lack of detailed questions about exposures to burn pits during military service. This section of the questionnaire is very weak.

In section 2.2, question C ("Were you in convoy or other vehicle operations one or more times per week where you felt you breathed in large amounts of dust...") is problematic because it lumps together frequency of exposure ("one or more times per week") with intensity of exposure ("large amounts"). A veteran could have been exposed to moderate amounts of dust every day, or to large amounts of dust every other week. Similarly, a Veteran could have performed refueling operations every other day (question D).

The single question about stress (question 2.4) doesn't seem scientifically defensible. Has this question been validated? Stress is a universal aspect of the human condition. In order for the assessment of stress to be scientifically valid, an appropriate stress scale is needed.

In section 2.5, question B doesn't specify the nature of the sickness (e.g., coughing, shortness of breath, sinusitis, nausea, etc.). In question D and question F, the Veteran could have two or more health problems or concerns. For example, someone exposed to burn pits during military service might be concerned about asthma, lung, respiratory, breathing problems and cancer. Question K ("Which exposure do you think has the biggest overall effect on your health?") is a very strange health communications question that requires the Veteran to select a single respiratory hazard. The literature on epidemiology and occupational medicine is filled with examples of environmental hazards causing disease through complex interactions (for example, lung cancer due to asbestos and smoking).

In section 4.3, question B only looks at a single intensity ("biggest dust exposure") and a single duration ("longest dust exposure"). It will therefore miss many jobs with significant exposures to dusts. Question B in section 4.4 has this same problem.

In section 6.3, question B includes "throat – pharynx" but does not ask specifically about cancer of the

nasopharynx. Cancer of the nasopharynx, especially rare histologic types, may be a sentinel illness of exposure to toxic substances during military deployment similar to asbestos and mesothelioma of the lung or pleura.

The questionnaire does not include any questions about rare but severe respiratory illnesses such as constrictive bronchiolitis or idiopathic pulmonary fibrosis (which has been associated with exposure to aviation fuel during military service). This is a glaring oversight even though these conditions are rare in the general population.

Sincerely,

(signed electronically)

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