DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket Number CDC-2013-0008; NIOSH-234]

National Institute for Occupational Health (NIOSH)-Certified B Readers; Training and Testing

Agency: National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

Action: Request for information and comment on Priority Knowledge and Competency Items to Address in Training and Testing of National Institute for Occupational Health (NIOSH)-Certified B Readers

Summary: The National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC, is requesting information from stakeholders and the general public to identify and prioritize competencies currently needed by B Readers. The information obtained will be used in the development of the new digital B Reader program, including training and examinations.
DATES: Electronic or written comments must be received by [insert date 60 days from publication in the Federal Register].

ADDRESSES: You may submit comments, identified by CDC-2013-0008 and NIOSH-234, by any of the following methods:

- Mail: NIOSH Docket Office, Robert A. Taft Laboratories, MS-C34, 4676 Columbia Parkway, Cincinnati, OH 45226.

All information received in response to this notice must include the agency name and docket number (CDC-2013-0008; NIOSH-234). All relevant comments received will be posted without change to www.regulations.gov, including any personal information provided. To view the notice and related materials, visit http://www.regulations.gov and enter CDC-2013-0008 in the search field and click “Search.”

FOR FURTHER INFORMATION CONTACT: Simone Tramma, MD, MS, 1600 Clifton Road NE MS E20, Atlanta, GA 30329-4018, telephone 404-498-0197

Background
Chest radiography is a widely applied and important tool for assessing lung health in clinical care, surveillance, research and hazard evaluations of workers exposed to respirable silica, asbestos, coal, beryllium, and other hazardous dusts. Collectively, these dust-induced diseases are called pneumoconioses. The International Labour Office (ILO) International Classification of Radiographs of Pneumoconioses provides a standardized system for classification of chest radiographs that has been widely used by physicians and epidemiologic researchers in the investigation of work-related respiratory hazards. For the last four decades, NIOSH has been training physicians and certifying competence in the use of the ILO system to classify film-based chest radiographs. Physicians who pass a rigorous standardized examination offered by NIOSH are designated as B Readers.

Recently, the ILO system was updated to allow the use of digital chest images instead of analog chest radiographs. Similarly, NIOSH updated its Coal Workers’ Health Surveillance Program to allow use of digital chest images. In follow up, NIOSH is now working to update its B Reader training and certification program by developing digital-format training materials and examinations.
Core knowledge and competencies to be addressed in an updated digital-format B Reader training and certification program might include the following:

I - Knowledge

Understand the following:

1. The different types of radiographic abnormalities that are or may be associated with dust exposure

2. The intention, format, and mechanics of the ILO classification system, including
   a) When to use the classification and what abnormalities should be classified
   b) How the ILO defines abnormalities for parenchymal and pleural disease
   c) The meaning of profusion and how to use major/minor profusion categories properly
   d) The nature and use of standard films/images in classification

3. Where to find information about how to apply the ILO system

4. Where to find information on the NIOSH B Reader system

5. Ethical approaches to classifying radiographs, including
   a) The responsibilities of the reader in communicating with worker, agency, lawyer, employer
   b) Confidentiality issues impacting readers
6. The effects of technical defects on the appearances covered in the classification.

II - Skills

Ability to accurately and reliably identify and categorize the following according to the ILO classification system:

1. Image quality
   a) Unreadable images
   b) Defects in image quality that may affect its classification

2. Normal radiographs
   a) Borderline normal

3. Small nodular opacities
   a) High profusion
   b) Low profusion
   c) Reliably classifying profusion as 1/0 or greater; or 0/1 or less.

4. Small linear/irregular opacities
   a) High profusion
   b) Low profusion
   c) Reliably classifying profusion as 1/0 or greater; or 0/1 or less

5. Reliable classification of Large Opacities
   a) Reliably classify presence of large opacities
   b) Reliably classify category of large opacities

6. Pleural disease
a) Plaque and diffuse
b) Calcifications
c) Costophrenic angle obliteration
d) Locations

7. Be able to identify and differentiate:
   1. Large opacities and confluence of small opacities (ax) lesions
   2. Cancer (ca) and pulmonary tuberculosis (tb) lesions

**Information Needs**

Additional data and information are needed to assist NIOSH in determining the knowledge elements and competencies that should be included in B Reader training and certification and how they should be prioritized for emphasis in training and certification testing. Information is particularly needed in response to the following questions:

1) What knowledge elements and competencies are essential for a B Reader?
2) What are the most critical knowledge elements and competencies to identify in the B Reader certification and re-certification examinations?
3) What are the key functions of the B Reader certification and re-certification examinations grading system, and how should the examinations be graded to accomplish those
functions? Should the general approach currently used for grading\textsuperscript{1, 2} be changed and if yes, how and why?

4) Should NIOSH consider alternative approaches to maintenance of B Reader certification besides recertification examinations every 4 years? If so, what alternative approaches would be both effective and desirable?

5) NIOSH seeks to obtain materials, including published and unpublished reports and research findings that will help to answer these questions. NIOSH encourages respondents to provide these materials.

References


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June 7, 2013

John Howard, Date

Director, National Institute for Occupational Safety and Health,
Centers for Disease Control and Prevention