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Review of JOWOG 30-8 Recommendations for Medical Surveillance Practices

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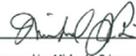
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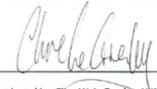
1958 U.S./UK MUTUAL DEFENSE AGREEMENT

BERYLLIUM MEDICAL SURVEILLANCE AND WORKER RESTRICTION PRACTICES AT
U.S. WEAPONS SITES AND U.K. ATOMIC WEAPONS ESTABLISHMENT

SRNL-RP-2016-00028

Prepared by JOWOG 30-8 Beryllium Safety Focus Area

 _____ 24 Feb 2016
Prepared by: Michael J. Brisson, U.S. Lead, JOWOG 30-8 Date

 _____ 01-Mar-2016
Reviewed by: Clive W. LeGresley, U.K. Lead, JOWOG 30-8 Date

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Background

- JOWOG 30-8 (Beryllium Safety task group within JOWOG 30, Facilities and Infrastructure) met on 5 November 2015, after the BHSC Meeting
- Dr. Michael Ardaiz, DOE Chief Medical Officer, joined this discussion
- Tasking goal was to improve consistency in medical surveillance and removal practices at weapons sites and AWE
- Seven recommendations were made that apply to U.S. sites
- Three recommendations were made that apply to both U.S. and U.K. sites
- The recommendations are presented on the following slides.
- Some of these recommendations may have relevance outside of DOE/AWE.



Recommendation #1 (for DOE sites)

- **Replace the BAWR with an alternative site-driven means of collecting and analyzing IH and medical information that is beneficial to sites and to DOE overall.**
 - Trending and analysis will be site specific, and needs to be relevant for each site and based on how many people are in the program at a given site.
 - A consistent way to roll up data is needed to ensure that all sites can benefit.
 - A task group will be needed to define this alternative method. Such a task group could be identified at the next meeting of JOWOG 30-8, planned for late March 2016 at the NNSA North Las Vegas office complex. Alternatively, the BHSC could be requested to establish a task group so that representatives from non-weapons sites working with beryllium are included.
- **Would the BHSC like to establish a task group to address this recommendation?**



Recommendation #2 (for DOE sites)

- Perform additional epidemiological studies such as recently completed by National Jewish Health for the Hanford site. Such studies would be beneficial at other sites.
- What other sites would like to have such a study done?
- Would such sites have to find their own funding to pay for it?
- How was the Hanford study funded?



Recommendation #3 (for DOE sites)

- Sites should use the EFCOG 2008 BeLPT algorithm to guide worker protection decisions.
 - Described in Middleton et al., *American Journal of Industrial Medicine*, 49:36-44 (2006)
 - Establishes BeS based on one abnormal and one borderline BeLPT result, or two abnormal BeLPT results

Issues:

- Not applicable to AWE because they do not use the BeLPT
- OSHA proposal defines “confirmed positive” as two consecutive abnormal or a second abnormal within two years of first abnormal (80 FR 47778)
- Dept. of Labor accepts a single abnormal BeLPT (contrary to both OSHA proposal and EFCOG algorithm)



Recommendation #4 (for DOE sites)

- Sites should have a process to ensure effective monitoring of beryllium affected workers, including an appropriate interface with the DOL program and consistency with applicable state laws.

Issues:

- Former HSS Director Podonsky had appealed in writing to the Department of Labor to share information between the DOE and DOL programs, to no apparent avail.
- Variations in state laws may impede efforts to achieve consistency.



Recommendation #5 (for DOE sites)

- Information needs to be developed and disseminated to site Occupational Medicine personnel to ensure a consistent level of knowledge and awareness.

Issues:

- Who can/should develop such information? In what form? Should it be part of, or separate from, the technical guidance called for by the BHSC Board in November?



Recommendation #6 (for DOE sites)

- Evaluate the need for SOMDs at sites with beryllium programs to be certified in occupational medicine (e.g., by the American Board of Preventive Medicine). The value of such certification is discussed by OSHA (in Publication 3160, *The Occupational Health Professional's Services and Qualifications: Questions and Answers*, 1999) and in the literature (OSHA Publication 3160 and Harber et al., *J. Occup. Environ. Med.*, 2013, 55(5): 532-538).

Issues:

- This is “bigger” than beryllium alone.
- Should this recommendation be addressed at the site level or by DOE-HQ?



Recommendation #7 (for DOE sites)

- Develop paper on history of BeS and CBD cases discovered at U.S. sites when BeLPT testing was implemented with comparison to the U.K. regime of 100% sampling but no routine BeLPT screening.

Comment:

- To be addressed by JOWOG 30-8 as a tasking for FY17 – led by Kathy Creek and Scott Seydel.



Recommendation #8 (for DOE and AWE)

- Worker restrictions should be based on an evaluation of risk to the worker. The evaluation should be conducted by qualified and Be-experienced IH with Occ Med support.

Issues:

- Do evaluation criteria need to be developed? If so, by whom?



Recommendation #9 (for DOE and AWE)

- Occ Med staff need to be knowledgeable and remain current on information regarding BeS and CBD health effects, and should be aware of available resources on the subject. There should be a time limit for staff to become knowledgeable.

Issues:

- Could a list of such resources be compiled and disseminated?
- Could a web-based or email-based information exchange be developed to disseminate information as it becomes available?



Recommendation #10 (for DOE and AWE)

- Research is needed for a better screening test, or combination of tests, than the current BeLPT. The improved test protocol could include the BeLPT along with one other test, or could be something entirely different.

Issues:

- The need for this test may be increased by the proposed OSHA rule on beryllium.
- The protocol must not violate the Genetic Information Nondiscrimination Act (GINA).
- It is noted that National Jewish Health has been doing some work in the genetics area which would not be permissible in the context of CBDPPs, given the GINA restrictions.



Further Discussion?

