

YOUR HEALTHCARE PARTNER FOR LIFESM

July 14, 1994

HIOSH Docket Office Robert A. Taft Laboratories Mail Stop C34 4678 Columbia Parkway Cincinnati, OH 45226

> Re: HIOSH Proposed Rule On Respiratory Protective Services (42 CFR PART 84 Fed Register Vol. 59, No. 99 pp. 26850-26893)

To Whom It May Concern:

The attached letter, sent to the Centers for Disease Control and Prevention in December 1993, provides the background information for our continued support of studies to determine the efficacy of respirators other than the HFPA particulate respirator. From January 1994, we have not had any patients diagnosed with pulmonary or laryngeal tuberculosis. Nearly two percent of our 1,400 employees have been screened for tuberculosis: there have been four conversions to a positive PPD. We applaud and support all efforts to provide criteria for testing and certifying respirators to enable us to select a more practical and economic product, still maintaining quality care for our patients and a safe environment for our employees.

Thank you again for hearing and considering our views.

Sincerely,

Joan C. Waller, M.D.

Chair, Infection Control Committee

Jane Sheeran, RN, MS, CIC

JCW/JS/nlm

Att:

cc: Jackie Bryan, APIC National Office
Kathy Arias, Delaware Valley Philadelphia APIC

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YOUR HEALTHCARE PARTNER FOR LIFE

December 9, 1993

Centers for Disease Control & Prevention Attention: Guidelines Work Group Mail Stop EO7 1600 Clifton Road NE Atlanta, GA 30333

Re: Draft Guidelines for Preventing the Transmission of Tuberculosis in Healthcare Facilities, Second Edition

Dear Colleagues:

Delaware County Memorial Hospital is a community-based 200-bed hospital with a strong, well-designed program to protect our employees from tuberculosis (TB). We strongly believe that the use of high-efficiency particulate air (HEPA) filtered respirators is not necessary in our program and in fact would waste both money and time.

In each of the nosocomial outbreaks of TB investigated by the CDC, the common problem was lack of adherence to existing CDC guidelines. Breaks in technique included:

- Delay in diagnosis of TB, especially in HIV-positive patients
- Precautions not maintained for adequate period of time
- Negative pressure ventilation lacking or appropriate room not available
- Door left open
- Health care workers entered isolation room wearing no mask or using mask improperly
- Patients left isolation area without wearing masks

There is <u>no</u> evidence that a requirement to use HEPA-filtered respirators would have prevented any of those outbreaks, nor that HEPA-filtered respirators add any real additional protection when all the other guidelines are followed.

Specifics regarding our hospital follow:

Administrative/Engineering Controls

In 1981-82 when the hospital was expanded, the issue of isolation rooms was addressed by constructing 4 isolation rooms on each of 3 units and 2 isolation rooms in the medical/surgical Intensive Care Unit. All these rooms are at negative pressure, have at least 6 air exchanges per hour and are vented to the outside. Isolation for TB includes placement of an ultraviolet light fixture over the door. More recently 2 rooms in a telemetry unit and 3 rooms in the emergency department have been modified for TB isolation. One of those rooms in the emergency department is used for aerosol pentamidine administration. The endoscopy unit is also at negative pressure with 6 air exchanges per hour and vented to the outside.

Education & Training

Educational efforts have been increased, directed toward hospital employees as well as medical staff, emphasizing prevention of TB transmission. Information was sent to all the active medical staff recommending early isolation of patients suspected or at high risk of TB and maintenance of TB isolation for an adequate period of time.

Programs on TB for the medical staff are being developed and we are currently considering requiring tuberculin skin testing on all medical staff at the time of reappointment.

TB education for all hospital employees is provided initially at an orientation inservice which all new employees attend. TB education is also presented at all mandatory inservice training for the nursing staff. Items discussed include identification of isolation rooms, keeping the door closed to maintain negative pressure, importance or isolation signs identifying the need to wear a mask, proper use of masks for employees and when transferring patients.

Incidence, Exposure, and Screening

DCMH has had 6 or fewer hospitalized patients with pulmonary TB each year since 1991, and only 3 cases to date for 1993. To monitor employee exposure, PPD skin testing is done annually on all employees. In areas of increased risk, such as respiratory therapy, bronchoscopy unit and emergency department, PPD testing is now done every 6 months. From November 1992 to October 1993, Occupational Health did PPD testing on over 1700 persons. There were 11 conversions among the 1700 tested, of which possibly 5 were thought to be work-related.

Respiratory Protection

The tie-on surgical mask was replaced this year with the 1812 sub-micron cone-shaped mask from 3M. This month we replaced the 1812 mask with the 1814 cone-shaped device from 3M which is EPA-registered as a particulate respirator (PR). It is our firm belief that this PR, which meets EPA requirements, when properly used will provide excellent protection at a high but tolerable cost and that there is no documented advantage to using the HEPA-filtered respirator.

Cost & Feasibility of Implementation

The initial cost for core training and fit-testing of the HEPA filtered respirator at this institution would be \$1,000. Purchase of HEPA-filtered respirators for the remaining "hands on" employees would be \$3,500. Given our low incidence of patients with pulmonary tuberculosis, most of whichever fit-tested device we provide will in fact be discarded without ever being used. There is a vast difference in purchasing, then discharding, a large number of 1814 PRs at 50 cents apiece, vs. the HEPA-filtered respirator at \$5 - \$10 apiece. Additional costs would include fit-testing of new employees hired, and purchase of these devices on an ongoing basis for in-house use.

The device used in respiratory protection, be it mask, particulate respirator or HEPA-filtered respirator, is only one factor in our efforts to prevent transmission of TB. All available evidence suggests that when properly used as part of an overall TB prevention program, any of the three will protect our employees and staff satisfactorily. We are aware of no evidence to warrant the enormous outlay of money and time that the HEPA-filtered respirator would incur, and we are greatly concerned that a requirement to use the HEPA-filtered respirator would divert resources from TB control measures which have been shown to be effective.

Thank you for hearing and considering our views.

Sincerely yours,

Joan C. Waller, M.D.

Chair, Infection Control Committee

Jane Sheeran, RN, MS, CIC

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cc:

Cheri L. Kroboth (HAP) Kathy Arias (APIC) Letty Piper Harold Haft, M.D.

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