

of the apparent selection of source cases, contact tracing frequently was initiated in cases with minimal infectiousness or with MOTT. Whether this approach is unique to our facility or more widely practiced is unknown. We believe that the benefit of contact tracing can be increased by improving the source-case selection and the method of carrying out the investigation. Regarding case selection, two elements may have an impact on the effectiveness of the investigation: the likelihood of TB and the extent of infectiousness. The clinical and radiological characteristics, unfortunately, are nonspecific.⁵ A positive smear and preliminary culture results could not distinguish TB from infection with MOTT; gene probes were unavailable during this study period. Furthermore, the predictors of infectiousness (cavitary disease, positive smear, and forceful cough) are most valuable in confirmed TB. Therefore, we believe that, in facilities with a low-to-moderate rate of TB, contact tracing should be limited to confirmed infectious TB and highly suspected cases, especially where transmission to household contacts is documented. Then, intensely exposed subjects should be screened first. Once transmission is documented, the investigation can be extended to others with less

TABLE

RELATIVE RISK FOR TUBERCULOSIS EXPOSURE IN CONTACT TRACINGS

| Risk of infection | Investigation (N=21) | Traced Days (N=115) |
|-------------------|----------------------|---------------------|
| | N (%) | |
| None* | 5 (24) | 36 (31) |
| Low† | 10 (48) | 56 (49) |
| Potentially high‡ | 6 (28) | 23 (20) |

* *Mycobacterium* other than tuberculosis.

† Smear-negative non-cavitary tuberculosis; smear-positive culture-negative tuberculosis on therapy; smear-positive culture-negative uncertain diagnosis.

‡ Untreated smear- and culture-positive for cavitary tuberculosis.

intense exposure. This strategy likely will improve the outcome of the investigational approach and free resources for better utilization. We caution that this proposed strategy may not be appropriate without compliance to regularly scheduled skin testing and may not be applicable to facilities having a higher prevalence of TB, suboptimal engineering conditions, or HCWs with risk factors for disease progression.

REFERENCES

1. Griffith DE, Hardeman JL, Zhang Y, Wallace RJ, Mazurek GH. Tuberculosis outbreak among health care workers in a community hospital. *Am J Respir Crit Care Med* 1995;152:808-811.
2. McGowan JE Jr, Jarvis WR. Nosocomial transmission of *Mycobacterium tuberculosis*:

role of health care workers in outbreak propagation. *J Infect Dis* 1995;172:1542-1549.

3. Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care facilities. *MMWR* 1994; 43(RR-13):1-132.
4. Centers for Disease Control and Prevention. Essential components of a tuberculosis prevention and control program. Recommendations of the Advisory Council for the elimination of tuberculosis. *MMWR* 1995;44(RR-11):1-34.
5. Scott B, Schmid M, Nettleman MD. Early identification and isolation of inpatients at high risk for tuberculosis. *Arch Intern Med* 1994;154:326-330.

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Comparable Specificity of Commercial Tuberculin Reagents

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Villarino and coinvestigators from the CDC conducted a double-blind trial to compare the reaction size and specificity of skin testing with Aplisol, Tubersol, and the standard purified protein derivative (PPD-S1). Between May 14, 1997, and October 28, 1997, 1,555 persons at low risk of latent TB infection in six US cities received four tuberculin skin reagents at sites assigned at random. These included simultaneous skin tests with

Aplisol, Tubersol, PPD-S1 and either a second PPD-S1 or PPD-S2 (a proposed new standard).

Reaction size at each injection site was measured by two investigators blinded to type of reagent. Aplisol produced slightly larger reactions than Tubersol, but this difference did not significantly change skin-test interpretation. The mean \pm SD reaction sizes were 3.4 \pm 4.2 mm with Aplisol, 2.1 \pm 3.2 mm with Tubersol, and 2.5 \pm 3.6 mm with PPD-S1. Assuming that all participants were uninfected, and using a 10-mm cutoff, the specificities of the tests were

high: Aplisol, 98.2%; Tubersol, 99.2%; and PPD-S1, 98.9%. Significant variability was not detected in interobserver, host, and lot-to-lot reagent comparisons.

The researchers concluded that, using a cutoff of at least 10 mm, testing with three different PPD reagents resulted in similar numbers of uninfected persons being classified correctly.

FROM: Villarino ME, Burman W, Wang YC, Lundergan L, Catanzaro A, Bock N, et al. Comparable specificity of 2 commercial tuberculin reagents in persons at low risk for tuberculosis infection. *JAMA* 1999;281:169-171.

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