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**SUMMARY OF FOLLOW-UP RESULTS FROM  
POTENTIAL TUBERCULOSIS EXPOSURES**

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There were two isolated episodes of Lewis Research Center (LeRC) workers who were diagnosed with pulmonary tuberculosis (TB) during the fall of 1990. The specifics surrounding each case were very different, and it is clear that the two episodes were completely unrelated. The fact that the final diagnoses of pulmonary tuberculosis came within three weeks of each other was purely coincidental.

While it became evident that neither worker diagnosed with tuberculosis contracted the infection while working at Lewis, there was some concern that co-workers, especially those who had close contact with either individual, may have been infected. This was especially a concern in the second incident, which involved an employee who worked in Building 49. This employee was symptomatic and had been coughing for almost six weeks before the final diagnosis of tuberculosis was made. The first case involved an employee who worked in the Engine Research Building (ERB) basement. This employee was neither symptomatic nor contagious, and the diagnosis of pulmonary tuberculosis was actually an incidental finding when a lung nodule, suspicious for cancer, was biopsied and subsequent cultures grew *Mycobacterium tuberculosis*, the organism responsible for TB.

The Occupational Medicine Service (OMS) conducted separate informational sessions and offered free PPD skin testing to all employees, both NASA and contractors, who felt that they were at risk of having been exposed to tuberculosis from either individual. Skin testing was conducted immediately to determine if the employee had previously been exposed to TB, and for all negative skin tests the PPD skin test was then repeated in three months to determine if that individual had indeed been infected with TB from one of the NASA employees.

Eleven (11) employees reported to OMS from the basement of ERB. Skin tests were done in September on these individuals, and 10 out of the 11 were negative. The eleventh individual had an equivocal result (borderline positive). This individual had no known exposure to TB in the past, and he was currently asymptomatic. After three

months the skin tests were repeated on all 11 of the individuals, including the individual with the equivocal results. All were negative on repeat except for the employee with the equivocal results. On repeat testing, his results were positive. A chest X-ray was negative, and the patient was referred to the Metro Health Center Tuberculosis Clinic where it was determined that he had experienced a booster phenomenon and his exposure to TB had most likely occurred as a child. His family was skin tested, with all having negative results. Currently, this employee is taking six months of INH (Isoniazid).

Thirty-nine (39) individuals reported to OMS for skin tests from the Building 49 incident, including seven (7) workers identified by the index case as having been in frequent contact with him. Thirty-seven had negative skin tests initially. One individual had a known prior history of a positive PPD skin test, so a chest X-ray was done that was negative. One individual tested positively to the PPD initially, and on further investigation it was discovered that she had received the BCG vaccination as a child in a developing country. She was given a chest X-ray, which was also negative. Repeat PPD skin tests were then performed on 36 individuals after three months, and all of the repeat tests were negative. The two individuals with known positive PPD reactions have been advised to receive annual chest X-rays. One individual has not returned for repeat testing because she is currently pregnant and would prefer not being retested until after the delivery of her child.

In summary, no NASA or contractor employee from either incident involving potential exposure to TB has been infected with the *Mycobacterium tuberculosis* bacteria as a result of exposure in the workplace. Stemming from these two incidents are three corollaries:

1. The Occupational Medicine Service is revising their annual health screening exams to at least offer PPD skin testing to employees as a baseline test.
2. The Director of Occupational Medicine Service and the Director of the Office of Health Services approached the Directors of the Cafeteria Exchange Workers and offered free PPD skin tests to all cafeteria workers. This service was implemented on a voluntary basis. To date, no one from the Cafeteria Exchange has requested skin testing.
3. All employees in the Office of Occupational Medicine Service are receiving annual PPD skin tests or chest X-rays if the employee has a known positive PPD reaction.