## COURT OF APPEALS OF VIRGINIA

Present: Chief Judge Moon, Judges Willis and Elder Argued at Richmond, Virginia

BRIAN S. LINDENFELD

v. Record No. 0790-97-2

OPINION BY
JUDGE LARRY G. ELDER
NOVEMBER 4, 1997

CITY OF RICHMOND SHERIFF'S OFFICE AND TRIGON ADMINISTRATORS

FROM THE VIRGINIA WORKERS' COMPENSATION COMMISSION

Malcolm Parks, III (Christopher A. Jones; Maloney, Barr & Huennekens, on briefs), for appellant.

William Joe Hoppe, Senior Assistant City Attorney (Office of the City Attorney, on brief), for appellees.

Brian S. Lindenfeld (claimant) appeals an order of the Workers' Compensation Commission (commission) denying his claim for benefits. He contends the commission erred when it found (1) that his tuberculosis was an ordinary disease of life rather than an occupational disease and (2) that he failed to prove by clear and convincing evidence that his tuberculosis was caused by his employment at the Richmond City Jail. For the reasons that follow, we affirm.

I.

## BACKGROUND

Claimant, a deputy sheriff, has worked at the Richmond City Jail (jail) since 1985. In early 1992, claimant took a TB skin test and tested "negative." In early March, 1994, claimant took another TB skin test and this time tested "positive." A

subsequent biopsy of a lesion in his lung revealed that he had active tuberculosis.

Believing he had contracted tuberculosis while working at the jail, claimant filed a claim for medical benefits and temporary total disability benefits. A deputy commissioner held a hearing. Dr. Jack Freund, the chief physician at the jail, testified during a de bene esse deposition about the methods by which tuberculosis is transmitted and the course of the disease. He testified that tuberculosis is generally transmitted only through the inhalation of airborne droplets of saliva or sputum from a person with an "active" case of the disease. Unlike the common cold, tuberculosis is generally not transmitted through contact with the skin of a person suffering from active TB. The doctor testified that tuberculosis would not be transmitted "[i]f someone who is active with TB coughed or sneezed into his or her hand and then shook hands with" a non-infected person.

Dr. Freund testified that tuberculosis is a bacterial disease with two stages: an asymptomatic stage and an "active" stage. A person infected with the tuberculosis bacteria remains asymptomatic as long as his or her immune system is healthy enough to produce macrophages that destroy the bacteria. Although a person with asymptomatic tuberculosis will test positive for the disease when he or she undergoes a TB skin test, these persons are incapable of transmitting the disease to others. A person infected with tuberculosis will develop an

"active" case -- and thus be able to transmit the disease -- if his or her immune system "breaks down" and no longer holds in check the TB bacteria living in his or her body.

Dr. Freund testified that the incidence of tuberculosis is greater among prison inmates than it is in the general population. He cited two articles from the Journal of the American Medical Association (JAMA) reporting on the increased incidence of tuberculosis in certain prison populations. M. Miles Braun, et al., <u>Increasing Incidence of Tuberculosis in a</u> Prison Population, 261 JAMA 393, 394 (1989) (stating that the incidence of tuberculosis in New York prisons increased from less than 25 cases per 100,000 inmates from 1976 through 1979 to 105.5 per 100,000 in 1986); Government Issues Guidelines to Stem Rising Tuberculosis Rates in Prisons, 262 JAMA 3249, 3249 (1989) (stating that the incidence of tuberculosis in prisons in California and New Jersey in 1987 was, respectively, six times and eleven times greater than the incidence of the disease in the general populations of those states). In the latter article, John J. Seggerson, Jr., Chief of the Division of Tuberculosis Control of the Centers for Disease Control, explained that [[o]vercrowded and poorly ventilated prisons are ideal environments for the spread of TB." See Government Issues Guidelines to Stem Rising Tuberculosis Rates in Prisons, 262 JAMA at 2349.

Both Captain Michael Minion, the Director of Medical

Services at the jail, and Dr. Freund testified about the physical condition of the Richmond City Jail and the incidence of tuberculosis exposure among inmates and staff. Both agreed that the Richmond City Jail is overcrowded and has an unsophisticated ventilation system. The facility was designed to house a maximum of 750 to 800 inmates; in May, 1996, its inmate population was between 1,100 and 1,300. In addition, the section of the jail in which the male inmates are housed does not have air-conditioning and is ventilated only by air flowing through windows, which are closed during cold weather, and hallways.

Captain Minion testified that he maintains statistics regarding the incidence of tuberculosis at the jail among inmates and employees. He testified that, in 1993 and 1994, a total of four inmates were diagnosed with active tuberculosis, two in each year. He also testified that twenty-six of the jail's employees who took a TB skin test in 1994 "converted" from TB negative to TB positive. Fourteen more employees converted to TB positive in 1995. Dr. Freund testified that the "conversion rate" of jail employees from TB negative to TB positive was higher than in the general population. Claimant was the only employee to be diagnosed with active tuberculosis.

Claimant testified about his duties at the jail and the nature of his contact with inmates. In between his "negative" TB test in 1992 and October, 1994, claimant was assigned to "shakedown" duty, which included examining the inside of inmates'

mouths from a distance of two to three inches. During these examinations, inmates occasionally yelled or breathed heavily upon claimant. Since October 21, 1992, claimant worked as the officer in charge of the property and supply section of the jail, a job that had three components. First, claimant issued supplies to inmates who were escorted to the property and supply office and worked side-by-side with inmates who had been "detailed" to assist him with unloading delivery trucks. Second, claimant provided security in the mess hall five days per week from 11:00 a.m. until 12:30 or 1:00 p.m. During this time, every inmate in the jail except those held in isolation passed through the mess hall for lunch. Third, claimant continued to perform shakedowns of inmates once or twice a week. His shakedown duties included the close inspection of inmates' mouths.

Claimant testified about his known exposure to tuberculosis at work and in public. Claimant testified that he was not aware of ever having actual contact with an inmate suffering from active tuberculosis during the time between his two TB tests. He testified that jail authorities did not disclose the identities of inmates who had active TB. Claimant also testified that he was not aware of ever having interacted with a person infected with active tuberculosis outside of his work at the jail. Claimant testified that, although he had part-time jobs outside of his employment during the relevant time period, these jobs involved little contact with other people. He testified that he

did have contact with his family and intermittent visitors to his house and occasionally frequented stores such as 7-Eleven and Wal-Mart. Finally, claimant testified that, when he learned that he had active tuberculosis, he immediately told the people with whom he had the most contact: his four children, his girlfriend and her children, his ex-wife, and the person who employed him to drive the tow truck. All of these people subsequently tested negative for tuberculosis.

Both Captain Minion and Dr. Freund testified about the procedures established at the jail to test and treat inmates for tuberculosis. Every inmate who enters the facility and stays long enough is given a "TB Mantoux Skin Test" within twenty-four to forty-eight hours after his or her arrival. The results of these tests are obtained when the inmate is reexamined forty-eight to seventy-two hours later. If the skin test is positive, the inmate is subjected to an x-ray photograph of his or her chest and a test of his or her liver function, which diagnose the extent of the inmate's infection. The "TB positive" inmate is also given "prophylactic medications for TB." Unless the chest x-ray and the liver test indicate that an inmate has active TB, the inmate remains housed in the general inmate population. If an inmate is discovered to have active TB, the inmate is isolated in the medical tier of the jail and then transferred as soon as possible to either the Department of Corrections' Office of Health Service or to the Medical College

of Virginia. This transfer occurs quickly because the medical facility in the jail does not have "respiratory isolation."

While an inmate with active tuberculosis is isolated in the medical tier awaiting transfer, both the inmate and deputies working nearby wear a "hepa-filter tuberculosis mask."

As a matter of practice, not every inmate entering the jail is tested for tuberculosis. The population of the jail is transient, and Captain Minion estimated that as many as 20,000 inmates pass through the jail each year. Inmates who are released within twenty-four hours of entering the jail do not receive a TB test because they leave before the test can be administered. In addition, the skin test is unlikely to detect TB in inmates who are also HIV positive. The jail houses an unknown number of inmates who are HIV positive. Any of these inmates who also have TB are likely to produce a "false negative" response to the TB skin test because their weakened immune systems no longer produce the antibody upon which the skin test relies to detect the presence of the tuberculosis in the body.

The record contains the opinions of three physicians regarding the causation of claimant's TB infection, only one of whom opined to a reasonable degree of medical certainty that claimant contracted tuberculosis while working in the jail. Dr. C.F. Wingo of the Commonwealth's Department of Health opined in a letter to claimant's attorney that "it is entirely possible that [claimant's] tuberculosis infection resulted from his

employment." In support of his opinion, the doctor cited the "excessive" conversion rate of employees at the jail from TB negative to TB positive and the fact that claimant's family had tested negative for the disease. Dr. Yale H. Zimberg, who performed the biopsy of claimant's lung and treated claimant's tuberculosis, opined that he did "not know the source of [claimant's] TB contact" and that it was possible that claimant was exposed to the disease outside of the jail. Dr. Freund testified that he believed to a reasonable degree of medical certainty that it was more likely than not that the exposure that caused claimant's TB infection occurred while he was working at the jail. Dr. Freund based his opinion on: (1) the articles in the <u>JAMA</u> that stated that the incidence of tuberculosis in prisons was greater than in the general population; (2) the fact that claimant's relatives tested negative for tuberculosis while "there was active TB in the jail"; (3) the high "conversion rate" of employees in the jail from TB negative to TB positive; and (4) the hypothetical description of claimant's duties at the jail given by claimant's attorney. Dr. Freund testified that he neither examined nor treated claimant and that he could not rule out the possibility that claimant was infected outside of work.

Following the hearing, the deputy commissioner denied claimant's claim. The deputy commissioner reasoned that claimant's tuberculosis was an ordinary disease of life and that the evidence did not clearly and convincingly prove that claimant

contracted tuberculosis at the jail. The deputy commissioner stated that

[i]t is certainly reasonable to suppose that work in an area exposing a worker to a greater chance of infection of a certain disease in fact causes that disease.

Nevertheless, . . . it is for the legislature to act to create a presumption that prison workers or other government employees coming into close contact with the general public or prisoners and who contract tuberculosis do so as a result of their employment.

Claimant appealed, and the commission affirmed. The commission found that claimant's tuberculosis was an ordinary disease of life and analyzed his claim under Code § 65.2-401. The commission then found that claimant had not proven by clear and convincing evidence that his tuberculosis was caused by his employment at the jail.

II.

## CLASSIFICATION OF CLAIMANT'S TUBERCULOSIS

Claimant argues that the evidence was insufficient to support the commission's finding that tuberculosis is an ordinary disease of life rather than an occupational disease. We disagree.

An "occupational disease" is "a disease arising out of and in the course of employment, but not an ordinary disease of life to which the general public is exposed outside of the employment." Code § 65.2-400(A). Conversely, an "ordinary disease of life" is a disease "to which the general public is exposed outside of the employment." See Code § 65.2-401.

Whether a particular condition or disease is an ordinary disease of life is a question of fact. See Knott v. Blue Bell, Inc., 7 Va. App. 335, 338, 373 S.E.2d 481, 483 (1988). The commission's factual findings are binding on this Court and will be upheld on appeal if supported by credible evidence. See Wells v. Commonwealth, Dept. of Transp., 15 Va. App. 561, 563, 425 S.E.2d 536, 537 (1993) (citation omitted); Code § 65.2-706(A).

We hold that credible evidence supports the commission's finding that claimant's tuberculosis was an ordinary disease of life to which the public is exposed outside of claimant's employment. See Van Geuder v. Commonwealth, 192 Va. 548, 551, 65 S.E.2d 565, 567 (1951). Two of the physicians who expressed opinions about the nature and causation of claimant's tuberculosis indicated that claimant could have been exposed to the disease outside the jail environment. Dr. Zimberg opined that it was possible for claimant to have contracted tuberculosis "regardless of his work environment." Dr. Freund testified that claimant could have been exposed to tuberculosis while walking in any public place, such as a supermarket, in which a person with active tuberculosis discharged saliva or sputum by sneezing. Because credible evidence supports the commission's finding, it is binding on appeal.

III.

CAUSATION OF CLAIMANT'S TUBERCULOSIS

Claimant next argues that the commission erred when it

concluded that his tuberculosis was not compensable as an ordinary disease of life under Code § 65.2-401. We disagree.

For an ordinary disease of life to be compensable under Code § 65.2-401, a claimant must prove by "clear and convincing evidence, to a reasonable degree of medical certainty" that the disease (1) arose out of and in the course of his employment, (2) did not result from causes outside of the employment, and (3) follows as an incident of an occupational disease, is an infectious or contagious disease contracted in the course of the employments listed in Code § 65.2-401(2)(b), or is characteristic of the employment and was caused by conditions peculiar to the employment. See Chanin v. Eastern Virginia Medical School, 20 Va. App. 587, 589, 459 S.E.2d 523, 524 (1995).

The commission concluded that claimant failed to prove the first and third elements required to receive benefits under Code § 65.2-401. Specifically, the commission found that claimant did not prove by clear and convincing evidence that his employment in the jail caused his tuberculosis. "Whether a disease is causally related to the employment and not causally related to other factors is . . . a finding of fact." Island Creek Coal Co. v. Breeding, 6 Va. App. 1, 12, 365 S.E.2d 782, 788 (1988).

The medical evidence in the record established that tuberculosis is only transmitted through the inhalation of airborne droplets of sputum or saliva from a person with an "active" case of the disease. Thus, in order to prove that he

contracted tuberculosis at the jail, claimant had to prove by clear and convincing evidence that he inhaled oral droplets containing the TB bacteria that were discharged from an inmate with active tuberculosis. Although the record established that claimant worked in an environment where the chances of contracting tuberculosis were greater than in other employments or in public, we hold that credible evidence supports the commission's finding that claimant did not prove by clear and convincing evidence that he contracted tuberculosis while working at the jail.

First, no evidence in the record directly established that claimant was exposed to an inmate with active tuberculosis.

Claimant testified that he did not know whether he ever personally interacted with an inmate suffering from active tuberculosis during the time between his TB tests in 1992 and 1994.

In addition, the circumstantial evidence regarding claimant's potential exposure to inmates with active tuberculosis supports the commission's refusal to infer that claimant inhaled airborne droplets carrying the disease while working at the jail. Claimant testified that his duties at the jail during the relevant time period required him to interact regularly with inmates and included the periodic examination of their mouths

<sup>&</sup>lt;sup>1</sup>The record established that claimant was the only employee of the jail to suffer from active tuberculosis during the relevant time period.

from a distance of two to three inches during "shakedown" duty.

He testified that inmates occasionally yelled or breathed heavily upon him during these examinations.

However, the evidence of claimant's interaction with inmates must be considered together with the evidence regarding the jail's policies regarding tuberculosis and its records of documented cases. When this is done, the totality of the evidence in the record does not provide clear and convincing proof that claimant was in fact exposed to an inmate with active tuberculosis. Although some inmates carried active tuberculosis during the time between claimant's TB tests, none of these inmates remained in the general inmate population for an extended period of time. Active tuberculosis was detected in four inmates during the relevant time period. However, pursuant to jail policies, these inmates were isolated from the general inmate population as soon as their tuberculosis was diagnosed. addition, due to small loopholes in the implementation of the jail's policy of testing every inmate for tuberculosis, it is possible that some inmates lived in the general inmate population with undetected cases of active TB. In practice, some inmates are released from the jail before the TB skin test can be administered to them, and Captain Minion testified that it was possible that some of these inmates had active tuberculosis. However, the possibility that claimant was exposed to these cases of active tuberculosis was remote because these inmates occupied

the jail for a short interval of time and did not frequent the areas of the jail in which claimant performed his duties.

Although inmates who had both HIV and active tuberculosis may have eluded detection when given the TB skin test, no evidence in the record establishes how many HIV positive inmates were in the general population during the relevant time period.

Finally, the medical evidence also supports the commission's conclusion that claimant did not meet the high burden of proof required by Code § 65.2-401. Dr. Zimberg stated that he did not know the origin of claimant's tuberculosis and that claimant could have been exposed outside of his employment. Dr. C.F. Wingo of the State Department of Health wrote that it was "entirely possible" that claimant contracted tuberculosis from his employment, but his letter did not indicate that he held this opinion to a reasonable degree of medical certainty. Although Dr. Freund testified that he believed claimant contracted his tuberculosis at the jail, the commission, as the trier of fact, was entitled to assign his opinion little weight in light of the other evidence in the case, including its conflict with the opinions of Drs. Zimberg and Wingo. See Penley v. Island Creek Coal <u>Co.</u>, 8 Va. App. 310, 318, 381 S.E.2d 231, 236 (1989) (stating that "questions raised by conflicting medical opinions will be decided by the commission").

Claimant argues that four key facts establish as a matter of law that he contracted his tuberculosis at the jail. First, he

cites the articles in the <u>JAMA</u> stating that the incidence of tuberculosis among some prison populations in other states was greater than the incidence of the disease in the general population. Second, he cites the fact that the conversion rate of employees at the jail from "TB negative" to "TB positive" was higher than the conversion rate in the general population in 1994 and 1995. Third, he cites the fact that all of the people closest to him outside of his employment tested negative for tuberculosis after he contracted the disease. Finally, he cites the fact that he came into contact with virtually every inmate of the jail, except those isolated from the general population, during his lunch time security duty in the mess hall.

Although claimant established that his risk of TB infection at the jail was greater than in the general public and he eliminated some possible sources of infection from outside of his employment (which is the second element of a claim under Code § 65.2-401), these facts alone do not compel the conclusion that he inhaled the TB bacteria while working in the jail. Instead, these facts merely show through an incomplete process of elimination that claimant may have contracted tuberculosis while at work. To hold that this method of proof constitutes clear and convincing evidence as a matter of law of a causal link between employment and a disease, such as tuberculosis, that is transmitted through the general population would effectively shift the burden to the employer to prove that claimant

contracted his disease from a source outside of his employment. The express provisions of Code § 65.2-401 assigning the burden of proof by clear and convincing evidence to the employee preclude such a conclusion. See <u>Van Geuder</u>, 192 Va. at 557, 65 S.E.2d at 570.

Moreover, claimant's reliance on his contact with inmates while patrolling the mess hall overstates the extent of his exposure to tuberculosis. Although claimant was in close proximity to most of the inmate population while performing this duty, it is unlikely that he contracted tuberculosis from this interaction. Claimant could only contract tuberculosis by inhaling airborne droplets of sputum or saliva from a person with active tuberculosis. Only four cases of active tuberculosis were detected among the inmate population during the relevant time period. The inmates with active tuberculosis were isolated from the general population and were prevented from eating in the mess hall as soon as their cases were diagnosed. Dr. Minion testified that most of the inmates with "hypothetical" cases of active tuberculosis would have been released from the jail before lunching in the mess hall. Claimant testified that he could not say he ever encountered an inmate with an active case of tuberculosis. Based on this tenuous circumstantial evidence of exposure to airborne droplets containing the TB bacteria at the jail, we cannot say the commission erred when it declined to infer that claimant contracted the disease at the jail. Compare

Fairfax County v. Espinola, 11 Va. App. 126, 130, 396 S.E.2d 856, 859 (1990) (holding that circumstantial evidence of medical technician's exposure to hepatitis supported the commission's finding that disease was contracted at work).

For the foregoing reasons, we affirm the decision of the commission denying claimant's claim for benefits.

Affirmed.