

## TUBERCULOSIS

Tuberculosis is a bacterial disease usually affecting the lungs (pulmonary TB) caused by organisms in the *Mycobacterium tuberculosis* complex (*M. tuberculosis*, *M. bovis*, and *M. africanum*). Other parts of the body (extrapulmonary TB) also may be affected (e.g., brain, lymph nodes, kidneys, bones, joints, larynx, intestines, eyes). Systemic symptoms include low-grade fever, night sweats, fatigue, and weight loss. In pulmonary or laryngeal TB, there also may be hemoptysis, a persistent and productive cough, chest pain, and shortness of breath. Transmission generally occurs when a susceptible person inhales airborne infectious droplet nuclei from the cough or sneeze of an infectious person.

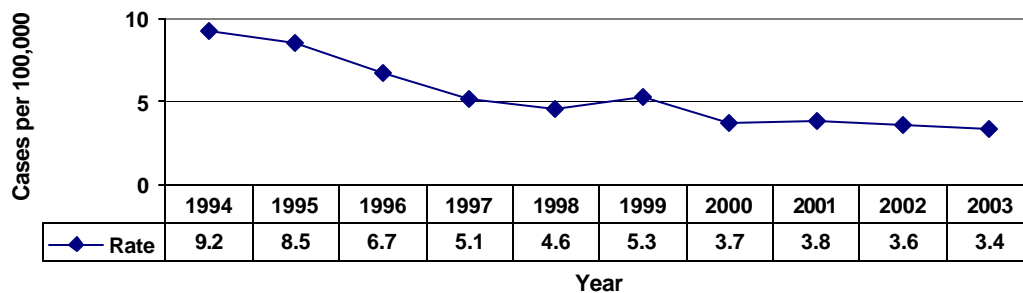
### Laboratory Confirmation by one of the following methods:

- Isolation of *M. tuberculosis* or *M. tuberculosis* complex organisms from a clinical specimen, **OR**
- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification test, **OR**
- Demonstration of acid-fast bacilli in a clinical specimen when a culture has not been or cannot be obtained. This criterion has most commonly been used to diagnose tuberculosis in the post mortem setting.

### Case Classification

*Confirmed:* A case that meets the clinical case definition or is laboratory confirmed.

**Tuberculosis Incidence, Kentucky  
1994-2003**

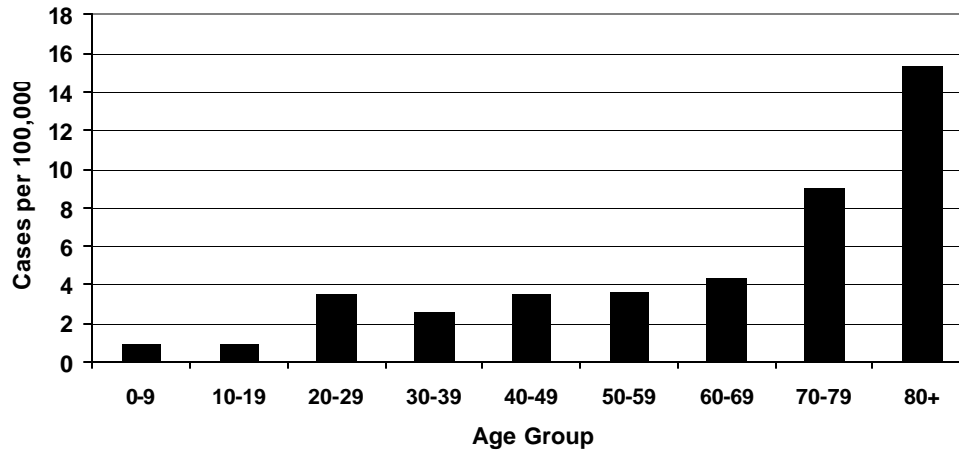


**Epidemiology**

<b>Kentucky 2003</b>	<b>Rate per 100,000</b>	<b>U.S. Rate (2002) per 100,000</b>
Cases 138	3.4	5.4

<b>Cases by Gender</b>	<b>Rate per 100,000</b>	<b>Cases by Race</b>	<b>% of Total Cases</b>
Female 46	2.2	Asian/Pacific Is. (6)	4.3
Male 92	4.6	Hispanic (19)	13.8
		African/American (19)	13.8
		Caucasian (94)	68.1

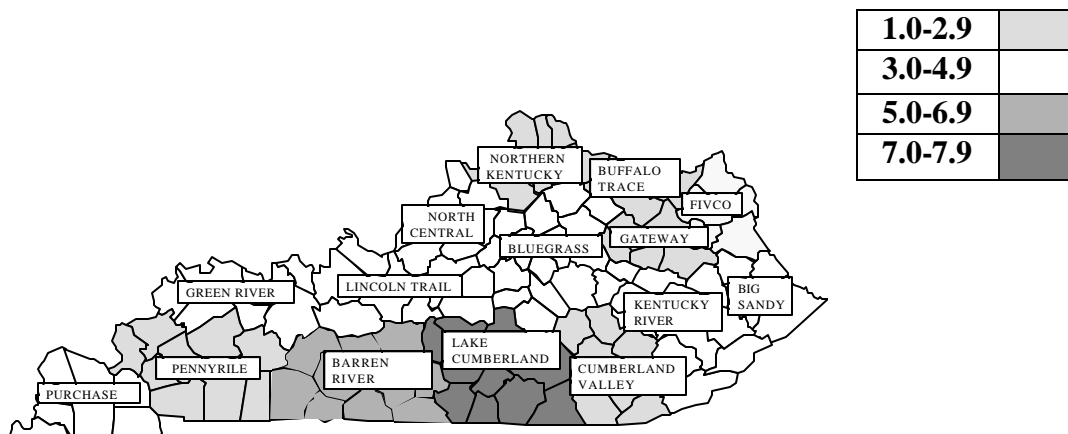
**Tuberculosis, Age-Specific Incidence  
Kentucky, 2003**



The incidence of reported tuberculosis cases continues to be highest in persons eighty and older. Seven of the 138 diagnosed cases were homeless in the past year, 6 were residents of a long term care facility at the time of diagnosis, 3 were residents of correctional facilities at the time of diagnosis

The country of origin was non-United States for 29 persons or 21.0% of the cases.

## Tuberculosis by District, Kentucky Annual Incidence, 2003



The Lake Cumberland District reported the highest rate of 7.7 cases per 100,000, followed by the Barren River District with a rate of 6.2 cases per 100,000 and the Lincoln Trail and Fivco Districts with rates of 4.4 cases per 100,000.

Kentucky has maintained a low reported TB rate for 2003, with a 5% decrease from 2002. The state rate for 2002 was 3.6 cases per 100,000 compared to 3.4 for 2003. There were 146 reported cases in 2002, compared to 138 for 2003. This enabled Kentucky to exceed a state objective to reduce the verified TB case rate to less than 3.5 cases per 100,000.

<b>District</b>	<b>Rate per 100,000</b>
Purchase	3.1
Pennyrile	1.4
Green River	1.4
Barren River	6.2
Lincoln Trail	4.4
North Central	3.6
Northern Kentucky	1.2
Buffalo Trace	1.8
Gateway	1.3
Fivco	4.4
Big Sandy	3.1
Kentucky River	2.5
Cumberland Valley	2.5
Lake Cumberland	7.7
Bluegrass	3.4