

Section 9. Tuberculosis

Tuberculosis (TB) is caused by the bacteria *Mycobacterium tuberculosis*. TB is a disease that is spread from person to person through the air; infection can occur by sharing airspace for an extended period of time in an enclosed setting such as one's home or in a small office. TB usually affects the lungs. Bacteria are put into the air when a person with active TB of the lungs coughs, sneezes, laughs, or sings.

TB skin or blood tests help identify persons who have been infected. Most people who are infected with the TB bacteria have what is known as latent TB infection (LTBI). Some people with LTBI will progress to active TB disease but it may take several years after they were initially infected before they become sick. LTBI is a condition in which TB bacteria are alive but inactive in the body. People with LTBI may greatly reduce the chance of progressing to TB disease by taking treatment for their infection. Persons with weakened immune systems (e.g., those with HIV) are at greater risk for progressing from LTBI to active TB disease.

Active TB is defined as an illness in which TB bacteria are multiplying and attacking a part of the body, usually the lungs. Symptoms of TB of the lungs may include a cough that lasts for three weeks or more, coughing up blood or blood stained mucus, loss of appetite, unexplained weight loss, drenching night sweats, extreme fatigue, sore throat or hoarseness. A person with active TB disease may be infectious and spread TB bacteria to others. TB is a disease than can be cured if treated properly.

This section describes TB surveillance data reported in the District from 2008 to 2012. Cases reported in the figures represent cases of active TB disease and not LTBI; LTBI is not a reportable condition in the District.

Summary

After a spike in the number of cases reported in 2006, the District has experienced considerable success reducing the number of TB cases and consequently the TB case rate among District residents. In 2012, 37 cases of TB were reported (Table 14). Please refer to appendix table A12 for more information on TB cases reported between 2008 and 2012 in the District.

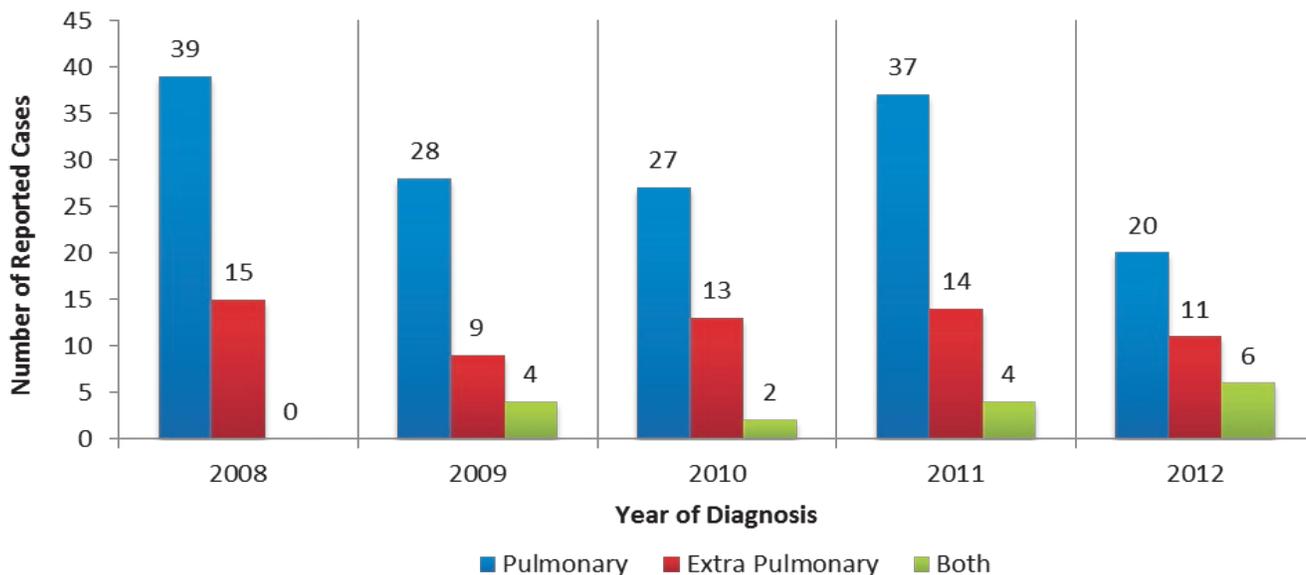
All positive TB cultures are tested for susceptibility to the medications used in treatment. Multi-drug resistant TB (MDR-TB), or TB that is resistant to two of the first-line treatment agents (isoniazid and rifampin) has been infrequent in the District. Two cases of MDR-TB were reported in 2006 and one case of MDR-TB was reported in 2010. No cases of MDR-TB were reported in 2012.

HAHSTA attributes the reduction in TB cases and the low number of drug resistant cases to using Directly Observed Therapy (DOT) as the standard of care for all active TB cases, the provision of case management services for all active TB cases, and rapid contact investigation which include education and evaluation.

Table 15. Reported Tuberculosis Rate per 100,000 persons
District of Columbia 2008-2012

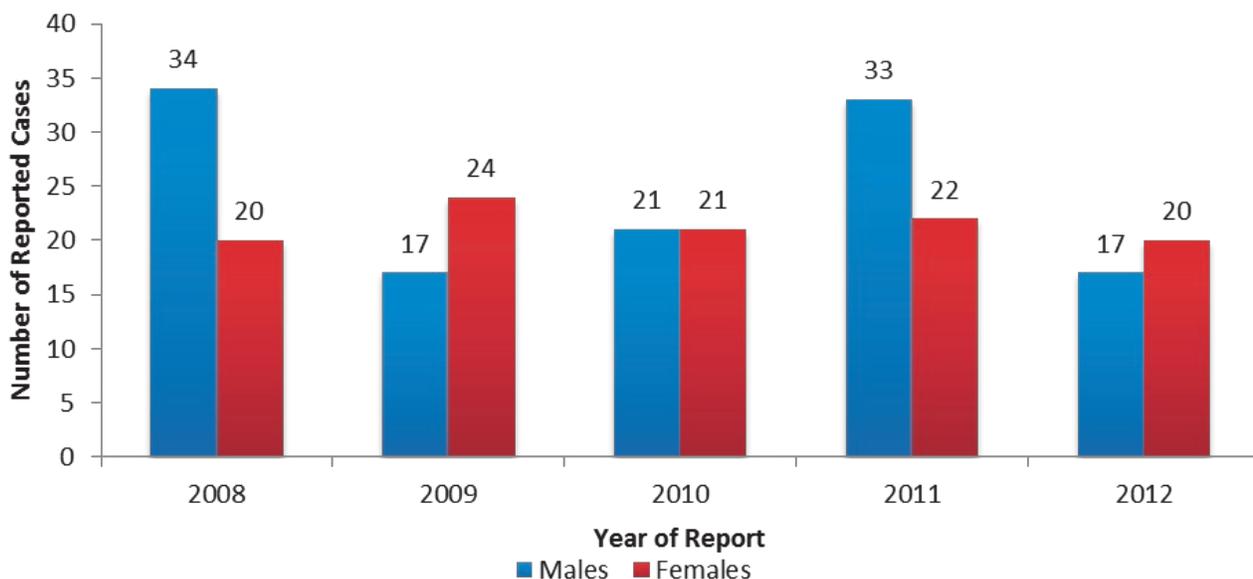
	2008		2009		2010		2011		2012	
	N	Rate								
District Total	54	9.1	41	6.8	42	7.2	55	8.9	37	5.9

Figure 38. Reported Cases of Tuberculosis by Year of Report and Disease State
District of Columbia, 2008-2012



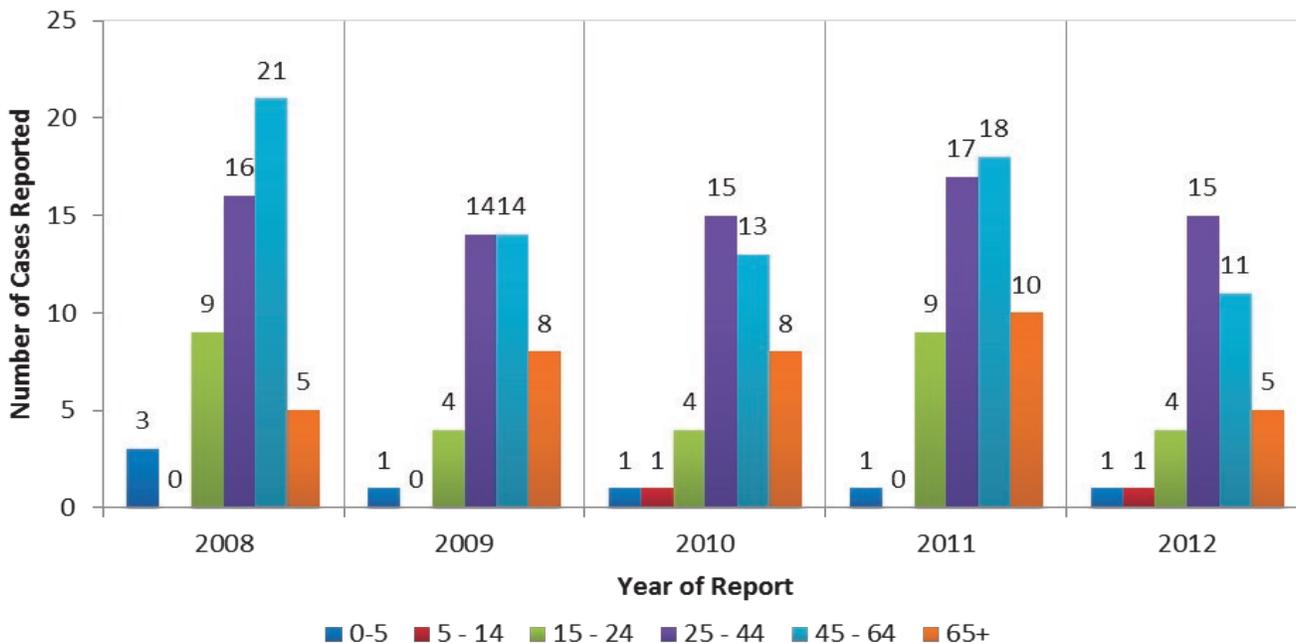
- There was a decline in the proportion of pulmonary TB cases between 2008 and 2012.
- Overall, the proportion of extra pulmonary cases has increased in the 5-year period; 27.8% in 2008 to 29.7% in 2012. Extra pulmonary TB, by definition, occurs in parts of the body other than the lungs or respiratory system and is not considered infectious.
- Occasionally, persons may be infected with TB in multiple parts of the body. During the reporting period, a total of 16 people were infected with both pulmonary and extra pulmonary TB.

Figure 39. Reported Cases of Tuberculosis by Year of Report and Sex
District of Columbia, 2008-2012



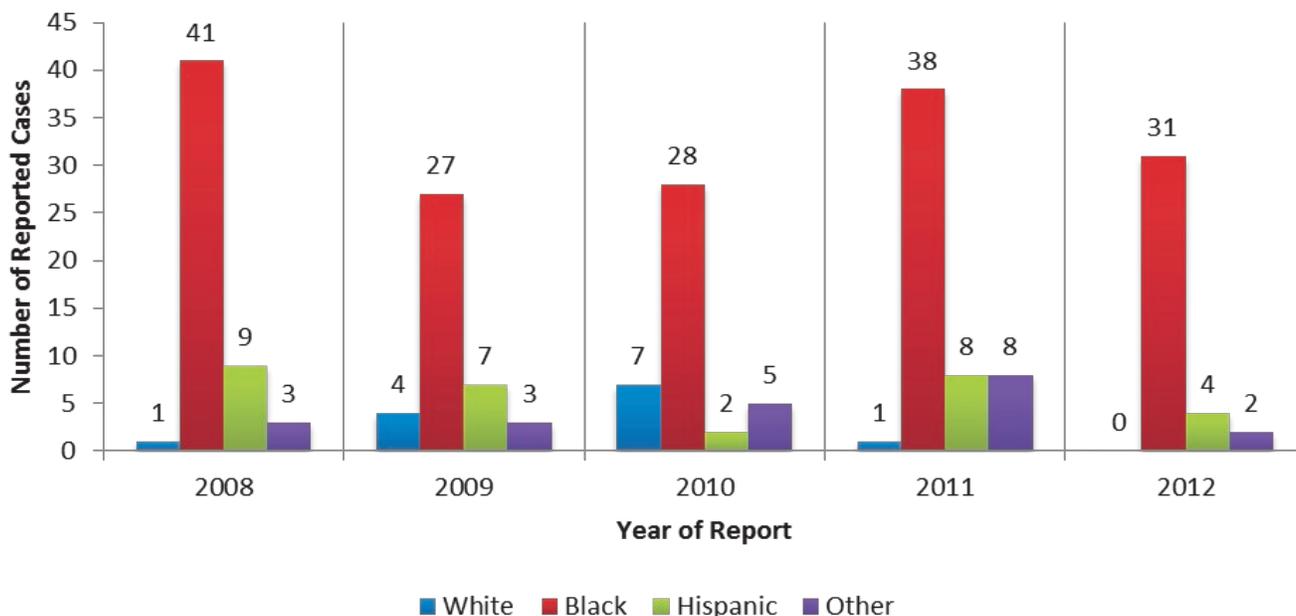
- Overall, 53.3% of reported TB cases were among men. Historically, TB is more prevalent among men; however the male to female ratio has shifted in recent years.

Figure 40. Reported Cases of Tuberculosis by Year of Report and Age at Diagnosis
District of Columbia, 2008-2012



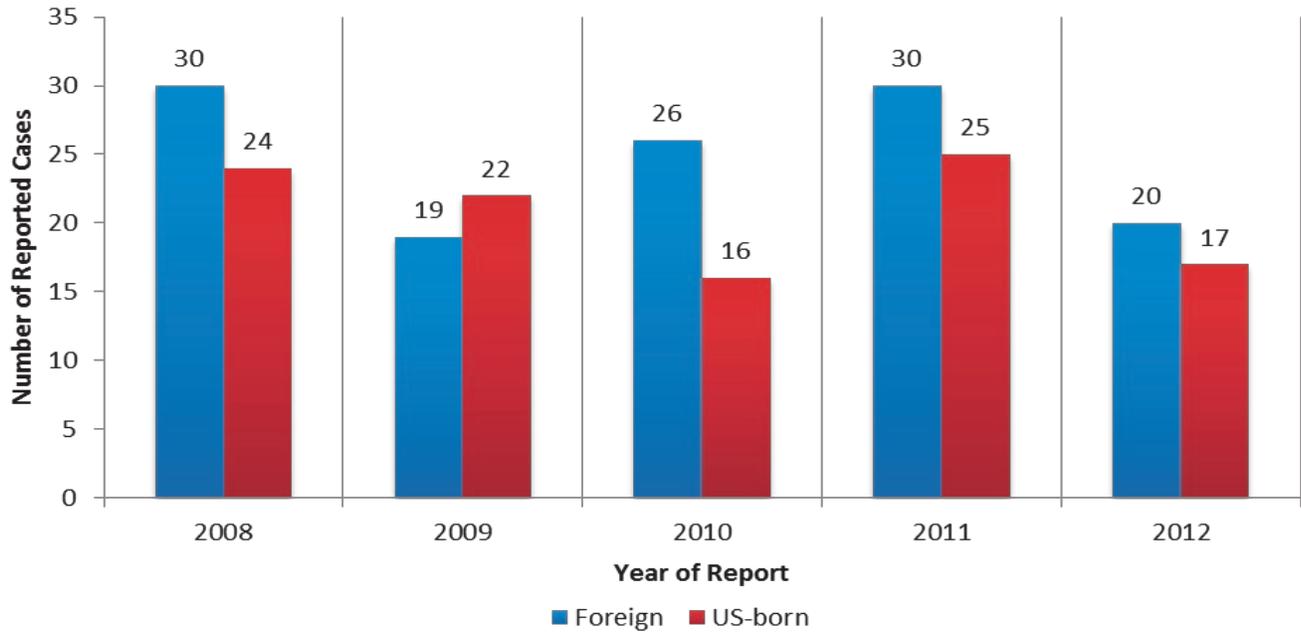
- Approximately 67% of cases reported between 2008 and 2012 were between the ages of 24 and 64.

Figure 41. Reported Cases of Tuberculosis by Year of Report and Race/Ethnicity
District of Columbia, 2008-2012



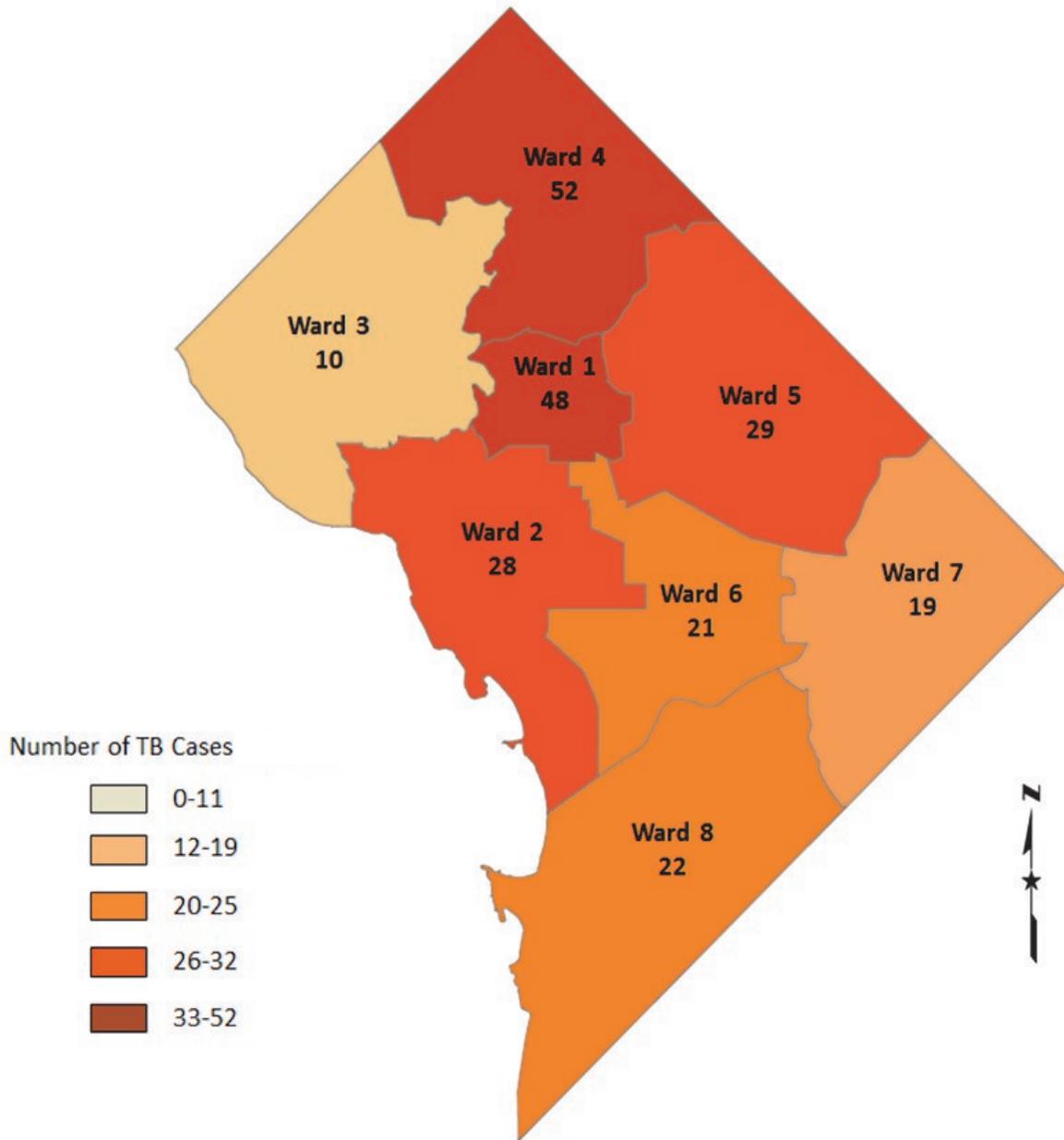
- More than two-thirds of all TB cases reported each year were black.

Figure 42. Reported Cases of Tuberculosis by Year of Report and Place of Birth, District of Columbia, 2008-2012



- The proportion of cases reported among foreign-born person remains high in the District. Foreign-born cases reported represented 55.6% of cases in 2008 and 54.1% of cases in 2012. This is similar to national data.

Map 8. Number of Reported Cases of Tuberculosis by Ward
District of Columbia, 2008-2012



- Between 2008 and 2012, the majority of TB cases were reported in Ward 4 and Ward 1.
- Ward 3 had the least number of reported cases (10), followed by Ward 7 (19).