

Tuberculosis in Vermont

Vermont Department of Health Tuberculosis Program

All suspected and confirmed cases of TB disease must be reported to the Department of Health. The TB Program staff will arrange for rapid testing when indicated and provide guidance on infection control measures. While latent TB infection is not reportable in Vermont, the TB Program staff can provide information about diagnosis using either the tuberculin skin test or the interferon-gamma release assay, interpretation of test results, and treatment options. Expert clinical consultation is provided by the University of Vermont Medical Center's infectious disease specialists.

Health care providers work with Health Department staff to ensure that treatment for TB disease is completed through use of Directly Observed Therapy (DOT). Directly Observed Therapy means that a trained health care worker or designated individual provides prescribed treatment and watches the patient take it. Studies show that 86-90% of all patients receiving DOT complete therapy, compared to 61% for those who self-administer. DOT helps prevent the spread of TB, helps patients finish TB therapy as quickly as possible, and decreases the chances of treatment failure and relapse.

When patients have pulmonary TB, the Health Department staff conducts investigations to identify and evaluate close contacts. TB Program staff provides testing for those identified as close contacts. Without treatment latent TB infection can progress to TB disease. Individuals with a latent TB infection can be prescribed treatment to prevent TB disease. The Health Department can provide information on deciding when to treat Latent TB Infection.

The Vermont Department of Health Laboratory offers multiple diagnostic tests for tuberculosis, including smear microscopy, culture, an amplified direct test, and antimicrobial susceptibility testing. The state lab also performs a QuantiFERON-TB Gold test for diagnosis of latent TB infection.

Education

The TB Program staff offers education and in-service training to broadly educate the medical community in Vermont and increase provider awareness of TB in Vermont. Program staff with expertise in TB are available to advise and support health care providers on appropriate infection control precautions, monitoring adverse effects of the treatment, and managing symptoms related to anti-tuberculosis medications.

Epidemiological Snapshot

Tuberculosis disease is rare in Vermont, but still occurs in a handful of people each year. Between 2003 and 2015, 77 cases of TB were reported in the state (averaging 5.5 cases a year). Reports of TB came from eleven counties, with the most coming from Chittenden County (48% of all reports). Foreign-born people and racial/ethnic minorities in Vermont are disproportionately affected by TB, which is a trend observed across the country.

Selected Characteristics of Vermont Tuberculosis Cases 2003 to 2015 (n = 77)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
U.S. Born	1	2	6	3	1	3	0	2	3	0	1	1	3	26
Foreign Born	8	4	2	5	2	3	6	3	5	4	4	1	4	51
<i>Immigrant</i>	0	0	0	1	0	0	2	1	0	2	3	0	2	11
<i>Refugee</i>	0	1	0	2	1	1	2	2	4	1	0	0	1	15
<i>Student, Employment, Tourist, or Family Visa</i>	2	1	1	1	1	0	1	0	1	1	0	0	1	10
<i>Other/Unknown</i>	6	2	1	1	0	2	1	0	0	0	1	1	0	15
Year Total	9	6	8	8	3	6	6	5	8	4	5	2	7	77

Vermont Tuberculosis Cases 1999 to 2015 by County of Residence

	Addison	Bennington	Caledonia	Chittenden	Essex	Franklin	Grand Isle	Lamoille	Orange	Orleans	Rutland	Washington	Windham	Windsor	Year Total
2015	1	0	0	4	0	0	0	0	1	0	0	1	0	0	7
2014	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
2013	0	0	0	4	0	0	0	0	0	0	0	0	1	0	5
2012	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
2011	0	0	0	5	0	0	0	0	0	1	1	0	0	1	8
2010	0	0	1	2	0	0	0	0	0	0	0	0	0	2	5
2009	0	1	0	2	0	0	0	0	0	0	0	1	1	1	6
2008	0	0	1	2	0	0	0	0	0	0	0	0	1	2	6
2007	1	0	0	1	0	0	0	0	0	0	0	1	0	0	3
2006	1	1	0	3	0	0	0	0	0	0	0	0	3	0	8
2005	2	1	0	1	0	2	0	0	0	0	0	0	0	2	8
2004	0	0	1	1	0	0	0	0	0	0	0	0	1	3	6
2003	2	0	0	6	0	1	0	0	0	0	0	0	0	0	9
2002	0	0	0	5	0	0	0	0	1	0	0	0	1	1	8
2001	1	0	0	4	0	0	0	0	1	0	0	0	0	1	7
2000	0	1	0	0	0	0	0	0	0	0	0	1	2	0	4
1999	0	0	0	2	0	0	0	0	1	0	0	0	0	0	3
Total	8	4	3	47	0	3	0	0	4	1	1	4	10	14	99