



Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

Date: March 24, 2017

To: Healthcare Providers and Local Health Departments

From: New York State Department of Health (NYSDOH), Bureau of Tuberculosis Control

INFORMATIONAL MESSAGE

March 24 is World Tuberculosis Day: New diagnostic tools and coordinated treatment remain essential to elimination efforts in New York

World Tuberculosis (TB) Day is an opportunity to recognize the successes and challenges in moving toward ending TB, in New York and globally. In New York, the number of reported cases of TB increased slightly in 2016, highlighting the need for continued vigilance. Overall, New York's sustained focus on controlling TB, particularly since the early 1990s, has resulted in a significant decrease, from 4,574 cases in 1992 to 765 cases in 2015. There were 768 cases in 2016, including 565 cases in New York City (2.1% decrease) and 203 cases (8.0% increase) in the rest of the state. New York State has the third highest number of TB cases, and its case rate (4.0/100,000) continues to be one of the highest in the nation. In 2016 there were 11 persons with multidrug-resistant TB in New York, compared to 6 the previous year. The highest TB rates were in New York City (6.9/100,000,) but 31 other counties reported 1-38 cases each.

TB disease is preventable. Most persons developing active disease acquired the infection years earlier, particularly when living in areas of the world with higher TB incidence than the United States, or when in close contact with a relative or colleague with undiagnosed pulmonary TB. To decrease this risk, persons need to be assessed for their risk of exposure, be tested if at increased risk, and be evaluated for disease. The U.S. Preventive Services Task Force in 2016 affirmed that TB testing should be offered in primary care settings as part of preventive services. National guidelines recommend an interferon-gamma release assay (IGRA) blood test (Quantiferon-TB or TSpot.TB) as a preferred option for most persons with prior Bacillus Calmette-Guerin (BCG) vaccination or for whom follow-up for skin test reading may be difficult. For persons with asymptomatic infection, there are new treatment options, including a 12-dose once-weekly isoniazid-rifapentine regimen, which needs to be given under supervision. Most persons can best seek and receive treatment for TB infection as part of their overall health care.

Early diagnosis of TB disease assures successful treatment and prevents new infections. For persons with symptoms suggestive of TB disease, such as a chronic unexplained cough, weight loss, night sweats or hemoptysis, specimens from coughed secretions or from appropriate tissue samples should be obtained for culture. TB usually starts in the lungs but involvement of other organs is common; practitioners need to keep thinking of this diagnosis and obtain fresh samples when appropriate. The New York State Department of Health's (NYSDOH) Wadsworth Laboratory, as well as some other labs, can identify the organism directly from a fresh specimen using molecular techniques, and will test directly for genetic markers suggestive of drug

resistance. NYSDOH is the first health department in the country to perform whole genome sequencing on each initial isolate. This powerful new technique helps optimize treatment, provides early indication of potential outbreaks, and contributes to international understanding of the TB organism essential to the development of improved drugs and vaccines.

Frontline local health workers assure infection control, support directly observed therapy and coordinate care over the six months or more of treatment. Young children are at particular risk for serious disease. Other persons with impaired immunity -- whether due to existing medical conditions such as HIV infection, renal failure, cancer, malnutrition or diabetes; or through immunosuppressing medical treatments for conditions like arthritis -- can also sometimes develop serious disease and may respond more slowly to treatment. With coordinated care, nearly all persons are able to successfully complete treatment and be cured, and any exposed individuals can be checked for infection and treated if needed.

The collaborative efforts of New York state and local public health agencies, health care practitioners, laboratorians, and basic science researchers, as well as the advocacy of community groups and individuals affected by this global disease are essential in moving toward ending TB, both within the state and worldwide. For questions on local data, guidelines or services, contact your local health department or the NYSDOH Bureau of Tuberculosis Control at tbcontrol@health.ny.gov.

Additional information

- CDC March 24, 2017 MMWR on World TB Day and 2016 national trends is available online at <https://www.cdc.gov/mmwr/index.html> Current information on TB worldwide is available online at <http://www.who.int/tb/en/>
- The USPSTF Recommendation for TB screening (September 2016) and CDC resources <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/Interim-tuberculosis-infection-screening>
- <https://www.cdc.gov/tb/publications/ltbi/pdf/cdc-uspstf-ltbi-messages-and-resources.pdf>
- ATS/IDSA/CDC Clinical Practice Guidelines: Diagnosis of tuberculosis in adults and children (January 2017) <https://academic.oup.com/cid/article/64/2/111/2811357/Official-American-Thoracic-Society-Infectious?searchresult=1>
- ATS/CDC/IDSA Clinical Practice Guidelines: treatment of drug-susceptible tuberculosis (October 2016) [https://academic.oup.com/cid/article/63/7/e147/2196792/Official-American-Thoracic-Society-Centers-for](https://academic.oup.com/cid/article/63/7/e147/2196792/Official-American-Thoracic-Society-Centers-for-Disease-Control-and-Prevention-Clinical-Practice-Guidelines-for-the-Treatment-of-Drug-Susceptible-Tuberculosis)
- NYSDOH Wadsworth Mycobacteriology Laboratory website: <https://www.wadsworth.org/programs/id/mycobact/>
- APHL/NTCA guidance on use of TB rapid tests in decisions regarding airborne isolation http://www.tbcontrollers.org/docs/resources/NTCA_APHL_GeneXpert_Consensus_State_Ment_Final.pdf