National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

U.S. Preventive Services Task Force Recommendation Statement: Screening for Latent Tuberculosis Infection (LTBI) in Adults

Centers for Disease Control and Prevention

Division of Tuberculosis Elimination

September 2016

Background: An Opportunity for Outreach

The U.S. Preventive Services Task Force (USPSTF) published a new recommendation to test for latent tuberculosis (TB) infection (LTBI) in populations at increased risk.

The TB community has a unique opportunity to use the announcement of this recommendation to draw attention to LTBI and educate the public, health care providers, at-risk populations, and policy makers on the importance of targeted testing and treatment for LTBI.

LTBI in the United States

- Up to 13 million people in the United States are estimated to have LTBI.
  - While TB disease is a nationally notifiable disease, LTBI is not reported to CDC.
  - Despite declines of TB disease in the United States, there has been no significant change in the rate of LTBI over the last decade.
- People who have latent TB infection were exposed to TB in the past.
- More than 85% of U.S. TB cases are believed to be associated with longstanding untreated LTBI.

Addressing LTBI to Accelerate TB Elimination

- DTBE has a central role in encouraging the expansion of LTBI testing and treatment in the United States.
- DTBE partners with state and local TB control programs to provide guidance, educational resources, and training on latent TB infection testing and treatment.
  - DTBE needs new strategies to expand partnerships and reach new audiences.
- Targeted testing and treatment of persons at greatest risk for TB is the most effective way to further reduce the number of new TB cases in the United States.

U.S. Preventive Services Task Force (USPSTF)

The Patient Protection and Affordable Care Act ("ACA") March 23, 2010 Goals:

- Providing more Americans with access to affordable health insurance
  - In 2013 approximately 44 million Americans were without health insurance (about 16% of the population).
  - At end of open enrollment in 2014, fewer than 13% of Americans were uninsured. By 2015 the uninsured rate had fallen below 10%
- Improving the quality of health care and health insurance
- Regulating the health insurance industry
- Reducing health care spending in the US

ACA and the U.S. Preventive Services Task Force

- Under ACA, preventive services with a USPSTF Grade of A or B are covered without cost-sharing (e.g., copayment or deductible) by many health insurance plans or policies
- Plans subject to this requirement (i.e. "non-grandfathered" plans) must comply within the first plan year that begins one year after the September 6, 2016 USPSTF recommendation
  - For example, plan years that begin January 1st will have to comply by January 1, 2018 at the latest

USPSTF

- The USPSTF is an independent, volunteer panel of national experts in prevention and evidence-based medicine.
- The primary goal of the USPSTF is to develop and disseminate evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications.
- Recommendations are developed based on rigorous review of existing peer-reviewed evidence, and evaluation of benefits and harms.
- Recommendations address only services offered in the primary care setting or services referred by a primary care clinician.
- Recommendations apply only to people who have no signs or symptoms of the specific disease or condition that the screening, counseling, or preventive medication targets.
- Recommendations are available online and in peer-reviewed literature.
  - http://www.uspreventiveservicestaskforce.org/BrowseRec/Index/browse-recommendations

USPSTF

- Every USPSTF recommendation is assigned a letter grade
- These grades are based on the strength of the evidence on a specific preventive service

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

http://www.uspreventiveservicestaskforce.org/uspstf/grades.htm

History of USPSTF LTBI recommendations

- 1996: USPSTF recommended (Grade A) LTBI screening of high-risk persons.
- 2002: USPSTF deferred to CDC LTBI testing recommendations to avoid duplication of other Federal Agency efforts. (no USPSTF Grade)

For current recommendation

- 2013: CDC and the Agency for Healthcare Research and Quality signed an interagency agreement to initiate a review.
- 2014: USPSTF posted LTBI Research Plan for 30-day public comment period.
- 2016: USPSTF posted Recommendation and Evidence Review for 30-day public comment period.
- 2016: USPSTF published final Recommendation

Questions Considered for USPSTF Recommendation

- Benefits of screening
  - *Does screening for the disease result in decreased incidence?*
  - *Does screening result in reduced mortality or morbidity?*
  - *Are screening tests accurate and reliable?*
  - *Are sequential screening strategies accurate and reliable?*
- Risks of screening
  - *Are there harms to screening or the diagnostic work-up?*
- Benefits of treatment
  - *Does LTBI treatment reduce transmission of TB and mortality?*
- Risks of treatment
  - *Are there harms associated with treatment of LTBI?*

2016 USPSTF Recommendation

2016 Recommendation

The USPSTF recommends screening for LTBI in populations that are at increased risk (B recommendation)

Population	Recommendation	Grade (What's This?)
Adults who are at increased risk for tuberculosis	The USPSTF recommends screening for latent tuberculosis infection (LTBI) in populations that are at increased risk.	B

*B Recommendation = USPSTF recommends this service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.

2016 USPSTF Recommendation

- This recommendation applies to asymptomatic adults ≥18 years of age who are at increased risk for TB and are seen in primary care settings.
  - Born in, or former residents of, countries with increased tuberculosis prevalence *(e.g., Mexico, Philippines, Vietnam, India, China, Haiti, Guatemala); or*
  - Currently live in, or have lived in, high-risk congregate settings *(e.g., homeless shelters, long-term care facilities, correctional facilities).*
- It does not apply to adults with symptoms of TB disease or children and adolescents (children and adolescents screening addressed in Bright Futures).

Additional Populations at Risk for LTBI

- The recommendation does not address the additional need for LTBI testing in other high-risk populations.
- CDC recommends the following populations continue to be tested for LTBI as part of other screening efforts:
  - Persons with immunosuppression: TB testing is included in standards of care for disease or medical management for HIV/AIDS, immunosuppressive medications, and silicosis.
  - Persons who are contacts of persons with active TB disease: TB testing is conducted as part of public health programs.
  - Health care workers and workers in high-risk congregate settings: TB testing is conducted as part of employee health programs.

Bright Futures: TB Testing for Children

- Bright Futures is a national health promotion and prevention initiative, led by the American Academy of Pediatrics and supported by the Maternal and Child Health Bureau, Health Resources and Services Administration.
- Bright Futures recommends TB testing for children at high-risk, and many health plans are required to cover the service under the Patient Protection and Affordable Care Act (ACA) at no-cost.

Bright Futures Medical Screening Reference Table
12 Month Visit

Selective Screening	Medical History Risk Factors	Risk Assessment[a]	Action if Risk Assessment Is Positive
Tuberculosis		• Was your child born in a country at high risk for tuberculosis (countries other than the United States, Canada, Australia, New Zealand, or Western Europe)? • Has your child traveled (had contact with resident populations) for longer than 1 week to a country at high risk for tuberculosis? • Has a family member or contact had tuberculosis or a positive tuberculin skin test? • Is your child infected with HIV?	Tuberculin skin test

Additional Related Guidelines

- American Thoracic Society and CDC Statement: Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* Recomm Rep. 2000;49(RR06):1-54
- Guidelines for the investigation of contacts of persons with infectious tuberculosis. *MMWR* Recomm Rep. 2005;54(RR-15):1-47
- Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005. *MMWR* Recomm Rep. 2005;54(RR-17):1-141
- Occupational Safety and Health Administration. Enforcement Procedures and Scheduling for Occupational Exposure to Tuberculosis. Directive No. CPL 02-02-078

Public Health Implications of USPSTF Recommendation for LTBI Screening

Strategic Implications of LTBI Recommendation

- USPSTF recommendation can serve as a catalyst for increasing focus on LTBI targeted testing and treatment, particularly in persons who reside in, but were born outside of, the United States.
- The recommendation is a critical tool for moving TB elimination efforts forward by addressing the reservoir of LTBI.

Impact to Medicare and Medicaid

- For LTBI screening without cost-sharing to be available to Medicare beneficiaries, the Centers for Medicare and Medicaid Services must first complete a Medicare National Coverage Determination.
- LTBI screening may not be available without cost-sharing to traditional Medicaid beneficiaries.
- LTBI screening may be available to Medicaid beneficiaries enrolled in alternative benefit plans.

Implications of USPSTF LTBI Recommendation for Clinical Practice

USPSTF LTBI Recommendation: Implications for Clinical Practice (1)

- TB prevention and control has traditionally been a function of state and local public health departments.
- However, many people at high risk for TB infection and TB disease who need to be tested and treated receive care from private healthcare providers and community health centers.
- The USPSTF recommendation expands opportunities for additional public and private health care providers to prevent and control TB.
- Providers should consult with their local or state health departments for populations at risk in their communities based on local demographic patterns.

USPSTF LTBI Recommendation: Implications for Clinical Practice (2)

- In the near future, many health plans should cover LTBI screening without cost-sharing for at-risk asymptomatic adults age ≥18 years in the following groups when using a provider within the health plan's network:
  - Persons born in, or former residents of, countries with increased TB prevalence
  - Persons who currently live in, or have lived in, high-risk congregate settings
- Other adults assumed to be at risk for LTBI may incur cost of co-pays, co-insurance, or deductibles for LTBI screening (depending on type of health coverage and setting in which screening is provided).

In Summary

- TB cannot be eliminated in the United States without increased efforts to test and treat LTBI.
- The USPSTF recommends screening for LTBI in adult populations that are at increased risk (B recommendation).
- USPSTF recommendation is a catalyst for increasing focus on LTBI targeted testing and treatment.
- The USPSTF recommendation expands opportunities for private health care providers to play a critical role in TB control and prevention.

DTBE's Communication Plan for USPSTF Recommendation

Overview

- Communication Objectives
- Communication Strategy
- Key Messages
- Communication Resources
- Communication Activities
- Next Steps

Overall DTBE Communication Objectives

- Communicate USPSTF recommendation and related policies to stakeholders
- Amplify communication activities from USPSTF and other partner activities
- Reinforce CDC latent TB infection guidelines and recommendations
- Provide links to latent TB infection resources, education materials, and training to help partners incorporate the recommendation into practice

DTBE's Communication Strategy

DTBE plans a multilayered approach with messages and materials tailored specifically for each audience.

- Reach public health care organizations and providers.
- Reach private health care organizations and providers serving high risk populations.
- Reach-high risk populations and organizations serving these populations.

Public Health Care Organizations and Providers

- Objective: Provide information and education about the USPSTF recommendation and direct providers to CDC latent TB infection resources.
  http://www.cdc.gov/tb/publications/ltbi/ltbiresources.htm
- Target Audiences:
  - Primary: TB Stakeholders (NTCA, Stop TB USA, ATS, IDSA, Results, testing companies)
  - Secondary: Health care providers (Community Health Centers, Bureau of Primary Care Providers, Medical Associations), Public Health Associations, Health advocacy groups

Private Health Care Organizations and Providers Serving High Risk Populations

- Objective: Promote testing for TB infection for at-risk populations as a preventive service covered under the ACA.
- Target Audiences: healthcare providers, professional medical associations (especially those which primarily treat at-risk patients), community health centers
- Channels/strategies: association newsletters/blogs/website content; Medscape & other health care provider social network (Hippocrates, Sermo, etc.); social media, Twitter chat(s) with professional associations; toolkits for health departments to conduct outreach

High Risk Populations and Organizations Serving These Populations

- Objective: Encourage at-risk patients to ask their health care providers about latent TB infection testing.
- Target Audiences: people with untreated latent TB infection at risk for developing disease, community organizations and service providers that work with these populations
- Channels/strategies: traditional media, social media, provider education, poster/flyers in provider offices/clinics, CBOs, Health Insurance company newsletters

Latent TB Infection Messages and Resources

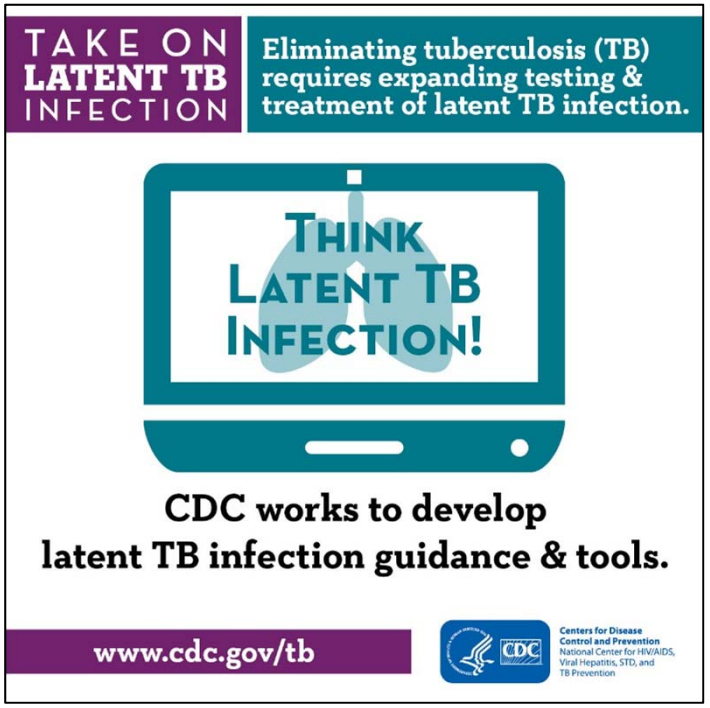
Key Messages

- Eliminating tuberculosis (TB) in the United States requires expanding testing and treatment of latent TB infection.
- The Centers for Disease Control and Prevention (CDC) and the U.S. Preventive Services Task Force (USPSTF) recommend testing populations that are at increased risk for TB infection.
- Clinicians, health care agencies, and community organizations, especially those serving at-risk populations, have a critical role in TB elimination.

DTBE Resources

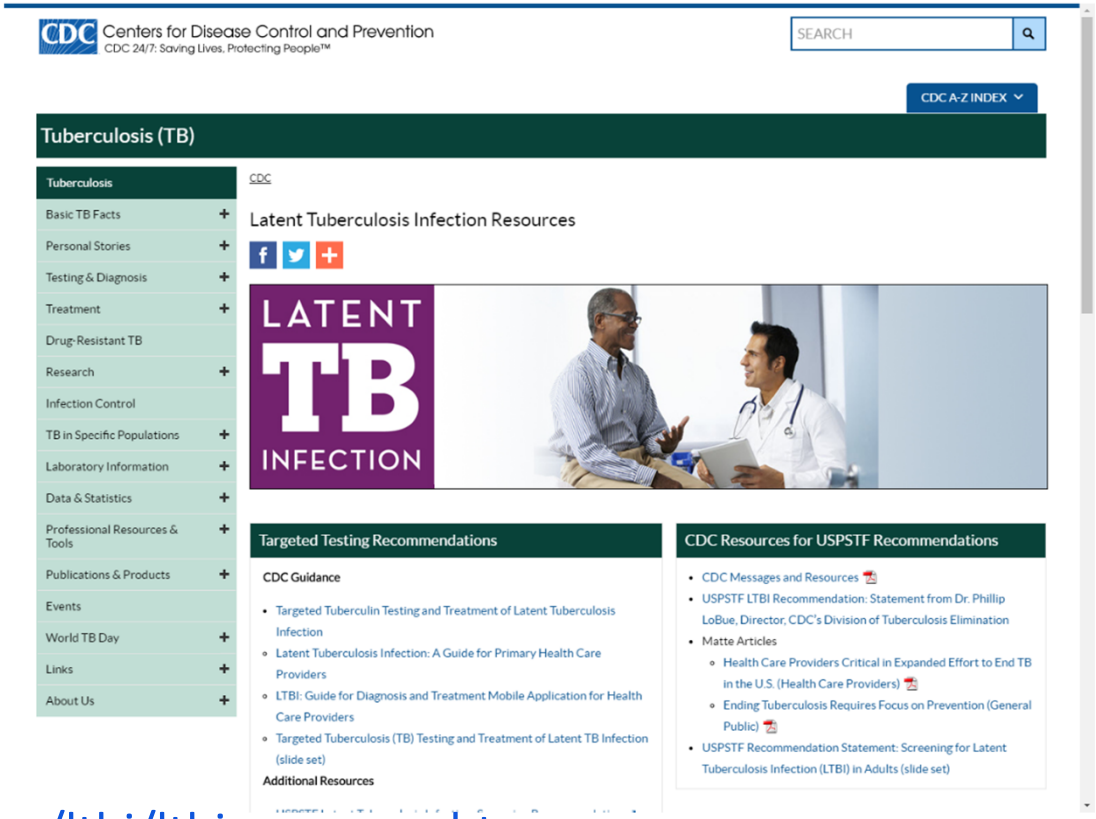
DTBE is highlighting latent TB infection resources including:

- Latent TB infection guidance
- Latent TB Infection infographics
- Fact Sheets
- Training



LTBI Resources Online Hub

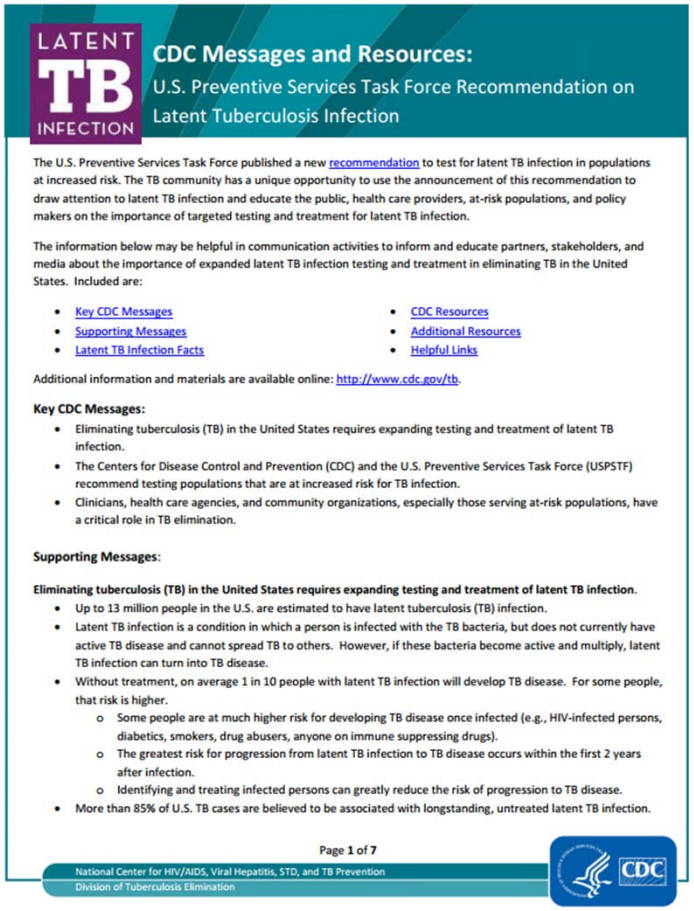
- One-stop shop for resources, materials, and links to latent TB infection and USPSTF materials



http://www.cdc.gov/tb/publications/ltbi/ltbiresources.htm

CDC Latent TB Infection Key Messages and Resources

- Use as talking points and references for more information
- Messages focus on:
  - Risk factors for latent TB infection
  - Difference between latent TB infection and TB disease
  - Testing for TB infection
  - Treatment for latent TB infection



LATENT TB INFECTION

CDC Messages and Resources:
U.S. Preventive Services Task Force Recommendation on Latent Tuberculosis Infection

The U.S. Preventive Services Task Force published a new recommendation to test for latent TB infection in populations at increased risk. The TB community has a unique opportunity to use the announcement of this recommendation to draw attention to latent TB infection and educate the public, health care providers, at-risk populations, and policy makers on the importance of targeted testing and treatment for latent TB infection.

The information below may be helpful in communication activities to inform and educate partners, stakeholders, and media about the importance of expanded latent TB infection testing and treatment in eliminating TB in the United States. Included are:

- Key CDC Messages
- Supporting Messages
- Latent TB Infection Facts
- CDC Resources
- Additional Resources
- Helpful Links

Additional information and materials are available online: http://www.cdc.gov/tb.

Key CDC Messages:

- Eliminating tuberculosis (TB) in the United States requires expanding testing and treatment of latent TB infection.
- The Centers for Disease Control and Prevention (CDC) and the U.S. Preventive Services Task Force (USPSTF) recommend testing populations that are at increased risk for TB infection.
- Clinicians, health care agencies, and community organizations, especially those serving at-risk populations, have a critical role in TB elimination.

Supporting Messages:

Eliminating tuberculosis (TB) in the United States requires expanding testing and treatment of latent TB infection.

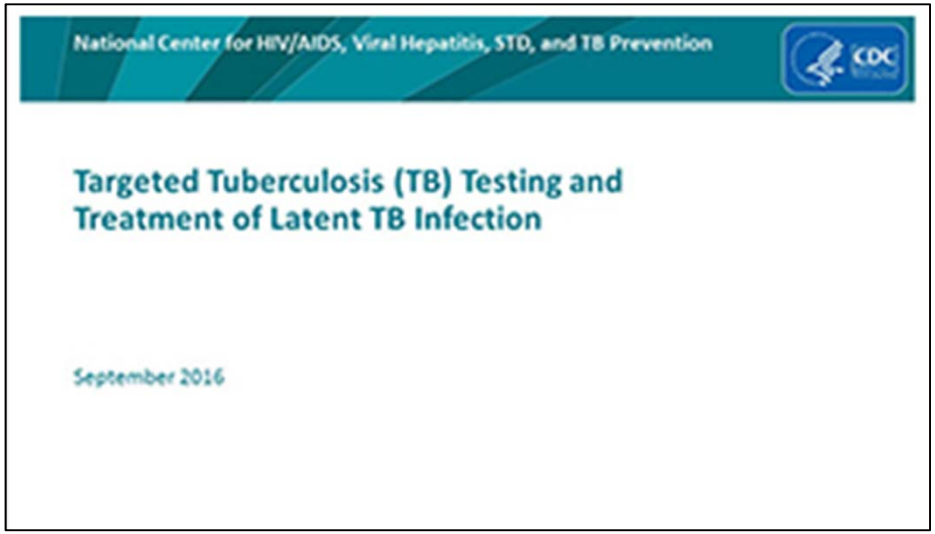
- Up to 13 million people in the U.S. are estimated to have latent tuberculosis (TB) infection.
- Latent TB infection is a condition in which a person is infected with the TB bacteria, but does not currently have active TB disease and cannot spread TB to others. However, if these bacteria become active and multiply, latent TB infection can turn into TB disease.
- Without treatment, on average 1 in 10 people with latent TB infection will develop TB disease. For some people, that risk is higher.
  - Some people are at much higher risk for developing TB disease once infected (e.g., HIV-infected persons, diabetics, smokers, drug abusers, anyone on immune suppressing drugs).
  - The greatest risk for progression from latent TB infection to TB disease occurs within the first 2 years after infection.
  - Identifying and treating infected persons can greatly reduce the risk of progression to TB disease.
- More than 85% of U.S. TB cases are believed to be associated with longstanding, untreated latent TB infection.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of Tuberculosis Elimination

CDC

Targeted Tuberculosis (TB) Testing and Treatment of Latent TB Infection Slide Set

- Download and customize for outreach and education activities
- Contains information on:
  - Risk factors
  - Testing and test selection
  - Diagnosis and treatment regimens
  - Case studies



Matte Articles for General and Clinical Audiences

- Matte articles are ready-to-print articles that can be used in any publication
- Matte articles can be used in online and print media, bulletins, newsletters, and web features
- Partners can customize articles with location specific data, local subject-matter experts, and links for further information

Audience: Health Care Providers (for trade/health care provider focused publications)
Word count: 508 (not including title)
Topic: Latent TB Infection

[Health Care Providers] Critical in Expanded Effort to End TB in the U.S.

September 2016

Audience: General Public
Word count: 458 (not including title)
Topic: Latent TB Infection

Ending Tuberculosis Requires Focus on Prevention

A new recommendation from the United States Preventive Services Task Force may make it easier to get tested for tuberculosis (TB) infection, which could help prevent future cases of TB disease.

TB was once the leading cause of death in the United States, but has faded from the memories of most Americans thanks to medical advances and public health efforts. But many people still suffer from this devastating disease, and it remains the leading infectious disease killer in the world.

"We need a new, expanded approach to eliminate TB in the United States," says [Dr. Philip LoBue, Director of the Division of Tuberculosis Elimination at the U.S. Centers for Disease Control and Prevention (CDC)]. "A major part of this approach is preventing people with latent TB infection from ever developing TB disease."

Latent TB infection is a condition in which a person is infected with the TB bacteria, but does not currently have active TB disease and cannot spread TB to others. However, if these bacteria become active and multiply, latent TB infection can turn into TB disease. CDC estimates that up to 13 million people in the U.S. have latent TB infection, and without treatment, approximately one in ten of these people will develop TB disease.

It's hard to predict who will develop TB disease and who will not, but some people have a higher risk. CDC and the United States Preventive Services Task Force recommend screening for latent TB infection in populations at increased risk.

You should talk to your doctor about getting a TB blood test or TB skin test if:

- You had close contact with someone with TB disease;
- You are from, or often visit a part of the world where TB is common;
- You spend time in places where TB is more common, like hospitals, long-term care facilities, correctional facilities, or homeless shelters; and/or
- You have HIV, diabetes, or other health problems that make it harder for your body to fight disease.

A TB blood test or a TB skin test can find infection, and there are several options available for treating latent TB infection. [LoBue] says [CDC] is working to educate health care professionals on new options that make testing and treatment easier for patients. Treatment for latent TB infection is 90 percent effective in preventing future cases of TB disease, and is much easier and less expensive than treating someone with TB disease.

[LoBue] acknowledges the complexities of TB are challenging, but remains optimistic. "We're fortunate to have strong public health programs that work to prevent TB disease. But we won't be satisfied until we end TB for good."

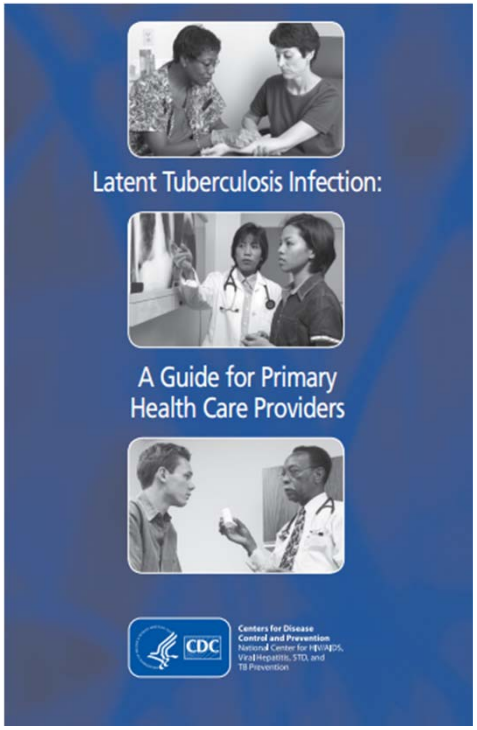
[For more information on tuberculosis and latent tuberculosis infection, contact your health care provider, your state TB control program, or visit www.cdc.gov/tb.]

###

Centers for Disease Control and Prevention *September 2016*

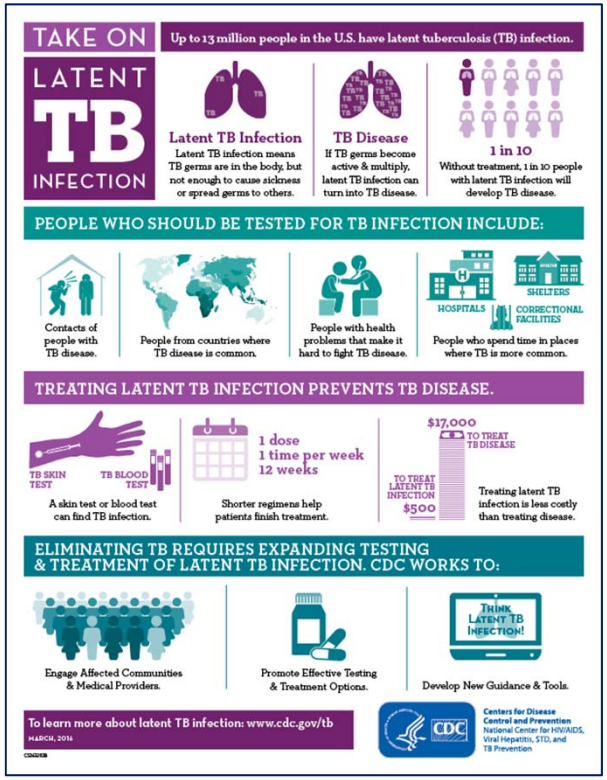
Latent TB Infection Resources for Clinicians

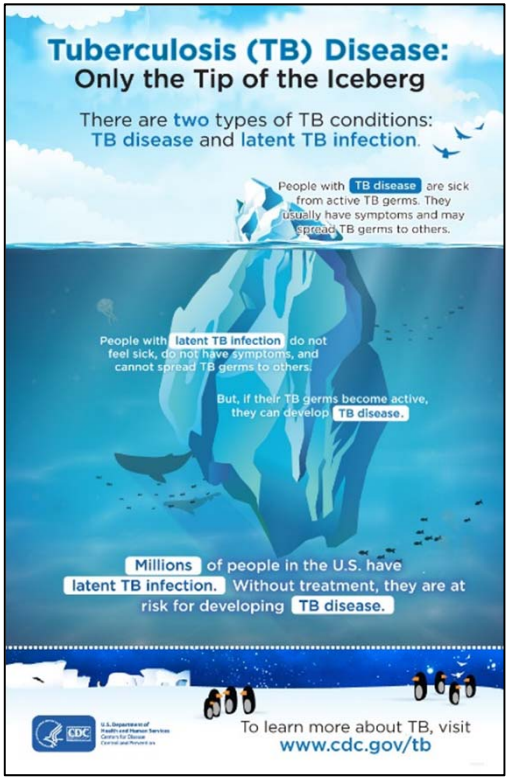
- Latent TB Infection: A Guide for Primary Health Care Providers
- Mobile app for Health Care Providers: Latent TB Infection: Guide for Diagnosis and Treatment
- Medscape Expert Commentary *(coming soon)*



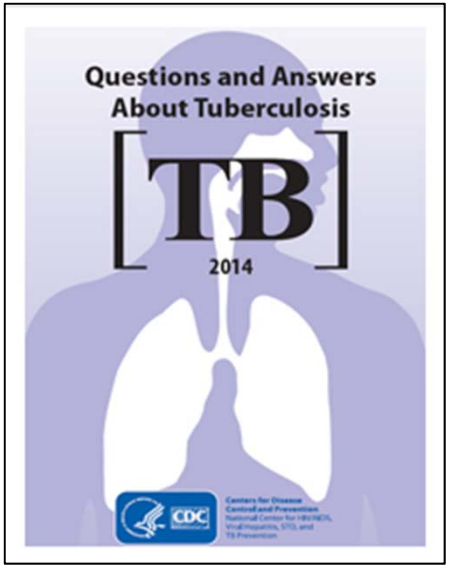
More: www.cdc.gov/tb/education/provider_edmaterials.htm

Latent TB Infection Infographics, Graphics & Web Buttons





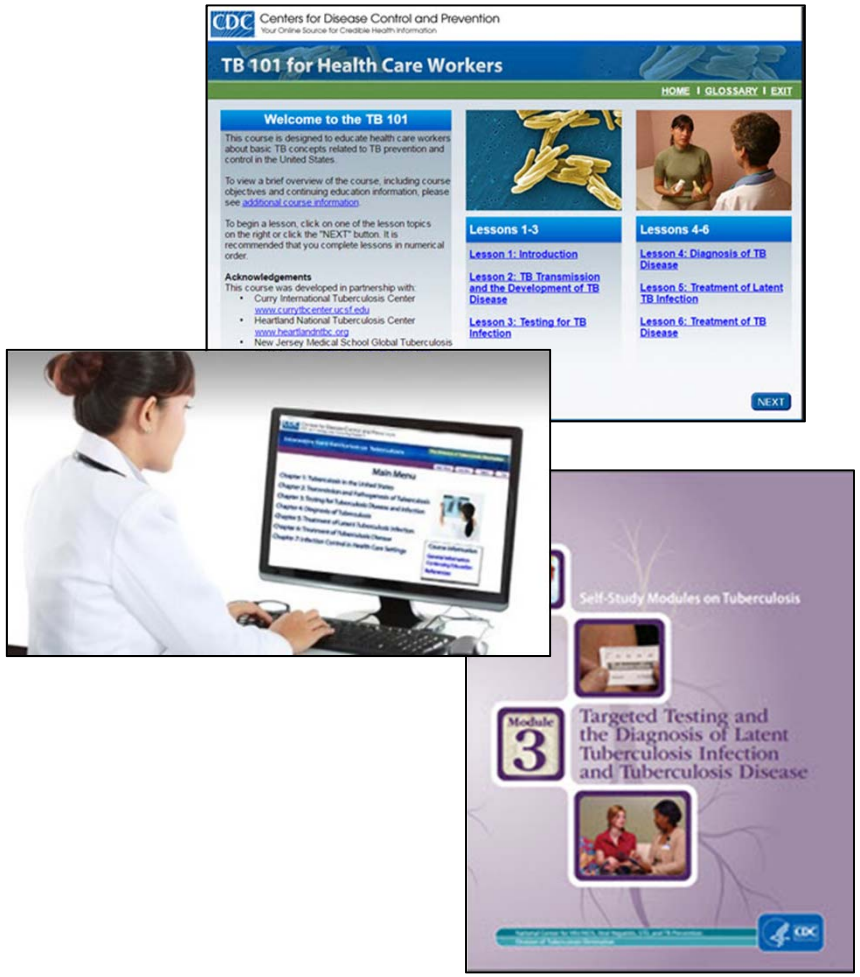
Fact Sheets and Patient Education Materials



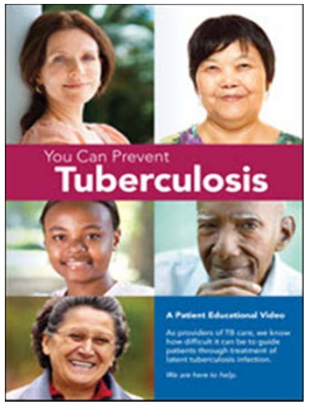
More: www.cdc.gov/tb/education/patient_edmaterials.htm

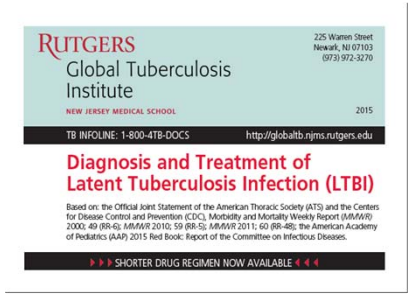
Training Resources

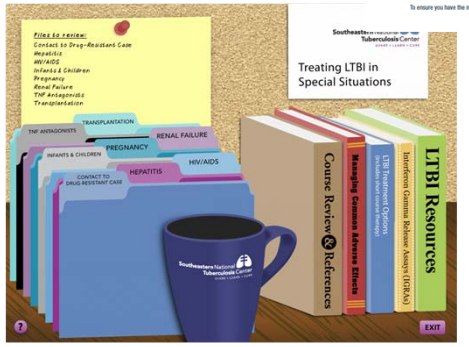
- TB 101 for Health Care Workers (available in Spanish)
- Interactive Core Curriculum on TB: What the Clinician Should Know
- Self-Study Modules
- Find TB Resources
- Regional Training and Medical Consultation Centers

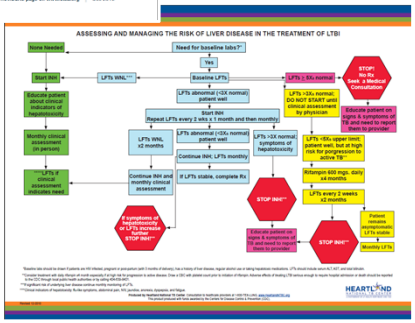


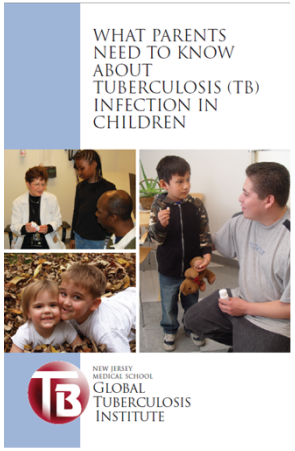
RTMCC LTBI Educational Products





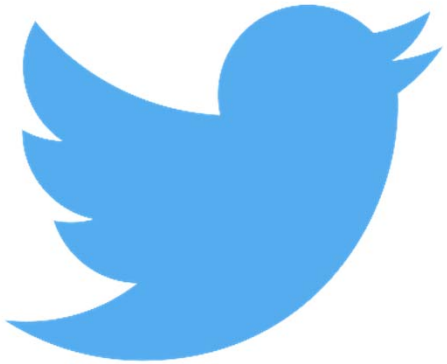






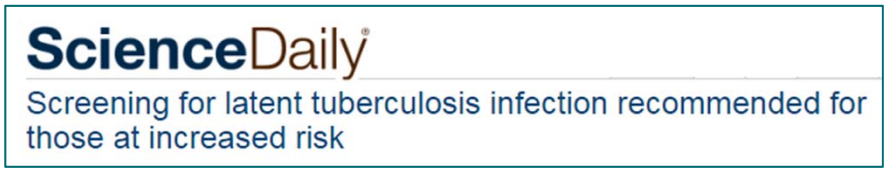
RTMCC All Products Page:
http://sntcmedicine.ufl.edu/rtmccproducts.aspx

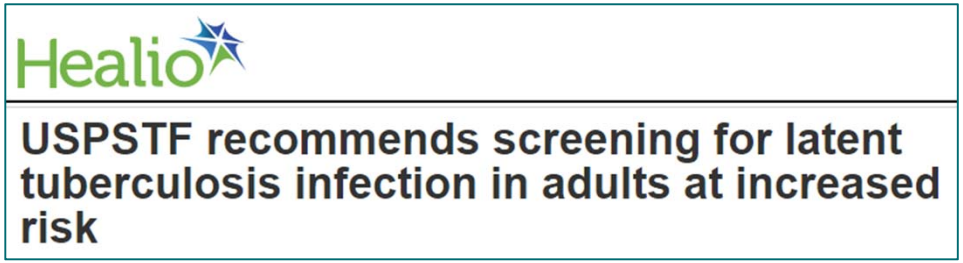
DTBE Communication Activities



- Traditional media: Statement from Dr. LoBue
- Partner emails (Dear Colleague, GovDelivery)
- CDC Newsletters (TB Notes, Connections)
- Social Media: DTBE Facebook and Twitter
- Outreach to TB stakeholders and professional associations (NTCA, RTMCCs)
- Amplification of USPSTF messages

Traditional Media Coverage





Social Media Coverage

CDC TB

Anyone can get TB. However, some people have a higher risk of getting infected with TB bacteria. The CDC supports the USPSTF recommendation to test certain high-risk groups for TB infection. To find out if you should get tested, visit http://go.usa.gov/xZ26j or talk to your doctor.

1,485 people reached

Like Comment Share

Christina Singh, Michelle Mesaros and 17 others

28 shares

LinkedIn

Centers for Disease Control and Prevention Eliminating TB in the US requires expanding testing and treatment of latent TB infection in high-risk groups. A new USPSTF recommendation to test at-risk populations, along with better testing and treatment options can help prevent TB disease. For more information, visit: http://bit.ly/2bUoMBD

Like (40) · Comment (1) · Share · 1 day ago

Amy Sullivan, Khulud Khudur, MPH +38

Dr Pankaj Rajneesh Budhiraja Appreciate the efforts .
1 day ago

Dr. Jono Mermin @DrMerminCDC · Sep 7

New! USPSTF Latent #Tuberculosis Screening Recommendation: Please read this statement from @cdc_TB's Dr. Lobue: go.usa.gov/xZjSH #TB

4 1

Dr. Tom Frieden @DrFriedenCDC · Sep 6

CDC supports new #USPSTF recommendation to test at-risk populations for TB infection. bit.ly/2bUoMBD

29 17

Next Steps

- Continue to promote targeted testing and treatment of latent TB infection through CDC communication channels.
- Continue to provide resources to partners and stakeholders can use to promote targeted testing and treatment of latent TB infection through their communication channels.
- Listen to partners to learn what additional activities or materials should be developed.
- Conduct outreach to medical and public health professionals to inform and educate on latent TB infection.

And remember:

It’s a marathon…

…not a sprint!

Questions?

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov