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.

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Suggestions for Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The USPSTF recommends the service. There is high certainty that the net benefit is substantial.</td>
<td>Offer or provide this service.</td>
</tr>
<tr>
<td>B</td>
<td>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.</td>
<td>Offer or provide this service.</td>
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<tr>
<td>C</td>
<td>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.</td>
<td>Offer or provide this service for selected patients depending on individual circumstances.</td>
</tr>
<tr>
<td>D</td>
<td>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.</td>
<td>Discourage the use of this service.</td>
</tr>
<tr>
<td>I</td>
<td>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.</td>
<td>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.</td>
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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)

* 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.
Additional Related Guidelines

- 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.

- **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
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
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)

Latent TB Infection Infographics, Graphics & Web Buttons

[TB Infographics Content]

- Latent TB Infection
  - Infographics on latent TB disease and its transmission.

- Tuberculosis (TB) Disease
  - Visual aids on the two types of TB conditions: only the tip of the iceberg.

- Latent TB Infection Infographics
  - Promotional materials for awareness and prevention.

- Web Buttons
  - Links to more information on TB and its treatment.

[Infographics Details]

- Infographic 1: Latent TB Infection
  - Statistics on latent TB infection in the U.S.
  - Tips for individuals with latent TB infection.

- Infographic 2: Tuberculosis Disease
  - Visual representation of the iceberg theory.
  - Information on the two types of TB conditions.

- Infographic 3: Latent TB Infection Infographics
  - Call to action for learning more about TB.

- Web Buttons
  - Links to CDC and other TB-related resources.

[Infographic Text]

- Latent TB Infection
  - People who are at risk for developing TB disease.

- Tuberculosis (TB) Disease
  - TB disease and latent TB infection.

- Latent TB Infection Infographics
  - CDC works to eliminate TB.

- Web Buttons
  - Learn more about TB at www.cdc.gov/tb
Fact Sheets and Patient Education Materials

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**
RTM CC & TB Educational Products

http://sntcm.edicine.ufl.edu/rtm_ccproducts.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

ScienceDaily
Screening for latent tuberculosis infection recommended for those at increased risk

Healio
USPSTF recommends screening for latent tuberculosis infection in adults at increased risk

Medscape Multispecialty
USPSTF: Screen At-risk Adults for Latent TB

MEDPAGE TODAY
Expand Screening for Latent TB: USPSTF
— Task force argues benefit would be at least moderate and could be substantial
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

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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, Khudud Khudur, MPH +38

Dr Pankaj Rajneesh Budhraja 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

Dr. Tom Frieden@DrFriedenCDC · Sep 6

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

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.