Review and update of USPSTF recommendations

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Disclosures

- None

Learning Objectives

- Learn about the structure and function of USPSTF
- Described benefits and harms of screening tests
  - PSA example
  - Overdiagnosis
- Review specific recommendations on 2020-2021 recent topics
- Review and compare other guidelines on these topics
- Choose an approach as a consumer of this information

USPSTF Members

- The 16 volunteer members represent disciplines of primary care including family medicine, internal medicine, nursing, obstetrics and gynecology, pediatrics, and behavioral medicine
- Led by a Chairperson, **Karina W. Davidson, PH.D., M.A.Sc.**
  - **Appointed March 17th, 2021**
- Members are appointed by Agency for Healthcare Research and Quality Director with guidance from Chair and Vice Chairs
- Current members include deans, medical directors, chief health officers, practicing clinicians, and professors

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https://uspreventiveservicestaskforce.org/uspstf/about-uspstf/current-members

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USPSTF

- Makes recommendations on clinical preventive services to primary care clinicians
  - The USPSTF scope for clinical preventive services includes:
    - screening tests
    - counseling
    - preventive medications
- Services are offered in a primary care setting
  - Recommendations apply to adults and children with no signs or symptoms

Overview

The U.S. Preventive Services Task Force…

- Makes recommendations based on rigorous review of existing peer-reviewed evidence
  - Does not conduct the research studies, but reviews and assesses the research
  - Evaluates benefits and harms of each service based on factors such as age and sex
- Is an independent panel of non-federal experts in prevention and evidence-based medicine

Is cost a factor?

- Recommendations made purely on science of clinical effectiveness, not cost (benefits vs. harms only)
- This is a deliberate decision by the Task Force, to avoid misperception that the Task Force's purpose is to limit health care based on cost.
- #deathpanel vs. #clinicaleffectiveness

https://www.uspreventiveservicestaskforce.org/Page/Name/uspstf-and-cost-considerations

What steps does USPSTF take in making a recommendation?

THE USPSTF RECOMMENDATIONS DEVELOPMENT PROCESS

1

STEP 1: TOPIC NOMINATION

Anyone can nominate a new topic or an update to an existing topic at any time, via the Task Force Web site. The Task Force prioritizes topics based on several criteria, including the topic's relevance to prevention and primary care, importance for public health, potential impact of the recommendation, and whether there is new evidence that may change a current recommendation.

2

STEP 2: DRAFT AND FINAL RESEARCH PLANS

Once a topic is selected, the Task Force and researchers from an Evidence-based Practice Center (EPC) develop a draft research plan for the topic. This plan includes key questions to be answered and target populations to be considered. The draft research plan is posted on the Task Force's Web site for four weeks, during which anyone can comment on the plan. The Task Force and the EPC review all comments and consider them while making any necessary revisions to the research plan. The Task Force then finalizes the plan and posts it on its Web site.

3

STEP 3: DRAFT EVIDENCE REVIEW AND DRAFT RECOMMENDATION STATEMENT

Using the final research plan as a guide, EPC researchers gather, review, and analyze evidence on the topic from studies published in peer-reviewed scientific journals. The EPC then develops one or more draft evidence reviews summarizing the evidence on the topic. Members discuss the evidence reviews and use the information to determine the effectiveness of a service by weighing the potential benefits and harms. Members then develop a draft recommendation statement based on this discussion. The draft evidence review and draft recommendation statement are posted on the Task Force Web site for four weeks.

4

STEP 4: FINAL EVIDENCE REVIEW AND FINAL RECOMMENDATION STATEMENT

The Task Force and EPC consider all comments on draft evidence reviews and the Task Force considers all comments on the draft recommendation statement. The EPC revises and finalizes the evidence reviews and the Task Force finalizes the recommendation statement based on both the final evidence review and the public comments.

All final recommendation statements and evidence reviews are posted on the Task Force's Web site. The final recommendation statement and a final evidence summary, a document that outlines the evidence it reviewed, are also published in a peer-reviewed scientific journal.

U.S. Preventive Services TASK FORCE

Name	Recommendation Type	Open On	Will Close On
Draft Research Plan *Oral Health: Screening, Referral, Behavioral Counseling, and Preventive Interventions*	Screening, Counseling, Preventive medication	Mar 18, 2021 12:00 PM EDT	Apr 14, 2021 11:59 PM EDT
Draft Evidence Review *Screening for Prediabetes and Type 2 Diabetes Mellitus*	Screening	Mar 16, 2021 11:00 AM EDT	Apr 12, 2021 11:59 PM EDT
Draft Recommendation Statement *Screening for Prediabetes and Type 2 Diabetes Mellitus*	Screening	Mar 16, 2021 11:00 AM EDT	Apr 12, 2021 11:59 PM EDT
Draft Research Plan *Latent Tuberculosis Infection in Adults: Screening*	Screening	Mar 11, 2021 12:00 PM EDT	Apr 7, 2021 11:59 PM EDT
Draft Evidence Review *Screening for Chlamydia and Gonorrhea*	Screening	Mar 2, 2021 11:00 AM EDT	Mar 29, 2021 11:59 PM EDT
Draft Recommendation Statement *Screening for Chlamydia and Gonorrhea*	Screening	Mar 2, 2021 11:00 AM EDT	Mar 29, 2021 11:59 PM EDT
Draft Research Plan *Screening for Autism Spectrum Disorder in Young Children*	Screening	Feb 25, 2021 12:00 PM EDT	Mar 24, 2021 11:59 PM EDT

Grade Definitions

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.

https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions#grade-definitions-after-july-2012

Level of certainty – listed in grades

Level of Certainty*	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by such factors as: • The number, size, or quality of individual studies. • Inconsistency of findings across individual studies. • Limited generalizability of findings to routine primary care practice. • Lack of coherence in the chain of evidence. As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.
Low	The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of: • The limited number or size of studies. • Important flaws in study design or methods. • Inconsistency of findings across individual studies. • Gaps in the chain of evidence. • Findings not generalizable to routine primary care practice. • Lack of information on important health outcomes. More information may allow estimation of effects on health outcomes.

https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions

Screening Tests: a review

- A Screening test has:
  - High Sensitivity / Low Specificity (potential for high false positives)
  - High Neg. Predictive Value / Low Pos. Predictive Value
- The relative risk of the screening test depends on:
  - Risk of further specific workup (biopsy, etc.) PLUS
  - Risk / Benefit of further treatment of both true disease state cancer and overdiagnosed cancer. (Net Gain vs. Net Loss)

Perceived benefit vs. Known risk

- Perceived benefit of Overdiagnosis, cancer survivors, elevating Lead-Time bias "The Belief in the screening test"
- Known Risk of screen (for false positives) + Risk of treatment (of over-diagnosed cancer) = "The Known, measured risks of the screening test"
- Overdiagnosed cancer fulfills the histologic criteria for CA but is not destined to progress and kill within the patient's natural lifetime.
  - Also increases 5 and 10 year survival bias.

Overdiagnosis- What is it?

- The inadvertent act of finding less invasive cancers that would never have caused death or overt illness and were only revealed by the screening test.
- These cancers with 'no harm potential' leading to workups and treatments including surgery, chemotherapy, and radiation – each with their own harm potential
- The NET result of overdiagnosis is **Iatrogenic Harm** created by having performed the screen too early, too often, or with poor specificity.

Example: Harms of Screening - PSA

- PSA has 15% false-positive rate.
  - Elevation not caused by cancer
  - Age, inflammation, enlarged prostate
- Assoc. with Trans-rectal ultrasound and biopsy, symptoms including pain, fever, bleeding, infection and temporary urinary difficulties; 1% hospitalized.

https://www.uspreventiveservicestaskforce.org/Page/Document/final-evidence-summary43/prostate-cancer-screening#table-1-summary-of-evidence

Harms of screening
Prostate CA treatment complications

- Complications of treatment after screen (110 in 1000)
- Serious CV events (2 in 1000)
- Venous Thromboembolism, DVT, PE (1 in 1000)
- Erectile dysfunction (29 in 1000)
- Urinary incontinence (18 in 1000)
- Death 2nd to treatment (1 in 1000)

https://www.uspreventiveservicestaskforce.org/Page/Document/final-evidence-summary43/prostate-cancer-screening#table-1-summary-of-evidence

Two men, one prostate:

52 year old (Carl)

- Given PSA + DRE
- PSA elevated, accel on repeat, Pr biopsy, infection, hospitalized 3 days
- Prostatectomy, sexual side effects, incontinence, DVT
- Died age 73 Acute MI

52 year old (Jeff)

- DRE alone
- Never had PSA, Never had biopsy
- No impotence, incontinence, no surgeries
- Died age 73 Acute MI

So, task force says…

Recommendation Summary

Population	Recommendation	Grade
Men aged 55 to 69 years	For men aged 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)-based screening for prostate cancer should be an individual one. Before deciding whether to be screened, men should have an opportunity to discuss the potential benefits and harms of screening with their clinician and to incorporate their values and preferences in the decision. Screening offers a small potential benefit of reducing the chance of death from prostate cancer in some men. However, many men will experience potential harms of screening, including false-positive results that require additional testing and possible prostate biopsy; overdiagnosis and overtreatment; and treatment complications, such as incontinence and erectile dysfunction. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening.	C
Men 70 years and older	The USPSTF recommends against PSA-based screening for prostate cancer in men 70 years and older.	D

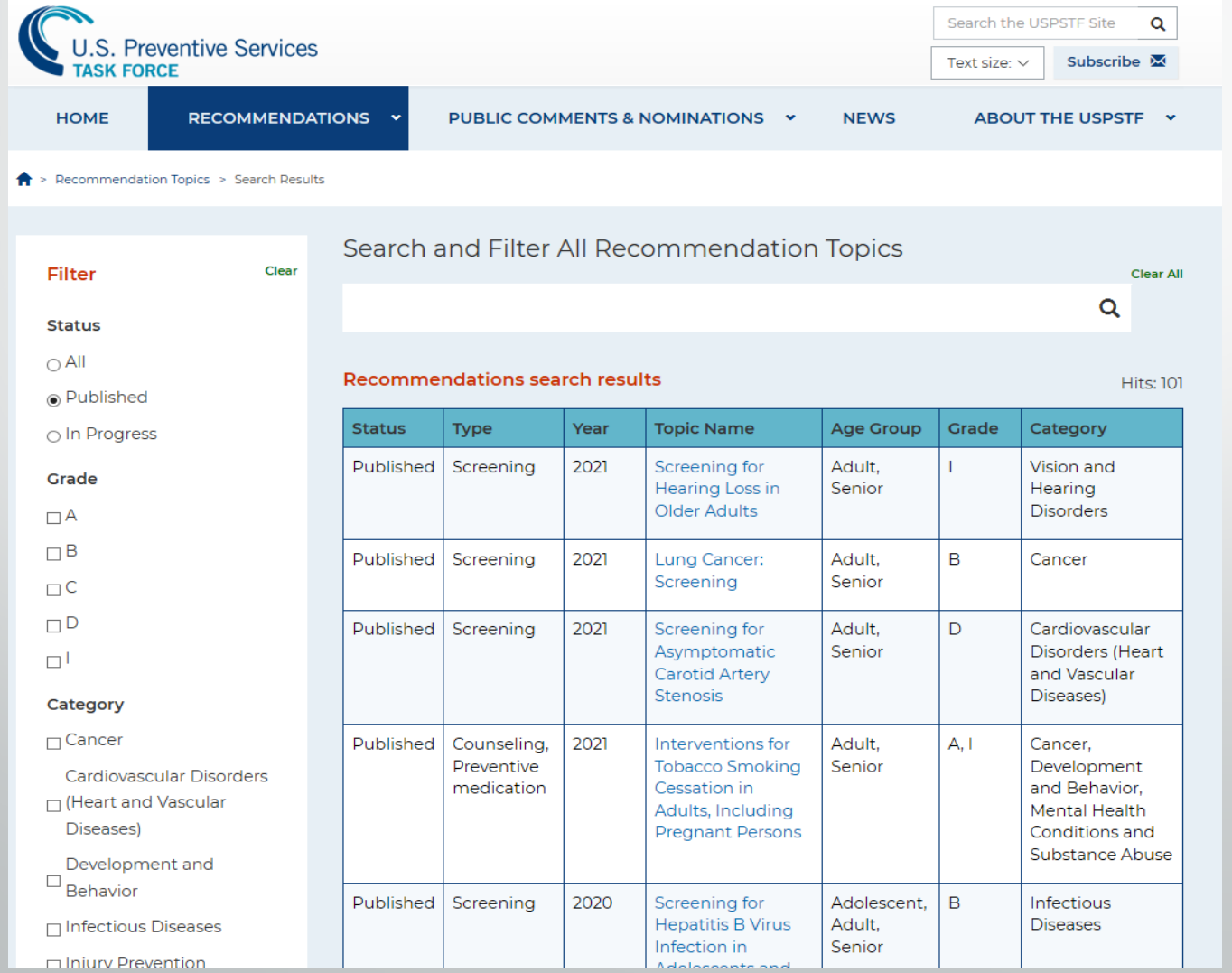
Since March 2020 – 12 Published recommendations from USPSTF

Status	Type	Year	Topic Name	Age Group	Grade	Category
Published	Screening	2021	Screening for Hearing Loss in Older Adults	Adult, Senior	I	Vision and Hearing Disorders
Published	Screening	2021	Lung Cancer: Screening	Adult, Senior	B	Cancer
Published	Screening	2021	Screening for Asymptomatic Carotid Artery Stenosis	Adult, Senior	D	Cardiovascular Disorders (Heart and Vascular Diseases)
Published	Counseling, Preventive medication	2021	Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons	Adult, Senior	A, I	Cancer, Development and Behavior, Mental Health Conditions and Substance Abuse
Published	Screening	2020	Screening for Hepatitis B Virus Infection in Adolescents and Adults	Adolescent, Adult, Senior	B	Infectious Diseases
Published	Counseling	2020	Healthy Diet and Physical Activity for Cardiovascular Disease Prevention in Adults With Cardiovascular Risk Factors: Behavioral Counseling Interventions	Adult, Senior	B	Cardiovascular Disorders (Heart and Vascular Diseases), Development and Behavior
Published	Screening	2020	High Blood Pressure in Children and Adolescents: Screening	Adolescent, Pediatric	I	Cardiovascular Disorders (Heart and Vascular Diseases)
Published	Counseling	2020	Sexually Transmitted Infections: Behavioral Counseling	Adolescent, Adult, Senior	B	Infectious Diseases
Published	Screening	2020	Unhealthy Drug Use: Screening	Adolescent, Adult, Senior	B, I	Development and Behavior, Mental Health Conditions and Substance Abuse
Published	Counseling	2020	Illicit Drug Use in Children, Adolescents, and Young Adults: Primary Care-Based Interventions	Adolescent, Pediatric	I	Development and Behavior, Mental Health Conditions and Substance Abuse
Published	Counseling	2020	Prevention and Cessation of Tobacco Use in Children and Adolescents: Primary Care Interventions	Adolescent, Pediatric	B, I	Cancer, Development and Behavior, Mental Health Conditions and Substance Abuse, Miscellaneous
Published	Screening	2020	Bacterial Vaginosis in Pregnant Persons to Prevent Preterm Delivery: Screening	Adolescent, Adult	D, I	Infectious Diseases, Obstetric and Gynecologic Conditions

Others In Progress

Status	Type	Year	Topic Name	Age Group	Grade	Category
In Progress	Preventive medication		Aspirin Use to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication	Adult, Senior		Cancer, Cardiovascular Disorders (Heart and Vascular Diseases)
In Progress	Preventive medication		Aspirin Use to Prevent Morbidity and Mortality From Preeclampsia: Preventive Medication	Adult		Obstetric and Gynecologic Conditions
In Progress	Screening		Atrial Fibrillation: Screening	Adult, Senior		Cardiovascular Disorders (Heart and Vascular Diseases)
In Progress	Screening		Breast Cancer: Screening	Adult, Senior		Cancer
In Progress	Screening		Chronic Obstructive Pulmonary Disease: Screening	Adult, Senior		Cardiovascular Disorders (Heart and Vascular Diseases)
In Progress	Screening		Colorectal Cancer: Screening	Adult, Senior		Cancer
In Progress	Screening		Gestational Diabetes Mellitus: Screening	Adolescent, Adult		Obstetric and Gynecologic Conditions
In Progress	Screening		Hypertension in Adults: Screening	Adult, Senior		Cardiovascular Disorders (Heart and Vascular Diseases)
In Progress	Screening		Impaired Visual Acuity and Glaucoma in Adults: Screening	Adult, Senior		Vision and Hearing Disorders
In Progress	Screening		Latent Tuberculosis Infection in Adults: Screening	Adult, Senior		Infectious Diseases
In Progress	Preventive medication		Menopausal Hormone Therapy in Postmenopausal Women: Primary Prevention of Chronic Conditions	Adult, Senior		Metabolic, nutritional, and Endocrine Conditions, Obstetric and Gynecologic Conditions
In Progress	Screening		Obstructive Sleep Apnea in Adults: Screening	Adult, Senior		Metabolic, nutritional, and Endocrine Conditions, Miscellaneous
In Progress	Counseling, Preventive medication, Screening		Oral Health: Screening, Referral, Behavioral Counseling, and Preventive Interventions	Adolescent, Adult, Pediatric, Senior		Miscellaneous

https://uspreventiveservicestaskforce.org/uspstf/topic_search_results?topic_status=P



U.S. Preventive Services TASK FORCE

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> Recommendation Topics > Search Results

Filter Clear

Status

- ○ All
- ◉ Published
- ○ In Progress

Grade

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ I

Category

- ☐ Cancer
- ☐ Cardiovascular Disorders (Heart and Vascular Diseases)
- ☐ Development and Behavior
- ☐ Infectious Diseases
- ☐ Injury Prevention

Search and Filter All Recommendation Topics

Clear All

Recommendations search results Hits: 101

Status	Type	Year	Topic Name	Age Group	Grade	Category
Published	Screening	2021	Screening for Hearing Loss in Older Adults	Adult, Senior	I	Vision and Hearing Disorders
Published	Screening	2021	Lung Cancer: Screening	Adult, Senior	B	Cancer
Published	Screening	2021	Screening for Asymptomatic Carotid Artery Stenosis	Adult, Senior	D	Cardiovascular Disorders (Heart and Vascular Diseases)
Published	Counseling, Preventive medication	2021	Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons	Adult, Senior	A, I	Cancer, Development and Behavior, Mental Health Conditions and Substance Abuse
Published	Screening	2020	Screening for Hepatitis B Virus Infection in	Adolescent, Adult, Senior	B	Infectious Diseases

Case #1: Greta H.

- 56 Y Female presents for well visit.
- Told by her daughter that she should be screened by an audiologist due to her age.
- Has not noticed any issues with her hearing.
- Is a hearing screen recommended for this age group?

USPSTF report March 23, 2021

Table. Summary of USPSTF Rationale

Rationale	Assessment
Detection	Adequate evidence that screening instruments can detect hearing loss
Benefits of screening and intervention and treatment	• Inadequate evidence that screening for hearing loss in asymptomatic patients improves health outcomes • Inadequate evidence that interventions to treat hearing loss in screen-detected patients improves health outcomes
Harms of early detection and intervention and treatment	Inadequate evidence to determine the harms of screening for and treatment of hearing loss
USPSTF assessment	The evidence on screening for hearing loss is lacking, and the balance of benefits and harms cannot be determined

Abbreviation: USPSTF, US Preventive Services Task Force.

Figure. Clinician Summary: Screening for Hearing Loss in Older Adults

What does the USPSTF recommend?	For adults 50 years or older who have not noticed any issues with their hearing: The USPSTF found that the evidence is insufficient to assess the balance of benefits and harms of screening for hearing loss in older adults. More research is needed. I statement
To whom does this recommendation apply?	This recommendation applies to asymptomatic older adults (≥50 years) with age-related, sensorineural hearing loss. This recommendation is for persons who have not noticed any issues with their hearing. It does not apply to adults with conductive hearing loss, congenital hearing loss, sudden hearing loss, or hearing loss caused by recent noise exposure, or those reporting signs and symptoms of hearing loss.
What's new?	This recommendation is consistent with the 2012 USPSTF statement.
How to implement this recommendation?	There is insufficient evidence to recommend for or against screening for hearing loss in persons with unrecognized hearing loss. Clinicians should use their clinical judgement about hearing testing for patients who have symptoms of hearing loss or who have raised concerns about their hearing.
Where to read the full recommendation statement?	Visit the USPSTF website (https://www.uspreventiveservicestaskforce.org) to read the full recommendation statement. This includes more details on the rationale of the recommendation, including benefits and harms; supporting evidence; and recommendations of others.

Recommendations of others – hearing loss

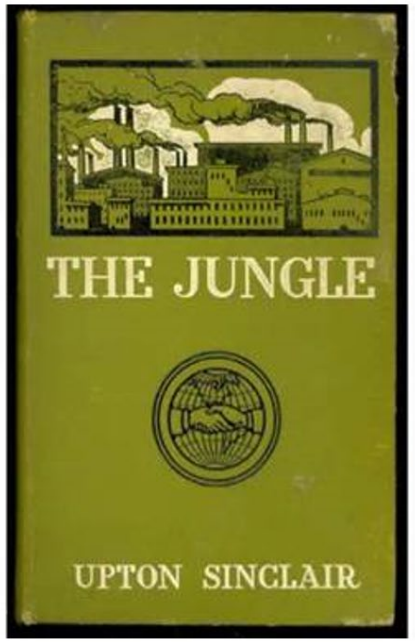
- AAFP references USPSTF statement – agrees.
- UK National Screening Committee does not recommend national screening program for adults 50 years or older.
- American Speech-Language-Hearing Association recommends adults be screened by audiologist once per decade and every 3 years after age of 50, more frequently with risk factors assoc. with hearing loss.

Why do guidelines differ?

- Availability of services and products in different populations
- A Different cultural perception of risk
- Lack of evidence-or differing interpretations of evidence
- Sometimes, honest differences in expert opinion
- Public opinion can influence recommendations

Exposed industry corruption in which lead to federal reforms in the meat industry.

Upton Sinclair "The Jungle" 1906

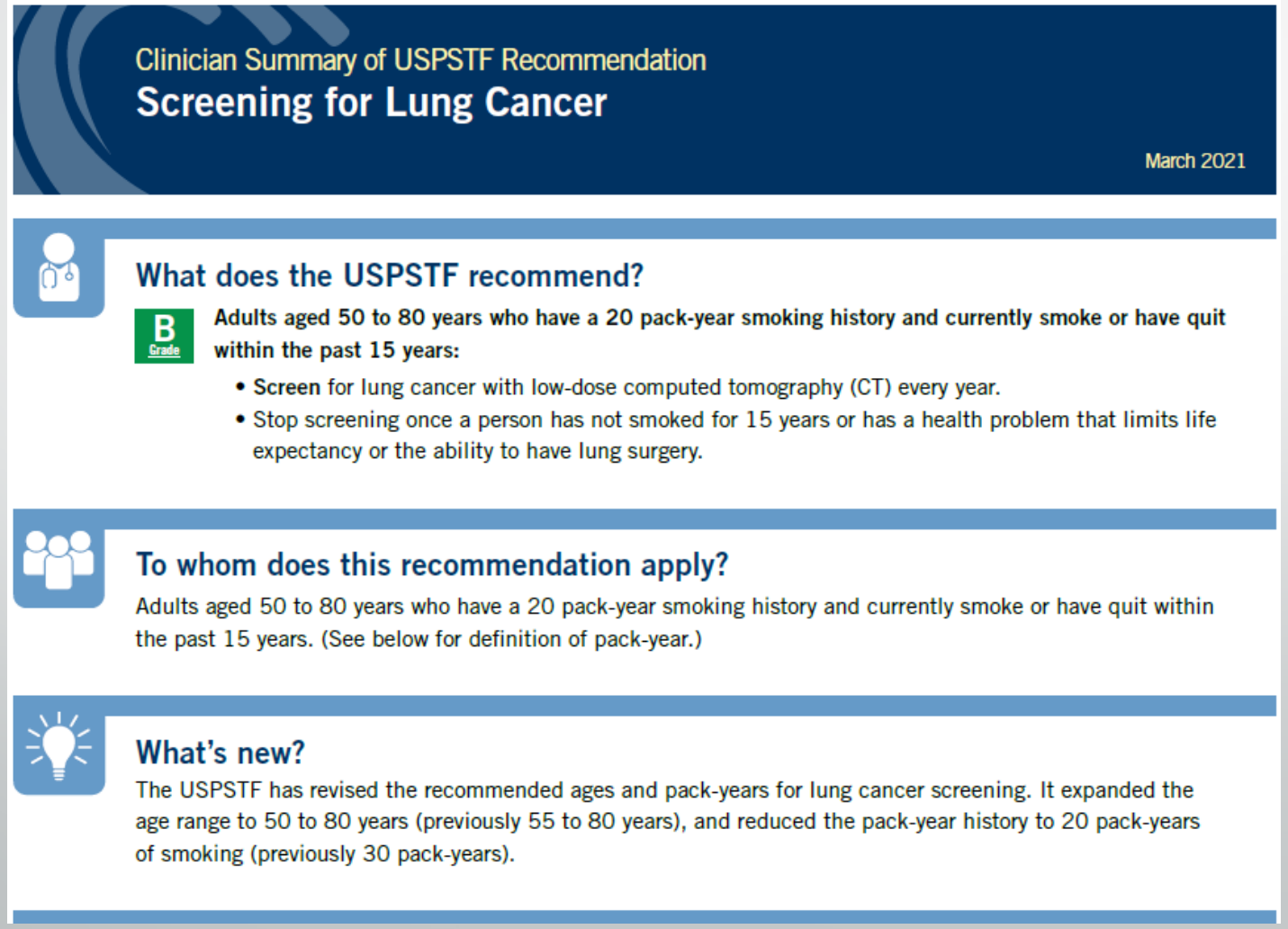


- *" It is difficult to get a man to understand something, when his salary depends on his not understanding it."*

Case #2: Henry T.

- 52Y Male with 24 pack-year smoking history, quit when he was 47.
- Wants to know if he needs any screening for lung cancer?
- If so, how often and what type of screening?
- How long after stopping does he still need screening?

USPSTF recommendation – March 2021



Clinician Summary of USPSTF Recommendation

Screening for Lung Cancer

March 2021

What does the USPSTF recommend?

B Grade

Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years:

- **Screen** for lung cancer with low-dose computed tomography (CT) every year.
- Stop screening once a person has not smoked for 15 years or has a health problem that limits life expectancy or the ability to have lung surgery.

To whom does this recommendation apply?

Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. (See below for definition of pack-year.)

What's new?

The USPSTF has revised the recommended ages and pack-years for lung cancer screening. It expanded the age range to 50 to 80 years (previously 55 to 80 years), and reduced the pack-year history to 20 pack-years of smoking (previously 30 pack-years).

Recommendations of Others

- American Association for Thoracic Surgery – annual LDCT age 55 to 79 with 30 pack-year hx, also starting age 50 w/ 20 pack-year if additional risk
- American Cancer Society – annual LDCT 55-74, 30 pack-year, current or have quit within past 15 years, screening be done in a high volume center.
- American College of Chest Physicians – annual LDCT, 55-77 years, but not be performed with comorbid conditions influencing ability to tolerate evaluation and treatment
- AAFP – Insufficient evidence to recommend for or against screening

Case #3: Carl S.

- 68Y Male presents for well visit.
- Pt states his adult son is 'in the medical field' wants him to be screened for carotid stenosis.
- Pt is asymptomatic and has never had a stroke or TIA.

Clinical Review & Education

JAMA | US Preventive Services Task Force | RECOMMENDATION STATEMENT

Screening for Asymptomatic Carotid Artery Stenosis
US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

IMPORTANCE Carotid artery stenosis is atherosclerotic disease that affects extracranial carotid arteries. Asymptomatic carotid artery stenosis refers to stenosis in persons without a history of ischemic stroke, transient ischemic attack, or other neurologic symptoms referable to the carotid arteries. The prevalence of asymptomatic carotid artery stenosis is low in the general population but increases with age.

OBJECTIVE To determine if its 2014 recommendation should be reaffirmed, the US Preventive Services Task Force (USPSTF) commissioned a reaffirmation evidence review. The reaffirmation update focused on the targeted key questions on the potential benefits and harms of screening and interventions, including revascularization procedures designed to improve carotid artery blood flow, in persons with asymptomatic carotid artery stenosis.

POPULATION This recommendation statement applies to adults without a history of transient ischemic attack, stroke, or other neurologic signs or symptoms referable to the carotid arteries.

EVIDENCE ASSESSMENT The USPSTF found no new substantial evidence that could change its recommendation and therefore concludes with moderate certainty that the harms of screening for asymptomatic carotid artery stenosis outweigh the benefits.

RECOMMENDATION The USPSTF recommends against screening for asymptomatic carotid artery stenosis in the general adult population. (D recommendation)

JAMA. 2021;325(5):476-481. doi:10.1001/jama.2020.26988

Editorial page 443

Multimedia

Related article page 487 and JAMA Patient Page page 500

Supplemental content

CME Quiz at jamacmelookup.com

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Group Information: The US Preventive Services Task Force (USPSTF) members are listed at the end of this article.

Corresponding Author: Alex H. Krist, MD, MPH, Virginia Commonwealth University, 830 E Main St, One Capitol Square, Sixth Floor, Richmond, VA 23219 (chair@uspstf.net).

Summary of Recommendation

The USPSTF recommends against screening for asymptomatic carotid artery stenosis in the general adult population.	D

Recommendations of Others

- American Heart Association / American Stroke Association – recommend against routine screening for asymptomatic patients.
- Other joint guidelines conclude that DUS screening indicated (or reasonable) for asymptomatic patients with carotid bruit.
- Society for Vascular Surgery recommend consideration for DUS screening in patients with multiple risk factors for stroke and in those with known peripheral artery disease or CVD

USPSTF Rec #4

What does the USPSTF recommend?

B Grade

For adolescents and adults:
Screen adolescents and adults at increased risk for hepatitis B virus (HBV) infection.

To whom does this recommendation apply?

All asymptomatic, nonpregnant adolescents and adults at increased risk for HBV infection, including those who were vaccinated before being screened for HBV infection.

What's new?

This recommendation is consistent with the 2014 USPSTF recommendation. It is strengthened by new evidence that treatment of HBV infection consistently leads to better health outcomes.

How to implement this recommendation?

Screen. Screen adolescents and adults at increased risk using hepatitis B surface antigen (HbsAg) tests followed by a confirmatory test for initially reactive results.

Important risk groups for HBV infection with a prevalence of ≥2% that should be screened include:

- Persons born in countries and regions with a high prevalence of HBV infection (≥2%), such as Asia, Africa, the Pacific Islands, and parts of South America
- US-born persons not vaccinated as infants whose parents were born in regions with a very high prevalence of HBV infection (≥8%)
- HIV-positive persons
- Persons with injection drug use
- Men who have sex with men
- Household contacts or sexual partners of persons with HBV infection

Case #5: Avery H.

- 10Y Female in for Cheerleading physical
- Mother states there is some high blood pressure in the family.
- Asks - What is the medical recommendation on screening for HTN in her daughter?
- Daughter asymptomatic, not previously known to have HTN

USPSTF Rec: Nov 2020

JAMA | US Preventive Services Task Force | RECOMMENDATION STATEMENT

Screening for High Blood Pressure in Children and Adolescents
US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

IMPORTANCE Prevalence of hypertension (both primary and secondary) in children and adolescents in the US ranges from 3% to 4%. Primary hypertension in children and adolescents occurs primarily in children older than 13 years and has no known cause but is associated with several risk factors, including family history and higher body mass index. Secondary hypertension occurs primarily in younger children and is most commonly caused by genetic disorders, renal disease, endocrine disorders, or cardiovascular abnormalities.

OBJECTIVE To update its 2013 recommendation, the USPSTF commissioned a review of the evidence on the benefits and harms of screening, test accuracy, the effectiveness and harms of treatment, and the association between hypertension and markers of cardiovascular disease in childhood and adulthood.

POPULATION This recommendation statement applies to children and adolescents aged 3 to 18 years not known to have hypertension or who are asymptomatic.

EVIDENCE ASSESSMENT The USPSTF concludes that the evidence to support screening for high blood pressure in children and adolescents is insufficient and that the balance of benefits and harms cannot be determined.

RECOMMENDATION The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for high blood pressure in children and adolescents. (I statement)

JAMA. 2020;324(18):1878-1883. doi:10.1001/jama.2020.20122

Editorial page 1838

Author Audio Interview

Related article page 1884 and JAMA Patient Page page 1916

Supplemental content

CME Quiz at jamacmelookup.com

Related article at jamanetworkopen.com

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Corresponding Author: Alex H. Krist, MD, MPH, Virginia Commonwealth University, 830 East Main St, One Capitol Square, Sixth Floor, Richmond, VA

Recommendations of Others

- American Academy of Pediatrics - screening all pts annually and high-risk patients at each visit at age 3 years – and ambulatory BP monitoring.
- AHA and National Heart, Lung, and Blood Institute recommend routine screening starting at age 3 years.
- AAFP states there is insufficient evidence for or against routine screening for HTN in children and adolescents.

Case #6: When to screen for unhealthy drug use? – June 2020

- Adults 18 and older – Grade B, screen by asking questions when services for accurate diagnosis, effective treatment, and appropriate care can be offered
- Adolescents – Grade I, evidence insufficient to assess balance of benefits and harms

- Previously in 2008 both of these were "I" scores.

Recommendations of Others

Several organizations have issued statements about screening for drug use by asking about drug use; these recommendations vary by patient subpopulation. SAMHSA recommends universal screening for substance use (including alcohol), brief intervention, and/or referral to treatment (known as SBIRT) as part of routine health care,[12] including during pregnancy.[17] The US Departments of Defense and Veterans Affairs[39] and the American Academy of Family Physicians[40] have adopted the 2008 USPSTF recommendation statement (I statement) indicating that evidence is insufficient to recommend routine screening for illicit drug use. The American Academy of Pediatrics recommends screening adolescents through their early 20s for substance use (including tobacco and alcohol) at every annual physical examination as well as screening adolescents who present to emergency departments or urgent care centers; report cigarette smoking; have depression, anxiety, or other mental health conditions associated with substance abuse; or exhibit school, legal, or social problems or other behavioral changes.[41] It provides a list of screening tools that have been validated for use in adolescents through their early 20s.[22] The Bright Futures initiative includes a recommendation that all adolescents (including those aged 18 to 21 years) should be screened for substance use (including tobacco and alcohol) as part of an overall psychosocial history.[42] The American College of Obstetricians and Gynecologists specifically advises screening women annually for nonmedical use of prescription drugs. It also recommends screening women aged 18 to 26 years for drug use as part of preventive care, universal screening of women before pregnancy and early in pregnancy, and screening postpartum women as indicated.[43-49]

Case #7: Anne P.

- 24Y Female OB patient presents for normal pregnancy visit.
- Asymptomatic, No history of preterm delivery, no issues with current pregnancy.
- Pt's older friend in the room wants to know why she hasn't yet been screened for Bacterial Vaginosis, convincing patient that you have missed this important step.
- Can she be screened today?

USPSTF April 7, 2020

JAMA | US Preventive Services Task Force | RECOMMENDATION STATEMENT

Screening for Bacterial Vaginosis in Pregnant Persons to Prevent Preterm Delivery

US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

IMPORTANCE Bacterial vaginosis is common and is caused by a disruption of the microbiological environment in the lower genital tract. In the US, reported prevalence of bacterial vaginosis among pregnant women ranges from 5.8% to 19.3% and is higher in some races/ethnicities. Bacterial vaginosis during pregnancy has been associated with adverse obstetrical outcomes including preterm delivery, early miscarriage, postpartum endometritis, and low birth weight.

OBJECTIVE To update its 2008 recommendation, the USPSTF commissioned a review of the evidence on the accuracy of screening and the benefits and harms of screening for and treatment of bacterial vaginosis in asymptomatic pregnant persons to prevent preterm delivery.

POPULATION This recommendation applies to pregnant persons without symptoms of bacterial vaginosis.

EVIDENCE ASSESSMENT The USPSTF concludes with moderate certainty that screening for asymptomatic bacterial vaginosis in pregnant persons not at increased risk for preterm delivery has no net benefit in preventing preterm delivery. The USPSTF concludes that for pregnant persons at increased risk for preterm delivery, the evidence is conflicting and insufficient, and the balance of benefits and harms cannot be determined.

CONCLUSIONS AND RECOMMENDATION The USPSTF recommends against screening for bacterial vaginosis in pregnant persons not at increased risk for preterm delivery. (D recommendation) The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for bacterial vaginosis in pregnant persons at increased risk for preterm delivery. (I statement)

JAMA. 2020;323(13):1286-1292. doi:10.1001/jama.2020.2684

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Related article page 1293 and **JAMA Patient Page** page 1324

Audio and **Supplemental content**

CME Quiz at jamacmelookup.com and **CME Questions** page 1312

Group Information: The US Preventive Services Task Force (USPSTF) members are listed at the end of this article.

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Table. Summary of USPSTF Rationale[a]

Rationale	Pregnant persons not at increased risk for preterm delivery
Detection	There is adequate evidence that currently available tests can accur
Benefits of early detection and intervention and treatment	• There is inadequate direct evidence on the benefits of screening for asymptomatic bacterial vaginosis in pregnant persons to reduce adverse health outcomes. • There is adequate evidence that treatment of asymptomatic bacterial vaginosis with antibiotics in pregnant persons not at increased risk for preterm delivery does not provide a benefit in reducing adverse health outcomes.
Harms of early detection and intervention and treatment	• There is inadequate direct evidence on the harms of screening fo • There is adequate evidence that treatment of bacterial vaginosis vaginal candidiasis and gastrointestinal upset, and no harms to tl • Overall, there is adequate evidence to bound the harms of screen no greater than small, based on the false-positive results from sc with antibiotics.
USPSTF Assessment	The USPSTF concludes with moderate certainty that screening for asymptomatic bacterial vaginosis in pregnant persons not at increased risk for preterm delivery has no net benefit.

Recommendations of Others

- Most organizations in the US do not recommend screening BV in asymptomatic pregnant women.
- ACOG – several screening tests have been proposed, but intervention studies on these tests have not demonstrated improved perinatal outcomes
  - Does NOT recommend use of these tests as a screening strategy
- CDC – Evidence does NOT support routine BV screening in asymptomatic pregnant women even in HIGH risk for preterm.

Case #8: Hayden T.

- 18Y Male getting ready to go to OSU in Stillwater
- Read somewhere about how all Baby Boomers need to be tested for Hepatitis C.
- States, “That doesn’t apply to me, right?”

USPSTF rec – March 2020

Clinician Summary of USPSTF Recommendation

Screening for Hepatitis C Virus Infection in Adolescents and Adults

March 2020

What does the USPSTF recommend?

B Grade

For adults aged 18 to 79 years:

Screen adults for hepatitis C virus (HCV) infection.

To whom does this recommendation apply?

Asymptomatic adults aged 18 to 79 years (including pregnant persons) without known liver disease.

What's new?

This recommendation expands the population that should be screened. The USPSTF now recommends that all adults aged 18 to 79 years be screened. Previously, it recommended screening adults born between 1945 and 1965 and others at high risk.

Recommendations of Others

- CDC – in process of updating (draft recs HCV screening 18 and older at least once in a lifetime, except in settings where prevalence is less than 0.1%
- ACOG recs HCV screening to pregnant persons with risk factors.
- American Association for the Study of Liver Diseases and Infectious Disease Society of America: recs 1-time routine, opt-out HCV all persons 18 and older AND 1-time for all persons younger than 18 at increased risk HCV exposure.

Case #9: A whole group of patients walk into a clinic…

- Men and Women aged 65-75 years who have smoked, never smoked…
- Women who never smoked.
- Women aged 65-75 who have EVER smoked

- (these people collectively ask about screening for abdominal aortic aneurysm, AAA)

USPSTF: December 2019

What does the USPSTF recommend?

B Grade

For men aged 65 to 75 years who have ever smoked

Perform 1-time screening for abdominal aortic aneurysm (AAA) with ultrasonography in men who have a history of smoking.

C Grade

For men aged 65 to 75 years who have never smoked

Selectively offer screening to men who do not have a history of smoking, rather than routinely screening all men in this group.

D Grade

For women who have never smoked and have no family history of AAA

Do not screen women who have never smoked and do not have a family history of AAA.

I Statement

For women aged 65 to 75 years who have ever smoked or have a family history of AAA

Evidence is insufficient to assess the balance of benefits and harms of screening for AAA with ultrasonography in women aged 65 to 75 years who have ever smoked or have a family history of AAA.

Good example of Research Gaps

- Properly powered RCTs among women with risk factors could close gaps in the evidence on screening for AAA
- Suggests well-calibrated modeling studies based on good data in absence of new trial data
- Well-conducted cohort studies examining rescreening benefits (including growth rates and health outcomes)
- Well-designed studies on thresholds for repair of AAA could inform benefits and harms of screening women, as evidence shows that AAAs in women may rupture at a smaller size than those of men.

Which do I follow?

- Pick a guideline.
- Refer to it at point of care.
- Discuss with your patient.
- Don't look back.

"I'll have an ounce of prevention."

https://usafamilymedicine.wordpress.com/tag/uspstf/

Downside of Too Much Screening?

- "It's just a needle stick, but the cascade of events that follows are fairly serious. I think the burden is on medicine to try and generate some evidence that the net benefits are there before drawing that tube of blood."

  - Peter Bach, MD – Pulmonologist and Epidemiologist at Memorial Sloan-Kettering Cancer Center in NYC - https://well.blogs.nytimes.com/2008/08/11/the-downside-of-cancer-screening/

Review

- Learn about the structure and function of USPSTF
- Described benefits and harms of screening tests
  - PSA example
  - Overdiagnosis
- Review specific recommendations on most recent topics
- Review and compare other guidelines on these topics
- Choose an approach as a consumer of this information

Questions?