
Screening and prevention

Razan Alotaibi , Ashwaq Almajed , Nouf Aloqaili, Nehal bayari, Ohoud alboqami

Dr.Nourah alshehri

Doctor notes
F2 notes (important)

OBJECTIVE:

1. To define screening/prevention and its uses in family practice.
2. To understand the criteria for screening tests.
3. To identify screening types and examples of targeted people for each type.
4. To identify appropriate approaches for prevention and screening of the common problems in primary care.
5. To explain pros and cons of screening.
6. Summaries the recommendations for screening programs in adults e.g.Breast cancer,Colorectal ca, cervical ca, prostate ca , osteoporosis ..etc.
7. Identify levels of prevention in primary care practice .
8. Review the local vaccination schedule from Saudi M.O.H.

MCQ

Q1. Mammography screening for breast cancer is considered?

- A. Primary prevention
- B. secondary prevention
- C. tertiary prevention

Q2.WHICH ONE OF THE FOLLOWING IS ON WILSON-JUNGNER CRITERIA?

- A. Natural history of illness is ill understood
- B. Detectable at late age
- C. Acceptable to the population
- D. The Risks, both physical and psychological, should be more than benefits.

Q3. What does case finding screening mean?

- A. Screening applied selectively to high risk groups.
- B. Screening done by more than one test to detect one disease
- C. Screening of persons who come to health practitioner for other complaints.
- D. Screening done by more than one test to detect more than one disease.

Q4: Which of the following is true about screening tests?

A. All screening tests do more good than harm.

B. A test can only qualify as a screening test, if there is robust scientific evidence to support its use

C. The health service must have sufficient capacity to cope with diagnosis, follow-up and treatment

D. Patients should be given sufficient information to allow them to decide for themselves whether or not they should be screened.

Q5. Which of the following ages is recommended to do screening for breast cancer?

- A. 60- 70
- B. 50- 74
- C. 40 - 74
- D. 40- 60

1.To define screening/prevention and its uses in family practice.

Ohoud Alboqami

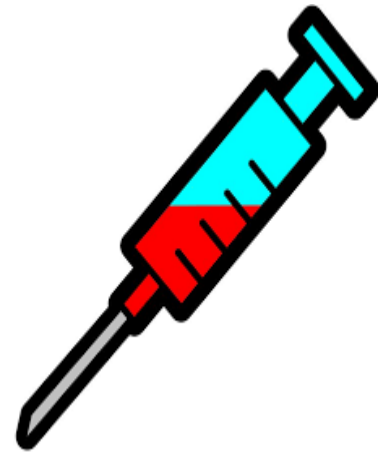
Definition of screening

- Screening is defined as the presumptive identification of unrecognized disease in an apparently healthy, **asymptomatic** population by means of tests, examinations or other procedures that can be applied rapidly and easily to the target population **(WHO)**



Tools of screening

- Instrument to measure a parameter. most famous example is BP screening
- Medical examination. Hip dislocation in children, Eye exam (squint and retinoblastoma), self breast examination and even clinical examination not recommended as screening test any more.
- Radiological test. mammogram
- Laboratory test. blood sugar, hepatitis, HbA1c
- Screening History. in psychiatric depression screened by history



Definition of prevention

- Actions to prevent the disease occurrence.
- actions aiming at eradicating, eliminating, or minimizing the impact of disease and disability, or if none of these is feasible, retarding the progress of disease and disability.

(a dictionary of epidemiology)



Uses in family practice

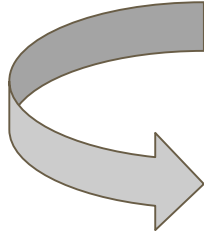
Case detection	<ul style="list-style-type: none">•Prescriptive screening•Identification of unrecognized disease or defect that doesn't arise from patient's request	Neonatal screening
Control of diseases	<ul style="list-style-type: none">•Prospective screening•Prevention of the transmission of the disease to healthy community members	Screening of the family members for infectious diseases such as tuberculosis
Research purposes	<ul style="list-style-type: none">•Initial screening is conducted to estimate the prevalence of a disease and subsequent screening will provide data on the incidence	

7. Identify levels of prevention in primary care practice

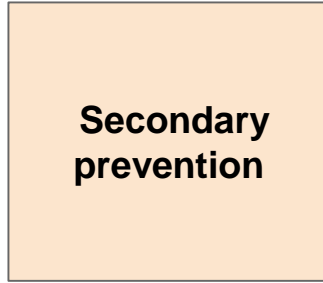
.ohoud Alboqami

Important

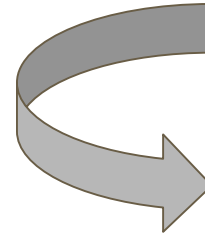
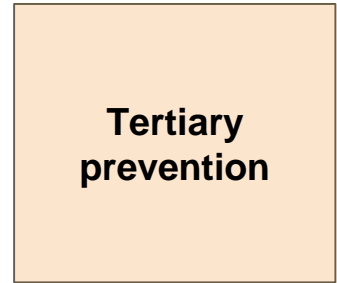
For the risk factors



The disease



The complications



Screening is a secondary prevention

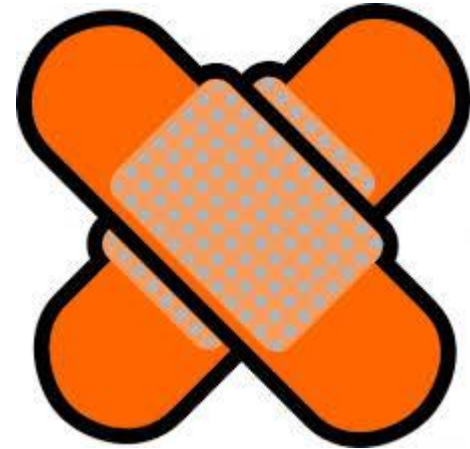
Primary prevention

intervening **before** health effects occur, through measures such as vaccinations, altering risky behaviors (poor eating habits, tobacco use), and banning substances known to be associated with a disease or health condition.



Secondary prevention

screening to identify diseases in the **earliest stages**, before the onset of signs and symptoms, through measures such as mammography and regular blood pressure testing



Tertiary prevention

- managing disease post diagnosis to **slow or stop disease progression** through measures such as chemotherapy, rehabilitation, and screening for complications. **palliative treatment is consider tertiary prevention**



2. To understand the criteria for screening tests.

Nehal Beyari

Important

Screening criteria:

We have two screening criteria:

1–Wilson-Jungner Criteria for screening. Concentrate on this

2–WHO criteria for good screening tests.



Wilson-Jungner classic screening criteria :

- All screening tests should meet the following criteria before they are introduced to the target population:

1- The condition being screened should be an important health problem.

Common in the community

2- The natural history of the condition should be well understood.

3- There should be a detectable early stage.

4- Treatment at an early stage should be of more benefit than at a later stage.

5- A suitable test should be devised for the early stage.



Cont..

6- The test is **acceptable** to the target population. *Not invasive*

7- **Intervals for repeating** the test have been determined.

8- **Adequate health service** provision has been made for the extra clinical workload resulting from screening.

9- **The Risks, both physical and psychological**, should be less than benefits.

10- The costs should be **balanced** against the benefits.

- **The condition being screened should be an important health problem:**

-Screening should target diseases with serious consequences such as mortality or severe or prolonged morbidity , not rare disease .

- **Example of screening disease that done in western area:** screening for skin cancer by doing (skin examination).

- **In our country:** We think more about (HTN- DM - DLD -breast cancer -colon cancer).

- **The natural history of the condition should be well understood :**

- History of the disease should be known, we can't treat untreatable disease.

-Example of disease has no screening test : **1-ovarian cancer** because it very aggressive, when we diagnose the patient she is already at a late stage ,so it is untreatable.

2-gastric carcinoma (very aggressive). 3. Bladder cancer.

- **There should be a detectable early stage**

- If the critical point occurs before the detectable preclinical phase, then screening cannot be effective.

- If the critical point occurs soon after the start of the detectable preclinical phase, then screening will often be too late.

- No benefit for starting screen when patient started to have symptoms.

- **Treatment at an early stage should be of more benefit than at a later stage**

- An effective treatment for the disease must exist for screening to improve patient

- Detection of disease alone is not cost effective, so we need to treat!!

- Patient at early stage of breast cancer has good prognosis and outcome than other patient at advanced stage.



● A suitable test should be devised for the early stage

- The screening test must have good sensitivity and specificity to detect more true-positive cases than false-positive cases.

We need test has(very high sensitivity):Advantage: decrease false negative. - Disadvantage: increase false positive .

SN out: the more sensitive the test is ,the more I can rule out the disease

So if the test negative so patient has no disease (negative)

يعني كل مازاد رقم السن أوت يعني هاي سيستف وجاتك النتيجة سلبية انت بقلب قوي تقولي للمريض ماعندك شي

Example(very imp in MCQs): pregnancy test (urine) is very high sensitive (99%)

Case: female patient presented to ER with severe abdominal pain and amenorrhea

What is your first step: rule out pregnancy (urine test)عشان يعرفوا يودوها قايني ولا سيرجري

لو التيست طلع نيقايف خلاص معناها البيشنت أكيد مو حامل مافي مجال للشك

So we rule out pregnancy, ectopic ,abortion and we refer the patient to surgery

- pregnancy test(blood) not screening test but it's sensitivity (100%)



- **The test is acceptable to the target population**
 - Patient must accept the test
 - **Intervals for repeating the test have been determined.**
 - Every disease has certain time for repeating the test .
E.g. after colonoscopy, I know if it normal the pt will be ok for 10 years, HbA1C for 1 year.
- **Adequate health service provision has been made for the extra clinical workload resulting from screening.**
- - The test must be affordable and available to the target population. If the test is available only at large urban medical facilities, or is not affordable for patients, or both, then screening cannot be effective.



- **The Risks, both physical and psychological, should be less than benefits.**

- **The test should not be too invasive or has serious side effects.**

- **The costs should be balanced against the benefits.**

- **To justify the cost of screening, the detectable preclinical phase of the disease should have a high prevalence among people who are screened.**

- **Case:** Old patient presented to your clinic with dementia you have to screen for hypothyroidism(patient is asymptomatic for hypothyroidism) initially:

- **We will order TSH (screening) (cheap) .**

- **Don't order T3 and T4 levels (very expensive) and we do not use for screening.**

WHAT IS

SENSITIVITY

SPECIFICITY



In screening we choose a highly Sensitive Test

Sensitivity: (SN out) pick up all those who have the disease.

Specificity: (SN In) exclude those who do not have the disease.

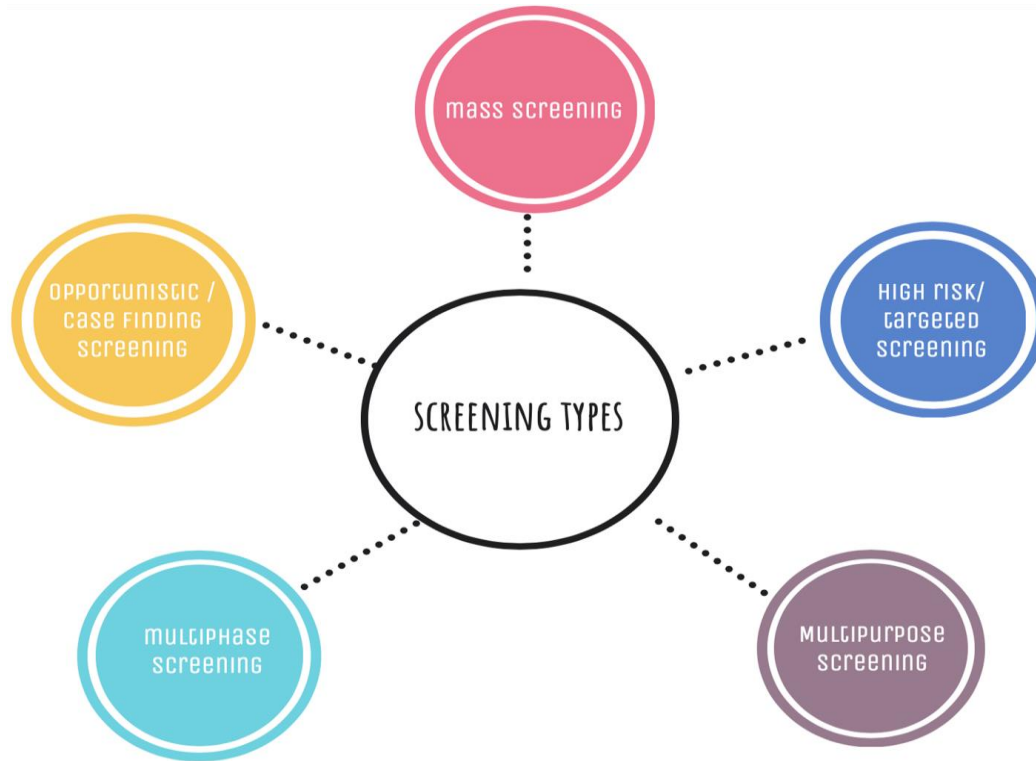


3. To identify screening types and examples of targeted people for each type.

Nouf Aloqaili

Types of screening

Important to know each type and its examples



1) Mass screening

- Aims to screen the **whole population** or **major subgroup** such as “all adults” or “young children” .
- Everyone in the group is screened regardless of the probability of having the disease or condition.



Examples:

- Mammography in women aged 40 years and above
- Cervical cancer screening in women > 21 year
- vision screening in school children
- Phenylketonuria in neonates



2) High risk / selective / targeted screening

- It is applied selectively to high risk groups, the groups defined on the basis of epidemiological research.



Examples:

- Screening for people who had close contact of a person with active TB.
- Screening for familial cancers, HTN and DM.
- Screening foetus for Down's syndrome in a mother who already has a baby with Down's syndrome.
- Screening for HIV in risk groups. **Drug users**
- Screening for CVD in high risk groups (HTN, DM).



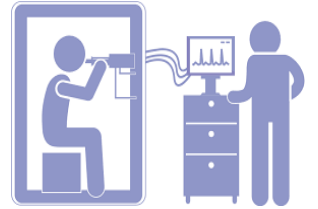
3) Multiphasic screening Usually 2 tests

- The screening during which various diagnostic procedures are done during the same screening program to carry out screening tests for a single diseases
- The procedure may also include questionnaire, clinical examination and a range of measurement and investigations.



Examples:

- CBC and HB electrophoresis for sickle cell anemia
- Lung function assessment
- PSA and PR for prostate cancer
- FBS and GTT for DM



4) Multipurpose screening يكون له أكثر من هدف

- Screening a large population for several disorders by two or more screening tests on the same occasion
- Commonly used for employers and health maintenance organizations



Examples:

- **Pre-military exams**, often employ multipurpose screening to test for possible disorders such as DM,HTN, and hearing impairment
- Screening in pregnant women for VDRL, HIV and HBV by serology



5) Opportunistic / case finding screening

- Utilization of screening tests for detection of conditions unrelated to the patients complaints.

Examples:

- Ophthalmologists routinely screen patients for glaucoma
- Measuring blood pressure in physician visits



4. To identify appropriate approaches for prevention and screening of the common problems in primary care.

Razan Alotaibi

1. What are common conditions or diseases Where we can apply screening & Prevention?



Breast Cancer: Important

1. Screening and prevention method? Conventional Digital Mammography Screening intervals:

- Women should continue screening mammography as long as their overall health is good and they have a life expectancy of **10** years or more.
- Women known to have a genetic mutation should be offered annual MRI surveillance from 20y if TP53 mutation, and from **30y if BRCA1/2 mutation**

In general breast screening start at 50 years old, Only for high risk can be started before 50 years and should be by mammogram if her age more than 40

Breast Cancer:

Population	Recommendation
1. Women aged 40 to 49 years	The decision to start screening mammography in women prior to age 50 years should be an individual one. Women who place a higher value on the potential benefit than the potential harms may choose to begin biennial screening between the ages of 40 and 49 years.
2. Women aged between 50 -74	The USPSTF recommends biennial screening mammography
3. Women aged 75 years or older	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening mammography

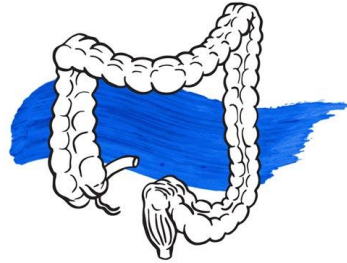
Colorectal Cancer

-**Colorectal cancer** is the second-leading cause of cancer death in the United States and Most common cancer in Saudi males and 3rd in Saudi females.

-The USPSTF found convincing evidence that screening for colorectal cancer in adults aged **50 to 75 years** reduces colorectal cancer mortality.

Risk:

- 1.older age.
- 2.A positive family history.
- 3.Male sex and black race are also associated with higher colorectal cancer





Colorectal Cancer: Each 10y, starting at 50y/o, gold standard: colonoscopy.

Screening Tests

1. Stool-Based Screening: A. Guaiac-based FOBT B. Fecal immunochemical test C. Multi-targeted stool DNA test (FIT-DNA)	Annually
2. Flexible sigmoidoscopy	Every 5 years
3. CT colonography	Every 5 years
4. Double-contrast barium enema	Every 5 years
5. Colonoscopy *it's gold standard for colorectal *	Every 10 years

The other tests are for patient who don't prefer colonoscopy, بالرغم من إنه ولا واحد ما يغني عن الكولونوسكوبي

Cervical Cancer:

1. Screening is testing of all women at risk of cervical cancer, most of whom will be without symptoms.
2. Screening aims to detect precancerous changes, which, if not treated, may lead to cancer.
3. Screening is only effective if there is a well organized system for follow-up and treatment.
4. There is a strong association between cervical cancer and HPV (types 16 and 18).
5. There exists an HPV vaccine that is best given between ages 11-12.

Cervical Cancer:

Woman's Age	How often should a woman have a Pap test?
under 21 years old	No testing needed
21-30 years old	Pap test every 3 years
30-65 years old	Pap test every 3 years or Pap and HPV every 5 years
65 years old or older	No testing needed

Lung Cancer:

Only for smokers

1. **Screening test or procedure:** Low-dose **CT**
2. **Population:** Current or former **smokers 55 to 80** years of age in good health with at least a 30 pack-year history
3. Clinicians should initiate a discussion about annual lung cancer screening with apparently healthy patients **55 to 80 years** of age who have at least a **30 pack-year smoking history** and who currently smoke or have quit within the past **15 years; a** process of informed and shared decision making with a clinician related



Lung Cancer:

When Should Screening Stop?

The Task Force recommends that yearly lung cancer screening stop when the person being screened.

- Turns 81 years old, or
- Has not smoked in 15 or more years.

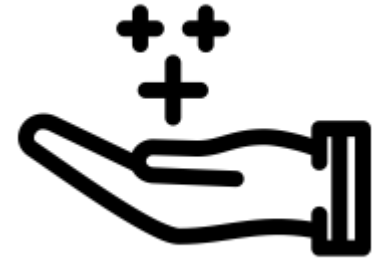


5. To explain pros and cons of screening.

Razan Alotaibi

Advantages:

1. Improved prognosis for some cases detected by screening.
2. Less radical treatment for some early cases.
3. Reassurance for those with negative test results.
4. Increased information on natural history of disease and benefits of treatment at early stage.
5. Economic saving on future treatment.
6. Cancer screening may give you an indication of cancer before any symptoms develop.
7. If cancer is diagnosed at an earlier stage, treatment is more likely to be successful.



Disadvantages

1. Longer morbidity in cases where prognosis is unaltered.
2. False reassurance for those with false-negative results.
3. Anxiety, Unnecessary intervention and sometimes morbidity for those with false-positive results.
4. Cancer screening can miss a number of cancers and provide false reassurance: no cancer screening test is 100% accurate.
5. Cancer screening can lead to unnecessary worry and investigations when there is no cancer present.



6. Summaries the recommendations for screening programs in adults e.g. Breast cancer, Colorectal ca, cervical ca, prostate ca , osteoporosis ..etc.

Ashwaq Almajed

Breast cancer screening recommendations:



Women aged 40 - 49 Years	Women aged 50 -74 years	Women aged \geq 75
The decision to start screening should be an individual one based on the higher value on the potential benefit than the potential harms	biennial screening mammography	No recommendation.

The test used for Screening :

- Conventional digital mammography.
 - *You have to know: 1.The test 2. The interval 3. The Age for each screening
 - *Before 40 we don't do screening except if she is symptomatic (feel lump) we do US.

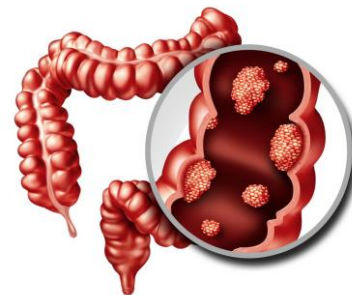
Colorectal Cancer screening recommendations:

Population for screening:

Adults aged 50 to 75 years.

Adults aged 76 to 85 years:

- should be an individual one, taking into account the patient's overall health and prior screening history.
- Adults in this age group who have never been screened for colorectal cancer are more likely to benefit.
- Screening would be most appropriate among adults who 1) are healthy enough to undergo treatment if colorectal cancer is detected and 2) do not have comorbid conditions that would significantly limit their life expectancy.



Colorectal Cancer screening recommendations:

Screening methods:

1. Stool- based tests :

Test	Frequency
Guaiac-based fecal occult blood test (gFOBT)	Every year
Fecal immunochemical test (FIT)	Every year
Multi-targeted stool DNA test (FIT-DNA)	Every 1 - 3 years



Colorectal Cancer screening recommendations:

Screening methods:

2. Direct Visualization Tests :



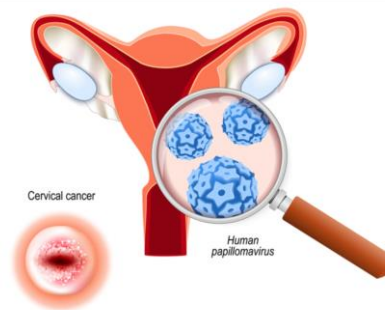
Test	Frequency
Colonoscopy	Every 10 years
Computed tomographic colonography (CTC)	Every 5 year
Flexible sigmoidoscopy	Every 5 years

Cervical Cancer Screening Recommendations:

Population for screening:

Women aged 21 to 65 years.

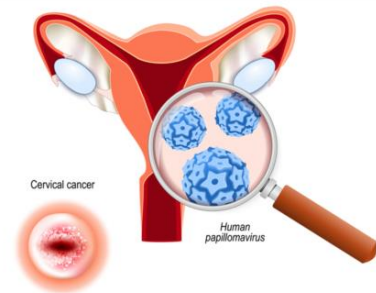
Screening Tests:



women aged 21 to 29 years	women aged 30 to 65 years
cervical cytology (pap smear) alone every 3 years.	<ul style="list-style-type: none">• cervical cytology (Pap smear) alone every 3 years. Or <ul style="list-style-type: none">• high-risk human papillomavirus (hrHPV) testing alone every 5 years. Or <ul style="list-style-type: none">• high-risk human papillomavirus (hrHPV) testing in combination with cytology every 5 years.

Cervical Cancer Screening Recommendations:

- The USPSTF recommends **against** screening for cervical cancer in women younger than 21 years.
- The USPSTF recommends **against** screening for cervical cancer in women older than 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer.
- The USPSTF recommends **against** screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade precancerous lesion



Prostate Cancer Screening Recommendations:

Population For screening:

- Men aged 55 to 69 years.
- Screening should be an individual one depending on the benefits and harms of screening.
- 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.
 - possible prostate biopsy.
 - overdiagnosis and overtreatment.
 - treatment complications, such as: incontinence and erectile dysfunction.
 - Prostate cancer is slow progressive, not aggressive cancer and patient can live with it, **so we don't recommend screening.**

Prostate Cancer Screening Recommendations:

Tests used For screening:

- Prostate Specific Antigen (PSA).
- Digital Rectal Exam (DRE).



Lung Cancer Screening recommendations:

Population for Screening:

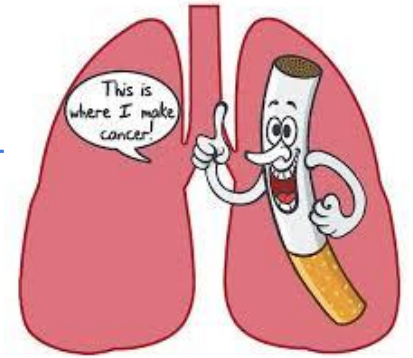
Adults Aged 55-80, with current history of smoking (30 pack-year) or have quit within the past 15 years.

Test used for screening:

low-dose computed tomography (LDCT) annually.

When to stop screening:

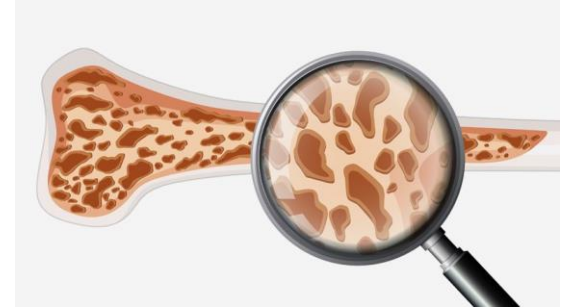
Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.



Osteoporosis Screening:

Population for screening:

- Women 65 years and older.
- Postmenopausal women younger than 65 years who are at increased risk of osteoporosis.



Screening method:

Central dual-energy x-ray absorptiometry (DXA) of the hip and lumbar spine.

The Benefit of screening:

To reduce risk of osteoporotic fractures.

In F2 Dr.Norah didn't say anything about this slid

Adult Preventive Health Care Schedule: Recommendations from the USPSTF

**This link is very important :

- You have to memorise **All recommendation of grades A and B** (even the ones not mentioned in the slides like HTN, obesity...etc)
- You have to Know: Interval , Age, Screening method

<https://drive.google.com/open?id=0B6Pox2S3l6bleUhPbnRUQnZTOHhBTno2NWRITTKxb0hXWU9N>

Adult Preventive Health Care Schedule: Recommendations from the USPSTF (as of August 16, 2019)

To be used in conjunction with USPSTF recommendation statements for additional details (see tables and references at <https://www.aafp.org/afp/PHCS>)
Only grade A/B recommendations are shown

Age	18	21	24	25	35	40	45	50	55	59	65	70	74	75	80
USPSTF screening recommendations															
Alcohol misuse ¹															
Depression ²															
Hypertension ³															
Obesity/weight loss ⁴															
Tobacco use and cessation ⁵															
HIV infection ⁶															
Hepatitis B virus infection ⁷															
Syphilis ⁸															
Tuberculosis ⁹															
BRCA gene risk assessment ¹⁰															
Chlamydia and gonorrhea ¹¹															
Intimate partner violence ¹²															
Cervical cancer ¹³															
Abnormal glucose/type 2 diabetes mellitus ¹⁴															
Hepatitis C virus infection ¹⁵															
Colorectal cancer ¹⁶															
Breast cancer ¹⁷															
Lung cancer ¹⁸															
Osteoporosis ¹⁹															
Abdominal aortic aneurysm ²⁰															
USPSTF preventive therapies recommendations															
HIV preexposure prophylaxis ²¹															
Primary prevention of breast cancer ²²															
Folic acid supplementation ²³															
Statins for primary prevention of CVD ²⁴															
Aspirin for primary prevention of CVD and colorectal cancer ²⁵															
Fall prevention in community-dwelling older adults ²⁶															
USPSTF counseling recommendations															
Sexually transmitted infection prevention ²⁷															
Diet/activity for CVD prevention ²⁸															
Skin cancer prevention ²⁹															
Legend															
	Normal risk			With specific risk factor			Recommendation grades								
Recommendation for men and women	A			B			A Recommended (likely significant benefit)								
Recommendation for men only	B			C			B Recommended (likely moderate benefit)								
Recommendation for women only	C			D			C Do not use routinely (benefit is likely small)								
	I			I			D Recommended against (likely harm or no benefit)								
							I Insufficient evidence to recommend for or against								

BMJ = body mass index, CVD = cardiovascular disease, USPSTF = U.S. Preventive Services Task Force. Visual adaptation from recommendation statements by Swanson PR, Lindberg C, Carrico C, and Clutter J.

8. Review the local vaccination schedule from Saudi M.O.H.

– Ashwaq Almajed

The Aim of vaccination schedule:

1. To protect children in the Kingdom and all target groups in the the community against diseases targeted by immunization
2. To maintain the Kingdom polio-free and to get rid of **measles, rubella** and **mumps**.
3. Reducing the infection rates of other diseases targeted by immunization.



The Vaccination Schedule For Children From Saudi M.O.H:

*Very important table for the exam



التطعيم Vaccine	الزيارة Visit
• BCG • Hepatitis B	• عند الولادة At Birth
• IPV • DTaP • Hepatitis B • Hib • Pneumococcal Conjugate (PCV)* • Rota**	• عمر شهرين 2 months
• IPV • DTaP • Hepatitis B • Hib • Pneumococcal Conjugate (PCV)* • Rota**	• عمر 4 شهور 4 months
• OPV • IPV • DTaP • Hepatitis B • Hib • Pneumococcal Conjugate (PCV)*	• عمر 6 شهور 6 months
• Measles • Meningococcal Conjugate quadrivalent (MCV4)	• عمر 9 أشهر 9 months
• OPV • MMR • Pneumococcal Conjugate (PCV)* • Meningococcal Conjugate quadrivalent (MCV4)	• عمر 12 شهر 12 months
• OPV • DTaP • Hib • MMR • Varicella • Hepatitis A	• عمر 18 شهر 18 months
• Hepatitis A	• عمر 24 شهر 24 months
• OPV • DTaP (Td)*** • MMR • Varicella	• عند دخول الصف الأول الابتدائي First class primary school age

d Conjugate (PCV13).

Rota vaccine.

om 7 years of age.

* لقاح البكتيريا العقدية الرئوية (PCV13).

** لقاح الروتا الأحادي.

*** يعطى الثنائي البكتيري ابتداءً من 7 سنوات.

OBJECTIVE:

1. To define screening/prevention and its uses in family practice.
2. To understand the criteria for screening tests.
3. To identify screening types and examples of targeted people for each type.
4. To identify appropriate approaches for prevention and screening of the common problems in primary care.
5. To explain pros and cons of screening.
6. Summarizes the recommendations for screening programs in adults e.g. Breast cancer, Colorectal ca, cervical ca, prostate ca , osteoporosis ..etc.
7. Identify levels of prevention in primary care practice .
8. Review the local vaccination schedule from Saudi M.O.H.

MCQ

Q1. mammography screening for breast cancer is considered?

A. Primary prevention

B. secondary prevention

C. tertiary prevention

Q2. WHICH ONE OF THE FOLLOWING IS ON WILSON-JUNGNER CRITERIA?

A. Natural history of illness is ill understood

B. Detectable at late age

C. Acceptable to the population

D. The Risks, both physical and psychological, should be more than benefits.

Q3. What does case finding screening mean?

- A. Screening applied selectively to high risk groups.
- B. Screening done by more than one test to detect one disease
- C. Screening of persons who come to health practitioner for other complaints.
- D. Screening done by more than one test to detect more than one disease.

Q4: Which of the following is true about screening tests?

- A. All screening tests do more good than harm.
- B. A test can only qualify as a screening test, if there is robust scientific evidence to support its use
- C. The health service must have sufficient capacity to cope with diagnosis, follow-up and treatment
- D. Patients should be given sufficient information to allow them to decide for themselves whether or not they should be screened.

Q5. Which of the following ages is recommended to do screening for breast cancer?

A. 60- 70

B. 50- 74

C. 40 - 74

D. 40- 60

This question from Dr.Nourah *very impo*

41 years old female patient, her aunt was diagnosed with breast cancer stage 2 at which age we offered screening to the patient ?

1- 40

2-45

3-50

4- as soon as possible

scenario





Scenario 1

A 52 year old male presented to primary clinic for routine check up for diabetes, and the doctor offered to do screening tests for him.

Scenario 2

A 25 Y/O female presented to the clinic ,she is worried about breast cancer because her friend diagnosed with metastatic breast cancer, after taking full history she has no risk factors for breast cancer.

References:

1. <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1?ds=1&s=breast%20cancer%20screening>
2. <https://www.lunghealthuk.com/screening-services/pros-and-cons-of-screening>
3. Oxford HandBook of General Practice 4TH Edition.
4. Basic epideiology - R Bonita, R Beaglehole, T kjellestrom. 2nd edition
5. Epidemiology for Public Health Practice - Robert H FRIIS
6. U.S. Preventive Services Task Force recommendations “USPSTF”
(<https://www.uspreventiveservicestaskforce.org/Page/Name/recommendations>)
7. Saudi Ministry of Health vaccination schedule
<https://www.moh.gov.sa/en/HealthAwareness/EducationalContent/vaccination/Pages/vaccination1.aspx>
8. https://www.cdc.gov/pictureofamerica/pdfs/picture_of_america_prevention.pdf
9. A dictionary of epidemiology
10. <https://www.health.ny.gov/diseases/cancer/cervical/campaign/>
11. https://www.cdc.gov/cancer/lung/basic_info/screening.htm

Thank you