

# HEALTHY AGING

Yasmeeen Khan, MD  
Advocate Medical Group  
4900 Main St, Downers Grove, IL



October 30, 2020

# Background

- I am a Family Medicine Physician practicing for almost 4 years at Advocate Medical Group in Downers Grove, IL.
- I enjoy caring for patients of all ages through various stages of their lives.
- Education & Training:  
Northwestern University, Loyola Stritch School of Medicine, and Advocate Lutheran General Hospital Family Medicine Residency
- I'm also a busy Mom of 3 boys!



# What is Healthy Aging?

- Taking positive stepping stones towards maintaining our health through each stage of life
- Being proactive about our well-being with a healthy and active lifestyle and taking preventive measures
- Being thorough with yearly health maintenance exam and recommended age-appropriate screenings
- Early detection and treatment of common and uncommon conditions
- WHO describes it to be “the process of developing and maintaining the functional ability that enables wellbeing in older age” allowing one to be independent in meeting their needs, making decisions, having mobility and strength, nurturing relationships, and being a contributing member to society (WHO int.)
- According to WHO between 2000 to 2050, population >60 yrs old expected to double to more than 20% of population



# What is needed for healthy aging?

- Changing our perspective on aging to one that is more positive and something to look forward to rather than worry about, something that we are prepared to face with confidence
- Being well-informed and proactive about our health and how to maintain it and prevent health conditions, and stabilizing conditions that we may have to the best of our ability
- Health systems advocating for us as we grow older
  - Yearly complete physicals for health maintenance
  - Medicare patients to visit us yearly for exams along with Annual Wellness Exam or Medicare 360 visits
  - Local and national government support for public health



# What affects how we age?

- People age differently. How we age is determined by a multitude of factors
- Our individual medical conditions
- Genetics: affects our likelihood of inheriting certain conditions that affect our wellbeing, e.g. family history of breast or colon cancer
- Socioeconomic conditions, home situation, education level, cultural backgrounds, and gender, family support also affect how we age and may provide relative advantages to certain demographics
- What we can control? Our lifestyle!
  - Diet, exercise, avoiding smoking
  - Age-appropriate health examinations and screenings



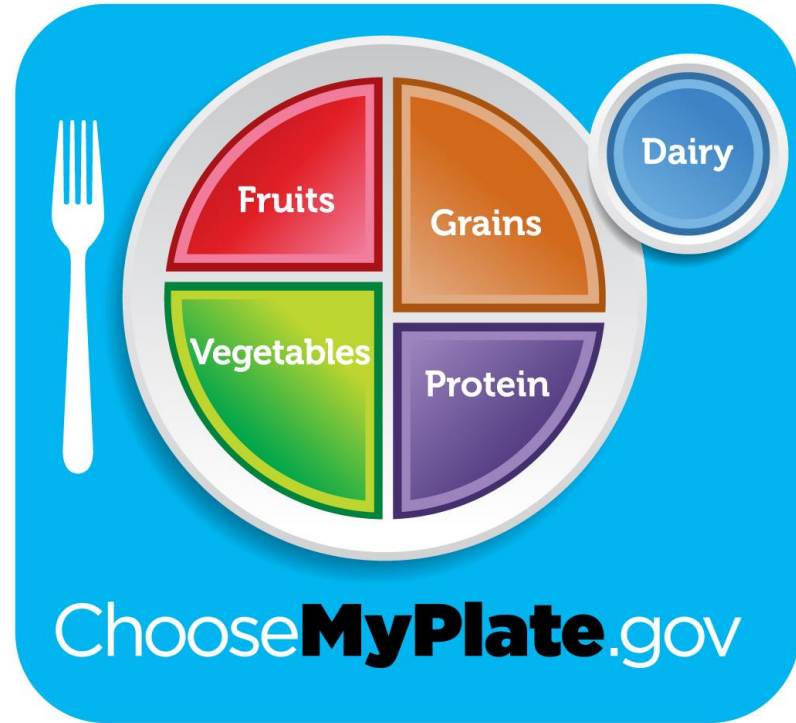
# Aiming for a healthy weight

- BMI- measure of body fat based on height and weight
  - Specific for age groups and gender
  - Normal BMI 18.5-24.9 (23-29 if >65yo)
  - Overweight 25-29
  - Obesity 30+
- According to CDC, obesity has had a national prevalence of 42.4% between 2017-2018 data, up from 30.5%.
- IL is at 31.5% prevalence
- Differences seen across educational, socioeconomic, ethnic groups
- Annual national medical cost is \$147 billion dollars
- Increase risk for co-morbid conditions
  - High BP, High cholesterol, Heart disease, Stroke, Type 2 Diabetes, Osteoarthritis, Gallbladder disease, Sleep Apnea, Cancers (colon, breast)
- Worsened prognosis for COVID-19 also seen in patients with obesity



# Choosing Healthy Meals

- Keep a grocery shopping list and stick to it! Avoid impulse purchases and empty calories
- Prefer fresh over processed foods
- Half your plate should be fruits and veggies
- Other half should be lean protein and grains (preferably whole-grains); avoid excess red meat
- Dairy (skim, 1%, or 2% preferred milk or cheese, low-fat yogurt)
- Avoid refined carbohydrates, trans fat and saturated fats
- Water is key, avoid unnecessary sugary drinks
- Consult with PCP, nutritionist
- Recommend a multivitamin for everyone







<p><b>tweak the sweets</b></p> <p>fruit cake vs. dessert</p> <p>fruit cake: delicious desserts</p>	<p><b>cheers to good health</b></p> <p>water vs. soda</p> <p>drink water to always celebrate</p>
<p><b>bake healthier</b></p> <p>fruit vs. butter</p> <p>use recipes with pureed fruits instead of butter or oil</p>	<p><b>spice it up</b></p> <p>herbs vs. sugar</p> <p>use spices and herbs instead of sugar and salt</p>
<p><b>brighten your meal</b></p> <p>fruit vs. meat</p> <p>fill half your plate with fruits and vegetables</p>	<p><b>skim the fat</b></p> <p>skim milk vs. heavy cream</p> <p>try skim sweetened milk instead of heavy cream</p>
<p><b>swap the grains</b></p> <p>whole wheat vs. white</p> <p>choose whole wheat flour instead of white flour</p>	<p><b>go easy on the gravy</b></p> <p>lean vs. fatty</p> <p>a little bit of gravy goes a long way</p>

USDA is an equal opportunity provider of services.



# MyPlate Plan

## Find your Healthy Eating Style

Everything you eat and drink matters. Find your healthy eating style that reflects your preferences, culture, traditions, and budget—and maintain it for a lifetime! The right mix can help you be healthier now and into the future. The key is choosing a variety of foods and beverages from each food group—and making sure that each choice is limited in saturated fat, sodium, and added sugars. Start with small changes—“MyWins”—to make healthier choices you can enjoy.

### Food Group Amounts for 2,000 Calories a Day

Fruits	Vegetables	Grains	Protein	Dairy
<b>2 cups</b>	<b>2 1/2 cups</b>	<b>6 ounces</b>	<b>5 1/2 ounces</b>	<b>3 cups</b>
Focus on whole fruits	Vary your veggies	Make half your grains whole grains	Vary your protein routine	Move to low-fat or fat-free milk or yogurt
Focus on whole fruits that are fresh, frozen, canned, or dried.	Choose a variety of colorful fresh, frozen, and canned vegetables—make sure to include dark green, red, and orange choices.	Find whole-grain foods by reading the Nutrition Facts label and ingredients list.	Mix up your protein foods to include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry.	Choose fat-free milk, yogurt, and soy beverages (soy milk) to cut back on your saturated fat.



# Keeping Yourself Active!



- Be creative in planning exercise into your schedule
- Can be challenging with pandemic precautions, e.g. shutdowns, exercising with a mask on at the gym
- Endurance, strength, balance, and flexibility
- Aerobic activity 30+ min 5 days a week (total 150 min/week)
  - Brisk walk
  - Keep yourself hydrated
- 2 days of muscle-strengthening activities (weights, squats), good for bone health also
- Balance exercises for older patients
  - Single leg stance, hip kicks, sit to stand, step ups

## How much activity do I need?

### Moderate-intensity aerobic activity

Anything that gets your heart beating faster counts.



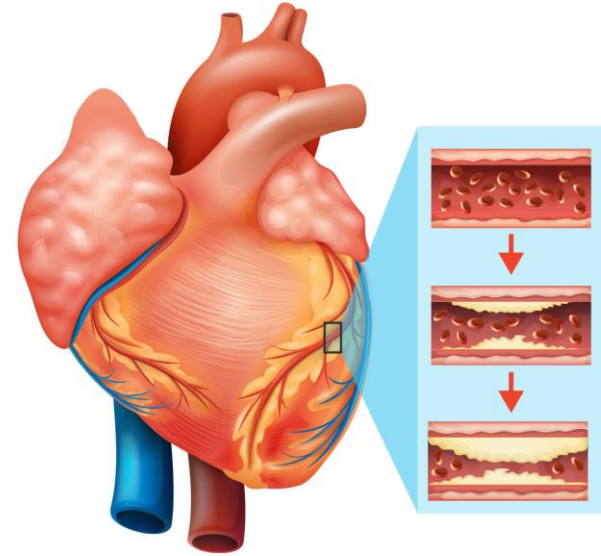
AND



Tight on time this week? **Start with just 5 minutes.** It all adds up!

# Preventing Cardiovascular Disease

- Cardiovascular disease (CVD) encompasses many conditions, mainly atherosclerotic CVD due to plaques forming in blood vessels
  - Coronary Artery Disease including Heart Attacks
  - Cerebrovascular disease causing Stroke, TIA
  - Peripheral Artery Disease
    - Other cardiac conditions include irregular heartbeats like Atrial fibrillation and Congestive heart failure
- Risks: family history, Metabolic syndrome, Diabetes, Kidney disease, RA, ethnicity group
- ASCVD Risk Score- gives calculation on 10 year and lifetime risk of ASCVD heart attack or stroke based on age, gender, race, BP, cholesterol, presence of existing HTN or DM, and smoking status (5% is borderline, >7.5% consider risk modification)

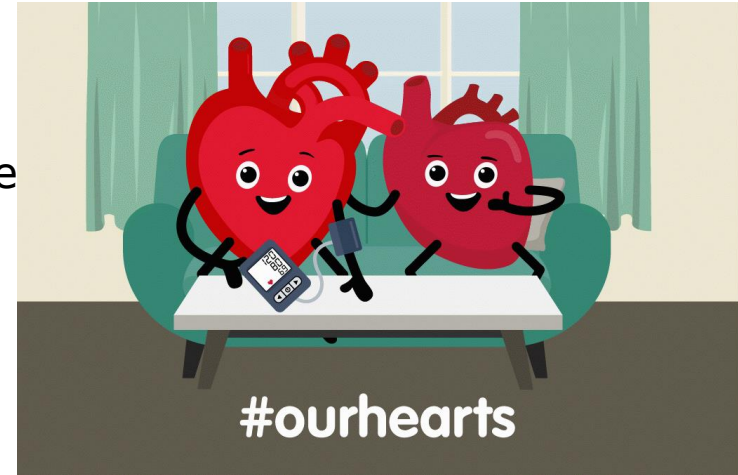


# Lower Your CV Risk- Cholesterol

- HDL is “good cholesterol”, goal  $>40$ , prevents plaques from accumulating
- LDL is “bad cholesterol” causes plaques ideal  $<100$  but 130 is the cut-off
- Triglycerides is another common fat in the body also detrimental to heart health
- Statins
  - Lower LDL cholesterol and TG levels to prevent plaque buildup
  - Prevent plaques from rupturing causing heart attacks and strokes
  - Consider it if LDL  $>190$ , Type 2 DM, high ASCVD score
- Fish oil
  - Decreases Triglycerides and increase HDL
- Avoid transfat and saturated fats-use grapeseed or olive oil in place of canola/veg oils
- Avoid red meat that contains fat, processed meats, shrimp, full-fat dairy, eggs in excess; Lean meats, fish, whole grains, beans, lentils, fruits and veggies
- Regular Exercise

# Lower CV Risk- Control your BP!

- Blood Pressure: When the heart pumps blood through the arteries, the pressure that is on the artery walls is the blood pressure. SBP heart squeezing blood out, DBP heart refilling
- Goal BP is 130/80 or less
- If 140/90 or higher on more than 2 in-office readings, start a medication that is right for the patient
  - White coat syndrome
  - Home monitoring
- Causes: family history, obesity, diet, stress, inactivity, ethnicity, smoking, alcohol.  
(Secondary HTN-chronic conditions or meds)
- Baby Aspirin 81mg/day may be beneficial in reducing CV risk, but not for patients with history of bleeding or patients with high fall risk



# Lower CV Risk, continued

- Control your blood sugar! Avoid excess carbs (breads, pastas, rice, sweets)
- Low sodium, low fat diet
- Regular Exercise
- Stress relief and adequate sleep, 7-8 hours/night
- Quit smoking, avoid any other drugs
- Avoid excess caffeine
- Avoid excess alcohol
  - Best to abstain
  - Moderate drinking is 1 drink/day women, 2 drinks/day men
  - No alcohol if pregnant or trying to conceive
  - Heavy drinking is >7 drinks/week in women, > 14 drinks/week
  - CAGE Screenings
  - Alcoholics Anonymous, medications, rehab





**1 MILLION**

PEOPLE WHO WILL HAVE A HEART ATTACK OR DIE FROM CORONARY HEART DISEASE THIS YEAR



**16.5 MILLION**

AMERICANS AGE 20 AND OLDER WHO ARE LIVING WITH CORONARY HEART DISEASE

**795,000**

PEOPLE WHO WILL HAVE A STROKE THIS YEAR



**356,000**

CARDIAC ARRESTS THAT OCCUR OUTSIDE A HOSPITAL EACH YEAR



# HARD NUMBERS

By AMERICAN HEART ASSOCIATION NEWS

A sampling of U.S. data from the American Heart Association's 2018 heart disease and stroke statistics report.



**103 MILLION**

ADULTS WITH HIGH BLOOD PRESSURE

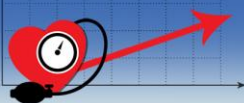


**6.5 MILLION**

AMERICANS AGE 20 AND OLDER WHO ARE LIVING WITH HEART FAILURE

**38 PERCENT**

RISE IN THE NUMBER OF HIGH BLOOD PRESSURE DEATHS BETWEEN 2005 AND 2015



**23 MILLION**

ADULTS WITH TYPE 2 DIABETES

**15 PERCENT**

ADULTS WHO SMOKED IN 2015



**56 MILLION**

PEOPLE 40 AND OLDER WHO ARE ELIGIBLE FOR CHOLESTEROL-LOWERING STATINS



**38 PERCENT**

ADULTS WHO WERE OBESE AS OF 2014



Source: "Heart Disease and Stroke Statistics-2018 Update: A Report from the American Heart Association," Circulation (numbers rounded)

Published Jan. 31, 2018

## Patient-Centered Approach for Primary Prevention



© Copyright 2019 American Heart Association, Inc., a 501(c)(3) not-for-profit. All rights reserved.

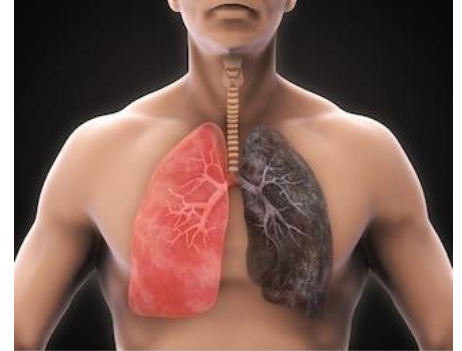


Advocate Health Care

We are AdvocateAuroraHealth

# Quit Smoking!

- Smoking cigarettes kills 480,000 people yearly in the US (1 in 5 deaths) (CDC)
- 13.7% adults (34.2 million) smokers, 15.6% of men, 12% women (2018 data)
- Smokers die 10 yrs or more earlier than nonsmokers
- 41,000 from secondhand smoke exposure
- Nicotine raises BP
- Carbon monoxide reduces the body's ability to carry oxygen
- Many harmful toxins, some cancer-causing
  - hydrogen cyanide, [Formaldehyde](#), [Lead](#), [Arsenic](#), Ammonia, uranium, [Benzene](#), Carbon monoxide, Nitrosamine, Polycyclic aromatic hydrocarbons (PAHs)
- 16 million Americans living with smoking-related disease. Causes cancers, heart disease, stroke, lung diseases like COPD, peripheral vascular disease, erectile dysfunction



shutterstock.com • 606112535



# Quit Smoking!

- People do try to quit, but it may take multiple attempts to quit for good
- CDC: 1-800-QUIT-NOW,
- App quitSTART, text SmokefreeTXT
- IL Tobacco Hotline: 1-866-QUIT-YES
- [smokefree.gov](http://smokefree.gov), [cdc.gov/quit](http://cdc.gov/quit)
- Tell your PCP, family, and friends
- Set a quit date and make a plan
- Avoid temptations, like coffee
- Healthy snacks, exercise, meditation
- Meds: nicotine replacement– patch, gum, lozenge, spray; wellbutrin, chantix
  - E-cig/vaping not recommended
- SET, CHOOSE, DECIDE, PREPARE, QUIT (AHA)
- Your health, and your bank account, will thank you! Economic cost \$300 billion/yr!



# PREVENTIVE SCREENINGS

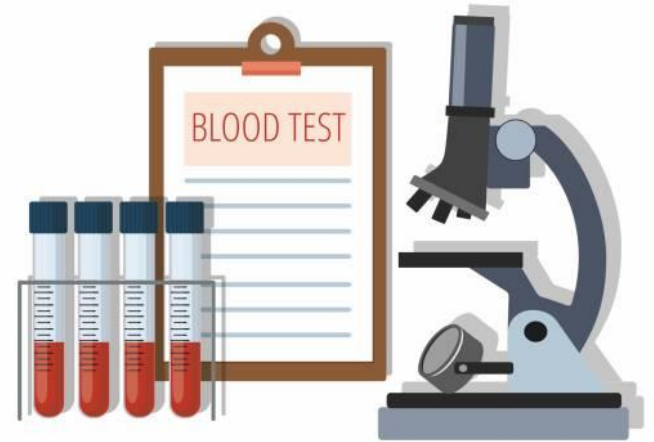
- Based on US Preventive Services Taskforce Recommendations
- A & B recommended screenings are recommended, moderate to substantial benefit
- C is selectively recommended/small benefit
- D is discouraged to screen
- I insufficient evidence to recommend for or against screening



# Routine Blood Tests

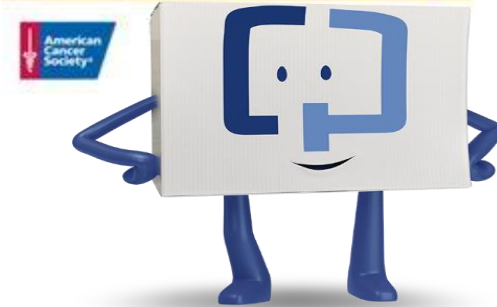
Typical panel may include:

- CBC – blood count
- CMP – liver, kidney, electrolytes, fasting glucose
- Lipids –fasting cholesterol
- TSH –thyroid function
- Vit D level
- A1c –if risk factors for diabetes
- Hepatitis C screening – once-in-a lifetime screening
- HIV Screening- 18-65yo at least one screening but can be more often
- Other labs ordered based on your medical conditions and symptoms, e.g. prenatal panel for pregnant patients, STD testing, etc.



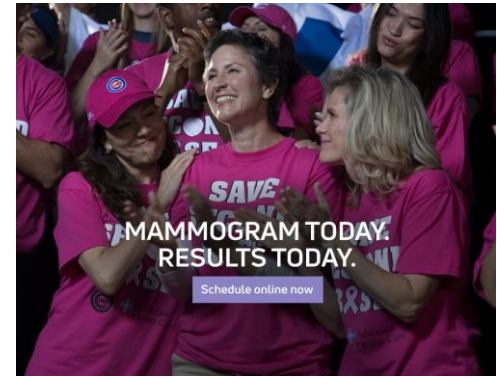
# Colon Cancer Screening

- Colonoscopy
  - Start at age 50 yrs old and continue until age 75 yrs old
  - If family history, may start sooner, 10 years prior to age of first degree relative diagnosed with colon cancer
  - If normal, repeat every 10 years; If polyps are found, may need to repeat at shorter intervals
- Cologuard
  - Widely available, detects cancers and precancers by detecting blood and DNA changes in the stool
  - sensitive and specific, detects 92% colon cancers, but 8% false neg, 13 % false positive
- FIT test
  - 72% detection rate
  - Yearly
  - Detects blood in stool



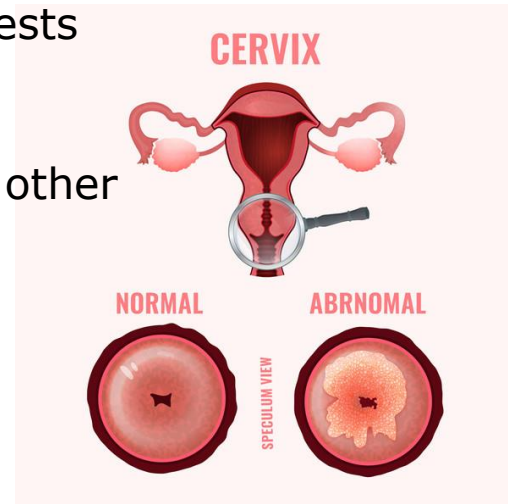
# Breast Cancer Screening

- 250,000 new cases in women yearly, 2,300 in men yearly
- 42,000 women and 510 men die yearly
- Yearly mammograms start at age 40 yo (50yo at the latest) or 10 years prior to first degree relative age at diagnosis with breast cancer
- If increased breast density seen, a breast screening ultrasound (ABUS) may be offered to provide more thorough imaging.
- MRI also offered in certain cases, if lifetime risk based on family history >20%
- If normal, repeat yearly
- USPSTF recommends stop at age 75yo, but may continue if desired and beneficial
- If family history of breast cancer with +BRCA 1/2, consider genetic counseling for testing



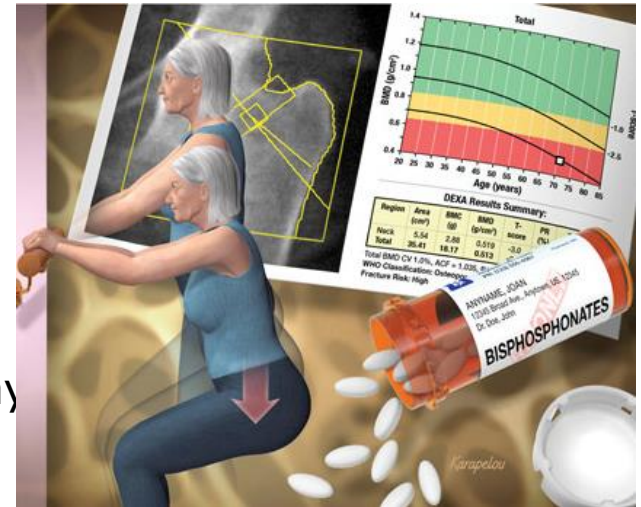
# Cervical Cancer Screening

- HPV Vaccine protects against 9 most common strains of Human Papilloma Virus that is known to cause cervical cancer
  - Generally 9-26 yrs, but it may now be given 27-45 yrs
  - 3 dose for 15 yrs and older at 0, 1-2, 6 month intervals
- Pap smears every 3-5 years
  - 21-29 yo: Every 3 yrs with testing cells only, if abnormal, tests for HPV
  - 30- 64yo: Every 5 yrs with co-testing of cells and for HPV
  - Pelvic exam performed during the paps and if necessary at other visits



# Osteoporosis screening

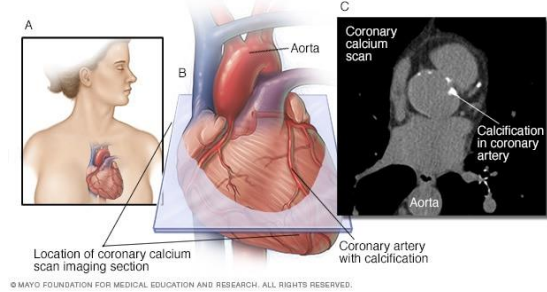
- Bone loss worsens with age, affected by family history, menopause, health conditions, medications, diet lacking calcium and vit d, sedentary lifestyle
- Vit d and calcium are building blocks for your bones
- Recommend screening at 65yo but may start earlier
- DEXA scan is an xray of the lumbar spine
- T-score reflects relative bone density
- Osteopenia -1 to -2.5 std dev below normal
- Osteoporosis is -2.5 or more std dev below normal
  - Vitamin D 2000 units/day and Calcium 1200mg/day
  - Weight-bearing exercises
  - Meds: Fosamax, Prolia, Reclast





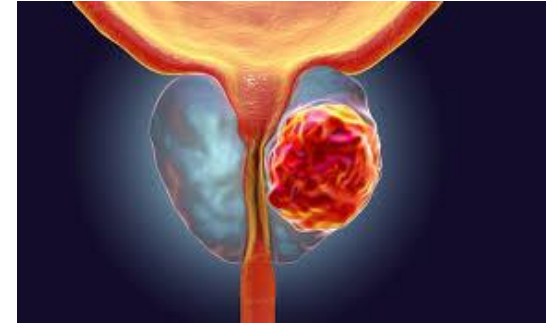
# Heart Scan

- Low dose CT scan of the Coronary arteries
- Measures the amount of calcium in the coronary arteries to give a coronary artery calcium score
- Score correlates with risk of a heart attack
- Male >45yo, Female >55yo
- Family history
- High blood pressure, High Cholesterol, Obesity, Diabetes, Smoker, Depression, Sedentary lifestyle
- This is not a diagnostic cardiac test, like a stress test that looks for signs of ischemia (lack of blood flow to the heart), echo (looks at heart's ability to pump and valve function), or an ekg (electrical conduction across the heart)



# Prostate Cancer Screening

- PSA Prostate specific antigen testing- blood test
- Men aged 55-69yo, recommendation is individual decision based on discussion of benefits vs harms
- Not rec'd in men 70yo and older but can still be done if requested
- If family history, consider starting screening earlier in 40s
- Potential Benefits of screening?
  - Reduce mortality with early diagnosis and treatment
- Potential harms?
  - False positive, most frequently from BPH
  - Treatments sometimes result in urinary incontinence, ED
- Do not get PSA drawn right after a digital rectal/prostate exam, bike riding, recent intercourse, prostatitis



# Skin cancer screening

- 1 in 5 Americans will develop skin cancer in their lifetime
- Avoid excessive sun exposure-every sunburn increases risk of skin cancer
- Sunscreen Spf-30 or higher reapply every 2 hours and sunshirts, wide-brimmed hats
- No tanning salons!
- Keep a log of moles
- Discuss with PCP or see Dermatologist for skin check

## DO YOU KNOW THE DIFFERENT TYPES OF SKIN CANCER?



### BASAL CELL CARCINOMA

- Most common form of skin cancer
- Often found on head, neck and arms



### SQUAMOUS CELL CARCINOMA

- Second most common form of skin cancer
- Often appears as red bump, scaly patch or sore that doesn't heal



### MELANOMA

- Deadliest form of skin cancer
- Can spread quickly to other parts of body if not diagnosed early



AMERICAN ACADEMY OF DERMATOLOGY | ASSOCIATION

## 1 The ABCDEs of Melanoma What to Look for:

Melanoma is the deadliest form of skin cancer. However, when detected early, melanoma is highly treatable. You can identify the warning signs of melanoma by looking for the following:

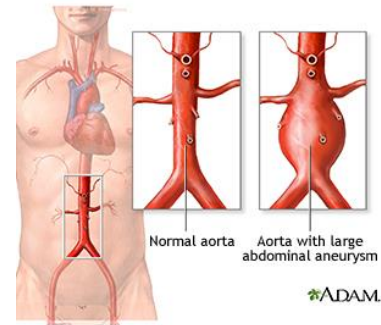


Example:



# Special Screenings

- For current and former smokers
- Lung Cancer screening = Low dose Chest CT Scan
  - Ages 50-80 with 20 pack year smoking history, current smoker or former smoker who quit within 15 years
  - Screen annually until >15 yrs since quitting smoking or unwilling to seek curative treatment if screening is abnormal
  - 16% relative reduction in lung cancer mortality
- Abdominal Aortic Aneurysm screening = Ultrasound Abdominal Aorta
  - One-time US for men 65-75 yo with any smoking history (cat B), less beneficial for men without smoking history
  - Not rec'd for women with or without smoking history



# Other Screenings

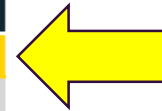
- Annual vision exams
  - Wear glasses/contacts if needed
  - Screen for cataracts, glaucoma, macular degeneration
- Dental exams and cleanings twice yearly
  - Brush and floss 2x/day, mouthwash
  - Avoid late-night munching and sugary drinks



# Vaccinations

**Table 1** Recommended Adult Immunization Schedule by Age Group, United States, 2020

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV) <sup>or</sup> Influenza live, attenuated (LAIV)	1 dose annually			
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV) (preferred) <sup>or</sup> Zoster live (ZVL)			2 doses <sup>or</sup> 1 dose	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal conjugate (PCV13)	1 dose			65 years and older
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication			1 dose
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2 or 3 doses depending on vaccine			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
Haemophilus influenzae type b (Hib)	1 or 3 doses depending on indication			



FLU SHOT!



TDAP EVERY 10 YEARS



SHINGRIX



PREVNAR13  
PNEUMOVAX

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended vaccination for adults with an additional risk factor or another indication

Recommended vaccination based on shared clinical decision-making

No recommendation/ Not applicable

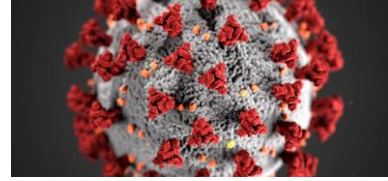
# Mental Health

- Anxiety and Depression are increasing during this pandemic
- Mood disorders occur when there is an imbalance brain's chemical serotonin that helps control one's mood, making it harder to cope with life's stresses. Tends to run in families but can be triggered by stress.
- See your PCP to help make a diagnosis
  - Anxiety → GAD-7: feeling nervous/anxious/on-edge, excessive worrying about different things, unable to control worrying, mood irritability, trouble relaxing, restlessness, feeling of impending doom
  - Depression → PHQ-9: feeling down, depressed, hopeless, lack of interest/motivation, poor sleep, change in appetite, feeling guilty, inability to concentrate, moving slowly, and sometimes, self-harm or not wanting to be around
- Make time to unwind, self-reflection, meditation or prayer
- Good sleep hygiene, along with healthy diet and exercise
- Therapy and/or medication may be recommended



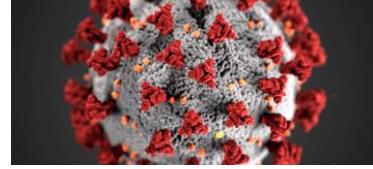


# COVID-19

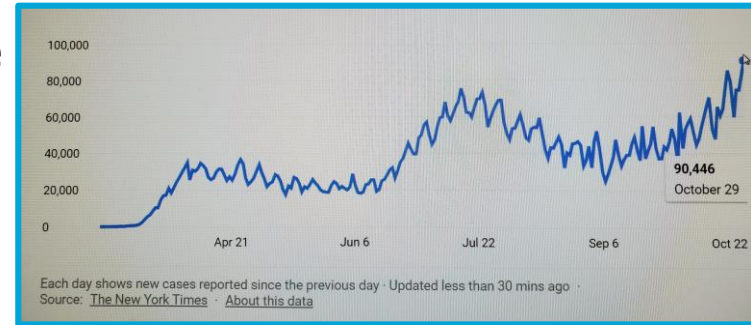


- 8,752,794 cases with 225,985 deaths in US per CDC time from exposure to onset of symptoms may be 2-14 days
- Variety of Symptoms—fever, cough, shortness of breath, fatigue, headache, loss or alteration of taste or smell, nausea, body aches, diarrhea, chest pain, sore throat, etc. May be asymptomatic in some patients.
- 8,752,794 cases with 225,985 deaths in US per CDC
- If feeling any symptoms, quarantine 10 days from symptom onset—stay home, avoiding sharing room/bathroom! May return to work/school after this period if feeling better and no fevers for at least 24-48 hours.
- Recommend getting tested- PCR nasopharyngeal swab
- Close contact of those with COVID-19- quarantine for 14 days with daily monitoring for fevers, other symptoms; may seek testing 48 hrs after exposure but still complete 14 day quarantine despite test results
- Treatments vary from supportive measures to full medical care in an ICU setting

# COVID-19



- Significant stress on family members of all ages, from children, parents, grandparents and other elderly—everyone is feeling the physical, mental/emotional, socioeconomic strain due to this pandemic
- 100 vaccines are in development, 36 are in clinical evaluation phase
- Unclear when vaccine will be ready, but in the meantime, we have to mitigate risks with:
  - Social distancing, staying home as much as possible, avoid socializing outside of immediate family
  - Maintaining 6 feet distance when out of home
  - Wearing a mask when out of home
  - Washing hands or alcohol sanitizer




**We will emerge from this hardship stronger together!**

# References

- Advocate Health Care [www.advocatehealth.com](http://www.advocatehealth.com)
- American Academy of Dermatology [www.aad.org](http://www.aad.org)
- American Cancer Society [www.cancer.org](http://www.cancer.org)
- American Heart Association [www.heart.org](http://www.heart.org)
- Association of American Family Physicians [www.aafp.org](http://www.aafp.org)
- Centers for Disease Control [www.cdc.org](http://www.cdc.org)
- Harvard Health Publishing [health.harvard.edu](http://health.harvard.edu)
- United States Department of Agriculture [www.choosemyplate.gov](http://www.choosemyplate.gov)
- United States Preventive Services Task Force.  
[www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org)
- World Health Organization [www.who.org](http://www.who.org)



 Advocate Health Care

We are  AdvocateAuroraHealth

 Advocate Health Care

We are  AdvocateAuroraHealth



Yasmeen Khan, MD  
Advocate Medical Group  
4900 Main St, Downers Grove, IL  
(630) 963-5440

[https://care.advocatehealth.com/  
doctors/yasmeen-khan-downers-  
grove-family-medicine](https://care.advocatehealth.com/doctors/yasmeen-khan-downers-grove-family-medicine)