

# Support for Native Caregivers & Family

## FREE In-Home Respite Care

50 hours of in-home care to support you and your loved one living with memory issues

Apply at: <https://bit.ly/ia2respitcare>

## FREE Virtual Support Groups

Free online support groups for caregivers or family of Native elders living with memory issues

Learn more at: <https://iasquared.org/?p=2174>

Are you a caregiver?

If you are caring for a parent, spouse, friend or relative, then you are a caregiver.

*Caregiving is hard, you don't have to do it alone*



Partnering to Improve the Wellbeing of Native Elders & Caregivers During COVID-19 & Beyond

Funding provided by the CDC Foundation



*Offer feedback on  
community resources*

SHARE YOUR NEEDS

**HELP US CREATE A  
SITE USEFUL TO YOUR  
WORK**

*Make your voice heard*

**Walmart**  
Gift Card

The International Association for Indigenous Aging (IA<sup>2</sup>) would like you to participate in a Virtual Talking Circle to share your thoughts on the new American Indian and Alaska Native Brain Health website.

## HEALTHY BRAIN WEBSITE TALKING CIRCLE

Registration is limited!

Participants who attend the session and complete a survey will receive a Walmart gift card!

**1:00PM TO 2:30PM ET  
NOVEMBER 2, 2021  
[CLICK TO REGISTER](#)**



Follow our page at [aianBrainHealth.org](https://aianBrainHealth.org)  
We look forward to seeing you there!

Scan the  
QR Code  
to Register





Welcome!

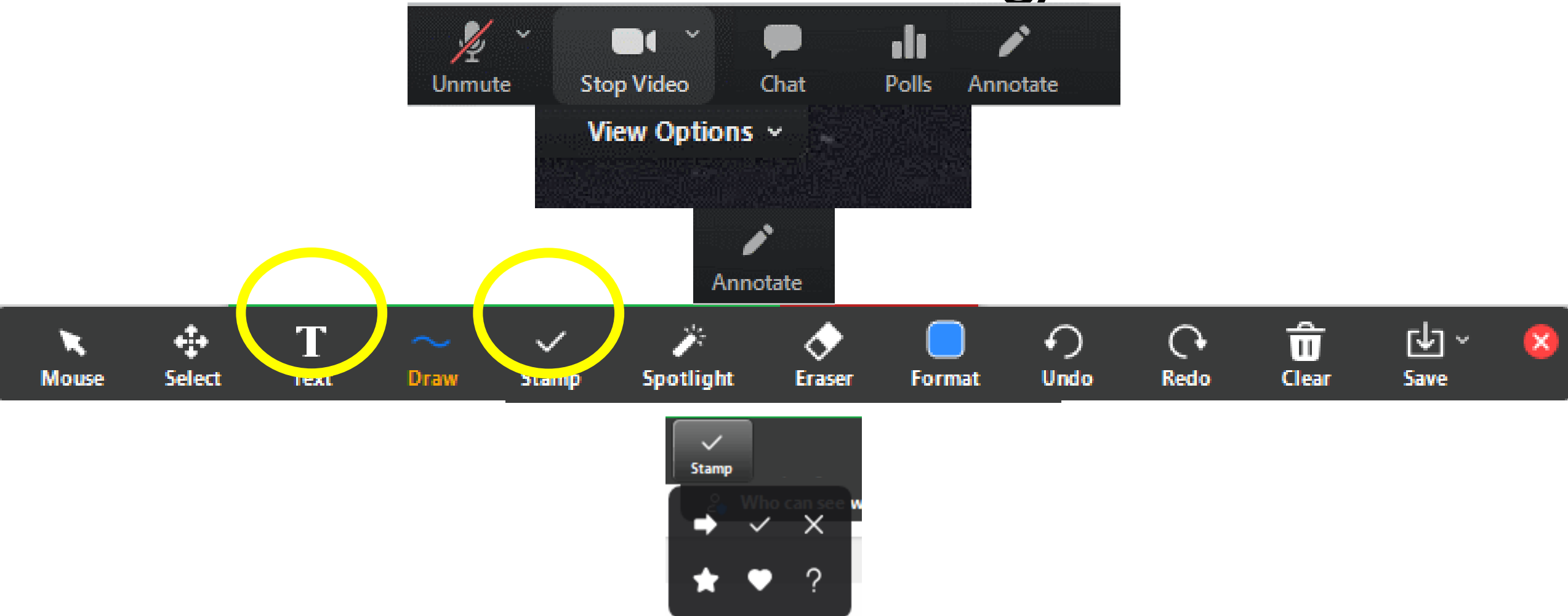
Opening Prayer



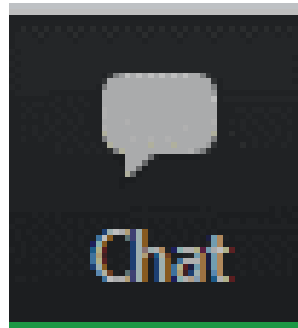
# Before We Begin...

- Please complete the pre-test (link in chat box)

# Use of Technology



# Questions on Content?



## Poll Feature

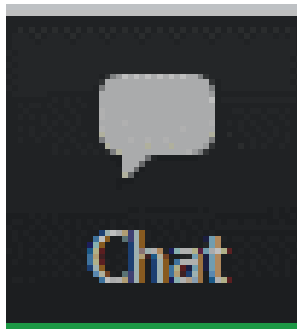
1. I'm most excited to learn about: (Single Choice) \*

☐ Health Promotion and Healthy Habits

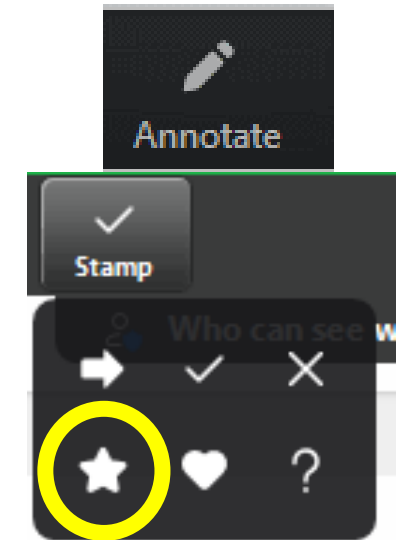
☐ Living with Chronic Conditions

Try It Out!

IT / Issues? – chat HOST/Jamie



Try It Out! – Show us where you're joining us from!





# Get To Know...

- The National Resource Center on Native American Aging / Facilitators
- Each other! Please share the following:
  - Name
  - Title
  - Tribal Affiliation (Personal and/or Professional)





# Native Elder Caregiver Curriculum (NECC)

Brought to you in partnership with the International Association for Indigenous Aging  
with funding from the CDC Foundation



# SECTION I: Health Promotion & Healthy Habits



# Objectives

At the end of the session, participants will:

1. Know the meaning of health promotion
2. Recognize healthy habits
3. Identify simple ways to incorporate health promotion and healthy habits into everyday living for elderly and caregivers

# Things To Think About *(1 & 3)*

As the material is presented, keep in mind the following points:

- In 2017, the number of American Indian and Alaska Native elders 65 and older was 272,250; that number is expected to triple to 648,000 by 2060.
- The oldest old (85+) increases more than 7x by 2050
- Current life expectancy for American Indians and Alaska Natives is 5.5 years less than the general population
- American Indian/Alaska Native people have higher rates of chronic diseases than other ethnic groups in the United States
- A pathway to improved life expectancy and quality of life is health promotion and chronic disease management



# Health Promotion

- WHO definition “the process of enabling people to increase control over, and to improve their health” (4).
- Goal of health promotion “how to get and stay healthier”. This is different from “treating diseases”.
- Approximately 80% of older adults have at least one chronic disease, and 50% of older adults have two or more chronic health conditions
  - Heart disease, respiratory problems, cancer, diabetes, and stroke are the most common types of chronic conditions.
- Impact the ability to perform activities of daily living (ADLs) and instrumental activities of daily living (IADLs).
  - ADLs involve bathing, dressing, and grooming.
  - IADLs are managing medications and shopping. (6)

# Health Promotion

Native Elders are traditionally respected and remain committed to future generations.

*“Elders can share knowledge about how to understand, solve, and prevent problems...Elders speak strongly about cultural values and rules on how to conduct oneself within the family and community...Through elders, wisdom becomes a living oral knowledge applied to current contexts.” (5)*

# Balance as a Primary Health Goal



# HEALTHY HABITS

## Oral Health

- Dietary health starts with oral health
- The NRCNAA's survey of thousands of Native Elders; Identifying our Needs: A Survey of Elders VII (2017-2019) identified two areas of dental needs:
  - 26% of Elders need teeth to be filled or replaced
  - 24% need work on dentures
- Preventative health care



# Food & Nutrition



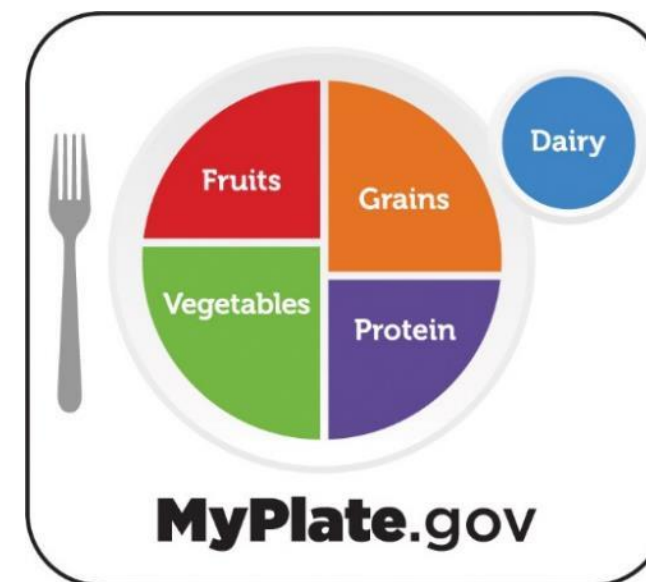
- Nutrition is fuel for the body
- 43.8% of older adults over 60 are obese
- Obesity puts elders at risk for chronic diseases
- Historically, many of the natural foods were introduced by Native Americans
- Processed foods have replaced traditional foods
- Challenges to eating healthy
- Programs such as THRIVE (Tribal Health and Resilience in Vulnerable Environments)

## Benefits of healthy nutrition can positively impact chronic diseases and can be lifesaving

The “Choose MyPlate 10 Tips to a Great Plate” includes ten tips to a “great plate”. (//)

### “Tips to a Great Plate”

1. Balance Calories
2. Enjoy your food but eat less
3. Avoid oversized portions
4. Foods to eat more often
5. Make half your plate fruits and vegetables
6. Switch to fat-free or low-fat (1%) milk
7. Make half your grains whole grains
8. Foods to eat less often
9. Compare sodium in foods
10. Drink water instead of sugary drinks



# Special Dietary Instructions for Specific Health Conditions

For elders who have certain chronic conditions like diabetes, hypertension (high blood pressure), hypercholesterolemia (high cholesterol) and obesity, it is beneficial to visit with a nutritionist or dietitian regarding any special dietary guidelines. Many IHS clinics have dietician resources and some of the Special Diabetes Programs for Indians (SDPI) programs have their own dietician or nutrition educator.

# Fluids/Hydration *(12)*

- Dehydration
  - Aging changes
  - Functional ability
  - Decreased thirst sensations contribute to dehydration problems
- The required amount of water intake does not change with age.
  - Six to eight glasses of water a day



# Smoking Cessation

Health effects of smoking cessation are so beneficial that if a person can make one change for better health, quitting smoking would be the best possible change.

- Effects of Smoking
  - Systemic
  - Causes respiratory disease
- Smoking is addictive
  - Difficult quitting
  - Websites provide plans such as [smokefree.gov](http://smokefree.gov)
- Smoke free gives these suggestions for quitting:
  - Choose a day in the next week or two to quit to prepare yourself
  - Set yourself up for success, pick a date that is not going to be stressful
  - Tell your family and friends that you are deciding to quit so they can be supportive

# Smoking Cessation

The National Cancer Institute provides the following suggestions to stop smoking *(14)*

## Interventions

- Counseling
- Medication
- Smoking reduction

## Benefits are seen even within 20 minutes:

- 20 minutes after quitting
- 12 – 24 hours after quitting
- 2 weeks – 3 months after quitting
- 1 to 9 months after quitting
- 1 year after quitting
- 5 to 15 years after quitting
- 10 years after quitting
- 15 years after quitting

# Second-Hand Smoke

Outside of use in ceremonies, it is difficult to find good reason for smoking. Second-hand smoke can be hard on the health of others in home or work settings and is especially hard on children's young lungs. Children and grandchildren often suffer increased rates of respiratory illnesses, such as asthma, when they are exposed to secondhand smoke, and they are also be more likely to become smokers themselves. Most people who do not smoke by age 25 will not become smokers. It is very beneficial to youth to not be exposed to second-hand smoke, and to have role models in their families who do not smoke.

(5)



# Sleep (16 & 5)

- Recommend seven and eight hours of sleep every night.
- Benefits of sleep
  - Help cleanse the brain and body of toxins
  - Sleep helps develop as well as sustain memory
- Sleep habits
  - Sleep less in shorter blocks of time
  - Take longer to fall asleep
  - Wake up more at night
  - Wake up earlier in the morning
- Sleep diary



# Managing Stress is Good Medicine

- Stress is part of living
- Too much stress is unhealthy
- Stress can be from a response to disease, disability, challenges with family, etc
- Stress response
  - Sympathetic  
Fight or flight – goal is survival!
  - Parasympathetic  
Get body back to normal state
- Our bodies are not made to live with continual high emotional stress

# Long-term Stress

- Whatever the stressor, the body reacts to survive
- Stress lasts too long affects the person physically, emotionally and unable to maintain normal function
- Everyone reacts differently
- American Heart Association recommends helpful tips
  - Positive Self-Talk
  - Emergency Stress Stoppers
  - Enjoyment of little things

# Exercise

## Benefits of Exercise

- Reduce pain
- Helps with blood glucose control
- Helps decrease falls
- Brains behave younger
- Generate new brain cells

## CDC recommends

- 150 minutes moderate exercise
- Muscle-strengthening exercises 2 times a week
- Half-hour of exercise daily

## Summary of 2008 Physical Activity Guidelines

1. “some exercise is better than none”
2. “additional benefits of exercise occur as the amount of physical activity increases”
3. “regular physical activity reduces the risk of many adverse health outcomes”
4. “health benefits of physical activity happen in all age groups, and even for people with disabilities”. (21)

**In terms of disease prevention, regular physical activity can lower the risk of:**

- earlier death
- coronary heart disease
- stroke
- high blood pressure
- Type 2 diabetes
- breast and colon cancer
- falls
- depression



**Exercise tips:**

- Difficulty accessing a gym
- Discuss activity with provider
- Exercise does not have to involve equipment
- Walking trails
- Special Diabetes Program for Indians



# Falls and Exercise



# Preventing Falls among Elders

Knowing specific risk factors that an elder may have for falls is the first step in preventing falls. Many risk factors can be modified through:

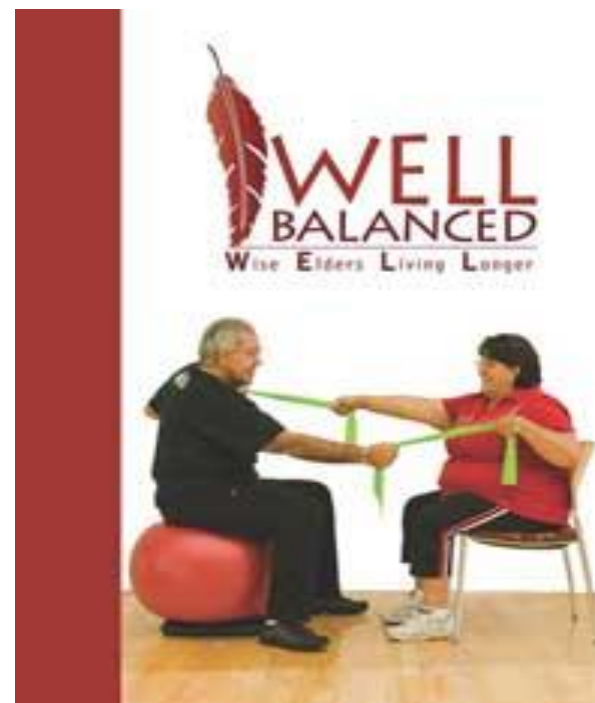
- balance
- strengthening exercises
- training in the use of adaptive equipment
- home safety assessments

**Falls are the leading cause of injury deaths for American Indian elders age 65 and over, according to the Centers for Disease Control and Prevention**

# Wise Elders Living Longer (WELL-Balanced)

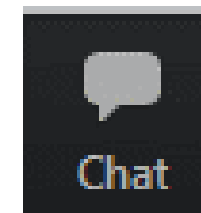
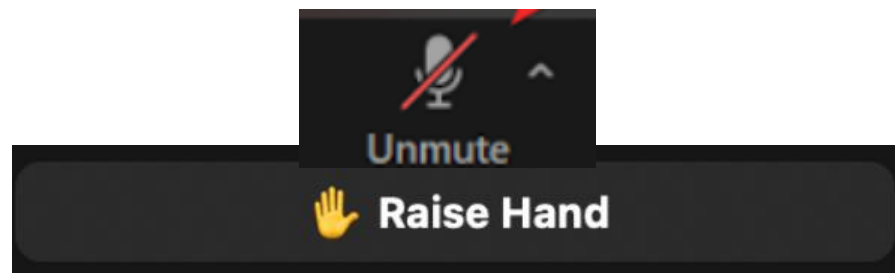
The “Well-Balanced Program”  
is designed to help elders:

1. prevent falls
2. manage diabetes, arthritis, and hypertension
3. engage in social activity
4. increase their level of exercise
5. develop strategies for independent living



# ACTIVITY

What evidence-based or evidence-informed programs exist in your community to address chronic conditions, health promotion, and healthy habits?





# POLL

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# Additional Websites

1. Tips to a Great Plate website:

[https://dc.statelibrary.sc.gov/bitstream/handle/10827/21198/DHEC\\_Choose\\_MyPlate\\_2016-04.pdf?sequence=1&isAllowed=y](https://dc.statelibrary.sc.gov/bitstream/handle/10827/21198/DHEC_Choose_MyPlate_2016-04.pdf?sequence=1&isAllowed=y)

2. The NHLBI has also published a cookbook that features heart healthy American Indian recipes:

<https://www.nhlbi.nih.gov/health/educational/healthdisp/pdf/recipes/Recipes-Native-American.pdf>





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# SECTION 2: Living with Chronic Conditions





# Objectives

At the end of the section, participants will:

1. Identify the most common chronic diseases experienced by American Indian Elders.
2. Learn about common chronic health conditions that many elderly live with on a day-to-day basis.
3. Learn to focus on the “care” of the person with the chronic health condition, when a “cure” is not possible.
4. Discuss treatment and interventions available for chronic health conditions.



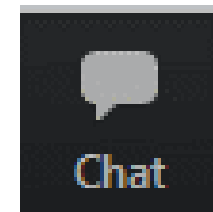
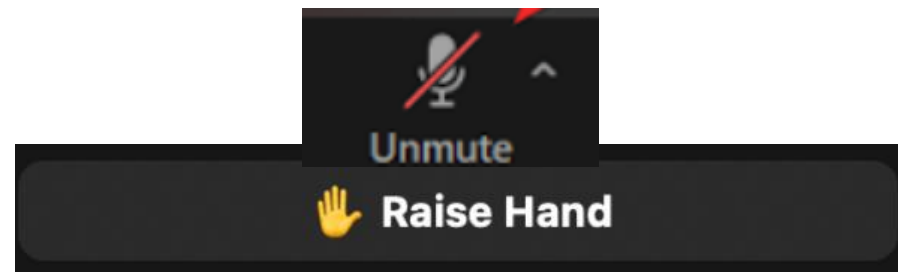
# Things To Think About

As the material is presented, keep in mind the following points:

- NRCNAA findings: high blood pressure, arthritis, diabetes, cataracts, and depression
- This session will focus on several of the chronic diseases that were mentioned in session I, Normal Age Related and Expected Changes in Aging
- Main goal of chronic conditions is to maintain current level vs. cure
- Secondary goal is to receive appropriate treatments

# Activity

What questions do you have about heart disease?



# Heart Disease

## Hypertension

- One of the most preventable contributors to cardiovascular disease and death
- Silent killer
- Most common diagnosis seen in primary care
- Contributes to 45% of deaths due to heart disease
- 51% of deaths due to stroke



# Heart Disease

## Hypertension

- Blood Pressure (BP) definition
  - Normal, elevated, stages one or two
  - Systolic top
    - pressure when heart beats
  - Diastolic bottom
    - pressure when heart rests

### Normal BP

- Systolic below 120
- Diastolic below 80

### Elevated BP

- Systolic between 120 - 129
- Diastolic below 80

### Stage One

- Systolic between 130-139 or
- Diastolic between 80-89

### Stage Two

- Systolic greater than or equal to 140 or
- Diastolic greater than or equal to 90

# Types of Hypertension

## Primary

- Unknown cause

## Secondary

- Underlying cause

## White coat

- Happens at the providers office

## Orthostatic

## HYPOTENSION

- Postural
- When BP drops: 20 systolic or 10 diastolic



# Changes in the Cardiovascular System

## Increase in cardiac output

- Amount of blood the heart pumps through the system in a minute
- Stroke volume and heart rate determine cardiac output

## Increase in peripheral resistance

- Valves thicken and become more rigid
- Decrease in amount of blood coming in and out of the heart

# Risk Factors

## Non-modifiable

- Gender
- Race
- Age

## Modifiable

- Tobacco use
- Blood pressure control
- Blood sugar control
- Elevated cholesterol
- Obesity
- Lack of exercise

**“Modifiable” risk factors are things you can change.**

# Contributing Factors for Hypertension

- ❖ Aging – major factor
- ❖ Stress
- ❖ Diabetes
- ❖ Lifestyle factors
  - Smoking
  - Obesity

# Management of Hypertension

Treatment for the different types of hypertension include:

- Non- pharmacological
    - Lifestyle modifications
  - Pharmacological
    - Easier to choose
- Normal BP
    - Yearly evaluation
  - Elevated BP
    - Goal of treatment is a BP less than 130/80
    - Start with non-pharmacological interventions
    - Reevaluate in 3 – 6 months
  - Stage I
    - Goal of treatment is a BP less than 130/80
    - Begin with non-pharmacological interventions along with an antihypertensive medication
    - Reevaluate in one month
  - ❖ Stage 2
    - Goal of treatment is a BP less than 130/80
    - Begin with non-pharmacological interventions along with two antihypertensive medications from different classes
    - Reevaluate in one month

# Living with Hypertension



Lifestyle modifications include:

- Diet - Low or reduced salt intake
- Stop smoking
- Exercise
- Weight loss
- Control blood sugar
- Limit alcohol intake
- Reduce stress



# Living with Hypertension



## Antihypertensive agents:

- Thiazides
  - Hydrochlorothiazide (HCTZ)
- Calcium Channel Blockers
  - Amlodipine
- Angiotensin Converting Enzyme Inhibitors (ACEIs)
  - Lisinopril
- ARB (Angiotensin Receptor Blockers)
  - Losartan
- Beta Blockers
  - Metoprolol

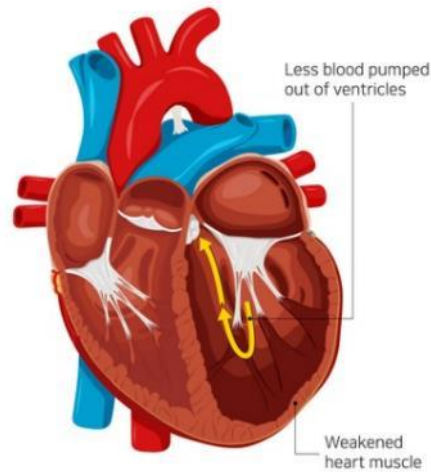
# Heart Failure

- Damage to the myocardial function
- 20% of those 40 years and older
- 5-year mortality rate of 50%
- 4<sup>th</sup> most common discharge diagnosis from the hospital over 65
- Hospital readmissions within 30 days increase mortality
- More common in men, more common in women in LTC
- African Americans have the highest rate

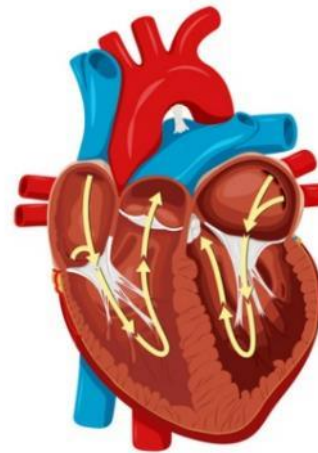
# Types of Heart Failure

## HEART FAILURE

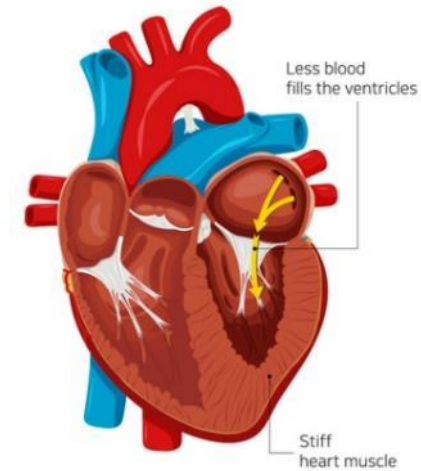
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Systolic Dysfunction



Normal



Diastolic Dysfunction

# Types of Heart Failure

## Left Sided

- Left ventricle works the hardest
- Heart fails to pump blood to the body
- Fluid starts to back up into the lungs
  - Shortness of breath
  - Fatigue
  - Abnormal lung sounds

## Right Sided

- Result of left sided heart failure
- Fluid backs up into the right side of the heart
- Backs up into the extremities

# Signs and Symptoms <sup>(6)</sup>

There are several sign and symptoms of heart failure.

They include:

- Shortness of breath upon exertion, and even at rest
- Chest pain/pressure and palpitations
- Tachycardia (fast heart rate)
- Fatigue and weakness
- Nocturia (frequent nighttime urination and oliguria (absence of urine)
- Anorexia, weight loss, and nausea
- Distention of neck veins
- Weak, rapid, and thread pulse
- Rales and wheezing in the lungs



# Diagnosing Heart Failure

- Review of symptoms
- Blood tests
  - Electrolytes (sodium and potassium)
  - Kidney and liver
- Chest X-rays
- Arterial Blood Gases

# Living with Heart Failure

## Non-pharmacological

- Managing symptoms
  - Oxygen
  - Reducing salt intake
  - Limiting oral intake
  - Monitor weight
  - Exercise

## Pharmacological

- Diuretics
  - Furosemide (Lasix)
- Vasodilators
  - Enalapril (Vasotec)
- Anticoagulants
  - Aspirin low dose
  - Warfarin (Coumadin)
  - Lovenox
- Digoxin
  - Lanoxin

# Myocardial Infarction (Heart Attack)

- Heart demands oxygen to function
- Not the right amount of oxygen
  - Can be due to Coronary Artery Disease
- Hypertension
- Hardening of the arteries.

# Symptoms of a Heart Attack



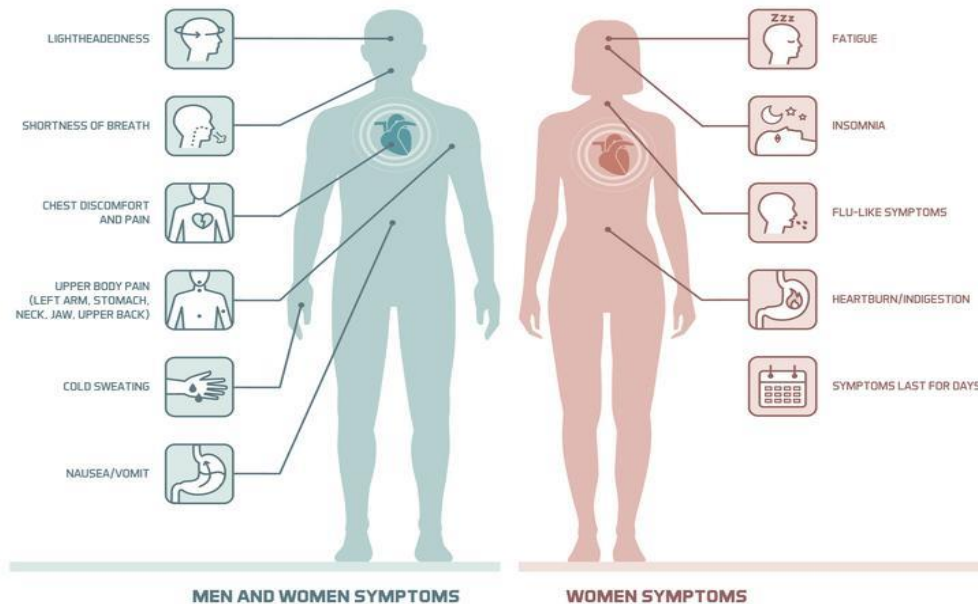
## HEART ATTACK SYMPTOMS

MEDICINE AND HEALTHCARE  
INFOGRAPHIC  
MEDICAL TREATMENT AND PREVENTION

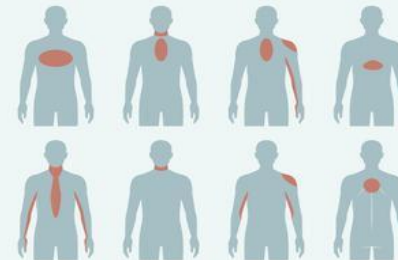
CARDIOVASCULAR HEALTH



### HEART ATTACK SYMPTOMS LOCATION



### HEART ATTACK PAIN LOCATION



### HEART ATTACK PREVENTION





# Diagnosing a Heart Attack

- Chest X-ray
- EKG
- Blood tests
  - Electrolytes
    - Potassium and sodium
  - Complete blood count
  - Cardiac enzymes
    - Indicates any damage to the heart muscle
      - Would be high if damage is done
    - Can be lower in the elderly
      - Leads to misdiagnosis

# Living with a Heart Attack

## Non-pharmacological

- Diet
- Stop smoking
- Stress reduction
- Exercise as appropriate

## Pharmacological

- Anticoagulants
  - Aspirin low dose
  - Warfarin (Coumadin)
- Angiotensin Converting Enzyme Inhibitors (ACEIs)
  - Lisinopril
- ARB (Angiotensin Receptor Blockers)
  - Losartan
- Beta Blockers
  - Metoprolol
- Statin
  - Atorvastatin

# POLL





*Offer feedback on  
community resources*

SHARE YOUR NEEDS

**HELP US CREATE A  
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*Make your voice heard*

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Follow our page at [aianBrainHealth.org](https://aianBrainHealth.org)  
We look forward to seeing you there!

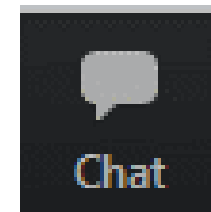
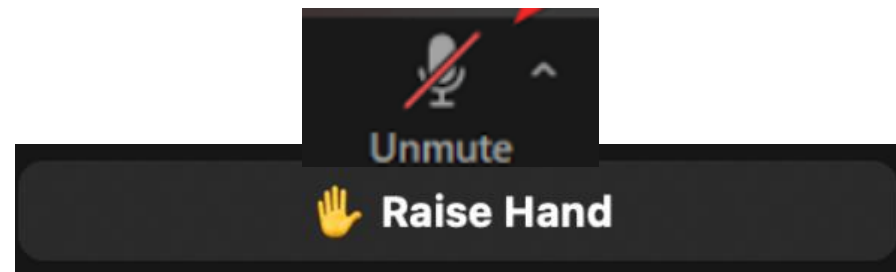
Scan the  
QR Code  
to Register





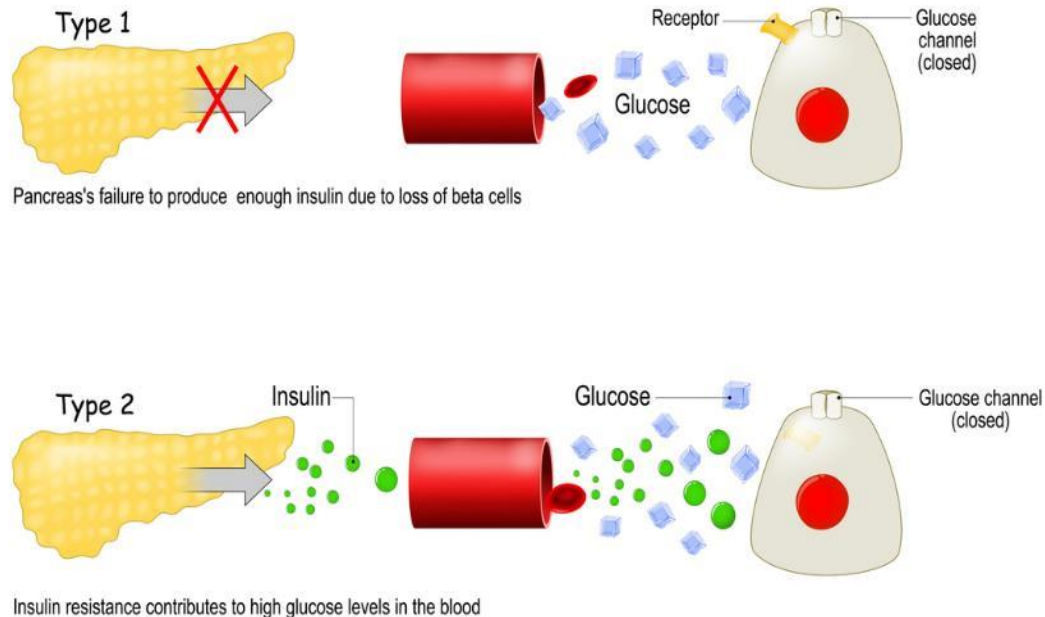
# Activity

What questions do you have about diabetes?



# Diabetes

## Diabetes mellitus



### Pancreas

- Insulin
- Glucagon

### Type 1

- Immune system attacks beta cells
- Beta cells produce insulin

### Type 2 (Native Americans & Alaska Natives highest prevalence)

- Insulin resistance
- Insulin deficiency
- Contributing factors
  - Family history
  - Hyperlipidemia
  - Gestational diabetes
  - Obesity
  - Smoking
  - High BP

# Diagnosing Diabetes

## 3 P's

- Polyuria
- Polyphagia
- Polydipsia

## Other symptoms

- Fatigue
- Sleep disorders
- Numbness of the limbs
- Blurred vision
- Poor wound healing



## DIABETES SYMPTOMS



ALWAYS THIRSTY



WEIGHT LOSS



FATIGUE



SLEEP DISORDERS



NUMBNESS  
OF THE LIMBS



BLURRED VISION



FREQUENT  
URINATION



DRY SKIN



VAGINAL INFECTIONS



ALWAYS HUNGRY



WOUNDS  
DO NOT HEAL



NAUSEA  
VOMITING

# Types of Blood Tests

## A1C

Result	A1C
Normal	Less than 5.7%
Prediabetes	5.7% to 6.4%
Diabetes	6.5% or higher

## FPG

Result	Fasting Plasma Glucose
Normal	Less than 100 mg/dL
Prediabetes	100 mg/dL to 125 mg/dL
Diabetes	126 mg/dL or higher

## OGTT

Result	Oral Glucose Tolerance Test
Normal	Less than 140 mg/dL
Prediabetes	140 mg/dL to 199 mg/dL
Diabetes	200 mg/dL or higher

# Living with Diabetes

## Prediabetes

- Blood sugar is high, not high enough to be considered diabetes

## Goal of treatment for type 2

- Blood glucose under control
- Diet
- Weight management
- Oral medications
- Injectable if beta cells are no longer working



# Living with Diabetes

## Oral hypoglycemic agents

Metformin

Sulfonylureas

- DiaBeta
- Glipizide

Glinides

- Repaglinide

Thiazolidinediones

- Rosiglitazone (Avandia)
- Pioglitazone (Actos)

DPP-4 inhibitors

- Sitagliptin (Januvia)
- Saagliptin (Onglyza)
- Linagliptin (Tradjenta)

SGLT2 inhibitors

- Canagliflozin (Invokana)
- Empagliflozin (Jardiance)

## Injectable medications

GLP-1 receptor agonists

- Byetta
- Liraglutide (Saxenda or Victoza)

Insulin

# Types of Insulin

Main types of insulin preparations				
Type	Onset	Peak	Duration	Comments
Rapid-acting insulin analogue	5-15 min	30-60 min	2-5 hr	Can be injected at the start of a meal
Short-acting (soluble/regular insulin)	30 min	1-3 hr	4-8 hr	Usually injected 15-30 minutes before a meal. Clear solution
Intermediate or long-acting insulin (isophane or zinc insulin)	1-2 hr (NPH, Lente) 2-3 hr (Ultralente)	4-8 hr 4-8 hr	8-12 hr (NPH) 8-24 hr (Ultralente)	Used to control glucose levels between meals. May be combined with short-acting insulin
Long-acting insulin analogue	30-60 min	No peak	16-24 hr	Usually taken once daily

# Hypoglycemia and Hyperglycemia

## Hypoglycemia

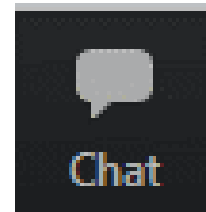
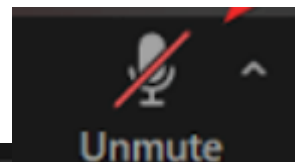
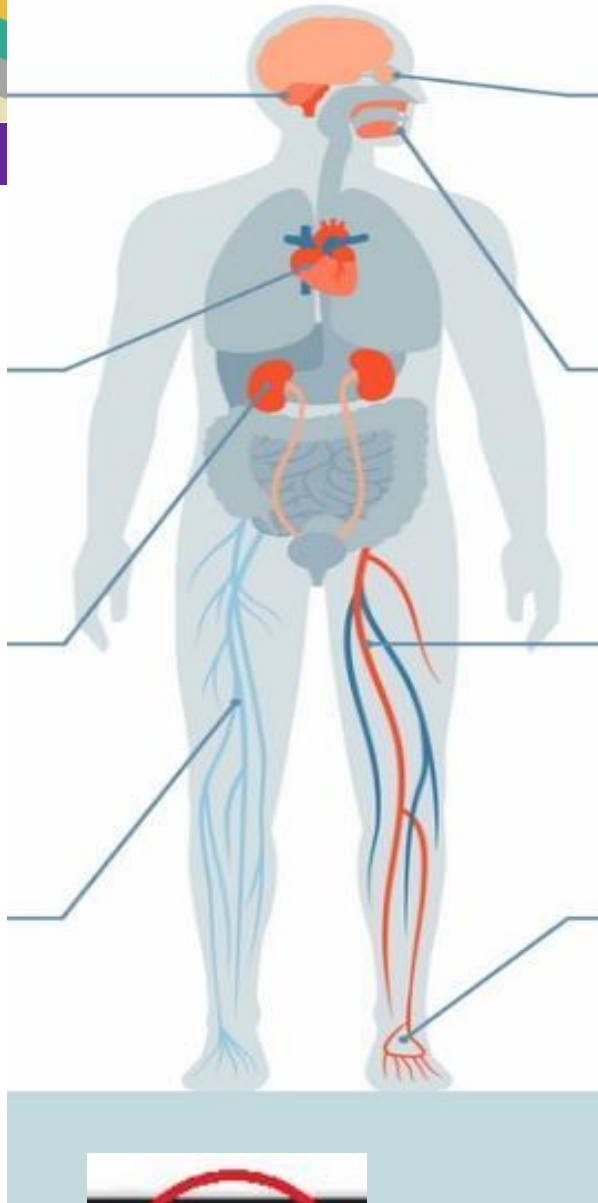
- Not enough sugar
- Symptoms:
  - Sweating
  - Pale
  - Irritable
  - Hunger
  - Lack of coordination
  - Sleepy

## Hyperglycemia

- Too much sugar
- Symptoms
  - Dry mouth
  - Increased thirst
  - Weakness
  - Headache
  - Blurred vision
  - Increase urination

# Activity

What long-term complications of diabetes have you experienced in your community?



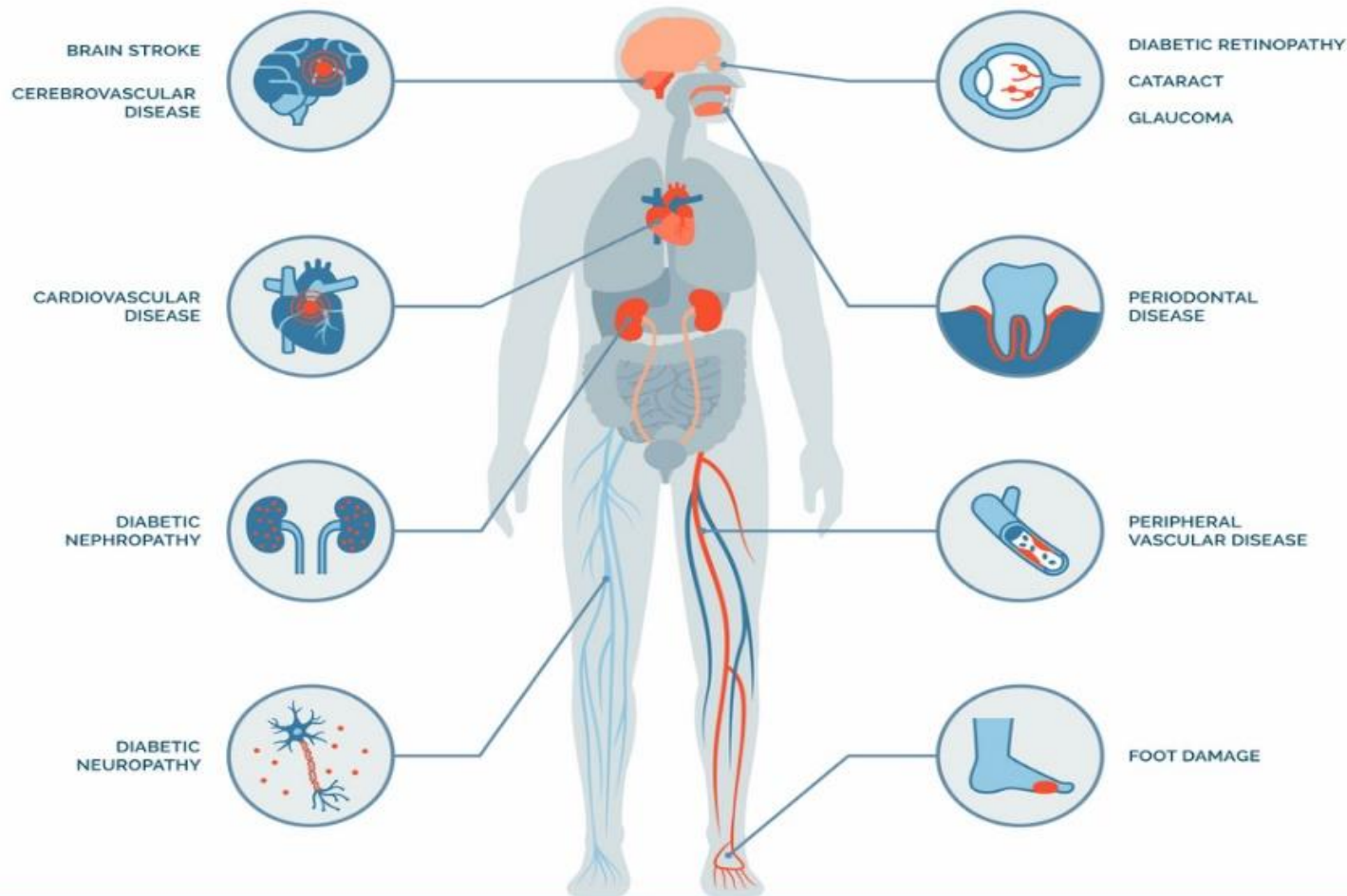


## LONG-TERM COMPLICATIONS OF DIABETES



Chronic Conditions

# Complications of Diabetes



Website with additional information on how diabetes affects the body:

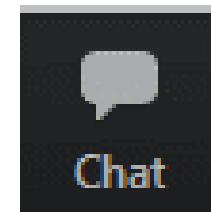
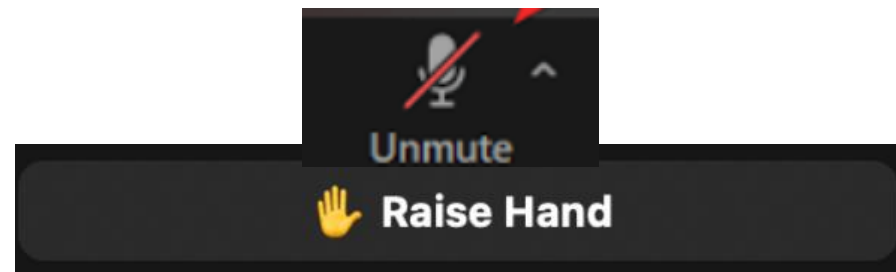
<https://www.healthline.com/health/diabetes/effects-on-body>



# POLL

# Activity

What questions/comments/concerns do you have about dialysis?



# Dialysis *(16)*

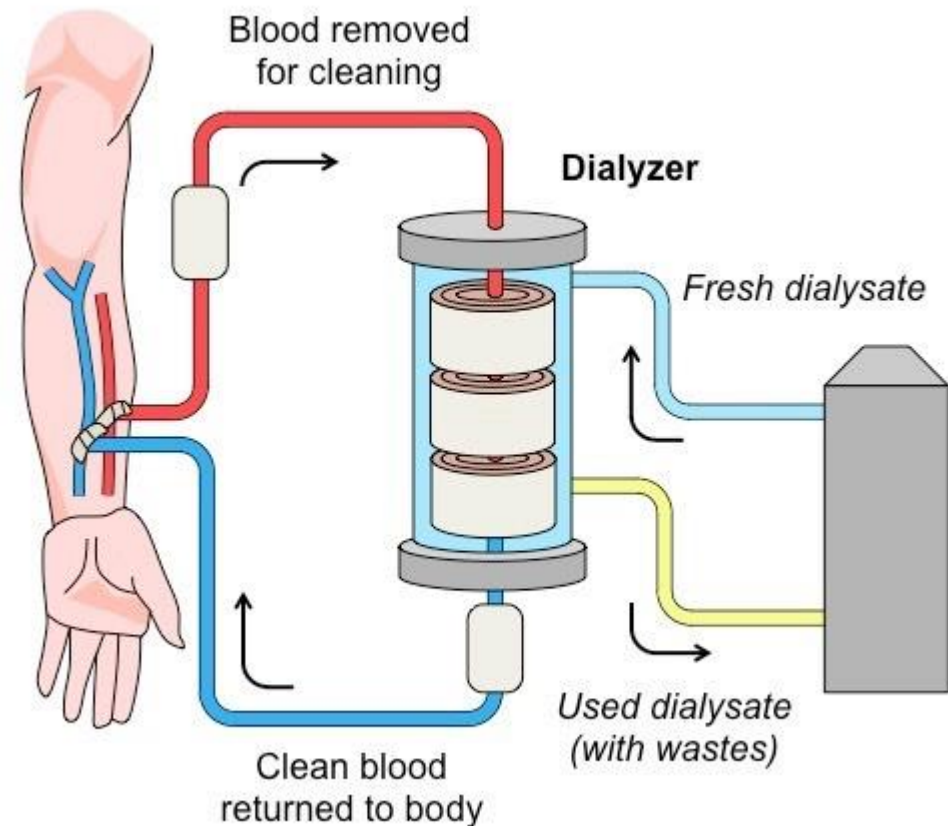
- Why do I need dialysis?
  - Kidneys fail
  - Kidneys are only functioning at 10 – 15%
- What is dialysis?
  - A process that removes waste, salt, and extra water from the system
  - Keeps certain elements in the blood at a normal level
    - Phosphorus
    - Calcium
  - Helps control blood pressure
- How does dialysis work?
  - Filters out the blood by doing an 'exchange'

# Dialysis

- What types of dialysis are there?
  - There are two kinds of dialysis: hemodialysis and peritoneal dialysis
    - Hemodialysis is done in the hospital or clinic
    - Peritoneal dialysis can be done at home (two types)
    - Elder should discuss which one works best for them

# Types of Dialysis

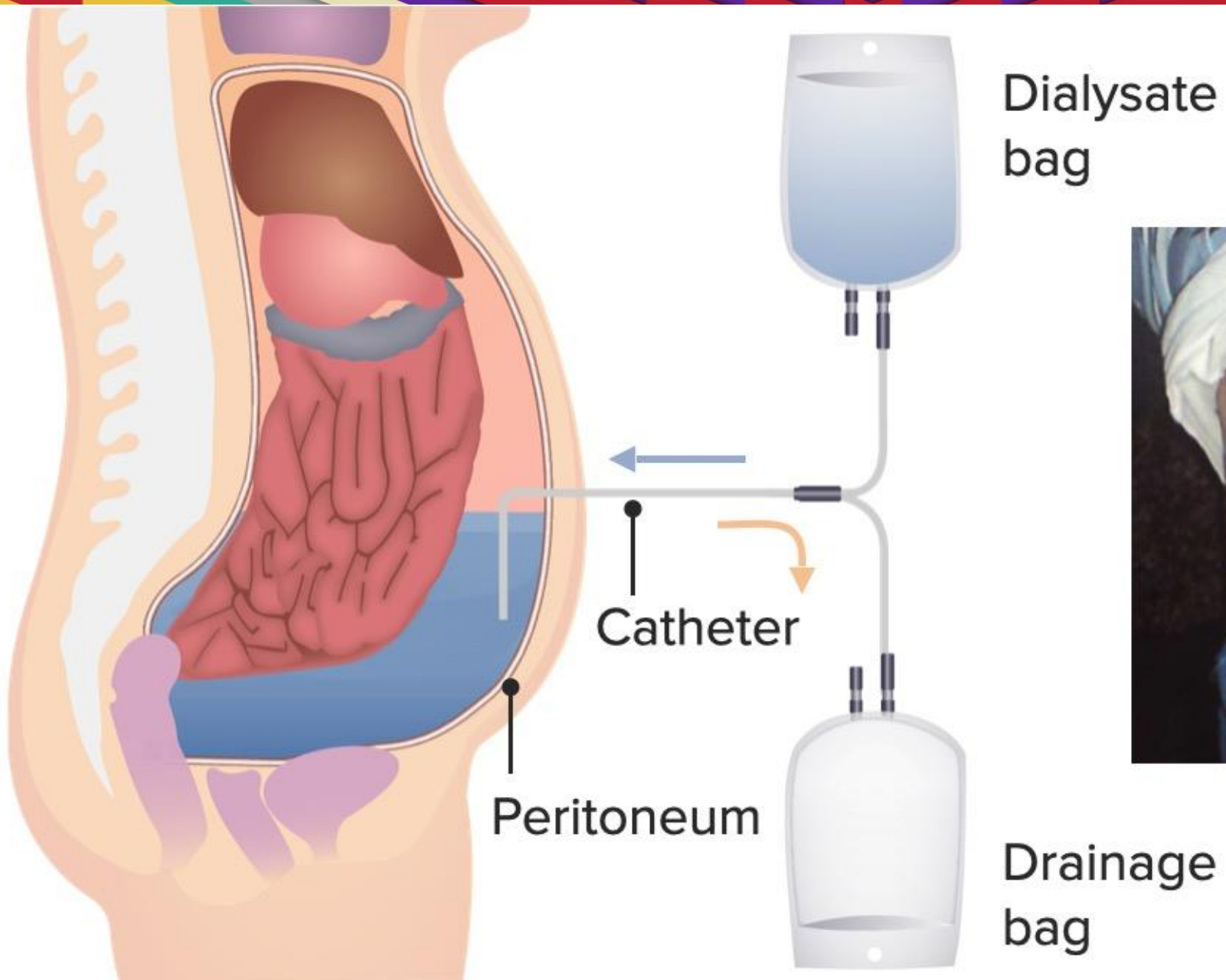
- Hemodialysis
  - A machine that removes waste and chemicals from the blood
  - An access (fistula) placed either in the arm or leg
  - Usually lasts 3 – 4 hours and is done 3 times a week





# Types of Dialysis

- Peritoneal dialysis
  - Wastes are cleaned inside the body
  - A plastic tube (catheter) placed in the body and washes out the blood
    - Continuous Ambulatory Peritoneal Dialysis (CAPD)
      - Only type of dialysis done without a machine
      - The exchange takes about 4 – 5 hours before it drains
      - It is done 4 – 5 times a day.
    - Automated Peritoneal Dialysis (APD)
      - Uses a machine called a 'cycler'.
      - It cycles every 1 – 1.5 hours
      - Done when the person sleeps



# Dialysis

- Is dialysis permanent?
  - Chronic renal failure
  - Acute renal failure
- Does dialysis hurt?
  - May be some discomfort with hemodialysis when the needle is put into the fistula
  - Can be a drop in BP
- Is dialysis expensive?
  - Yes, Medicare/ Medicaid or private health insurance
- How long can I live on dialysis?

# Dialysis

- How do I live with dialysis?
  - Diet
    - Limit fluids
    - Limit foods with salt and potassium
    - Examples of foods to eat: (low in potassium)
      - Apples, cranberries, grapes, pineapples, and strawberries
      - Cauliflower, onions, peppers, radishes, summer squash and lettuce
      - Pita, tortillas and white breads, and white rice
      - Beef and chicken
  - Activity
    - Depends on the type of dialysis

# Dialysis

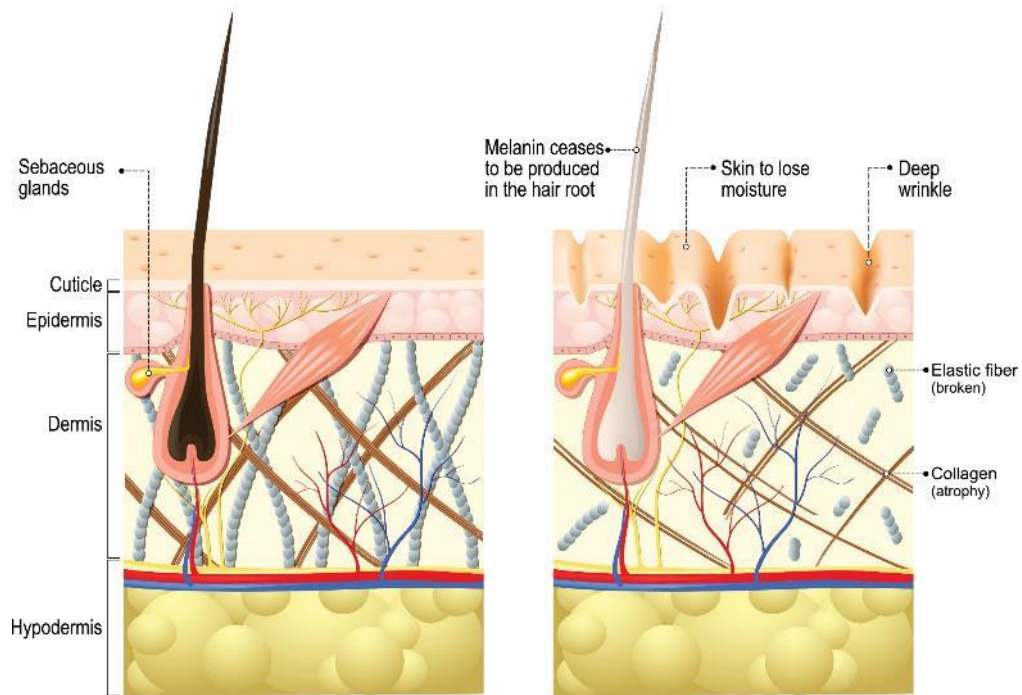
- Will I feel normal
  - Many feel normal when on dialysis, although they may be tired the day of hemodialysis
- Can I work when on dialysis?
  - Yes, depends on energy level
  - Those that do Peritoneal Dialysis may not feel as tired as those with Hemodialysis
- Can I go visit family/friends when on dialysis?
  - Hemodialysis – need to find a dialysis unit to make an appointment
  - Peritoneal dialysis – need to bring equipment with them



# POLL

# Integumentary (Skin) System <sup>(6 & 7)</sup>

Skin is the largest organ of the body.



Younger skin

Older skin

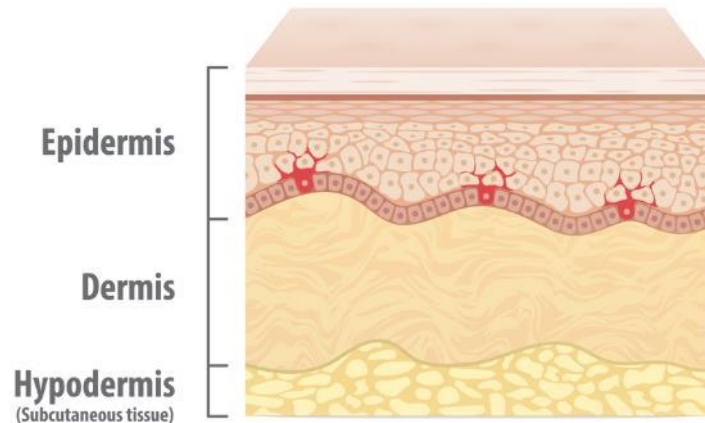
## Major defense against infections

### Changes in the skin

- Dry, thin, wrinkled, and less elastic
- More sensitive to ultraviolet light
- Decrease blood vessels
  - Increase risk for infections
  - Slower wound healing
  - Decreased sense of touch and pressure
  - Decreased ability to respond to temperature changes
  - Body temperature is lower

# Layers of the Integumentary System (7)

## LAYERS & CELL STRUCTURE OF SKIN



## Three layers

1. Epidermis
  - Top layer
  - Renews itself every 30 days
  - Seborrheic keratosis
2. Dermis
  - Middle layer
  - Elastin fibers thicken and fragment - loose skin/skin tears
3. Hypodermis
  - Lower layer
  - Subcutaneous fat

# Disorders of the Integumentary System (6 & 7)

## Infections

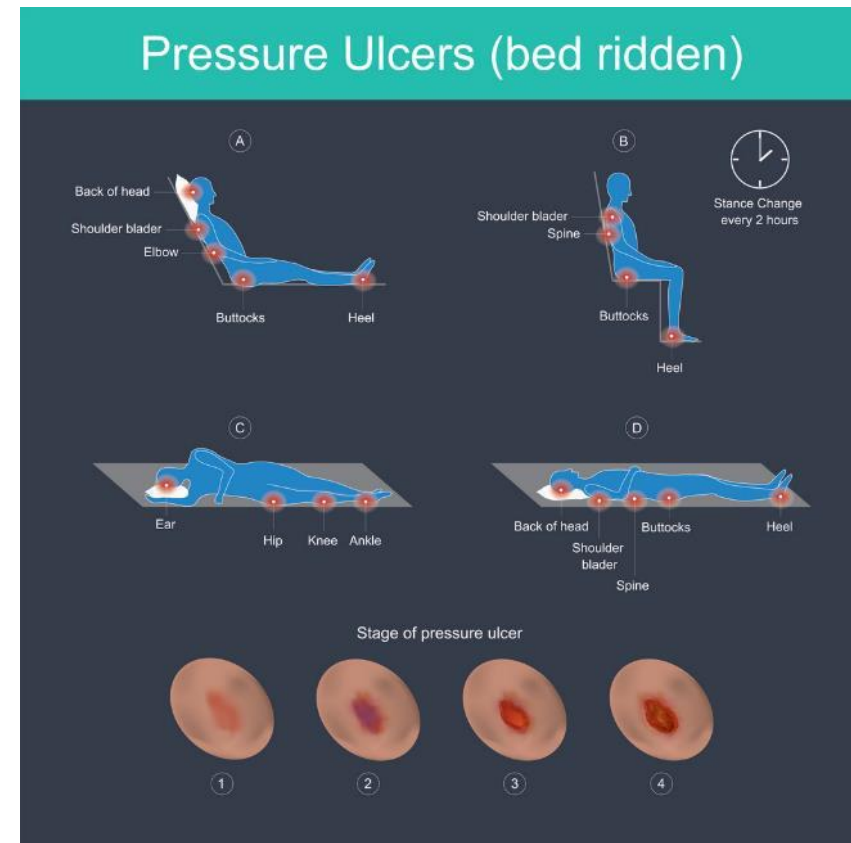
- 1<sup>st</sup> line of defense

## Skin tears

- Tear in the 1<sup>st</sup> and 2<sup>nd</sup> layer of skin

## Pressure Ulcers/Sores

- Sitting/laying in one place too long
- Obesity
- Urinary/bowel incontinence
- Stages
  - 1, 2, 3, 4, unstageable





# Care for Pressure Ulcers (7)

## Prevention

- Prevention
- Incontinence
  - Use of an incontinent product (not a diaper)
    - Clean and change every 2- 3 hours
- Diet and fluids
  - Protein
- Immobile
  - Pressure relieving mattress (not egg crates)
  - Turning and repositioning every 2 – 3 hours
- Treatment
  - Prescribed dressings





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Are you a caregiver?

If you are caring for a parent, spouse, friend or relative, then you are a caregiver.

*Caregiving is hard, you don't have to do it alone*

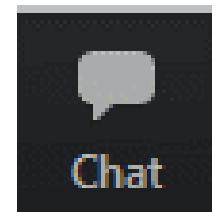
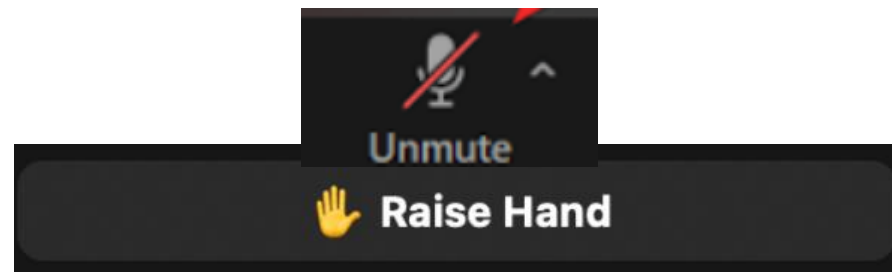


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Funding provided by the CDC Foundation

# Activity

What questions do you have about respiratory conditions?



# Respiratory Diseases

- Two main respiratory diseases
  - Asthma
    - chronic inflammatory disorder of the airways
  - Chronic Obstructive Pulmonary Disease (COPD).



# Asthma

## Airways

- Hyperresponsive
- Wheezing, breathlessness, tightness in the chest, coughing

## Attacks

- More common at night or early in the morning

More prevalent in the African American population

## Contributing factors

- Exposure to allergens
- Exposure to occupational irritants
- Family history
- Smoking
- Pollution
- Respiratory infections



# Diagnosing Asthma

No blood tests

Pulmonary Function Tests

- amount of forced expiratory volume in 1 second (FEV1) breath out as much as possible
- forced vital capacity (FVC), breath in as much as they can

Bronchodilator to measure improvement

- 12% - reversible airway obstruction

Differentiates asthma from COPD.

*This type of testing is particularly useful in an older adult that has a prior smoking history.*

# Living with Asthma

Incentive Spirometry



Peak Flow Meter



# Living with Asthma

## Four Components of Management

1. Assessment and monitoring
2. Education of Elder and their family/support system
3. Control of comorbid conditions and environmental factors
4. Pharmacotherapy
  - Albuterol inhaler
  - Fluticasone (steroid based)

# Chronic Obstructive Pulmonary Disease (COPD)

Chronic disease that is preventable and treatable

- Airways become inflamed and thickened
- Decreases the amount of air flow going in and out
- Air gets trapped
- Women tend to be more susceptible

Signs and symptoms are like asthma

- Shortness of breath
- Wheezing
- Fatigue
- Blue lips and/or fingernail beds

# Diagnosing COPD

- Pulmonary Function Tests (PFT) are performed to differentiate asthma from COPD.
- Arterial Blood Gases (ABGs).
  - ABGs measure the amount of oxygen, carbon dioxide and the pH of the blood
- Chest x-ray



# Living with COPD (13)

## Variety of medications

- No one best medication
- Treat the symptoms

## Protect your lungs

- Reduce exposure to irritants

## Nutrition

- Complex carbohydrates
- Small meals to save energy
- Limit the amount of salt
- Drink plenty of water

## Physical activity

- Moderate exercise
- Stretching, aerobic, resistance exercises

## Coping with emotions

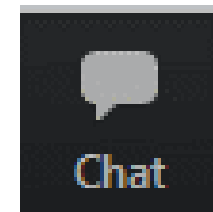
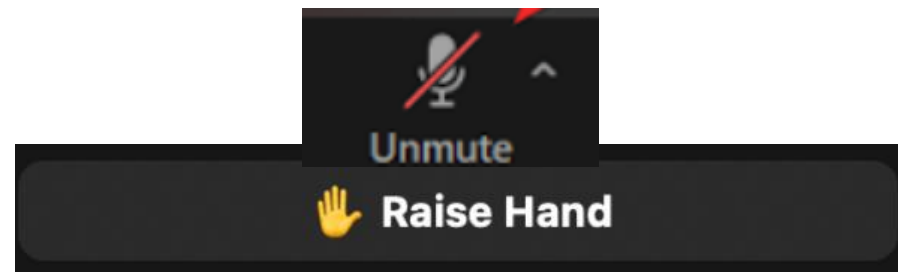
- Anxiety and depression

## Planning for the future

- Palliative care
- End of life discussions

# Activity

What questions do you have about the central nervous system?



# Central Nervous System

- Mental health
  - Depression
- Neurocognitive/Neurodegenerative disorders
  - Delirium
  - Mild or Major Neurocognitive Disorder
    - Dementia
    - Alzheimer's
    - Frontotemporal lobar degeneration
    - Lewy body
    - Vascular disease
    - Traumatic brain injury
    - Substance/medication induced
    - Parkinson's

# Depression (14)

Depression can be caused by situational events or a chemical imbalance in the brain. There are four different types of depression that an Elder could experience:

1. Major depressive disorder – includes symptoms that last at least two weeks and interferes with performing daily tasks.
2. Persistent depressive disorder – a depressed mood that lasts longer than two years, the Elder may still be able to perform daily tasks
3. Substance/medication-induced depressive disorder – depression that is a result of the use of substances such as alcohol or pain medication.
4. Depressive disorder due to a medical condition – depression that is related to an illness such as heart disease or diabetes.

# Signs and Symptoms

- The signs and symptoms for the older adult are different than younger adults.
- Sadness may not be the main symptom
  - Feeling of numbness
  - Lack of interest in activities they previously enjoyed
- Depression can be displayed differently depending on cultures.
  - May have more physical symptoms,
    - Aches and pains
    - Headaches
    - Digestive problems.



# Diagnosing Depression

If the Elder has several of the following signs that last for more than two weeks, a depression screening and appointment with a provider is suggested:

- Persistent sad, anxious, or "empty" mood
- Feelings of hopelessness, guilt, worthlessness, or helplessness
- Irritability, restlessness, or having trouble sitting still
- Loss of interest in once pleasurable activities, including sex
- Decreased energy or fatigue
- Moving or talking more slowly
- Difficulty concentrating, remembering, or making decisions
- Difficulty sleeping, waking up too early in the morning, or oversleeping
- Eating more or less than usual, usually with unplanned weight gain or loss
- Thoughts of death or suicide, or suicide attempts (14)

# Living with Depression

- Depression, no matter how severe, can be treated.
- Social stigma
- Some elderly may feel they are 'weak'
- Depression needs to be viewed like any other disease.

*A person with depression cannot just 'get over it'.  
We would not tell someone with diabetes to 'get over  
it.'*

# Treatment Options for Depression

1. Identify that there is a problem
2. Psychotherapy
3. Medications
4. Electroconvulsive Therapy

Selective serotonin reuptake inhibitors

- Fluoxetine (Prozac)
- Sertraline (Zoloft)

Selective norepinephrine reuptake inhibitors

- Venlafaxine (Effexor)
- Duloxetine (Cymbalta)

Bupropion

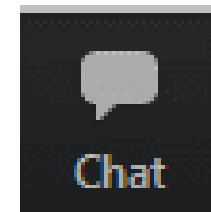
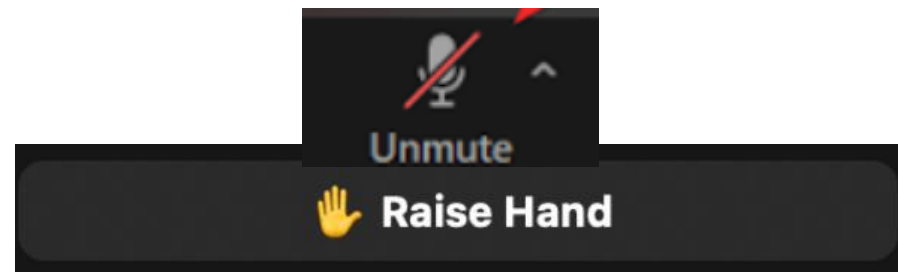
- Wellbutrin

# Suicide *(17)*

- The National Institute of Mental Health (NIMH) considers depression in those 65 and older to be a major public health problem
- Native communities have higher rates of suicide than any other racial and ethnic group
- 8th leading cause of death for American Indians and Alaska Natives of all ages
- Many older adults who commit suicide have visited a primary care physician very close to the time of the suicide – 20 percent on the same day, 40 percent within one week – of the suicide (Older study, 1994)

# Activity

How has mental health and/or suicide impacted your community?





# Resources

<https://suicidepreventionlifeline.org/help-yourself/native-americans/>

<https://iasquared.org/service-suicide-prevention-resource-center-in-american-indian-alaska-native-settings/>

<https://www.ihs.gov/suicideprevention/>



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# Neurocognitive Disorders

- Diagnosing
  - Delirium
    - Can be reversible
    - Causes
      - Infection
      - Medication
      - Anesthesia
      - Lack of oxygen to the brain
      - Low hemoglobin
  - Treatment
    - Treat the cause

# Neurocognitive Disorders

- Diagnosing
  - Mild or Major Neurocognitive Disorder
    - Dementia
    - Alzheimer's
    - Frontotemporal lobar degeneration
    - Lewy body
    - Vascular disease
    - Traumatic brain injury
    - Substance/medication induced
    - Parkinson's

# ACTIVITY Part I

Use **the annotate feature and stamp** which neurocognitive disorders are most common in your community

Dementia  
Alzheimer's  
Frontotemporal lobar degeneration  
Lewy body  
Vascular disease  
Traumatic brain injury  
Substance/medication induced  
Parkinson's

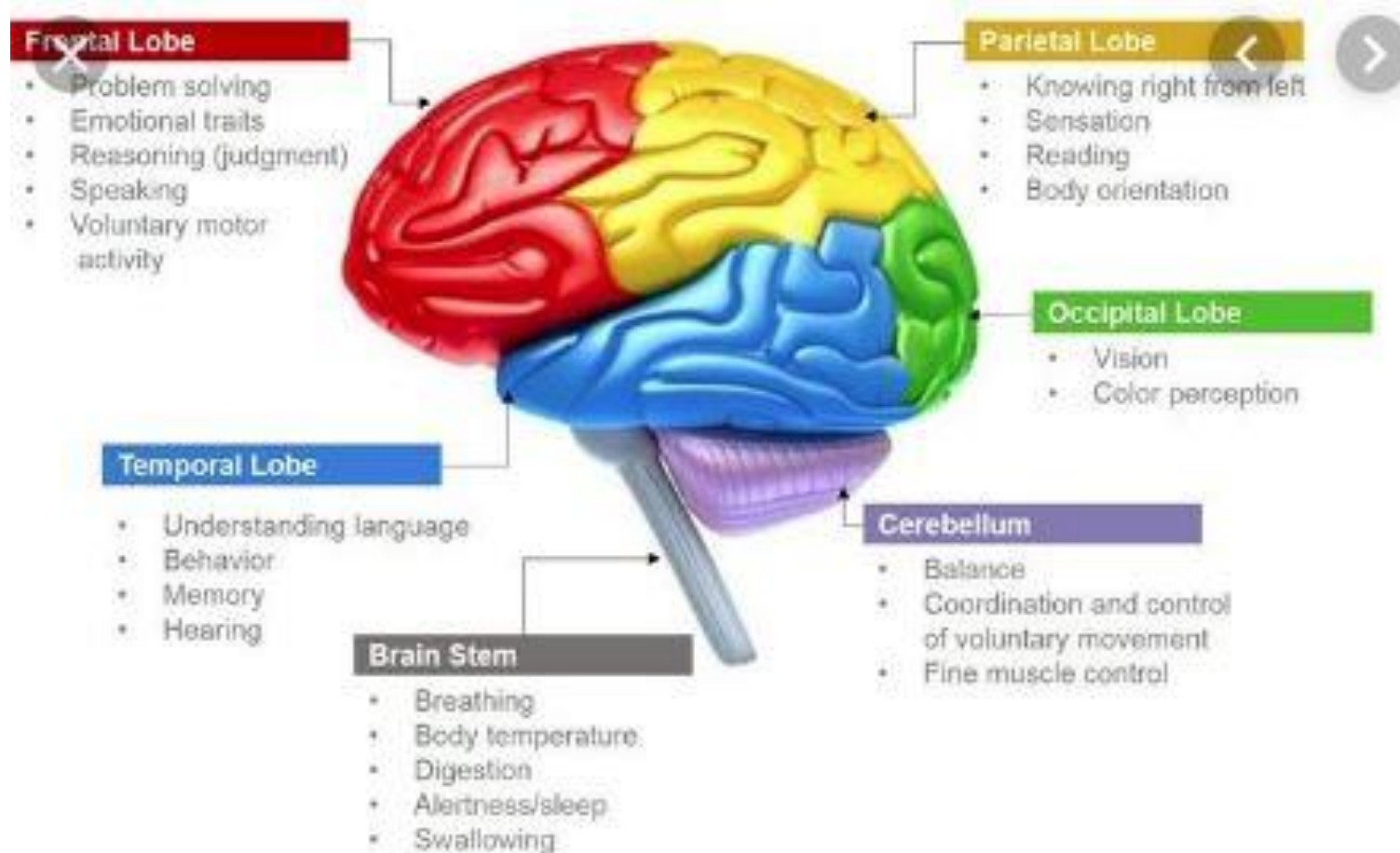
# ACTIVITY Part II

Use **the annotate feature and stamp** which neurocognitive disorders are effectively diagnosed in your community

Dementia  
Alzheimer's  
Frontotemporal lobar degeneration  
Lewy body  
Vascular disease  
Traumatic brain injury  
Substance/medication induced  
Parkinson's

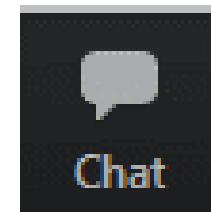
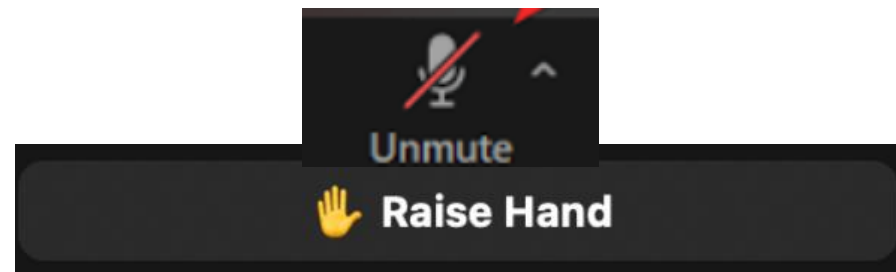


# Parts of the Brain (Goggle Search: readbiology.com)



# Activity

What difficulties do you encounter when caring for someone with a cognitive impairment?



# Living with Cognitive Disorders

- Reality orientation vs. validation therapy
- Paranoia/scared
- Crying
- Repeating
- Accusing
- Arguing

# Treatment for Cognitive Disorders

- Medications
  - “Alzheimer’s Medications”
    - Aricept
    - Namenda
  - Mood Stabilizers
    - Depakote
    - Trileptal
- Antidepressants
  - SSRIs
    - Zoloft
    - Prozac
    - Paxil
  - Remeron  
(Mirtazapine)
- Antianxiety
  - AVOID Ativan

# POLL



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# POLL

# POLL

# Contact Information



800.896.7628

[info@nrcnaa.org](mailto:info@nrcnaa.org)

<https://www.nrcnaa.org/>



301.933.6492

[admin@iasquared.org](mailto:admin@iasquared.org)

<http://www.iasquared.org>



# REMEMBER

1. Please complete the evaluation
  - Separate evaluation if receiving CEUs
2. Share our additional opportunities

Thank you for joining us!

# Support for Native Caregivers & Family

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*Caregiving is hard, you don't have to do it alone*



Partnering to Improve the Wellbeing of Native Elders & Caregivers During COVID-19 & Beyond

Funding provided by the CDC Foundation





*Offer feedback on  
community resources*

SHARE YOUR NEEDS

**HELP US CREATE A  
SITE USEFUL TO YOUR  
WORK**

*Make your voice heard*

**Walmart**   
Gift Card

The International Association for Indigenous Aging (IA<sup>2</sup>) would like you to participate in a Virtual Talking Circle to share your thoughts on the new American Indian and Alaska Native Brain Health website.

## HEALTHY BRAIN WEBSITE TALKING CIRCLE

Registration is limited!

Participants who attend the session and complete a survey will receive a Walmart gift card!

**1:00PM TO 2:30PM ET  
NOVEMBER 2, 2021  
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