

# Common Diseases and Conditions of your Residents

8 HOUR CEU COURSE FOR  
RCFE AND ARF  
ADMINISTRATORS





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# Course Objectives

01

Discuss the normal aging process – what IS normal?

02

Discuss 21+ of the most common diseases and conditions of our residents

03

Learn how our licensed facilities can assist the residents with these conditions

04

Discuss the use of home health and hospice in our facilities



# Definitions

DSS = Department of Social Services

RCFE = Residential Care Facility for the Elderly

ARF = Adult Residential Facility

LPA = Licensing Program Analyst

SNF = Skilled Nursing Facility

AB = Assembly Bill

SB = Senate Bill

Resident = anyone living in long-term care

Physician's Report = now termed "medical assessment" (aka LIC 602 or 602A)

Physician = may include "a licensed medical professional acting within their scope of practice" (i.e., Nurse Practitioner or Physician's Assistant)



# Sources

Many sources were consulted to prepare this course.

At the end of the course, these sources are listed.





# Note

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On January 1, 2025, RCFE Title Regulations changed in regard to what must be done solely by a “physician”.

In most cases (unless specifically stated that it **MUST** be a physician), a “licensed medical professional acting within their scope of practice” can conduct medical assessments (formerly known as “Physician’s Reports” (LIC 602 and 602A)”, prescribe medications, order tests, etc.

When you see “Physician” throughout the class, please note this.



# Aging

- ▶ Define “normal” aging
- ▶ Discuss potential physical changes
- ▶ Discuss potential emotional changes





# Normal Aging

- ❧ Normal aging or “healthy aging” is a term that is widely used to describe the natural changes that occur in the absence of any disease.
- ❧ Individuals age at extremely different rates.
- ❧ How a body ages depends in part on family (genetic) patterns of aging, but **lifestyle choices** have a more powerful impact on how well a body ages.



# Normal Aging – Integumentary System

## Integumentary (or skin) system:

The major functions of this system are protection from environmental hazards and temperature control.



# Normal Aging – Integumentary System

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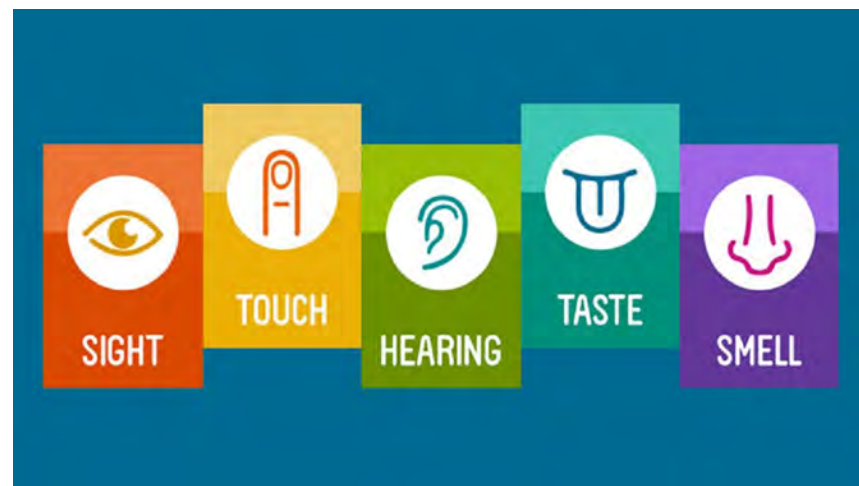
- Skin becomes less elastic, thin and can tear easily
- Fatty tissue of the skin is lost
- Folds, lines and wrinkles appear
- Dry skin develops due to decreased oil
- Increased sensitivity to cold
- Decrease in the melanin pigment in skin, which means older people are more sensitive to the sun
- Whitening or graying of hair
- Loss or thinning of hair
- Sweat glands become less active, leading to the reduced ability to lose body heat



# Normal Aging – The Senses

As we age, our senses become less sharp. This includes vision, smell, taste and the ability to feel pain.

All of these can affect our lifestyle – we may become more dependent on others.



# Normal Aging – The Senses

## Hearing:

- Ears have two purposes – hearing and maintaining balance.
- As you age, structures inside the ear start to change and their functions decline.
- Your ability to pick up sounds decreases and you may also have problems maintaining your balance as you sit, stand, and walk.



# Normal Aging – The Senses



- Age-related hearing loss is called *presbycusis* and it affects both ears.
- Hearing may decline, especially of high-frequency or high-pitch sounds.
- It may also cause trouble telling apart certain sounds or problems understanding others when there is background noise.
- Ear wax build-up can also cause hearing issues.

# Normal Aging – The Senses

## Vision:

- All of the eye structures change with aging.
- The pupil may react more slowly in response to darkness or bright light.
- The lens becomes yellowed, less flexible, and slightly cloudy.
- With age, the sharpness of vision (visual acuity) gradually declines.



# Normal Aging – The Senses

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- The most common problem is difficulty focusing the eyes on something close; this condition is called *presbyopia*.
- Reading, or bifocal, glasses or contact lenses can help correct presbyopia.
- Aging also causes trouble adapting to darkness or bright light and problems with glare, brightness, and darkness.



# Normal Aging – The Senses

- Aging eyes do not produce enough tears and this can lead to dry eyes.
- Common, but not necessarily normal, eye disorders in the elderly include cataracts, glaucoma, macular degeneration (discussed in this course), and diabetic and hypertensive retinopathy.
- Aging also causes it to be harder to tell the colors blue and green apart.



### Taste and Smell:

- The senses of taste and smell work together. Think about when you have a cold – can you smell or taste?
- The number of taste buds decreases with age.
- Sensitivity to the 4 tastes often declines after age 60 (salt, sweet, bitter and sour).

# Normal Aging – The Senses

- Usually salty and sweet tastes are lost first, followed by bitter and sour tastes.
- The mouth produces less saliva with age; this causes dry mouth, which can affect the sense of taste.
- The sense of smell can diminish, especially after age 70.
- Decreased taste and smell can lessen interest and enjoyment in eating.



# Normal Aging – Respiratory System

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Bones become thinner and change shape, changing the shape of the ribcage. As a result, your ribcage is less able to expand and contract during breathing.

The muscle that supports breathing, the diaphragm, becomes weakened and may prevent from inhaling and exhaling enough air.

# Normal Aging – Respiratory System

As a result of these changes, seniors are at increased risk of:

- Lung infections, such as bronchitis and pneumonia
- Shortness of breath
- Low oxygen level, which reduces the body's ability to fight diseases
- Abnormal breathing patterns, resulting in problems such as sleep apnea (episodes of stopped breathing during sleep)



# Normal Aging – The Heart

- The heart may increase in size, especially the left ventricle.
- The heart wall thickens, so the amount of blood that the chamber can hold may actually *decrease* despite the increased overall heart size.
- This makes the heart may fill more slowly.

# Normal Aging – The Heart

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- Arteries narrow and are less elastic = decreased blood flow. This causes the person to feel cold most of the time
- The valves inside the heart, which control the direction of blood flow, thicken and become stiffer.
- A heart murmur caused by valve stiffness is fairly common in the elderly.



# Normal Aging – The Heart

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- The arteries and blood vessels may develop fibrous tissue and fat deposits. This may result in a slightly slower heart rate.
- The blood vessels and arteries also become stiffer, causing the heart to work harder to pump blood through them. This can lead to high blood pressure and other cardiovascular problems.

# Normal Aging – The Heart

- Many older people have orthostatic hypotension, a condition in which the blood pressure falls when a person goes from lying or sitting to standing.
- This causes dizziness because there is less blood flow to the brain.





# Normal Aging – The Heart

Blood changes slightly with age. Normal aging causes a reduction in total body water. As part of this, there is less fluid in the bloodstream, so blood volume decreases.



The speed with which red blood cells are produced in response to illness or stress is reduced, creating a slower response to blood loss and anemia.



Most of the white blood cells stay at the same levels, although certain white blood cells important to immunity decrease in their number and ability to fight off bacteria, which leads to a reduced ability to resist infection.

## Normal Aging – The Heart

An older heart may not be able to pump blood as well when there is stress put on it. These may cause the heart to work harder:

- Certain medications
- Emotional stress, like the loss of a loved one
- Extreme physical exertion
- Illness
- Infections, like a urinary tract infection
- Injuries, like a broken hip from a fall

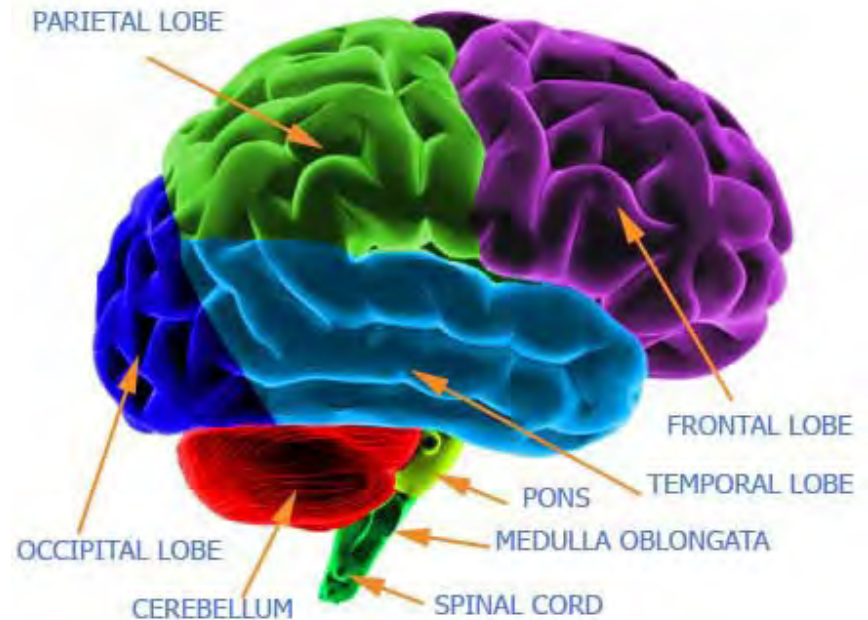


# Normal Aging – Digestive System

- Age may cause digestive tract disorders, such as constipation, and diverticulosis.
- Also with age, the stomach lining's capacity to resist damage decreases, which in turn may increase the risk of ulcers.
- Saliva production is decreased.
- Appetite may decrease.

# Normal Aging – Nervous System

The brain and nervous system are the body's control center – they control the organs, such as the heart and kidneys and the body's movements, your senses, your thoughts and memories.





## Normal Aging – Nervous System

- With age, the brain and nervous system go through natural changes.
- The brain and spinal cord lose nerve cells and weight (atrophy).
- Nerve cells may begin to pass messages more slowly as one ages.
- Slowing of thought, memory, and thinking is a normal part of aging.



# Normal Aging – Urinary System

- ❖ Kidney function decreases.
- ❖ Poisonous substances can build up in blood.
- ❖ The bladder wall changes and muscles weaken. The elastic tissue becomes tough and the bladder becomes less stretchy, resulting in the bladder not holding as much urine as before.
- ❖ Urine may become concentrated.
- ❖ Urinary incontinence may occur.



# Normal Aging – Muscles, Bones and Joints

- A normal person may shrink up to 2 inches! This can be due to spinal column compression and even flattening arches.
- Bone mass or density is lost as people age, especially in women after menopause. The bones lose calcium and other minerals, which can lead to osteoporosis.

# Normal Aging – Muscles, Bones and Joints

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The joints become stiffer and less flexible. Fluid in the joints may decrease, and the cartilage may begin to rub together and erode.



Lean body mass decreases, caused in part by loss of muscle tissue (atrophy). Muscle changes often begin in the 20s in men and the 40s in women.



# Normal Aging – Muscles, Bones and Joints

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Muscle tissue is replaced more slowly, and lost muscle tissue may be replaced with a tough fibrous tissue. This is most noticeable in the hands, which may appear thin and bony.

# Normal Aging – Muscles, Bones and Joints

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- Bones become more brittle and may break more easily.
- Inflammation, pain and stiffness may result from breakdown of the joint structures. Almost all elderly people are affected by joint changes, ranging from minor stiffness to severe arthritis.
- Loss of muscle mass reduces strength.



# Normal Aging – Muscles, Bones and Joints

- The risk of injury increases because gait changes, loss of balance and instability may lead to falls.
- Muscle contractures may occur in people who are unable to move on their own or have their muscles stretched through exercise – so make sure daily activities include stretching, mobility, flexibility, etc.

# Normal Aging - Memory

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Have you ever misplaced your keys?  
Called someone the wrong name?  
Forgotten a phone number?

This is normal aging. Not remembering  
what the keys are FOR – that is not!



# Normal Aging - Memory

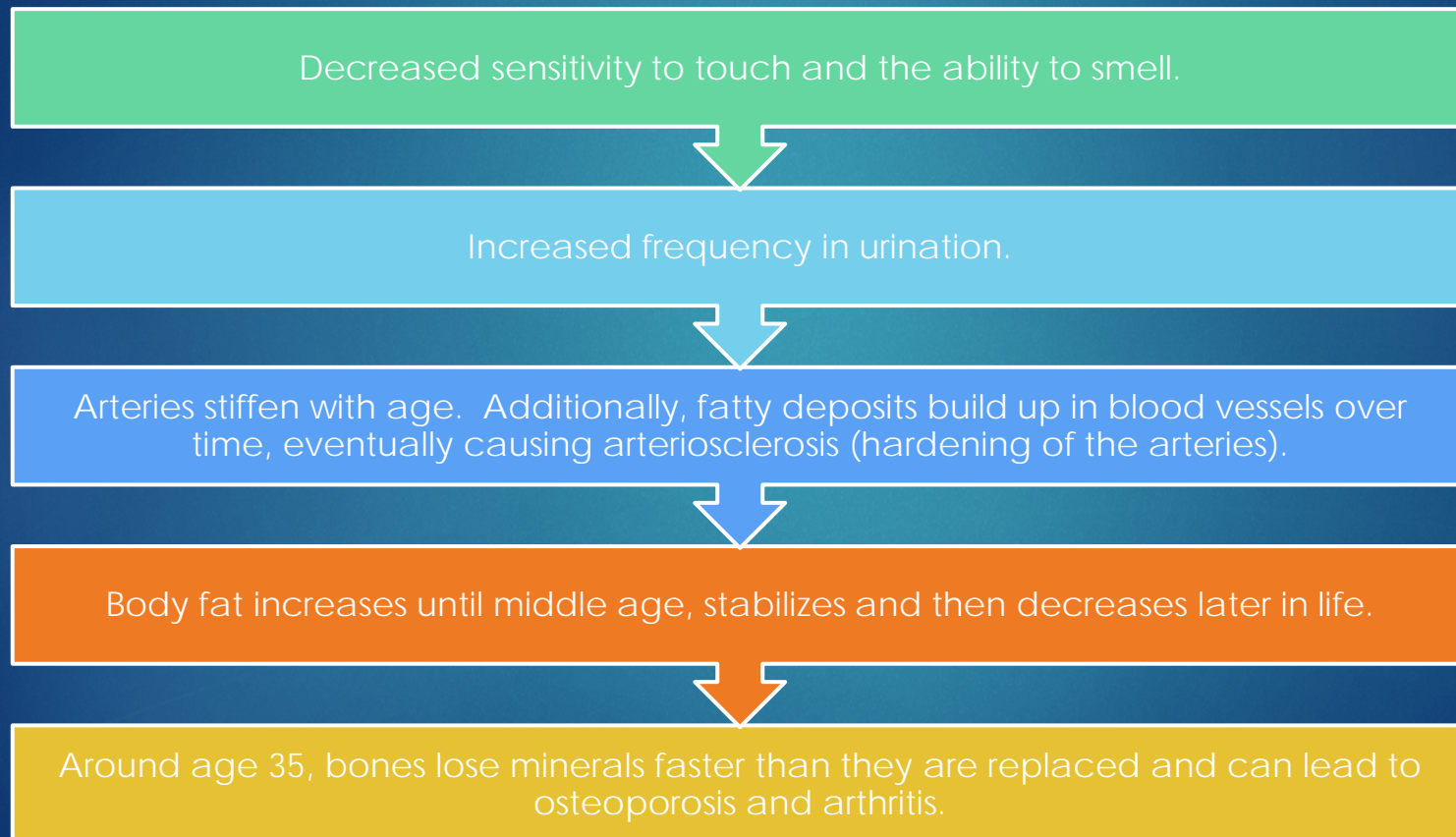
What causes age-related memory loss?

- ❖ The hippocampus, a region of the brain involved in the formation and retrieval of memories, often deteriorates with age.
- ❖ Older people often experience decreased blood flow to the brain, which can impair memory and lead to changes in cognitive skills.
- ❖ Seniors are less efficient at absorbing brain-enhancing nutrients.



# Normal Aging - Other

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# Normal Aging - Other

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By age 80, it is common to have lost as much as 2 inches of height.

The brain loses some of the structures that connect the nerve cells, and the function of the cells themselves is diminished.

Heart muscles thicken with age. The maximum pumping rate and the body's ability to extract oxygen from the blood both diminish with age.

Kidneys shrink and become less efficient.

# Normal Aging - Other

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Somewhere around the age of 20, the lung tissue begins to lose elasticity and rib cage muscles shrink progressively. Maximum breathing capacity diminishes with each decade of life.

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Metabolism slows greatly with age, medicines and alcohol are not processed as quickly.

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Muscle mass declines, especially with lack of exercise.

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Reflexes are slowed.

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Nails grow more slowly and skin is more dry and wrinkled.

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Hormone levels decrease, and sexual drive is reduced.

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# Normal Aging - Other

- ❖ Vision and hearing decrease
- ❖ Decreased senses of taste and smell
- ❖ Reduced sense of touch and sensitivity to pain
- ❖ Reduced blood flow to the brain = loss of more brain cells
- ❖ Shorter memory, forgetfulness
- ❖ Slowed ability to respond
- ❖ Confusion
- ❖ Dizziness

# Normal Aging - Emotions



- Not only does the body change physically as it ages, but there are a range of emotional changes that can occur. For example, if the person loses a spouse or a close friend, they can become very depressed, which can lead to weight loss/gain and sleep disturbances.
- The person may feel lonely, depressed and anxious and have a loss of self-esteem, especially if they need help with their activities of daily living, like showering.
- They may also feel like they are unproductive and having little value to society.



# Normal Aging - Emotions

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Think about this scenario:



Your daughter realizes that you are unsafe to live by yourself anymore (you think she's crazy – you are totally independent!). She is moving you to "the home" (aka assisted living).

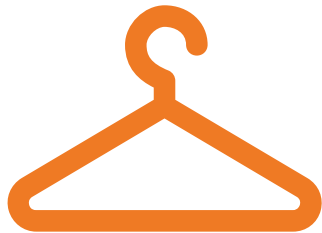
# Normal Aging - Emotions

You must sell your house, with all of those wonderful memories, along with the furniture since it will not fit in your shared room. Oh, by the way, meet your new roommate, Helga. She doesn't speak English much but you'll get to learn German! Oh, and she snores.

The car is being sold, also, since you parked it on the porch yesterday.



# Normal Aging - Emotions



Those beautiful clothes in your 3 closets? They won't fit so you must choose just 5 of your favorite outfits.



You love to cook? Sorry! We prepare all the meals for you and we hope you love meatloaf.

# Normal Aging - Emotions

You liked to shower in the evening before bed? Well, now we're switching you to the morning since it's easier for the staff.

Lights out at 8:00 since you will keep everyone up with the television.

Oh, and Bingo is at 3:00, even though you don't like it.



# Normal Aging - Emotions

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So, how does this sound? Awful, right?!?!?!?



This is how a resident may feel moving in with you.



What are you going to do to make the transition an easier one for them?

# Cardio-vascular Disease





# Cardiovascular Diseases

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Cardiovascular disease refers to the class of diseases that involve the heart or blood vessels (arteries and veins).

**Heart Disease**

**Heart Attack**

**Congestive Heart Failure**

**Hypertension**



# Cardiovascular Disease (cont'd)

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Cardiovascular diseases include:

- ♥ coronary heart disease (heart attacks)
- ♥ cerebrovascular disease
- ♥ raised blood pressure (hypertension)
- ♥ peripheral artery disease
- ♥ rheumatic heart disease
- ♥ congenital heart disease
- ♥ heart failure



# Cardiovascular Disease (cont'd)

The major causes of  
cardiovascular disease  
are:

tobacco use  
physical inactivity  
an unhealthy diet



# Cardiovascular Disease (cont'd)

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The World Health Organization states\*:

- Globally, cardiovascular diseases are the #1 cause of death and is projected to remain so.
- An estimated 17.9 million people died from CVDs in 2019 (most recent statistics), representing 32% of all global deaths.
- Of these deaths, 85% were due to heart attack and stroke.

\*Source: [https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))



## Cardiovascular Disease (cont'd)

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About 80% of these deaths occurred in low- and middle-income countries\*.

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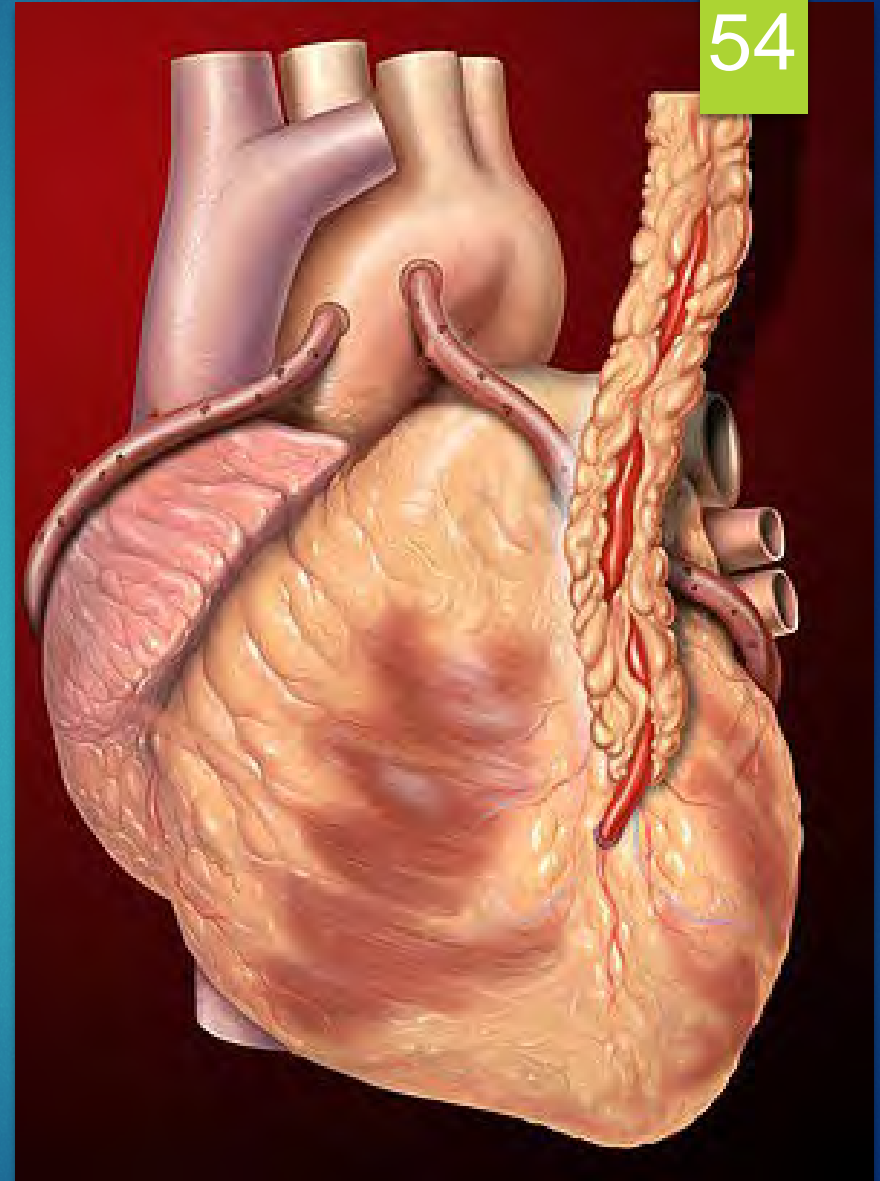
If current trends are allowed to continue, by 2025 an estimated 20 million people will die from cardiovascular disease (mainly from heart attacks and strokes).

[https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))

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# Cardiovascular Disease (cont'd)

- ♥ Coronary heart disease ("CAD") = the most common type of heart disease.
- ♥ It is also the number one killer of both men and women in the United States.
- ♥ Occurs when fatty deposits called plaque build up inside the coronary arteries.





# Cardiovascular Disease (cont'd)

- ♥ The coronary arteries wrap around the heart and supply it with blood and oxygen.
- ♥ When plaque builds up, it narrows the arteries and reduces the amount of blood that gets to your heart.
- ♥ This can lead to serious problems, including heart attack.

# Cardiovascular Disease (cont'd)

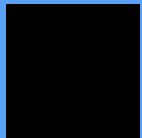
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CAD is caused by hardening of the arteries, or atherosclerosis.



Atherosclerosis occurs when plaque builds up inside the arteries. (Arteries are the blood vessels that carry oxygen-rich blood throughout your body.)

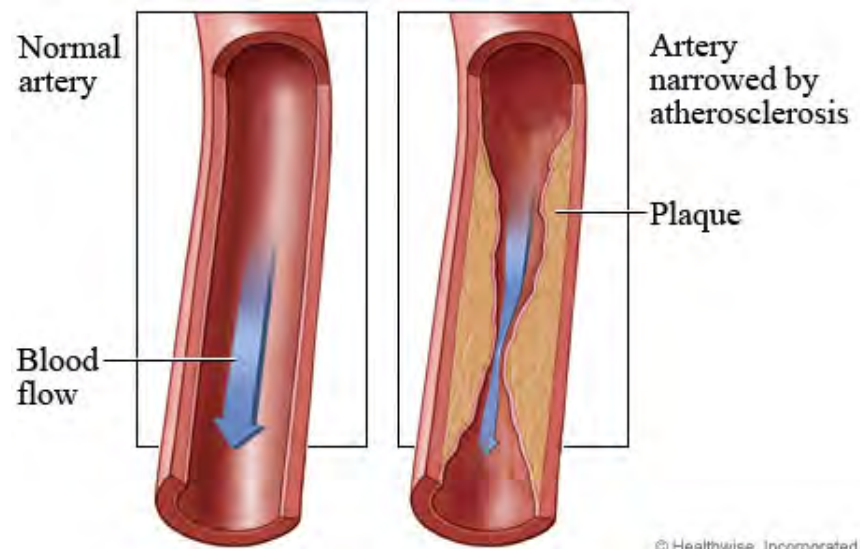


Atherosclerosis can affect any arteries in the body.



# Cardiovascular Disease (cont'd)

When atherosclerosis occurs in the arteries that supply blood to the heart, it is called coronary artery disease.

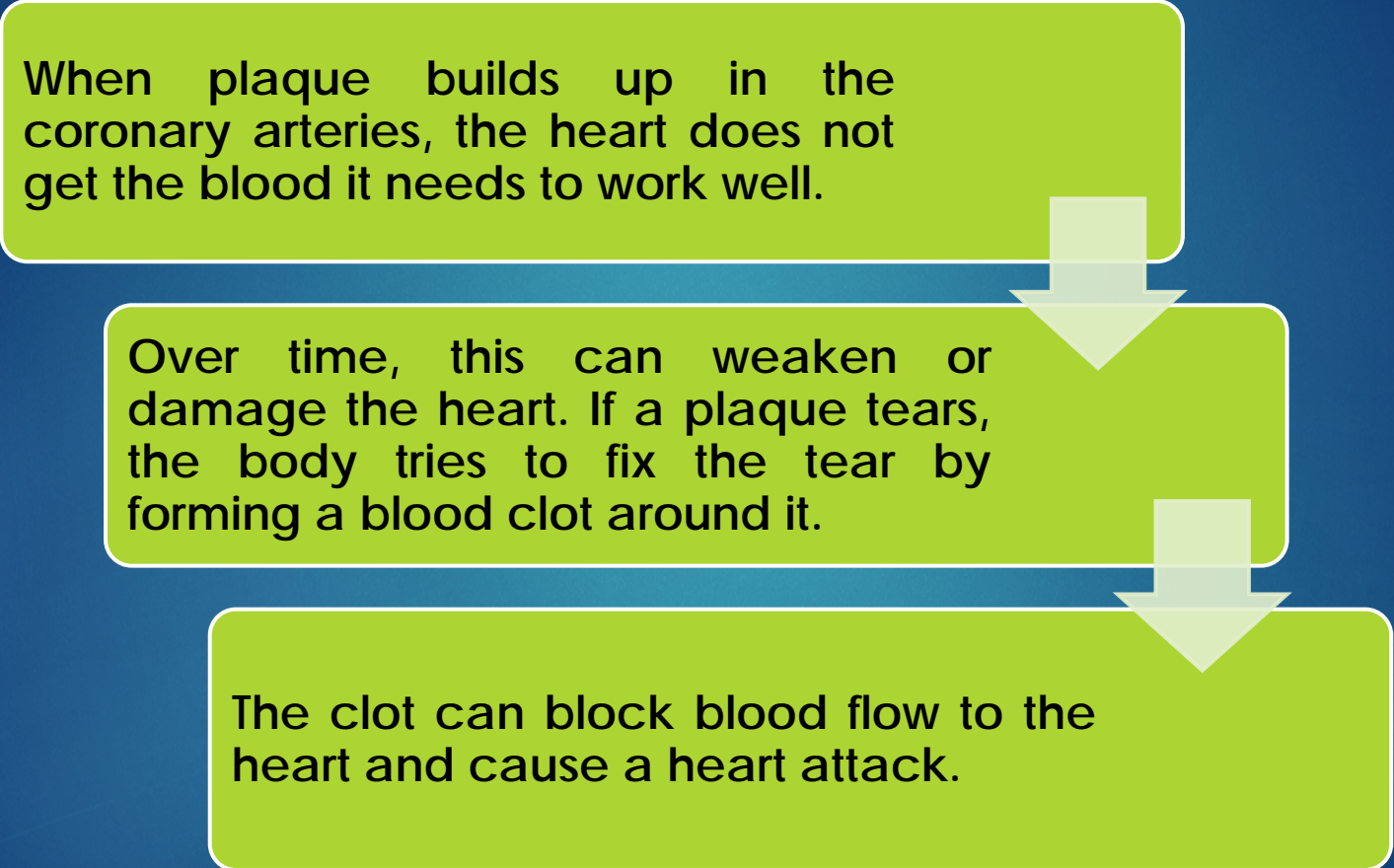


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# Cardiovascular Disease (cont'd)

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When plaque builds up in the coronary arteries, the heart does not get the blood it needs to work well.



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graph TD; A[When plaque builds up in the coronary arteries, the heart does not get the blood it needs to work well.] --> B[Over time, this can weaken or damage the heart. If a plaque tears, the body tries to fix the tear by forming a blood clot around it.]; B --> C[The clot can block blood flow to the heart and cause a heart attack.];
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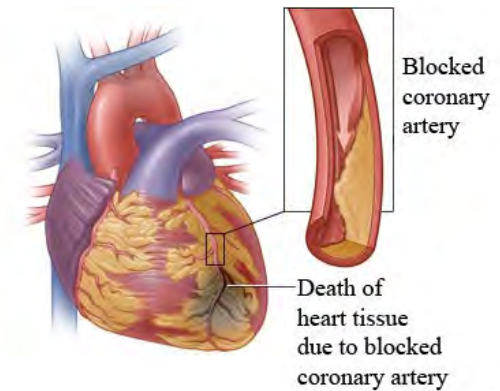
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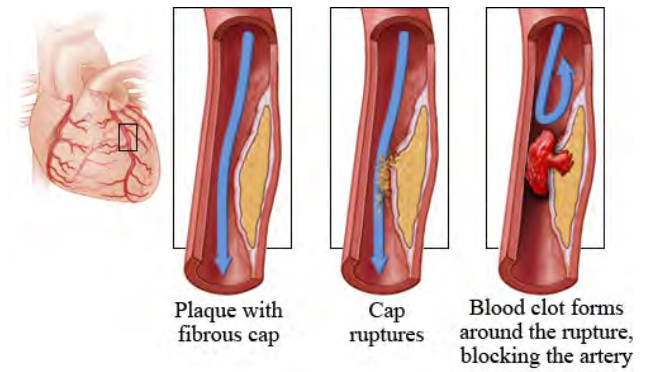
# Cardiovascular Disease (cont'd)

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The blood clot forms and then blocks the artery, thus leading to a heart attack.



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## Cardiovascular Disease (cont'd)

### Symptoms of CAD:

Typical first symptoms, which usually occur after the age of 50, include:

chest pain ("angina")

shortness of breath

heart attack

mild symptoms: rapid heartbeat,  
stomach pain and sweating



# Cardiovascular Disease (cont'd)

## Risk factors:

over the age of 65

smoking

high cholesterol

high blood pressure

diabetes

heredity





# Cardiovascular Disease (cont'd)

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## Diagnosing CAD:

- Electrocardiogram (EKG or ECG), which checks for problems with the electrical activity of the heart. An EKG can also show signs of an old or new heart attack.
- Blood tests.
- Chest X-ray.
- Exercise electrocardiogram, commonly called a "stress test." This test checks for changes in the heart during exercise.



# Cardiovascular Disease (cont'd)

Treatments:

- Change your lifestyle!

Stop smoking.

Get regular exercise  
– start with walking  
30 minutes a day.

Eat a heart-healthy  
diet full of fruits,  
vegetables, high-  
fiber grains and fish.

Reduce your stress  
level.



## Cardiovascular Disease (cont'd)

### Treatments (cont'd):

#### Medications:

- ✓ Statins to help lower cholesterol.
- ✓ Beta-blockers or ACE inhibitors to lower blood pressure.
- ✓ Aspirin or other medicines to reduce the risk of blood clots.
- ✓ Nitrates to relieve chest pain.



# Cardiovascular Disease (cont'd)

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## Treatments (cont'd):

### Procedures:

- Angioplasty: used to open blocked arteries.
- Not major surgery.
- During angioplasty, the doctor guides a thin tube (called a catheter) into the narrowed artery and inflates a small balloon. This widens the artery to help restore blood flow. Often a small wire-mesh tube called a stent is placed to keep the artery open.
- The doctor may use a stent that is coated with medicine, called a drug-eluting stent. When the stent is in place, it slowly releases a medicine that prevents the growth of new tissue and this helps keep the artery open.

# Cardiovascular Disease (cont'd)

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## Treatments (cont'd):

### Procedures:


- ▶ Bypass surgery (major surgery) may be used if more than one coronary artery is blocked.
- ▶ It uses healthy blood vessels to create detours around narrowed or blocked arteries.



# Cardiovascular Diseases (cont'd)

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- 💣 **Myocardial infarction**, commonly known as a heart attack.
- 💣 Occurs when the blood supply to part of the heart is interrupted causing some heart cells to die.
- 💣 Most commonly due to blockage of a coronary artery.
- 💣 The resulting restriction in blood supply and oxygen shortage, if left untreated for a sufficient period of time, can cause damage and/or death of heart muscle tissue.



## Cardiovascular Diseases (cont'd)

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Let's watch a video  
about heart  
attacks:

[https://www.youtube.com/watch?v=3\\_PYnWVoUzM](https://www.youtube.com/watch?v=3_PYnWVoUzM)



# Typical Heart Medications

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- ♥ ACE inhibitors (angiotensin-converting- enzyme inhibitors)
- ♥ Diuretics (Water Pills)
- ♥ Vasodilators
- ♥ Digitalis Preparations (Digoxin)
- ♥ Beta Blockers
- ♥ Blood thinners (Coumadin)
- ♥ Angiotensin II Receptor Blockers (ARBs)
- ♥ Calcium Channel Blockers
- ♥ Potassium

# Cardiovascular Diseases (cont'd)

## Assisting your residents with heart disease:

1. Recognize the symptoms.
2. Call the doctor if symptoms become more frequent or severe.
3. Call for emergency assistance if rest and/or medications do not relieve symptoms after 15 minutes. DO NOT WAIT TO GET HELP!



# Cardiovascular Diseases (cont'd)

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## Assisting your residents with heart disease:

4. Help them reduce the risk factors (smoking, obesity, etc.)
5. Control hypertension (high blood pressure).
6. Provide a low salt/low fat diet if the physician/etc. indicates.
7. Ensure they take the proper medications. The medications are used to control the symptoms and help the heart work more efficiently.



# Diabetes





# Diabetes

**Diabetes:** a disease in which the body does not produce or properly use insulin.

Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life.

The cause of diabetes continues to be a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles.

# Diabetes (cont'd)

## Type 1 diabetes

Results from the body's failure to produce insulin, the hormone that "unlocks" the cells of the body, allowing glucose to enter and fuel them.

It is estimated that 5-10% of Americans who are diagnosed with diabetes have type 1 diabetes.\*

\*Source:

<https://www.cdc.gov/diabetes/basics/what-is-type-1-diabetes.html#:~:text=Type%201%20diabetes%20is%20less,Managing%20your%20blood%20sugar.>



## Type 2 diabetes

Results from insulin resistance (a condition in which the body fails to properly use insulin), combined with relative insulin deficiency. Most Americans who are diagnosed with diabetes have type 2 diabetes\*.

## Gestational diabetes

Pregnancy-related diabetes.

## Diabetes (cont'd)

\*Source:  
<https://www.cdc.gov/diabetes/basics/type2.html>

# Diabetes (cont'd)

## Type 2:

- ◆ The most common form of diabetes.
- ◆ Millions of Americans have been diagnosed with type 2 diabetes, and many more are unaware they are at high risk.
- ◆ Some groups have a higher risk for developing type 2 diabetes than others; it is more common in African Americans, Latinos, Native Americans and Asian Americans/Pacific Islanders, as well as seniors.





# Diabetes (cont'd)

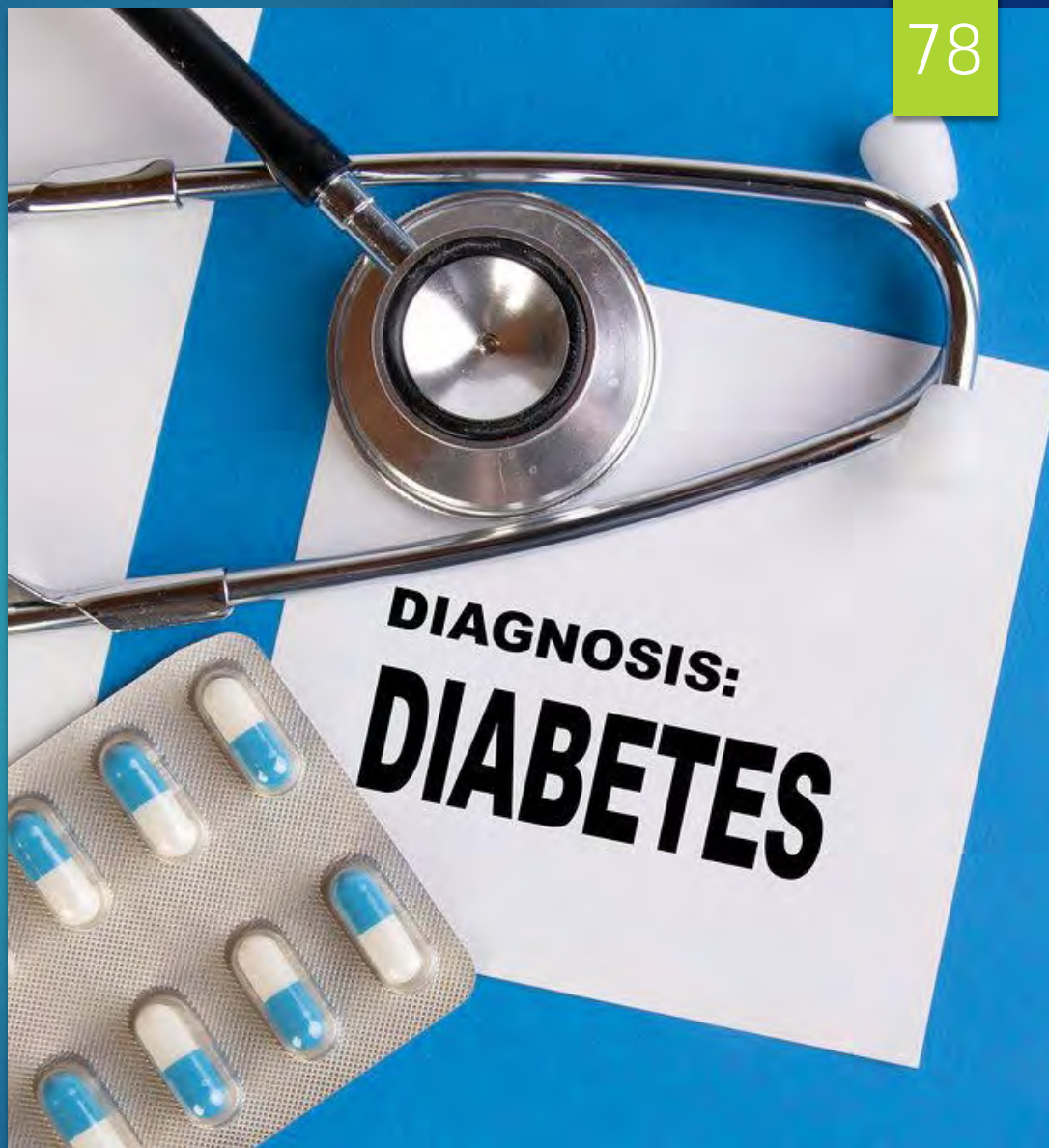
## Who's at risk?

1. People over age 45
2. People with a family history of diabetes
3. People who are overweight
4. People who do not exercise regularly
5. People with low HDL cholesterol or high triglycerides, high blood pressure
6. Certain racial and ethnic groups
7. Women who had gestational diabetes, or who have had a baby weighing 9 pounds or more at birth

# Diabetes (cont'd)

Some diabetes symptoms include:

- ▶ Frequent urination
- ▶ Excessive thirst
- ▶ Extreme hunger
- ▶ Unusual weight loss
- ▶ Increased fatigue
- ▶ Irritability
- ▶ Headaches
- ▶ Infections that do not heal quickly
- ▶ Blurry vision







# Diabetes (cont'd)

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## Diagnosing diabetes:

- evaluating your medical history
- doing a physical exam
- ordering a blood glucose test. [A blood glucose test is a blood test that measures the amount of sugar in your blood; the test is usually done first thing in the morning, before you eat or drink anything.]

# Diabetes (cont'd)

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Treatment for diabetes also includes checking blood sugar levels to make sure that the disease is under control. It is important to watch for signs of high and low blood sugar; both can cause problems and need to be treated.

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Blood sugar goals for the diabetic:

80 -120 before meals  
100 -180 1-2 hours after meals  
100 -140 at bedtime



# Diabetes (cont'd)

These diabetic conditions require **immediate** treatment:

- 🚑 Hypoglycemia – blood sugar level less than 70
- 🚑 Hyperglycemia – blood sugar level greater than 180
- 🚑 Diabetic ketoacidosis – body does not have enough insulin





# Diabetes and Food

## Diabetics should choose:

- Lots of vegetables and fruits from the rainbow of colors available to maximize variety.
- Non-starchy vegetables such as spinach, carrots, broccoli or green beans with meals.
- Whole grain foods over processed grain products - brown rice or whole wheat pasta.
- Dried beans (like kidney or pinto beans) and lentils.
- Include fish in meals 2-3 times a week.
- Lean meats like cuts of beef and pork that end in "loin" such as pork loin and sirloin.
- Remove the skin from chicken and turkey.

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# Diabetes and Food (cont'd)

Diabetics should choose (cont'd):

- Non-fat dairy such as skim milk, non-fat yogurt and non-fat cheese.
- Water and calorie-free "diet" drinks instead of regular soda, fruit punch, sweet tea and other sugar-sweetened drinks.
- Liquid oils for cooking instead of solid fats that can be high in saturated and *trans* fats. Remember that fats are high in calories.
- Cut back on high calorie snack foods and desserts like chips, cookies, cakes, and full-fat ice cream.
- Eating too much of even healthful foods can lead to weight gain. Watch portion sizes.

# Diabetes (cont'd)

## Diabetics and sweets:

The myth that sugar causes diabetes is commonly accepted by many people. Research has shown that it isn't true. Eating sugar has nothing to do with developing type 1 diabetes.

The biggest dietary risk factor for developing type 2 diabetes is simply eating too much and being overweight – your body doesn't care if the extra food comes from cookies or cake, it is gaining weight that is the culprit.





# Diabetes (cont'd)

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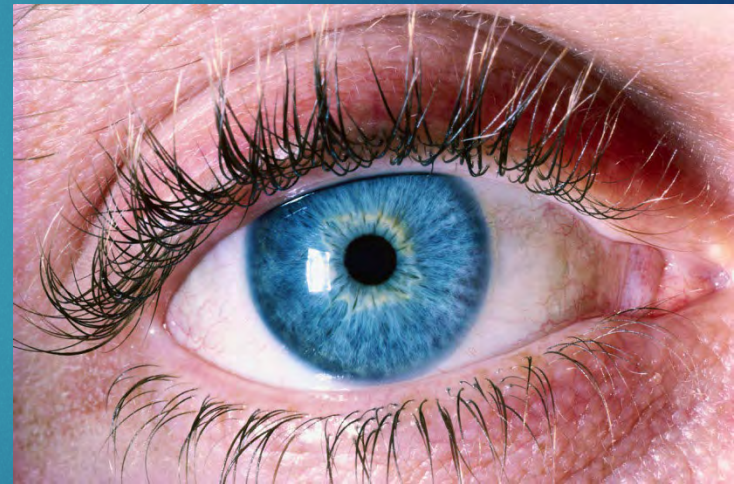
Assisted Living Education

Complications from diabetes:

Eye complications

Foot complications

Skin complications





# Diabetes (cont'd)

86

People with diabetes are at increased risk for eye complications:

- 👁 Most people with diabetes will get some form of retinopathy, a disorder of the retina.
- 👁 People with diabetes are 40% more likely to suffer from glaucoma than people without diabetes\*, and the longer someone has had diabetes, the more common glaucoma is.
- 👁 People with diabetes are 60% more likely to develop cataracts\*\*.

\*Source:

<https://www.health.ny.gov/publications/0939/#:~:text=Glaucoma%20is%20a%20group%20of,get%20glaucoma%20as%20other%20adults.>

\*\*Source: <https://www.diabetes.co.uk/diabetes-complications/cataracts.html#:~:text=Diabetes%20is%20one%20of%20the,greater%20risk%20of%20developing%20cataracts.>



## Diabetes (cont'd)

### Glaucoma:

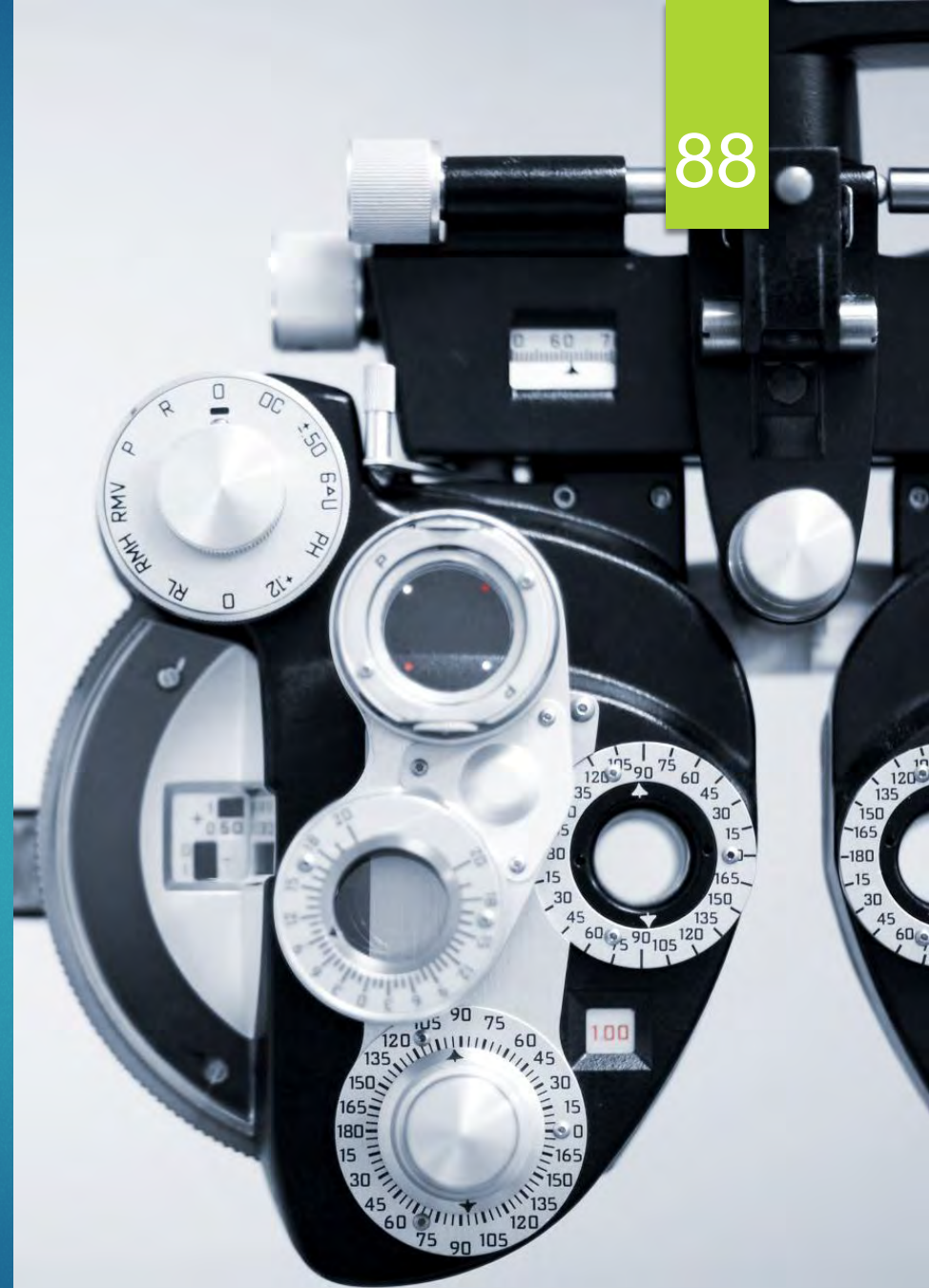
- Occurs when pressure builds up in the eye.
- The pressure pinches the blood vessels that carry blood to the retina and optic nerve; vision is gradually lost because the retina and nerve are damaged.
- There are several treatments for glaucoma; drugs to reduce pressure in the eye or surgery.

# Diabetes (cont'd)

## Cataracts:

- With cataracts, the eye's clear lens clouds, blocking light.
- For cataracts that interfere greatly with vision, doctors usually remove the lens of the eye.
- In people with diabetes, retinopathy can get worse after removal of the lens, and glaucoma may start to develop.

88





# Diabetes (cont'd)

89

## Foot complications:

Foot problems most often happen when there is nerve damage, also called *neuropathy*, which results in loss of feeling in the feet.

Diabetic nerve damage can also lessen the ability to feel pain, cold and heat.

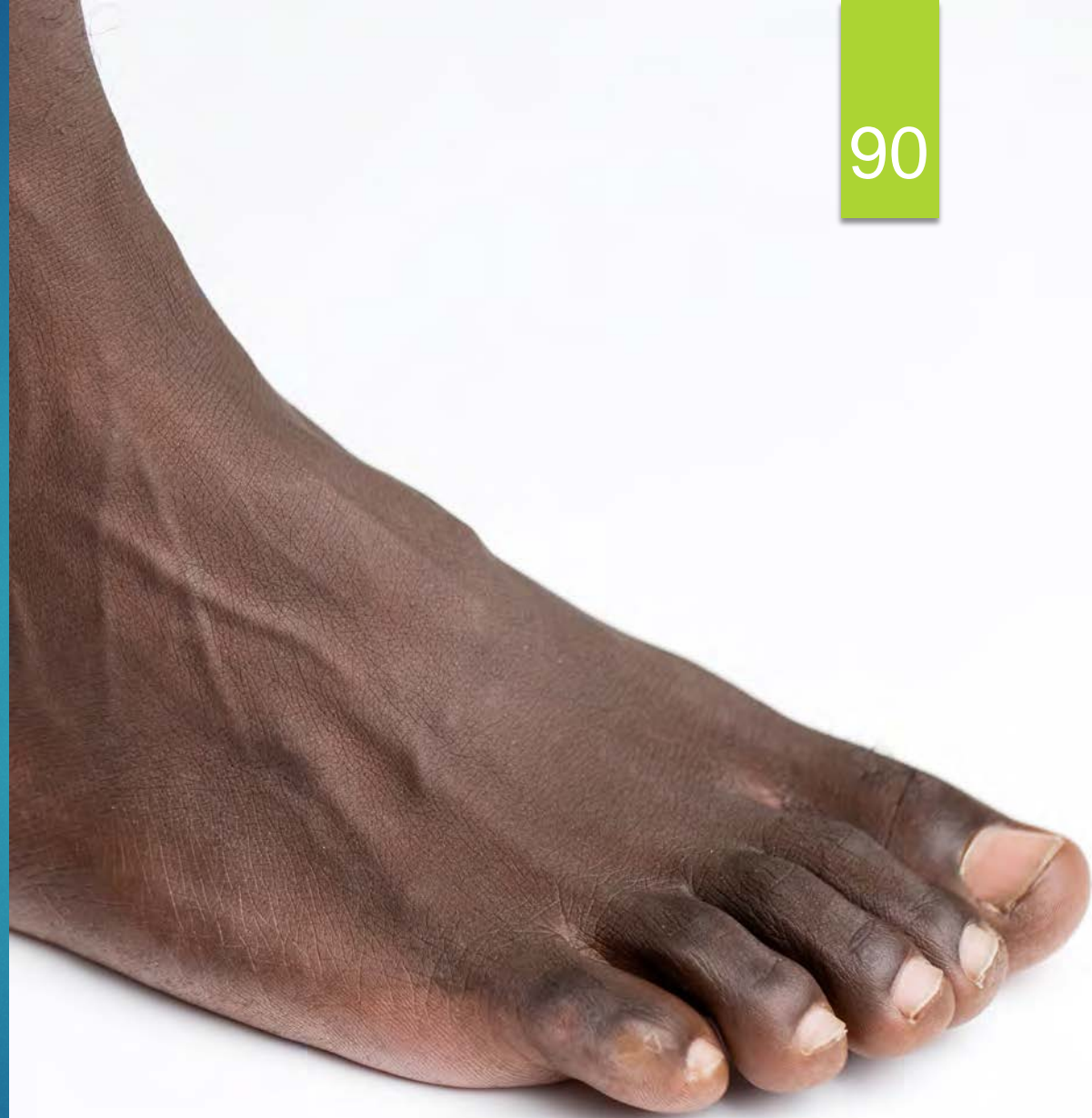
The feet can become very dry, leading to peeling and cracking, thus increasing the chance of infection (the nerves that control the oil and moisture in the foot no longer work).

# Diabetes (cont'd)

90

## Foot complications (cont'd):

- Calluses occur more often and build up faster on the feet of people with diabetes.
- If not trimmed, calluses can get very thick, break down, and turn into ulcers.
- A medical professional should care for calluses.
- Foot ulcers are also very common with diabetics. Untreated, these can lead to infection.





# Diabetes (cont'd)

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## Foot complications (cont'd):



Diabetes causes blood vessels of the foot and leg to narrow and harden, thus leading to poor circulation (reduced blood flow).



If your resident's feet are cold, have them wear socks – do not put them in hot water as they may not feel the pain and burn their feet.



Exercise is good for poor circulation; it stimulates blood flow in the legs and feet.

# Diabetes (cont'd)

92

## Foot complications (cont'd):

- 🦶 **Amputations** - People with diabetes are far more likely to have a foot or leg amputated than other people.
- 🦶 **Why?** Many people with diabetes have artery disease, which reduces blood flow to the feet.
- 🦶 **Also,** many people with diabetes have nerve disease, which reduces sensation. Together, these problems make it easy to get ulcers and infections that may lead to amputation.





# Diabetes (cont'd)

## Skin complications:

- ❖ Skin problems are sometimes the first sign that a person has diabetes.
- ❖ These can include bacterial infections, fungal infections and itching.
- ❖ Due to poor circulation, even minor scrapes can result in open sores that heal slowly.

# Diabetes (cont'd)

94

## Skin complications (cont'd):

🖐️ *Digital Sclerosis* - happens to about one third of people who have type 1 diabetes\*.

🖐️ This is a condition in which the back of the hands develop tight, thick, waxy skin.

\*Source: <https://diabetes.org/diabetes/skin-complications#:~:text=Digital%20sclerosis&text=The%20finger%20joints%20become%20stiff,blood%20glucose%20levels%20under%20control.>





# Diabetes (cont'd)

Diabetes and kidney disease –

- 🦋 The kidney's job is to remove waste products from the blood.
- 🦋 High levels of blood sugar make the kidneys filter too much blood; all this extra work is hard on the filters which can cause kidney failure.

# Diabetes (cont'd)

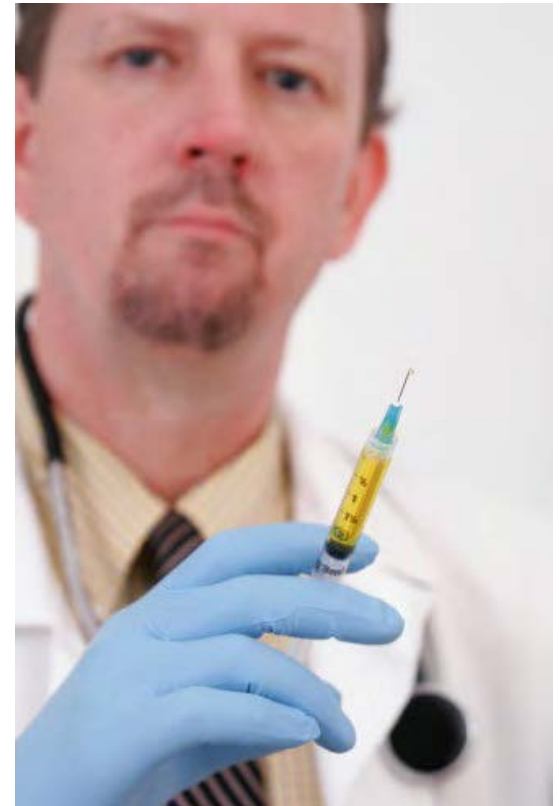
## Treatment:

Insulin is required for type 1 diabetics.

It is sometimes necessary for type 2 diabetics.

Syringe is the most common route but the use of insulin pens and pumps is increasing.

Injectons should be done in same general area of the body for consistency, but not in the exact same place each time.





# Diabetes (cont'd)

Assisting your resident who is diabetic:

1. If the resident cannot perform their own testing and injections, then the **ONLY** person that can do that is a licensed medical professional (a nurse). **NO un-licensed person can do this in the facility!!!**



## Assisting your resident who is diabetic:

Assist them in controlling their diabetics, mainly the simple carbohydrates (white flour, etc.)

Encourage them to exercise, as appropriate.



# Fractures - Osteoporosis





# Fractures - Osteoporosis (cont'd)

## Osteoporosis:

- △ A disease in which bones become fragile and more likely to break.
- △ If not prevented or if left untreated, it can progress painlessly until a bone breaks.
- △ These broken bones (also known as fractures) occur typically in the hip, wrist and spine.



# Fractures - Osteoporosis (cont'd)

## Who's at risk?



Osteoporosis affects millions of older adults.



It usually strikes after age 60.



Women are four times more likely than men to develop the disease.\*



Men also suffer from osteoporosis.

\*Source:

<https://www.webmd.com/osteoporosis/osteoporosis-risk-factors#:~:text=Women%20over%20the%20age%20of,they%20have%20a%20higher%20risk.>

# Fractures - Osteoporosis (cont'd)

What causes osteoporosis?

A lack of bone strength or bone density.

As we age, our bones get thinner naturally.

But some things can make us more likely to have the severe bone thinning of osteoporosis.



# Fractures - Osteoporosis (cont'd)

The risk factors that cannot be helped:

- **Age** - The risk for osteoporosis goes up as we get older.
- **Family background** - Osteoporosis tends to run in families.
- **Being a post-menopausal woman** - Estrogen protects the body from bone loss and after menopause, the body makes less estrogen.
- **Body type** - Having a slender body frame.
- **Race** - People of Asian and European background are most likely to get osteoporosis.

# Fractures - Osteoporosis (cont'd)

104

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The risk factors that we CAN help:

- ▶ Smoking
- ▶ Drinking too much alcohol
- ▶ Not doing enough weight-bearing exercises
- ▶ Lack of calcium and vitamin D from food or supplements







# Fractures - Osteoporosis (cont'd)

## Symptoms of osteoporosis:

- ▶ a broken bone in the hip, spine, or wrist after a bump or fall
- ▶ pain in the back
- ▶ loss of height
- ▶ a curved backbone

# Fractures - Osteoporosis (cont'd)

106

## Diagnosing osteoporosis:

- ❑ A bone density test to measure bone thickness using a dual energy X-ray absorptiometry (DXA).
- ❑ This measures the density of bones in the spine, hip and wrist — the areas most likely to be affected by osteoporosis — and it's used to accurately follow changes in these bones over time.



# Osteoporosis (cont'd)

107

Osteoporosis can cause chronic pain.

Medication is the most popular way to manage osteoporosis pain. These can include:

- OTC pain medications like acetaminophen, aspirin, ibuprofen, and naproxen are safe pain relievers for most people, but they can cause stomach irritation and bleeding or liver problems in some people.



# Osteoporosis (cont'd)

Drugs include (cont'd):

- Narcotics can help in the short-term with acute pain but should not be used for chronic pain.
- Calcitonin is an osteoporosis drug sold under the brand names *Miacalcin*, *Calcimar*, or *Fortical*. Calcitonin may help relieve pain associated with bone fractures.



# Stroke





# Stroke

- ◎ Cerebrovascular Diseases  
= "cerebrovascular" refers to blood flow within the brain.
- ◎ Cerebrovascular disease includes all disorders in which an area of the brain is temporarily or permanently affected by bleeding or lack of blood flow.
- ◎ Include stroke, aneurysms and vascular malformations.





# Stroke (cont'd)

111

Stroke is the fifth leading cause of death in the United States.\*

Of the more than 700,000 people affected every year, about 500,000 of these are first attacks, and 200,000 are recurrent.\*

\*Source: <https://www.stroke.org/en/about-stroke#:~:text=Stroke%20is%20the%20No.,to%20and%20within%20the%20brain>.

# Stroke (cont'd)

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- About 25% of people who recover from their first stroke will have another stroke within 5 years.\*
- Stroke is a leading cause of serious long-term disability.
- Each year, an estimated 30,000 people in the United States experience a ruptured cerebral aneurysm and as many as 6% may have an unruptured aneurysm.\*\*

\*Source: <https://www.ninds.nih.gov/health-information/disorders/stroke#:~:text=In%20fact%2C%20about%2025%20percent,days%20of%20their%20first%20stroke>.

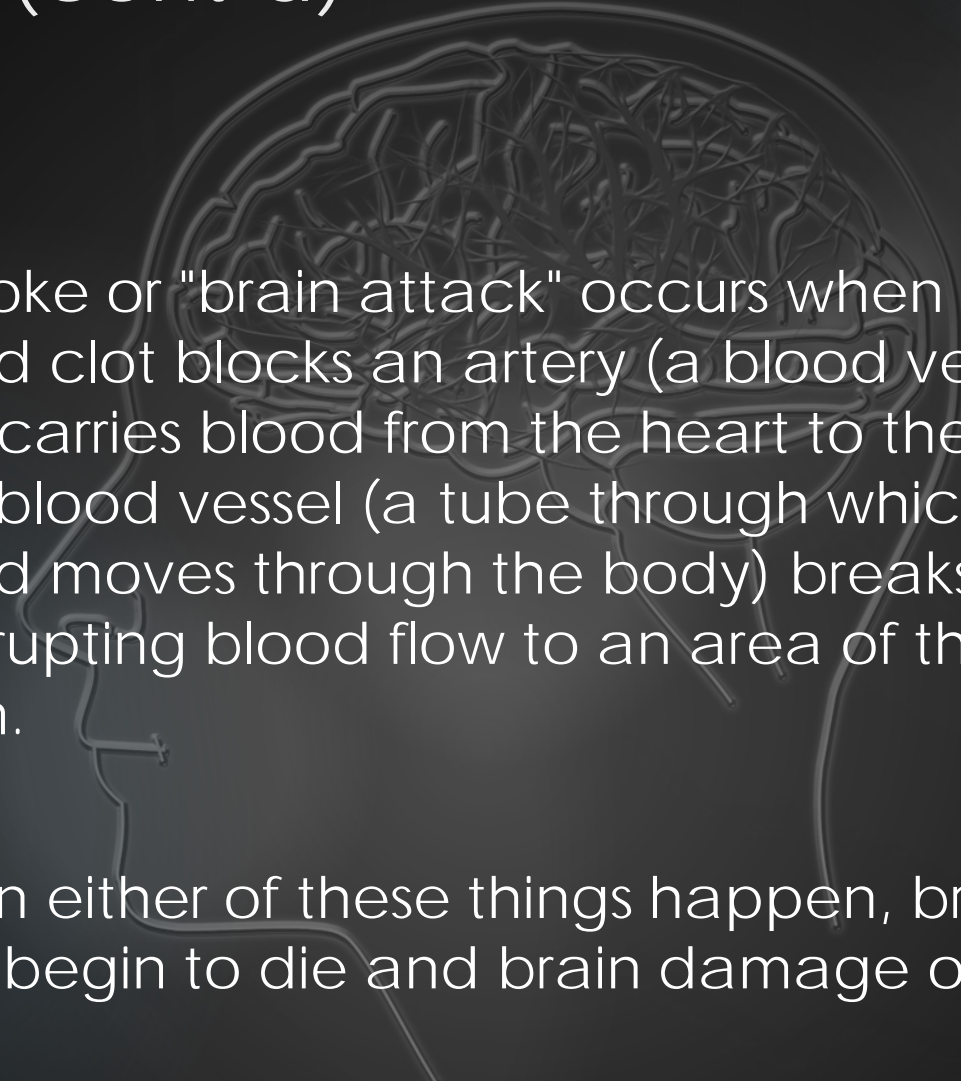
\*\*Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2323531/>



# Stroke (cont'd)

113

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A stroke or "brain attack" occurs when a blood clot blocks an artery (a blood vessel that carries blood from the heart to the body) or a blood vessel (a tube through which the blood moves through the body) breaks, interrupting blood flow to an area of the brain.

When either of these things happen, brain cells begin to die and brain damage occurs.

# Stroke (cont'd)

114

- ❖ When brain cells die during a stroke, abilities controlled by that area of the brain are lost.
- ❖ These abilities include speech, movement and memory.
- ❖ How a stroke patient is affected depends on where the stroke occurs in the brain and how much the brain is damaged.

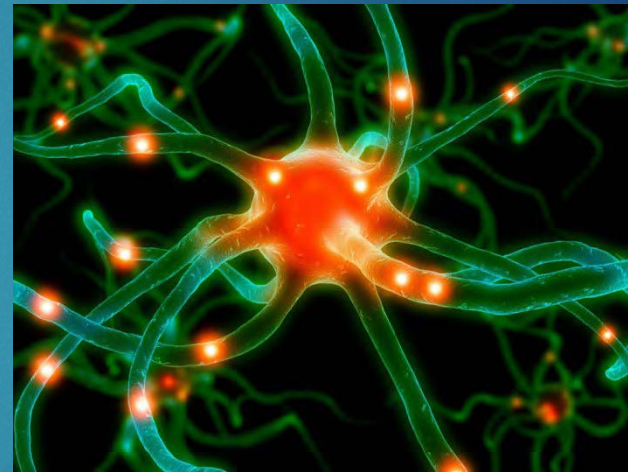


# Stroke (cont'd)

115

## Types:

- Ischemic Stroke
- Hemorrhagic Stroke
- Transient Ischemic Attack (TIA)





# Ischemic Stroke

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- The most common type of stroke.
- Two types of ischemic stroke: *thrombotic* and *embolic*.
  - ▶ A thrombotic stroke occurs when a blood clot, called a thrombus, blocks an artery to the brain and stops blood flow.
  - ▶ An embolic stroke occurs when a piece of plaque or thrombus travels from its original site and blocks an artery. The materials that has moved is called an embolus.
- How much of the brain is damaged or affected depends on exactly how far downstream in the artery the blockage occurs.



- Can be caused by hypertension, rupture of an aneurysm or vascular malformation, or as a side effect of anticoagulation medications (like Coumadin).
- Bleeding into the brain tissue – very serious.
- Usually requires surgery to relieve the pressure caused by the bleeding.

# Transient Ischemic Attack (TIA)

A temporary cerebrovascular event that leaves no permanent damage.

Usually, it entails an artery to the brain is temporarily blocked, causing stroke-like symptoms, but the blockage dislodges before any permanent damage occurs.

Symptoms of a TIA may be similar to a stroke, but they disappear quickly – one might not know they had one.

About 30 percent of all people who suffer a major stroke experience a prior TIA, and 10 percent of all TIA victims suffer a stroke within two weeks.\*

\*Source: <https://www.aans.org/en/Patients/Neurosurgical-Conditions-and-Treatments/Cerebrovascular-Disease#:~:text=About%2030%20percent%20of%20all,a%20course%20of%20treatment%20started>  
Academy of Neurological Education



# Stroke (cont'd)

## Risk factors:

- ▶ High blood pressure
- ▶ Smoking
- ▶ Carotid or other artery disease
- ▶ History of TIAs
- ▶ Diabetes
- ▶ High blood cholesterol
- ▶ Physical inactivity and/or obesity





# Stroke (cont'd)

120

**Stroke strikes fast! Call 911.**

Signs of a stroke:

- Sudden numbness or weakness of the face, arm or leg – especially on one side of the body.
- Sudden confusion, trouble speaking or understanding.
- Sudden trouble seeing in one or both eyes.
- Sudden trouble walking, dizziness, loss of balance or coordination.
- Sudden severe headache with no known cause.



# Stroke (cont'd)

121

**Use the F.A.S.T. method for recognizing and responding to stroke symptoms:**

- |            |  |
|------------|--|
| F = FACE   | Ask the person to smile.                     |
| A = ARMS   | Ask the person to raise both arms.           |
| S = SPEECH | Ask the person to repeat a simple statement. |
| T = TIME   | Call 911 immediately.                        |



# Stroke (cont'd)

122

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**A resident who  
has had a stroke  
may have:**

Paralysis on the  
left or right side of  
the body

Vision problems

Quick, inquisitive  
behavioral style or  
slow, cautious  
behavioral style

Memory loss

Speech/language  
problems





## Stroke (cont'd)

123

Medications for people who have had a stroke may include Coumadin (warfarin).

Residents taking this medication must follow the physician's orders precisely.

The following slides will discuss this powerful, and potentially dangerous, drug.

# Coumadin

Otherwise known as Warfarin.


COUMADIN® is an anticoagulant.  
*Anti* means *against*, and *coagulant* refers to *blood clotting*.

This anticoagulant helps reduce clots from forming in the blood.



## Coumadin (cont'd)

It is used to help prevent and treat blood clots in the legs, lungs, and those clots associated with heart-valve replacement or an irregular, rapid heartbeat (*atrial fibrillation*).



For heart attack patients, it may be used to lower the risk of death, another heart attack, stroke, and blood clots moving to other parts of the body.

# Coumadin (cont'd)

126

Factors that can increase the risk of bleeding while on COUMADIN include:

- ✓ being 65 years of age or older
- ✓ history of bleeding involving the stomach or intestine
- ✓ high blood pressure
- ✓ certain diseases of the brain, heart or kidney
- ✓ anemia
- ✓ cancer
- ✓ physical injury
- ✓ taking other drugs,
- ✓ a long duration of therapy



## Coumadin (cont'd)

### **Other possible side effects:**

Death of skin tissue (skin necrosis or gangrene). It happens because blood clots form and block blood flow to an area of the body; amputation may be necessary.

Pain in the toes and they look purple or dark in color.

Flu-like symptoms.

# Coumadin (cont'd)

126

Coumadin dose changes:

- ☠ A medication error involving Coumadin can be deadly.
- ☠ Coumadin dose levels can change frequently – you need to monitor this very carefully.





## Coumadin (cont'd)

Residents on Coumadin will have to have frequent blood tests.

The blood test is called a PT/INR test. PT/INR stands for Prothrombin Time and International Normalized Ratio.

These tests are used to see how quickly the blood clots and whether the patient is getting the right amount of the drug.

# Coumadin (cont'd)

130

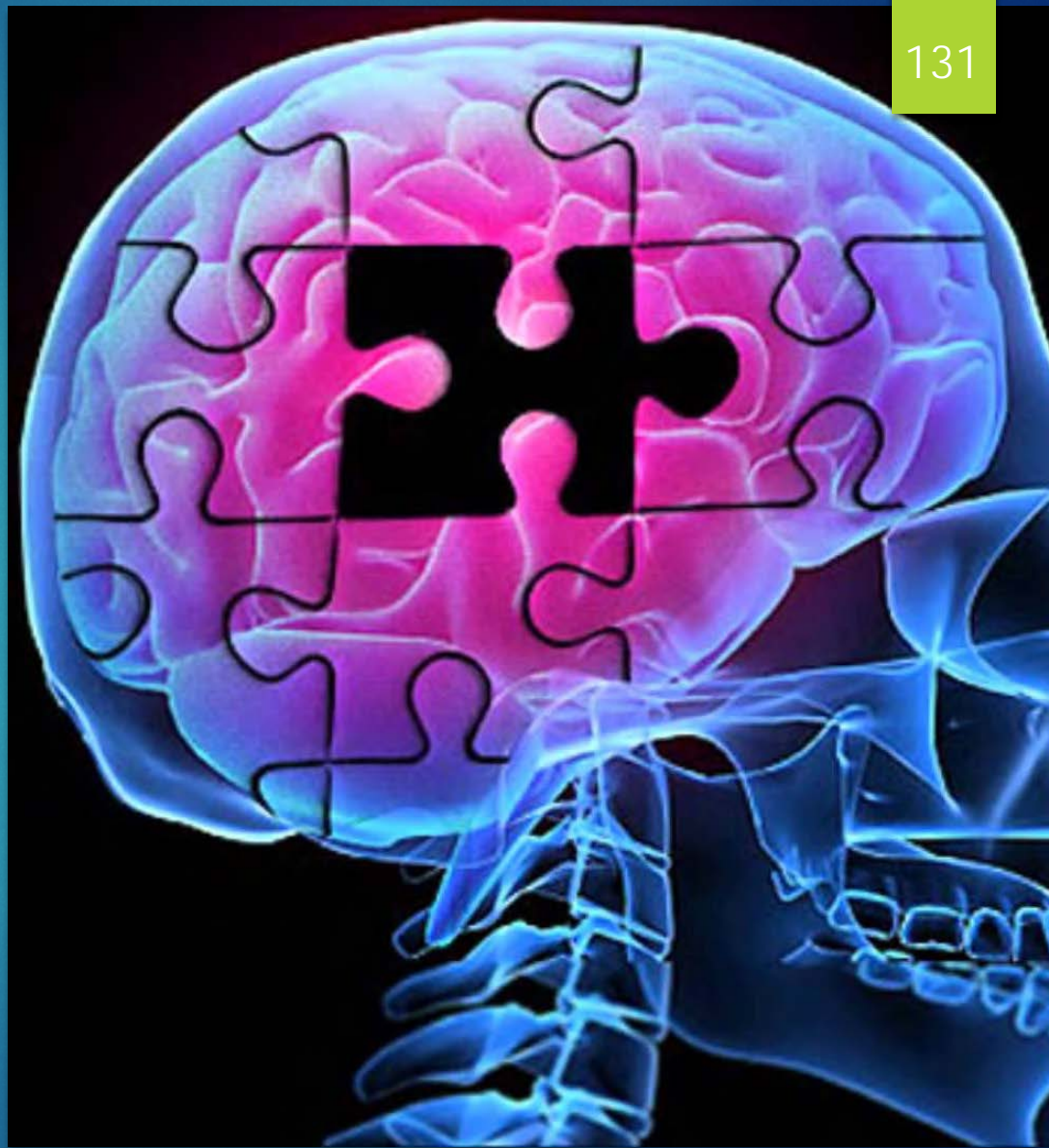
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Residents on blood-thinners should:

- 👁 Monitor for signs of bleeding, such as bleeding gums or bloody urine
- 👁 Watch for black, tarry stools or stools with blood
- 👁 Monitor bruising
- 👁 Blow nose gently
- 👁 Use an electric razor
- 👁 Use a soft-bristle toothbrush
- 👁 Avoid tight, constrictive clothing



# Dementia and Alzheimer's Disease



131



# What is Dementia?

- General term describing the loss of the ability to think, remember, reason and communicate.
- Not a disease, but a group of symptoms or a syndrome that is caused by certain diseases, conditions or temporary illnesses.



# What causes dementia?

Damage or changes to the brain, caused by reversible and irreversible causes, such as:

- Diseases, such as Alzheimer's disease
- Strokes, tumors or head injuries
- Vitamin B12 deficiencies
- Malnutrition
- Over-medicating
- Substance abuse

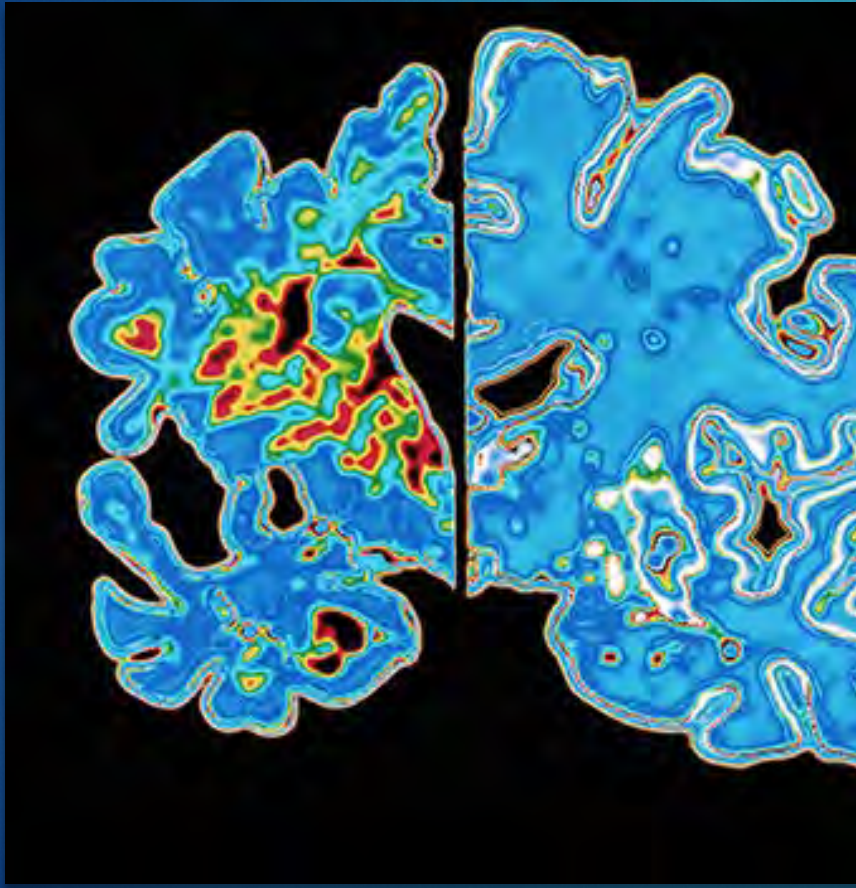
# What is MCI?

- MCI = “Mild cognitive impairment”
- Different from both Alzheimer’s disease and normal age-related memory change.
- People with MCI have ongoing memory problems but do not have other losses like confusion, attention problems and difficulty with language.
- Not everyone diagnosed with MCI goes on to develop Alzheimer’s disease.



# What is Alzheimer's disease?

135



- A slow, progressive disease, starting with mild memory problems and ending with severe brain damage.
- The course the disease takes and how fast changes occur vary from person to person.
- On average, patients with Alzheimer's disease live from 8 to 10 years after they are diagnosed, though the disease can last for as many as 20 years.

## What is Alzheimer's disease?

Every day scientists learn more, but right now the causes of Alzheimer's disease are still unknown, and there is **no cure**.



# The 10 Warning Signs of AD

137

The Alzheimer's Association publishes this list of 10 warning signs:

1. Memory changes that disrupt daily life.
2. Challenges in planning or solving problems.
3. Difficulty completing familiar tasks at home, at work or at leisure.
4. Confusion with time or place.
5. Trouble understanding visual images and spatial relationships.

# The 10 Warning Signs of AD

6. New problems with words in speaking or writing.
7. Misplacing things and losing the ability to retrace steps.
8. Decreased or poor judgment.
9. Withdrawal from work or social activities.
10. Changes in mood and personality.



# Dementia and Alzheimer's Disease

Treatments available:

Because there is no cure, managing the disease usually involves medications to control symptoms, in combination with various non-drug strategies designed to ease the suffering of the person afflicted as well as his or her family and caregiver.



# Dementia and Alzheimer's Disease

Treatments available:

2 types of 5 individual drugs have been approved by the FDA for treating cognitive symptoms:

1. Cholinesterases (Aricept, Exelon)
2. Memantines (Namenda)



# Dementia and Alzheimer's Disease

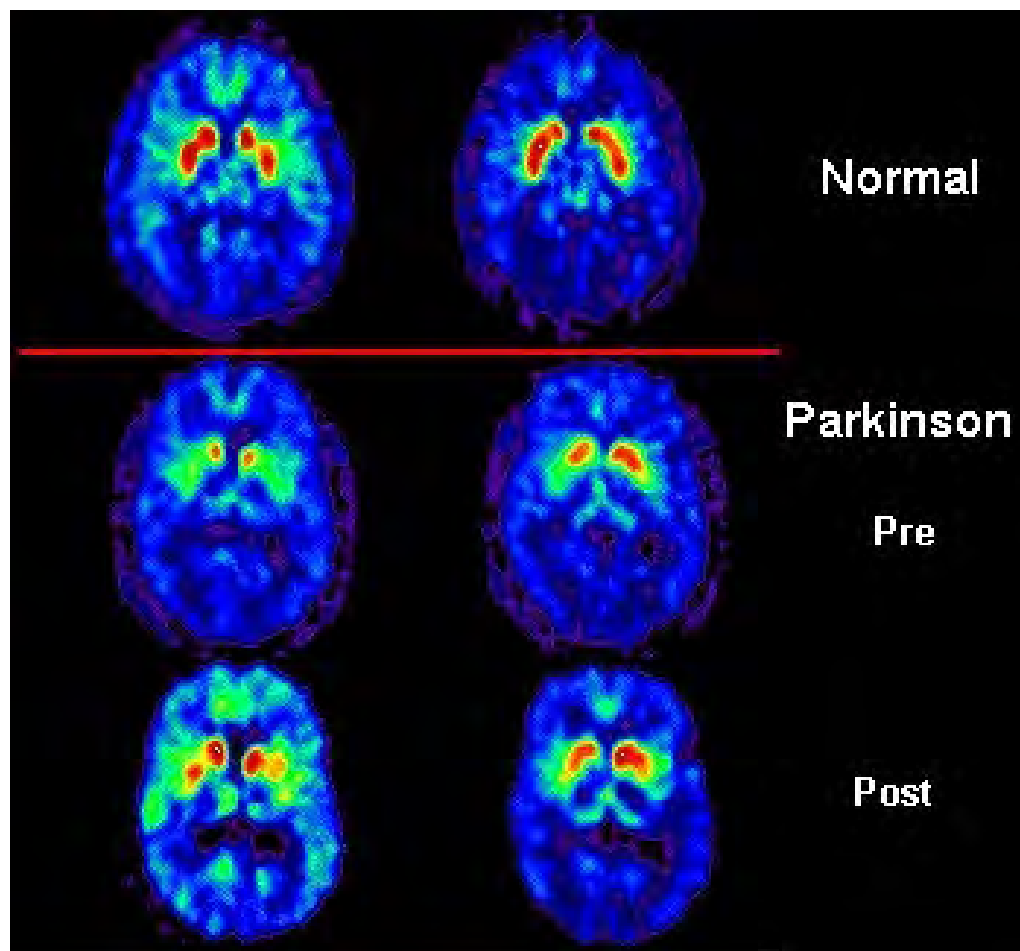
141

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Caring for your resident with AD:

1. Train the staff per Title 22 and Health and Safety Code regulations;
2. You are responsible for their safety so if they have wandering tendencies, can you care for them safely? If not, do not admit them!

# Parkinson's Disease





# Parkinson's Disease (cont'd)

143

- Parkinson's disease is a chronic and progressive degenerative disease of the brain that impairs motor control, speech, and other functions. It also affects movement.
- It is caused by the loss of dopamine-producing brain cells.
- It develops gradually, sometimes starting with a barely noticeable tremor in just one hand.

# Parkinson's Disease (cont'd)

144

The four primary symptoms of PD are:

- tremors, or trembling in hands, arms, legs, jaw, and face;
- rigidity, or stiffness of the limbs and trunk;
- *bradykinesia*, or slowness of movement; and
- postural instability, or impaired balance and coordination



# Parkinson's Disease (cont'd)

145

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Let's watch a video with Michael J. Fox and Katie Couric about his experience with Parkinson's disease.

<https://www.youtube.com/watch?v=o8lsjfjgAA8>

# Parkinson's Disease (cont'd)

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- The symptoms and the course of Parkinson's disease can vary a great deal from person to person.
- There is no known cure for Parkinson's disease
- Residents with Parkinson's may have tremors, gait and posture issues, speech and swallowing problems or drooling.



# Parkinson's Disease

147

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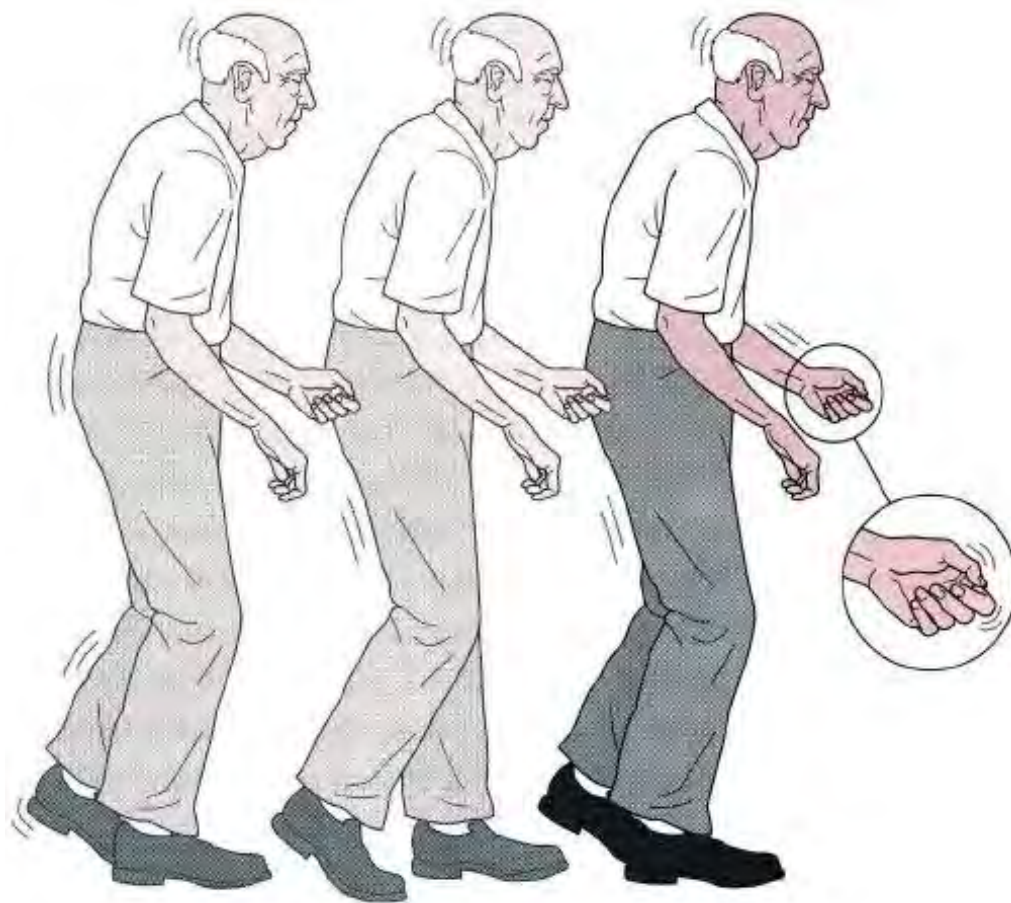
- ❑ There is no cure for PD, but medications, surgery, exercise, and lifestyle changes can relieve some symptoms of the disease.
- ❑ The typical medication prescribed is Levodopa combined with Carbidopa.
- ❑ In some cases, surgery may be appropriate if the disease does not respond to drugs.

# Parkinson's Disease (cont'd)

148

Helping your resident with Parkinson's:

1. They may need adaptive equipment for eating;
2. Make sure that there is no clutter in their room or apartment to trip over;
3. Make sure physician's orders are being followed precisely in regard to their medications.







# COPD

# COPD

Chronic obstructive pulmonary disease (COPD) is a progressive and irreversible disease that makes it hard to breathe.

COPD can cause coughing that produces large amounts of mucus (a slimy substance), wheezing, shortness of breath, chest tightness, and other symptoms.

Cigarette smoking is the leading cause of COPD. Most people who have COPD smoke or used to smoke. Long-term exposure to other lung irritants, such as air pollution, chemical fumes, or dust, also may contribute to COPD.



# COPD (cont'd)

151

- COPD develops slowly. Symptoms often worsen over time and can limit the ability to do routine activities.
- Severe COPD may prevent the resident from doing even basic activities like walking, cooking, or taking care of themselves.
- The disease is not passed from person to person—you cannot catch it from someone else.

## COPD (cont'd)

COPD has no cure yet, and doctors do not know how to reverse the damage to the airways and lungs.

However, treatments and lifestyle changes can help the resident feel better, stay more active, and slow the progress of the disease.



# COPD (cont'd)

153

## Symptoms:

- Chronic cough
- Shortness of breath or breathlessness
- Difficulty breathing in or out
- Wheezing or noisy breathing
- Fatigue
- Weight loss
- Depression and anxiety
- Chest and stomach pain

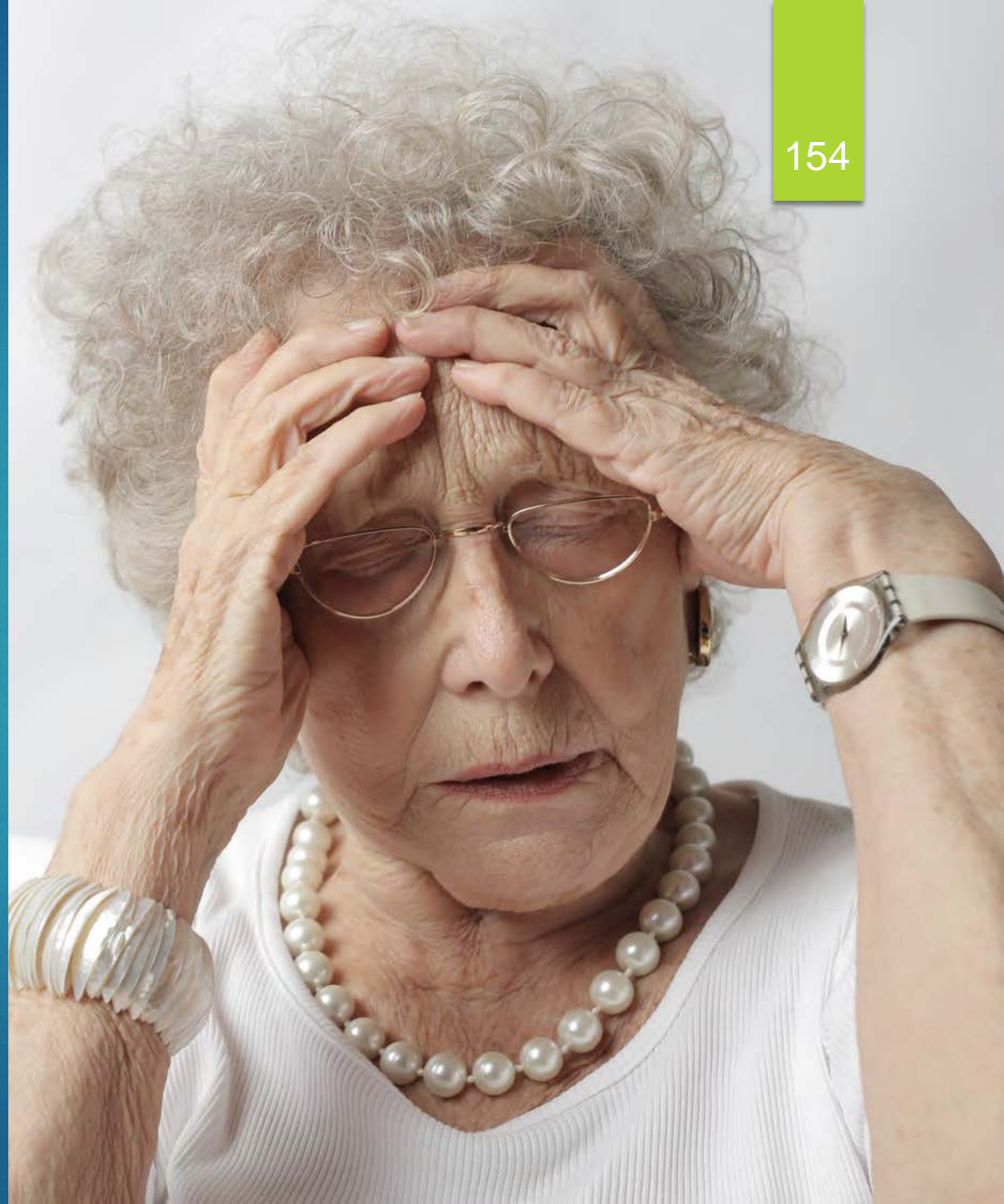


# COPD (cont'd)

154

Because the resident is not getting enough oxygen to the brain, they can have:

- ☑ headaches
- ☑ sleeplessness
- ☑ irritability
- ☑ problems with thinking and learning





# COPD (cont'd)

## Assisting your residents who have COPD:

1. Ensure that their oxygen is being delivered, stored and utilized properly;
2. Ensure that the physician/etc. orders are being followed precisely.
3. Encourage them to quit smoking (if they smoke) and watch their weight.
4. Have them ask their physician about pulmonary rehabilitation.

# Incontinence





# Incontinence (cont'd)

157

- There are two different types – urinary and bowel.
- Urinary incontinence — the loss of bladder control — is a common problem for many of our residents/consumers.
- Fecal incontinence is the loss of bowel control.

# Incontinence (cont'd)

158

## Possible causes of urinary incontinence:

- Disorders like Parkinson's and Alzheimer's disease, multiple sclerosis, strokes and spinal cord injury can all interfere with nerve function of the bladder.
- Enlarged prostate is the most common cause of incontinence in men after the age of 40\*; sometimes prostate cancer may also be associated with urinary incontinence. Moreover, drugs or radiation used to treat prostate cancer can also cause incontinence.

\*Source: <https://www.pennmedicine.org/for-patients-and-visitors/patient-information/conditions-treated-a-to-z/enlarged-prostate>



# Incontinence (cont'd)

159

Possible causes of urinary incontinence (cont'd):

- Age! Aging of the bladder muscle can decrease the bladder's capacity to store urine.
- Having a hysterectomy. In women, the bladder and uterus are supported by many of the same muscles and ligaments. Any surgery that involves a woman's reproductive system, including removal of the uterus, may damage the supporting pelvic floor muscles, which can lead to incontinence.



## Incontinence (cont'd)

**Urinary incontinence also may be caused by an easily treatable medical condition, such as:**

Urinary tract infection. These can irritate the bladder, causing strong urges to urinate, and sometimes incontinence.

Constipation. The rectum is located near the bladder and shares many of the same nerves. Hard, compacted stool in the rectum causes these nerves to be overactive and increase urinary frequency.



# Incontinence (cont'd)

161

Different types of urinary incontinence that may affect our population:

- **Functional incontinence** occurs when a person recognizes the need to urinate but cannot make it to the bathroom.
  - There are several causes of functional incontinence including confusion, dementia, poor eyesight, mobility or dexterity.
- **Transient incontinence** can be temporary, triggered by medications, mental impairment, restricted mobility, and stool impaction.

# Incontinence (cont'd)

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## Care:

Take the resident to the toilet on a regular basis  
– generally every 2 hours or more often, if necessary.

If the resident is wearing incontinence products, make sure they are checked and changed properly and when needed.





## Incontinence (cont'd)

### Care (cont'd):

3. Check the residents at night and change, if necessary.
4. Watch for skin breakdown and report to the physician/etc. immediately.
5. Keep the resident well hydrated.



# Cancer



# Cancer

165

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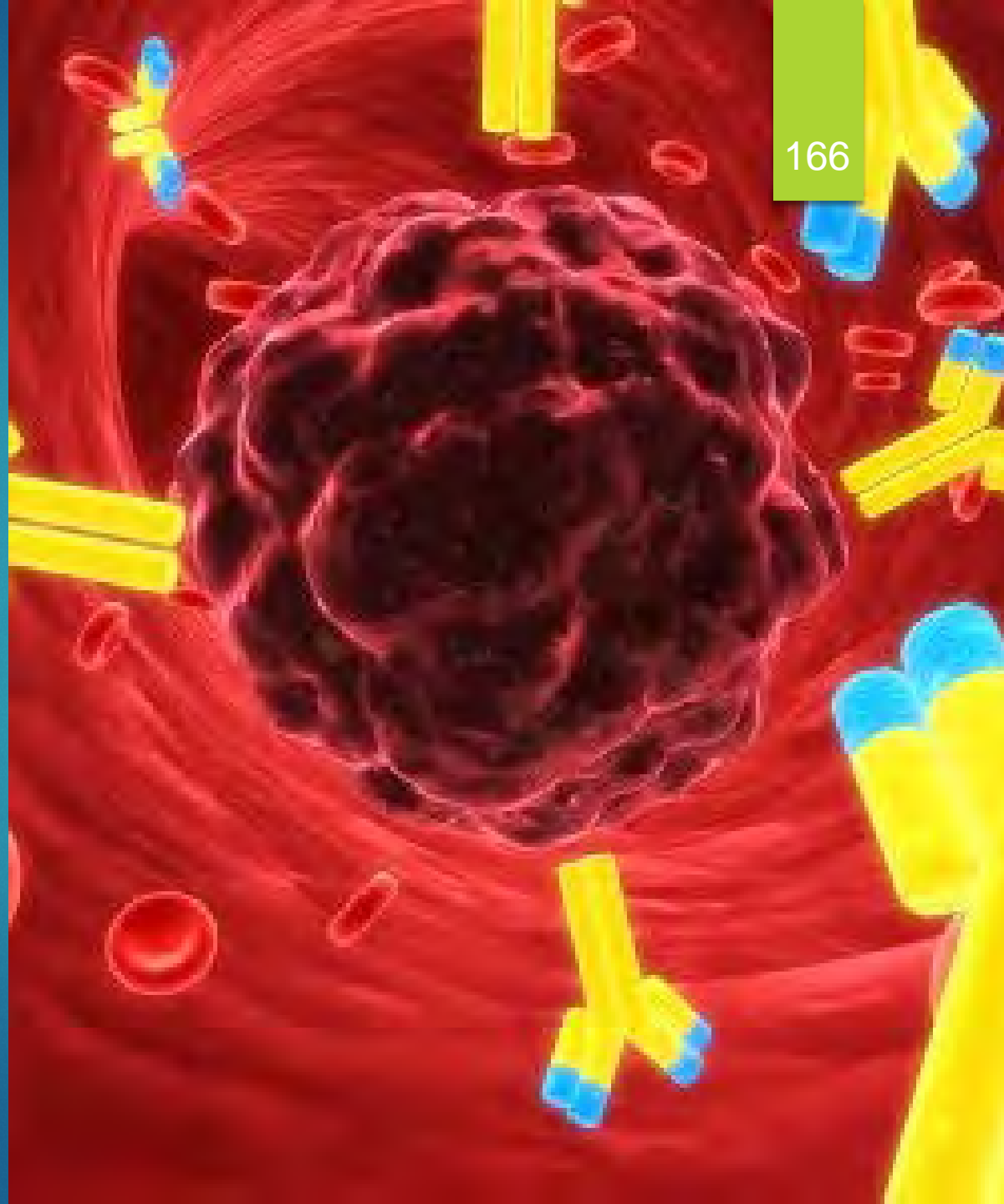
## According to the American Cancer Society\*:

- Over one million people get cancer each year.
- About 1 out of every 2 American men and 1 out of every 3 American women will have some type of cancer at some point during their lifetime.
- Anyone can get cancer at any age, but about 77% of all cancers are diagnosed in people age of 55 and older.

\*Source: <https://www.cancer.org/>

# What is cancer?

- The body is made up of hundreds of millions of living cells. Normal body cells grow, divide, and die in an orderly fashion.
- Cancer begins when cells in a part of the body start to grow out of control.
- There are many kinds of cancer, but they all start because of out-of-control growth of abnormal cells.

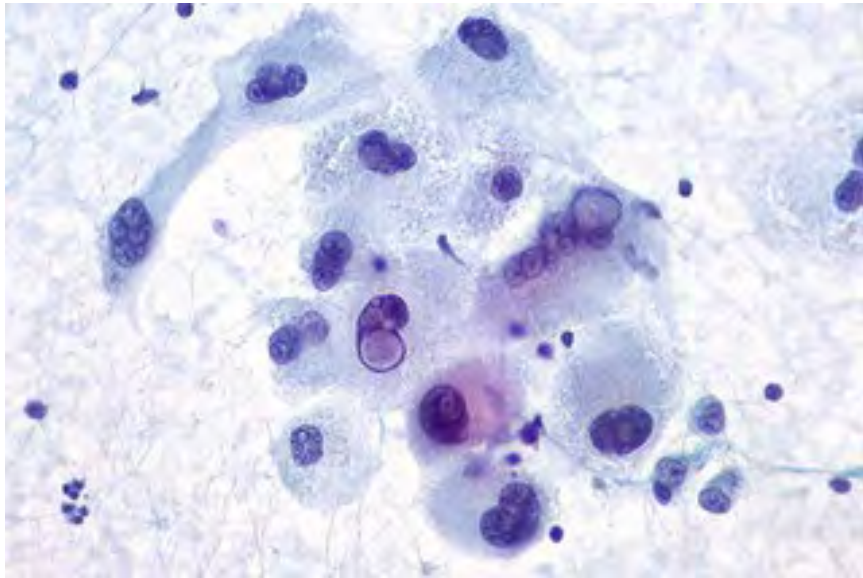




# What is **cancer** (cont'd)?

- Cancer cell growth is different from normal cell growth; instead of dying, cancer cells continue to grow and form new, abnormal cells.
- Cancer cells can also invade (grow into) other tissues, something that normal cells cannot do.
- Growing out of control and invading other tissues are what makes a cell a cancer cell.

# What is cancer (cont'd)?



*Malignant* =  
cancerous

*Benign* = non-  
cancerous



# What is **cancer** (cont'd)?

169

- Cells become cancer cells because of damage to DNA (DNA is in every cell and directs all its actions).
- In a normal cell, when DNA gets damaged the cell either repairs the damage or the cell dies.
- In cancer cells, the damaged DNA is not repaired, but the cell doesn't die like it should. Instead, this cell goes on making new cells that the body does not need.
- These new cells will all have the same damaged DNA as the first cell does.

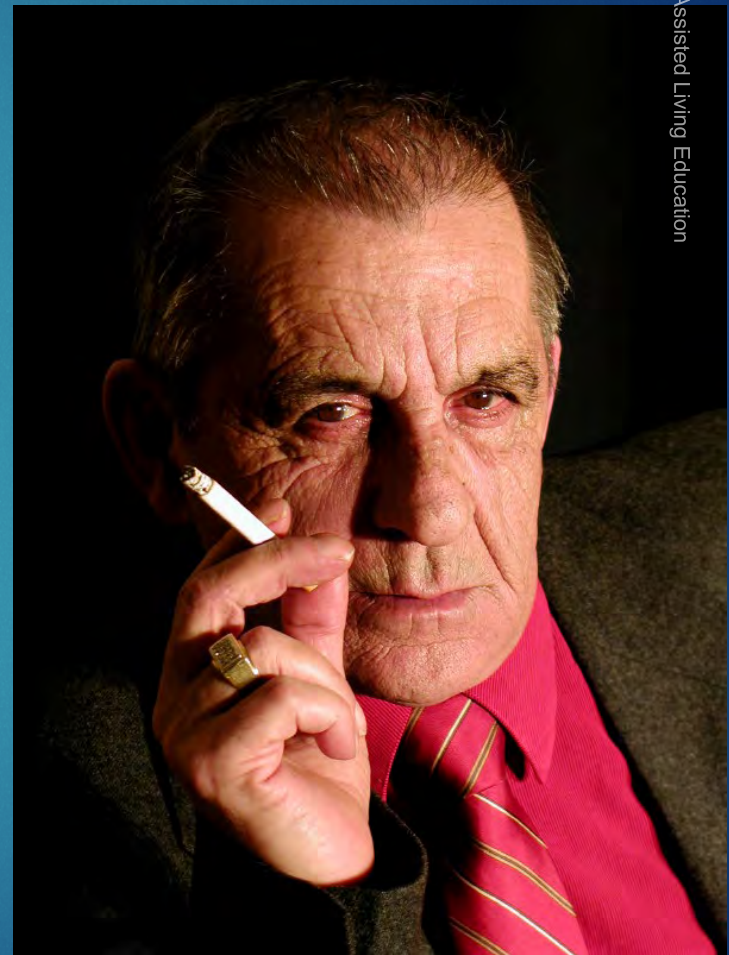


# What is **cancer** (cont'd)?

170

## What causes a DNA change?

- Could be something in the environment, like cigarette smoking.
- Often no clear cause is found.



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# What is **cancer** (cont'd)?

171

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## Tumors:

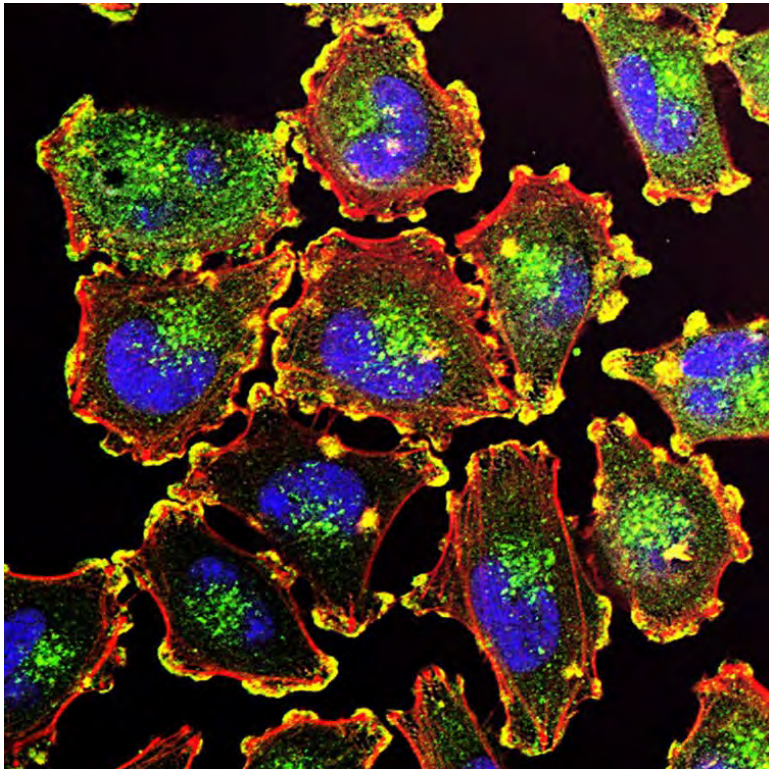
In most cases the cancer cells form a *tumor*.

But some cancers, like leukemia, rarely form tumors. Instead, these cancer cells involve the blood and blood-forming organs and circulate through other tissues where they grow.

Not all tumors are cancerous.

# What is cancer (cont'd)?

172



Cancer cells often travel to other parts of the body, where they begin to grow and form new tumors that replace normal tissue.

This process is called *metastasis*. It happens when the cancer cells get into the bloodstream or lymph vessels of the body.



# Most Common Cancers

173

## MEN

1. Prostate cancer
2. Lung cancer
3. Colon cancer

## WOMEN

1. Breast cancer
2. Colon cancer
3. Lung cancer

# Cancer Risk Factors

- Smoking
- Drinking alcohol
- Sun exposure
- Obesity and inactivity
- Bad nutrition
- Infectious diseases [i.e., human papilloma virus (HPV)]
- Excessive radiation
- Certain inherited DNA changes

In most cases, the exact cause of cancer remains a mystery.





# Cancer (cont'd)

175

Possible cancers your residents may have:

- \* breast cancer
- \* prostate cancer
- \* brain cancer
- \* skin cancer
- \* pancreatic cancer
- \* bone cancer





# Breast Cancer

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- Over the course of a lifetime, 1 in 8 women will be diagnosed with breast cancer.\*
- Breast cancer is a cancer that starts in the tissues of the breast.
- Men can get breast cancer, too.
- Many breast cancers are sensitive to the hormone estrogen (estrogen causes the breast cancer tumor to grow).
- Early breast cancer usually does not cause symptoms.

\*Per the American Cancer Society: <https://www.cancer.org/>



# Breast Cancer (cont'd)

177

Symptoms may include:

- ▶ Breast lump or lump in the armpit that is hard, has uneven edges, and usually does not hurt.
- ▶ Change in the size, shape, or feel of the breast or nipple -- for example, redness, dimpling, or puckering that looks like the skin of an orange.
- ▶ Fluid coming from the nipple -- may be bloody, clear-to-yellow, or green and look like pus.
- ▶ Bone pain
- ▶ Breast pain or discomfort
- ▶ Skin ulcers
- ▶ Swelling of one arm (next to breast with cancer)
- ▶ Weight loss



# Breast Cancer (cont'd)

Treatments may include:

- ✓ Chemotherapy medicines to kill cancer cells
- ✓ Radiation therapy to destroy cancerous tissue
- ✓ Surgery to remove cancerous tissue -- a lumpectomy removes the breast lump; mastectomy removes all or part of the breast and possible nearby structures
- ✓ Hormonal therapy to block certain hormones that fuel cancer growth (the drug tamoxifen)
- ✓ Targeted therapy to interfere with cancer cell growth and function



# Breast Cancer (cont'd)

179

## Tamoxifen:

- This drug blocks the effects of estrogen, which can help breast cancer cells survive and grow.
- Most women with estrogen sensitive breast cancer benefit from this drug.
- A newer class of medicines called aromatase inhibitors, such as exemestane (Aromasin), have been shown to work just as well or even better than tamoxifen in post-menopausal women with breast cancer.

# Breast Cancer (cont'd)

According to the American Cancer Society (ACS)\*, the 5-year survival rates for persons with breast cancer that is appropriately treated are as follows:

- 100% for stage 0
- 100% for stage I
- 92% for stage IIA
- 81% for stage IIB
- 67% for stage IIIA
- 54% for stage IIIB
- 20% for stage IV

\*Source:  
<https://www.cancer.org/cancer/types/breast-cancer/understanding-a-breast-cancer-diagnosis/breast-cancer-survival-rates.html>



# Prostate Cancer

181

- Prostate cancer is cancer that grows in prostate gland.
- The prostate is a small, walnut-sized structure that makes up part of a man's reproductive system.
- It wraps around the urethra, the tube that carries urine out of the body.

# Prostate Cancer (cont'd)

182

With PSA testing, most prostate cancers are now found before they cause symptoms.

While most of the symptoms listed below can be associated with prostate cancer, they are more likely to be associated with non-cancerous conditions:

- ▶ Urinary hesitancy (delayed or slowed start of urinary stream)
- ▶ Urinary dribbling, especially immediately after urinating
- ▶ Urinary retention
- ▶ Pain with urination
- ▶ Lower back pain
- ▶ Pain with bowel movement



# Prostate Cancer (cont'd)

## Detection:

- ★ Prostate-specific antigen (PSA) is a protein produced by cells of the prostate gland.
- ★ The PSA test measures the level of PSA in the blood.
- ★ Testing also includes digital rectal exams, urinalysis, x-rays and scans.

# Prostate Cancer (cont'd)

184

## Treatment:

Prostate cancer that has spread may be treated with:

- drugs to reduce testosterone levels;
- radiation;
- surgery to remove the testes; or
- chemotherapy

Possible surgical complications may include urinary incontinence and/or impotence.



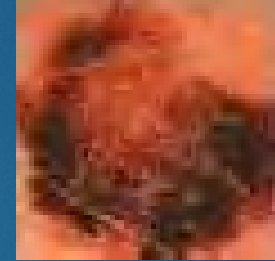
# Skin Cancer

185

Skin cancer is the uncontrolled growth of abnormal skin cells.

If left unchecked, these cancer cells can spread from the skin into other tissues and organs.

There are different types of skin cancer:  
*basal cell carcinoma* (the most common)  
and  
*melanoma* (less common, but more dangerous).



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# Skin Cancer (cont'd)

Skin cancers may have many different appearances. They can be:

small, shiny, waxy, scaly and rough, firm and red, crusty or bleeding, or have other features.

Anything suspicious should be looked at by a physician.





# Skin Cancer (cont'd)

187

**Also look for:**

Asymmetry: 1/2 of the abnormal skin area is different than the other half

Borders: irregular borders

Color: varies from one area to another with shades of tan, brown, or black (sometimes white, red, blue)

Diameter: usually (but not always) larger than 6 mm in size (diameter of a pencil eraser)

Any skin growth that bleeds or will not heal

# Skin Cancer (cont'd)

## Causes:

The outer layer of skin, the epidermis, is made up of different types of cells. Skin cancers are classified by the types of epidermal cells involved:

- ▶ **Basal cell carcinoma** develops from abnormal growth of the cells in the lowest layer of the epidermis and is the most common type of skin cancer.
- ▶ **Squamous cell carcinoma** involves changes in the squamous cells, found in the middle layer of the epidermis.
- ▶ **Melanoma** occurs in the melanocytes (cells that produce pigment) and is less common than squamous or basal cell carcinoma, but more dangerous. It is the leading cause of death from skin disease.



# Skin Cancer (cont'd)

189

**Skin cancer is the most common form of cancer in the United States. Known risk factors include the following:**

Complexion: Skin cancers are more common in people with light-colored skin, hair, and eyes.

Genetics: Having a family history of melanoma increases the risk of developing this cancer.

Age: Non-melanoma skin cancers are more common after age 40.

Sun exposure and sunburn: Most skin cancers occur on areas of the skin that are regularly exposed to sunlight or other ultraviolet radiation; this is considered the primary cause of all skin cancers.

# Skin Cancer (cont'd)

190

## Treatments:

- surgical removal of the mole, cancerous skin
- skin cream with medication
- depending on the severity of the cancer and if it has spread, chemotherapy and/or radiation.



# Macular Degeneration



# Macular Degeneration

192



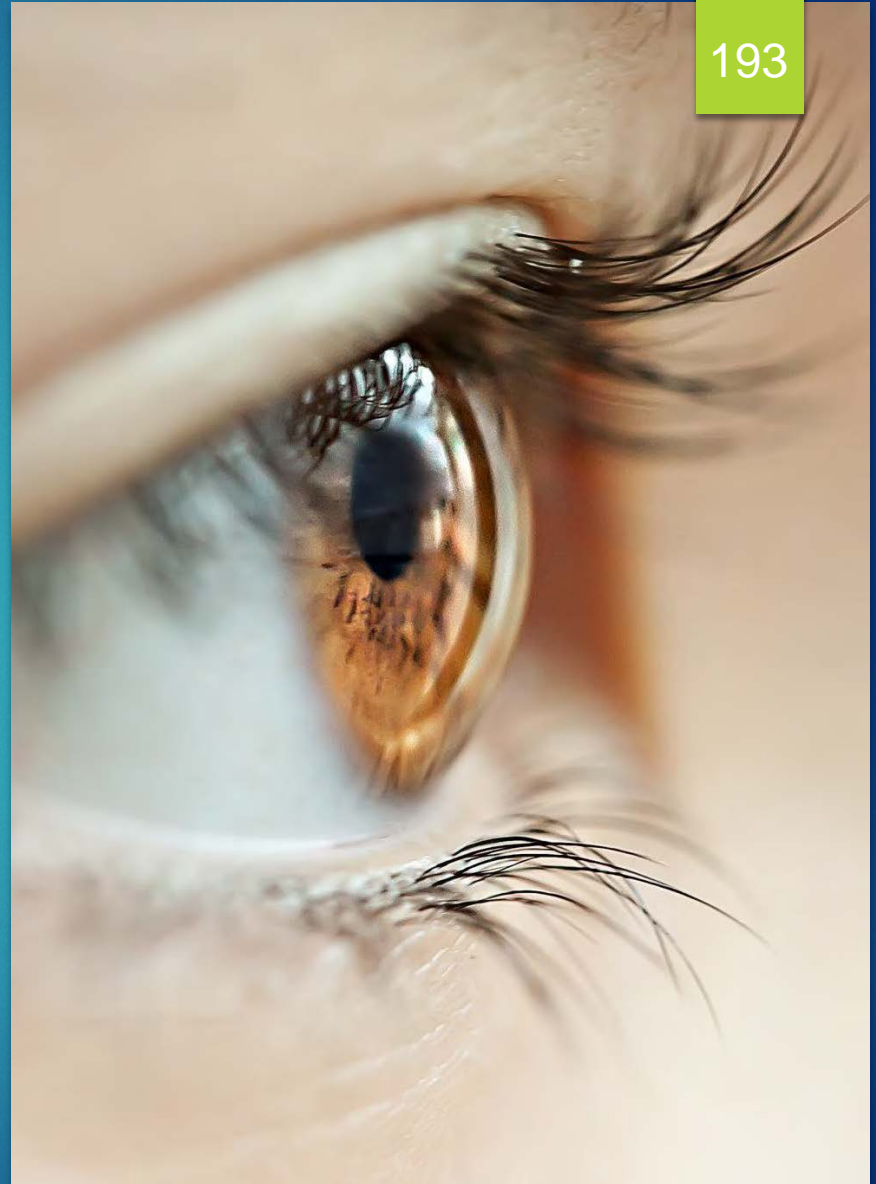
Macular degeneration is a common eye condition and a leading cause of vision loss among people age 50 and older.

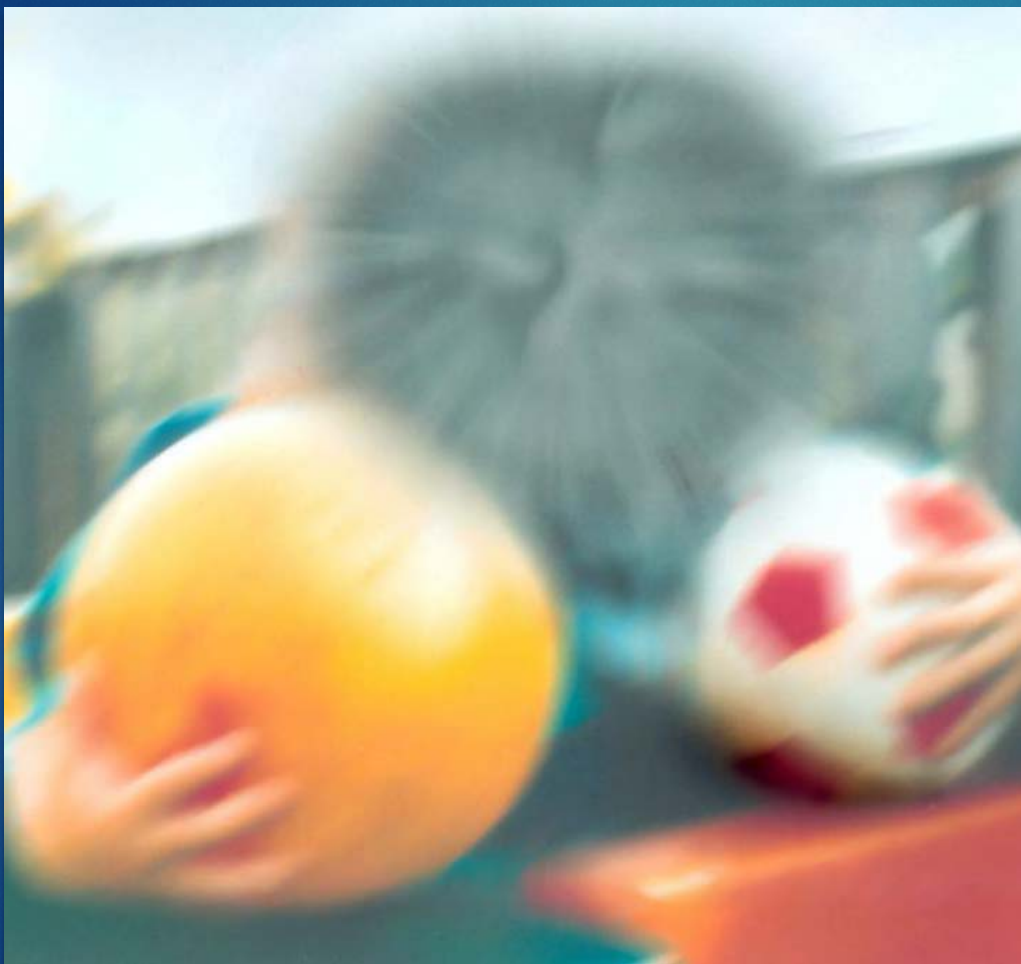
It causes damage to the macula, a small spot near the center of the retina and the part of the eye needed for sharp, central vision, which allows you to see objects that are straight ahead.



# Macular Degeneration

In some people, it advances so slowly that vision loss does not occur for a long time, but in others, the disease progresses faster and may lead to a loss of vision in one or both eyes.





## Macular Degeneration

As it progresses, a blurred area near the center of vision is a common symptom.

Over time, the blurred area may grow larger or the person may develop blank spots in their central vision.

Objects also may not appear to be as bright as they used to be.



# Macular Degeneration

195

This is how someone  
with macular  
degeneration sees.

They have blind spots.



# Macular Degeneration

Macular degeneration by itself does not lead to *complete* blindness, with no ability to see.

However, the loss of central vision can interfere with simple everyday activities, such as the ability to see faces, read, write, or do close work, such as sewing.

196





# Macular Degeneration

197

To reduce the risk or slow its progression, make these healthy choices:

- Avoid smoking
- Exercise regularly
- Maintain normal blood pressure and cholesterol levels
- Eat a healthy diet rich in green, leafy vegetables and fish

# Hypertension





# Hypertension

- ♥ High blood pressure or hypertension means high pressure (tension) in the arteries. Arteries are vessels that carry blood from the pumping heart to all the tissues and organs of the body.
- ♥ High blood pressure does not mean excessive emotional tension, although emotional tension and stress can temporarily increase blood pressure.
- ♥ Normal blood pressure is below 120/80; blood pressure between 120/80 and 139/89 is called "pre-hypertension", and a blood pressure of 140/90 or above is considered high.

# Hypertension Medications

High-blood pressure (hypertension) medications:

- ▶ Avapro
- ▶ Lasix
- ▶ Diovan
- ▶ Cardizem
- ▶ Lopressor
- ▶ Toprol-XL



# Hypertension Medications (cont'd)

201

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## Avapro:

- ★ In a group of drugs called angiotensin II receptor antagonists.
- ★ It keeps blood vessels from narrowing, which lowers blood pressure and improves blood flow.
- ★ It works by decreasing the levels of certain chemicals in the body.

# Hypertension Medications (cont'd)

202

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## Lasix:

- Lasix (furosemide) - a loop diuretic (water pill).
- Prevents the body from absorbing too much salt, allowing the salt to instead be passed in the urine.
- Treats fluid retention (edema) in people with congestive heart failure, liver disease, or a kidney disorder.
- Also used to treat hypertension.



## Hypertension Medications (cont'd)

Lasix (cont'd):

Possible side effects:

- 🖐️ More frequent urination = increased chance of dehydration
- 🖐️ Increased sensitivity to sunlight and sunburn
- 🖐️ Possible allergic reactions
- 🖐️ If your resident takes sucralfate (Carafate), tell them to take it at least 2 hours before or after they take Lasix.

# Hypertension Medications (cont'd)

## Cardizem:

- ✓ In a group of drugs called calcium channel blockers.
- ✓ It works by slowing the electrical conduction in the heart, slowing heart rate, and/or normalizing heart rhythm.
- ✓ Used to treat hypertension, angina pectoris (chest pain), and certain heart rhythm disorders (i.e., atrial fibrillation).



# Hypertension Medications (cont'd)

205

Cardizem (cont'd):

Possible side effects:

- 🖐️ May impair thinking or reactions.
- 🖐️ Avoid driving or doing things that require being alert.
- 🖐️ Stopping the medication suddenly may make health condition worse.
- 🖐️ Pill cannot be crushed – it is time-released.

# Hypertension Medications (cont'd)

206

Lopressor:

- *Metoprolol* is in a group of drugs called beta-blockers.
- Used to treat angina (chest pain) and hypertension.
- Also used to treat or prevent heart attack.



# Hypertension Medications (cont'd)

207

Lopressor (cont'd):

Possible side effects:

- 🖐️ May impair thinking or reactions.
- 🖐️ Avoid driving or doing things that require being alert.
- 🖐️ Drinking alcohol with Lopressor can increase sleepiness.
- 🖐️ Pill cannot be crushed – it is time-released.
- 🖐️ Should be taken with a full glass of water and with food or just after a meal.

# Hypertension

208



Assisting your resident with hypertension:

1. Ensure that their physician/etc. orders are being followed.
2. Serve meals that are low or very low in sodium, depending on the physician order.
3. Help them watch their stress levels.
4. Assist them with monitoring their blood pressure.



# Depression



# Depression (cont'd)

Anyone can feel sad or blue from time to time, but depression is not a normal part of aging – depression is a medical condition requiring treatment.





# Let's look at depression.....

211

It's important  
to deal with  
depression.

Possible causes of  
depression in our  
residents:

- loss of a spouse
- loss of independence
- loss of friends
- loss of long-time home
- illness
- reality of dying
- medications

# Depression (cont'd)

212

## Signs of depression:



- ▶ loss of interest or pleasure in usual activities
- ▶ crying
- ▶ change in appetite or weight
- ▶ change in sleeping patterns
- ▶ slowness, fatigue, loss in energy
- ▶ thoughts of suicide or death



## Depression (cont'd)

If you sense that your resident is battling depression, you must get them help as soon as possible.

Their physician/etc. will do a thorough physical to rule out possible physical causes.

They may also prescribe medications (anti-depressants) for the resident.

# Depression (cont'd)

214

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Treatment may include counseling and medications.

## Common anti-depressants:

Prozac  
Remeron

Paxil  
Zoloft

Celexa  
Wellbutrin

Lexapro  
Effexor

Most people need to take an anti-depressant regularly for at least 6 weeks to begin to get the full effect.



# Depression (cont'd)

The most common anti-depressant side effects are:

constipation	daytime sleepiness
diarrhea	dizziness
dry mouth	headache
nausea	sexual problems
shakiness	trouble sleeping
weight gain	

Many side effects go away after a few weeks, but some only go away after the medication is discontinued.

# Depression (cont'd)

216

Warning:



A resident should never stop taking an antidepressant medicine suddenly.

If they quit their medicine all at once, it can make them feel sick, as if they have the flu.





# Depression (cont'd)

217

Some things that may be helpful to say to your resident:

- ▶ I care about you.
- ▶ You are not alone.
- ▶ Do you want a hug?
- ▶ You are really important to me.



# Arthritis

218





# Arthritis

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- Arthritis is the leading cause of disability in the U.S.\*
- There are over 100 different forms of arthritis.
- The most common form, osteoarthritis (degenerative joint disease) is a result of trauma to the joint, infection of the joint, or age.
- Other arthritis forms are rheumatoid arthritis and psoriatic arthritis, autoimmune diseases in which the body attacks itself.
- Arthritis strikes more women than men.

\*Source:

<https://www.cdc.gov/chronicdisease/resources/publications/factsheets/arthritis.htm#:~:text=In%20the%20United%20States%2C%2024,lost%20earnings%20of%20%24303.5%20billion.>

# Arthritis (cont'd)

R

220

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Treatments:

Because there are so many different types of arthritis, treatments vary depending on the type.

Generally, painkillers are used to treat pain and inflammation and it is recommended that people who are overweight maintain a healthy weight.



# Arthritis (cont'd)

221



Some arthritis sufferers are turning to non-medical ways to help ease the suffering. They include:

Acupuncture and  
acupressure

Massage therapy

Heat relief

Medication and  
relaxation

# High Cholesterol





# High Cholesterol

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Cholesterol is a waxy substance that is found in the fats (lipids) in blood.

While the body needs cholesterol to continue building healthy cells, having high cholesterol can increase the risk of heart disease.

Someone with high cholesterol levels may need medications and to watch their diet and exercise.

# High Cholesterol

224

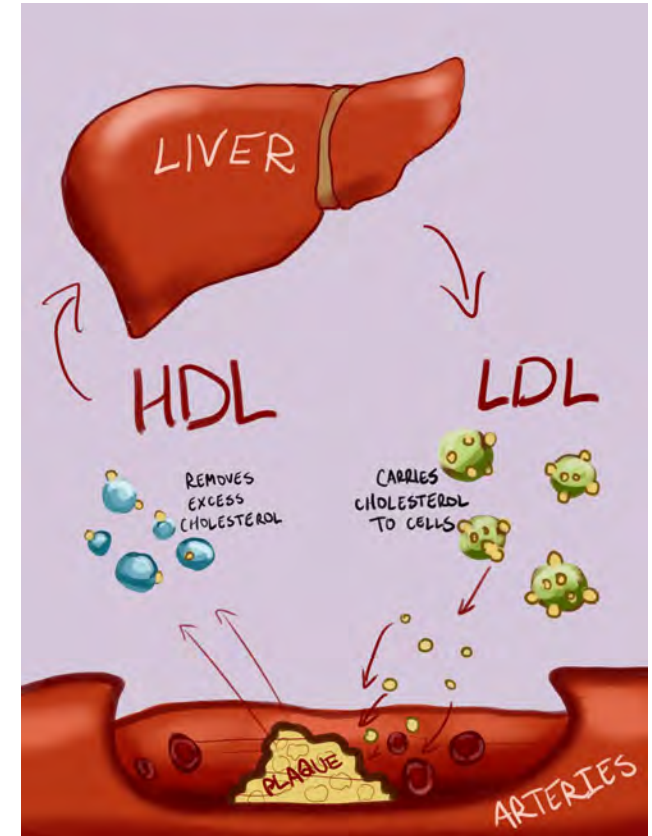
- ✓ High cholesterol leads to the development of fatty deposits in the blood vessels.
- ✓ Eventually, these deposits make it difficult for enough blood to flow through the arteries; the heart may not get as much oxygen-rich blood as it needs, which increases the risk of a heart attack.
- ✓ Decreased blood flow to the brain can also cause a stroke.



# High Cholesterol

There are different types of cholesterol:

- Low-density lipoprotein (LDL). LDL, or "bad," cholesterol transports cholesterol particles throughout the body. LDL cholesterol builds up in the walls of the arteries, making them hard and narrow.
- Very-low-density lipoprotein (VLDL). This type of lipoprotein contains the most triglycerides, a type of fat, attached to the proteins in the blood. VLDL cholesterol makes LDL cholesterol larger in size, causing blood vessels to narrow.



# High Cholesterol

226

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There are different types of cholesterol (cont'd):

- High-density lipoprotein (**HDL**). HDL, or "good," cholesterol picks up excess cholesterol and takes it back to the liver.
- **Triglycerides** are another fat produced by the liver and also found in food. Like high cholesterol, high triglycerides can be dangerous to one's health - keep the triglycerides low!



## Total Cholesterol Levels\*:

HIGH is 240 mg/dL or higher

BORDERLINE HIGH is 200–239 mg/dL

DESIRABLE is less than 200 mg/dL

\*per the National Cholesterol Education Program (NCEP) Adult Treatment Panel (ATP)





# High Cholesterol

228

People with high cholesterol should:

1. Watch their diet. Eat heart-healthy foods.
2. Maintain a healthy weight
3. Exercise regularly.
4. Take medications, if prescribed.
5. Quit smoking.





# Congestive Heart Failure



# Congestive Heart Failure

230

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Congestive heart failure (CHF) is a condition in which the heart's function as a pump to deliver oxygen rich blood to the body is inadequate to meet the body's needs. It can be caused by:

- diseases that weaken the heart muscle;
- diseases that cause stiffening of the heart muscles; or
- diseases that increase oxygen demand by the body tissue beyond the capability of the heart to deliver.



# Congestive Heart Failure

231

## Symptoms:

Congested lungs (shortness of breath, wheezing, dry hacking cough)

Fluid and water retention (swollen ankles, edema, frequent urination)

Dizziness, fatigue and weakness

Irregular or rapid heartbeats

# Congestive Heart Failure

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## Assisting residents:

- Serve heart-healthy foods.
- Encourage them to exercise daily, per physician's orders.
- Encourage them to get a flu and pneumonia vaccine.
- Follow physician's orders regarding medications.



# Dehydration

233

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# Water

234

- 💧 Water is your body's principal chemical component, making up, on average, 60 percent of your body weight.
- 💧 Every system in your body depends on water. For example, water flushes toxins out of vital organs, carries nutrients to your cells and provides a moist environment for ear, nose and throat tissues.





# Water (cont'd)

235

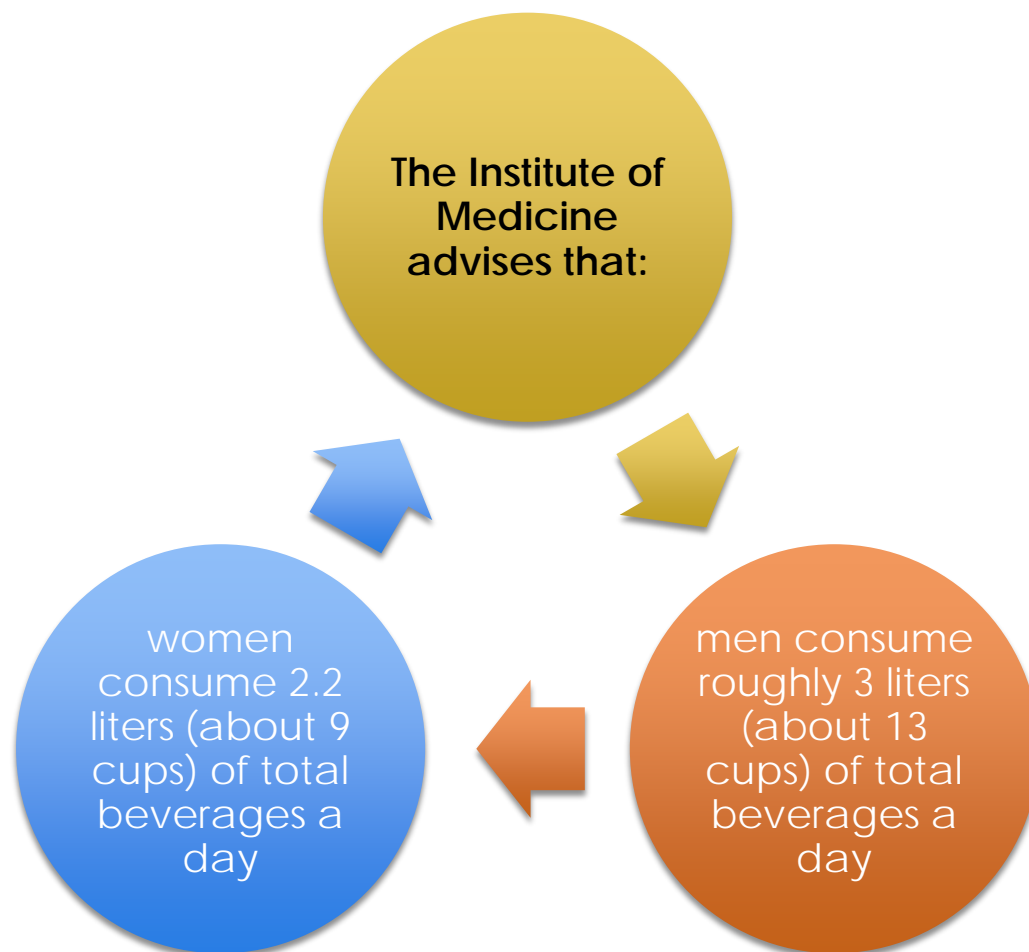
## How much water do you need?

Every day you lose water through your breath, perspiration, urine and bowel movements.

For your body to function properly, you must replenish its water supply by consuming beverages and foods that contain water.



# Water (cont'd)





# Water (cont'd)

237

- The average urine output for adults is about 1.5 liters (6.3 cups) a day.
- You lose close to an additional liter of water a day through breathing, sweating and bowel movements.
- Food usually accounts for 20 percent of your total fluid intake, so if you consume 2 liters of water or other beverages a day (a little more than 8 cups) along with your normal diet, you will typically replace the lost fluids.

# Dehydration

238

- ☀ Dehydration is a serious, sometimes fatal condition.
- ☀ Dehydration = not enough body fluids and important blood salts in the body to carry on normal functions at the best level.
- ☀ Dehydration occurs with a loss of fluids, not drinking enough water, or a combination of both.



# Dehydration (cont'd)

239

- ❖ Thirst is the first warning sign that we should drink, but some of our residents cannot recognize that sign.
- ❖ A healthy adult should drink at least six 8-ounce glasses of water each day.
- ❖ If urine is pale in color and occurring every 2- 3 hours, then they are drinking enough water.

# Dehydration (cont'd)

240

Common reasons why people do not drink enough fluids:

1. loss of appetite
2. lack of thirst
3. do not like to go to the bathroom







## Dehydration (cont'd)

241

Try to pay attention to what residents drink and how much they urinate, especially residents with AD or dementia.

Dehydration can be extremely dangerous in the elder population and must be addressed immediately.

# Dehydration (cont'd)

242

## Mild dehydration:

- Thirst
- Dry lips and tongue
- Skin looks dry

## Moderate dehydration:

- Skin not very elastic, may sag and does not bounce back quickly when lightly pinched and released
- Decreased urine output
- Sunken eyes



# Dehydration (cont'd)

243

## Severe dehydration:

- ✘ small amounts of dark colored urine
- ✘ low blood pressure, dizziness
- ✘ rapid breathing
- ✘ blue lips
- ✘ rapid, weak pulse over 100 (at rest)
- ✘ cold hands or feet
- ✘ confusion, lack of interest
- ✘ shock

# Dehydration (cont'd)

244

## Treatment:

- ❖ Mild dehydration – give fluids by mouth.
- ❖ The MD may order an oral rehydrating solution (ORS) that replaces blood salts and water in balanced amounts – these solutions allow the intestines to absorb the maximum amount of water. Don't confuse these with sports drinks, like Gatorade – these can cause vomiting and diarrhea.
- ❖ IV fluids may be necessary for moderate to severe dehydration.



# Dehydration (cont'd)

Tips to encourage fluid intake:

1. Keep fluids within resident's reach.
2. Offer a variety of fluids to avoid monotony.
3. Offer small amounts often.
4. Offer foods with a high-water content.
5. Serve fluids at proper temperature.





## Dehydration (cont'd)

246

Group discussion:

What types of food and drinks are you serving your residents to help with hydration?



# Immobility and Gait Issues

247

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# Immobility and Gait Issues

Gait and balance disorders are common in older adults and are a major cause of falls in this population.

They are associated with increased morbidity and mortality, as well as reduced level of function.





# Immobility and Gait Issues

249

There are many affective disorders, psychiatric conditions and physical conditions that can cause gait issues. They include:

- Depression
- Fear of falling
- Sleep disorders
- Substance abuse
- Cardiovascular diseases
- Arrhythmias
- Congestive heart failure

# Immobility and Gait Issues

250

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## Tips for helping your residents:

- Help your resident get assistive devices from their physician/etc. if they have balance or mobility issues.
- Follow physician's instructions about getting up slowly. First, have the resident sit up in bed for a few minutes, then move legs off edge of bed and sit on edge of bed for a few minutes, then stand up.
- Help your resident arrange for physical therapy, if possible.



# Assistive Devices

251

Is your resident using their walker, cane or wheelchair correctly?

## Canes:

- ❑ Can support about 25% of a person's weight
- ❑ People with minor balance problems, pain or leg weakness may benefit from using a cane



## Canes:

- ❑ Helps to redistribute a person's weight, therefore improving balance and reducing falls
- ❑ Canes should always be held on the resident's strong side – unless otherwise directed by a physical therapist
- ❑ The handle of the cane should be at the person's hip joint



# Assistive Devices (cont'd)

253

## Walkers:

- ❑ Can support up to 50% of a person's weight
- ❑ Good for people with weakness in one or both legs, poor coordination and difficulty balancing without support

# Assistive Devices (cont'd)

254

## Walkers:

### Types of walkers:

1. straight leg with rubber tips on ends – require some upper body strength since the walker must be lifted and moved forward as the resident walks.
2. walker with wheels – good for people who only need the walker for balance – but not support. Can be difficult to use on thick carpets.
3. walker with a seat – can support up to 300 pounds and have brakes in both the front and the rear.



# Assistive Devices (cont'd)

- ▶ Is your resident “walking” with the walker up in the air??
- ▶ Let their physical therapist or physician/etc. know – they may not need it.





# Assistive Devices (cont'd)

256

## Wheelchairs:

- ❑ Can be manual or electric
- ❑ All have brakes which should be used when the resident is not moving
- ❑ Electric scooters





## Wheelchairs:



What is your facility's policy on motorized scooters? What about wheelchairs in the dining room? Or parked outside of their room?

# Pressure Injuries





# Pressure Injuries

Pressure injury = An erosion in the SKIN that results from the pressure of remaining in one position for an extended period of time, commonly called a bedsore or pressure sore.

Two thirds of pressure sores occur in patients older than 70 years.\*

\*Source:

<https://emedicine.medscape.com/article/190115-overview?form=fpf>

# Pressure Injuries (cont'd)

260

Pressure injuries can range from a very mild pink coloration of the skin, which disappears in a few hours after pressure is relieved on the area, to a very deep wound extending to and sometimes through a bone into internal organs.

These ulcers, as well as other wound types, are classified in stages according to the severity of the wound.



# Pressure Injuries (cont'd)

261

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The typical way a pressure injury forms is from pressure, but they can also occur from friction by rubbing against something such as a bed sheet, cast, brace, etc., or from prolonged exposure to cold.



# Pressure Injuries (cont'd)

262

Any area of tissue that lies just over a bone is much more likely to develop a decubitus ulcer.

These areas include the spine, coccyx or tailbone, hips, heels, and elbows; they can also occur on the tops of the toes and behind the ears (from oxygen).

The weight of the person's body presses on the bone, the bone presses on the tissue and skin that cover it, and the tissue is trapped between the bone structure and bed or wheelchair surface. The tissue begins to decay from lack of blood circulation.

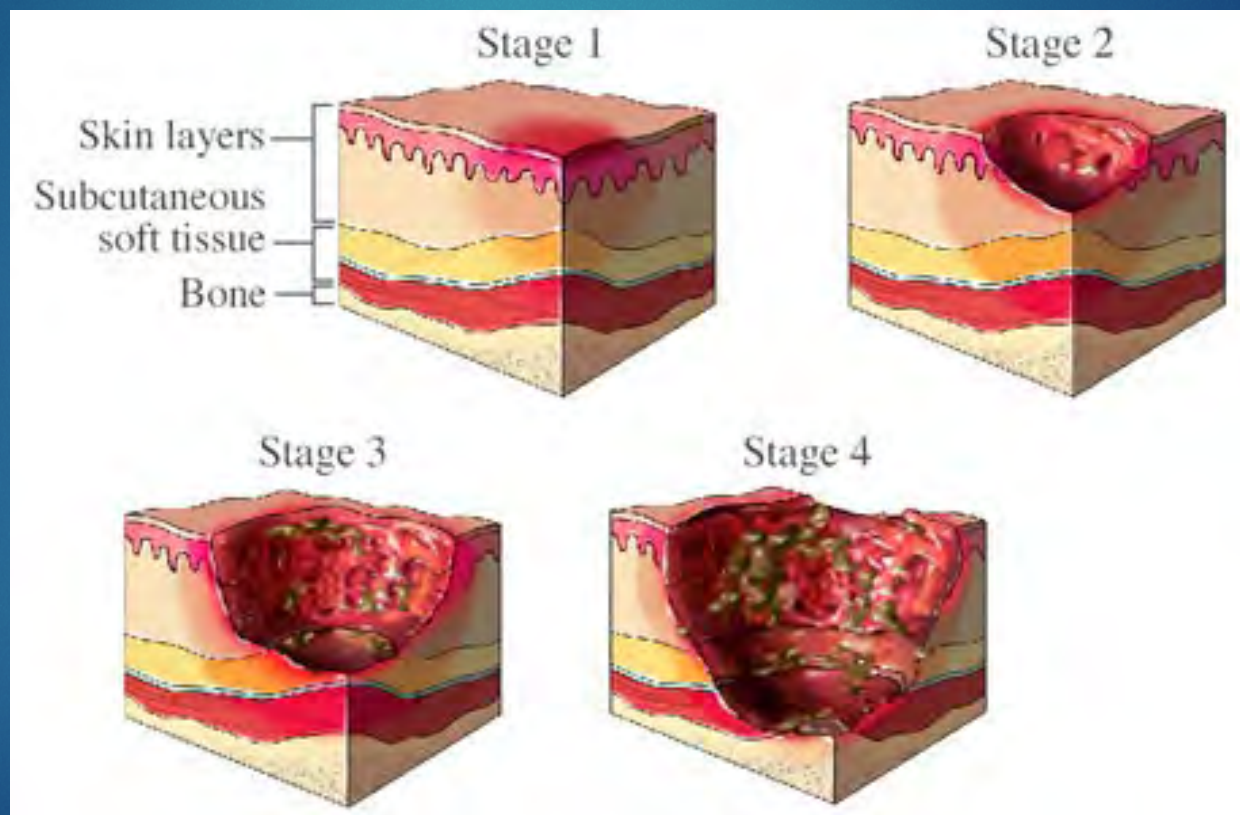


# Pressure Injuries (cont'd)

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The stages:



# Pressure Injuries (cont'd)

264

## STAGE 1

- Reddening of the skin.
- The skin is unbroken and the wound is superficial (looks like a light sunburn or a first degree burn as well as a beginning pressure injury).
- This should quickly fade when pressure is relieved on the area.



# Pressure Injuries (cont'd)

265

## STAGE 1

- Treatment: turning or alleviating pressure in some form or avoiding more exposure to the cause of the injury as well as covering, protecting, and cushioning the area.
- Soft protective pads and cushions are often used for cushioning and protecting.
- An increase in vitamin C, proteins, and fluids is recommended.
- Increased nutrition is part of prevention.



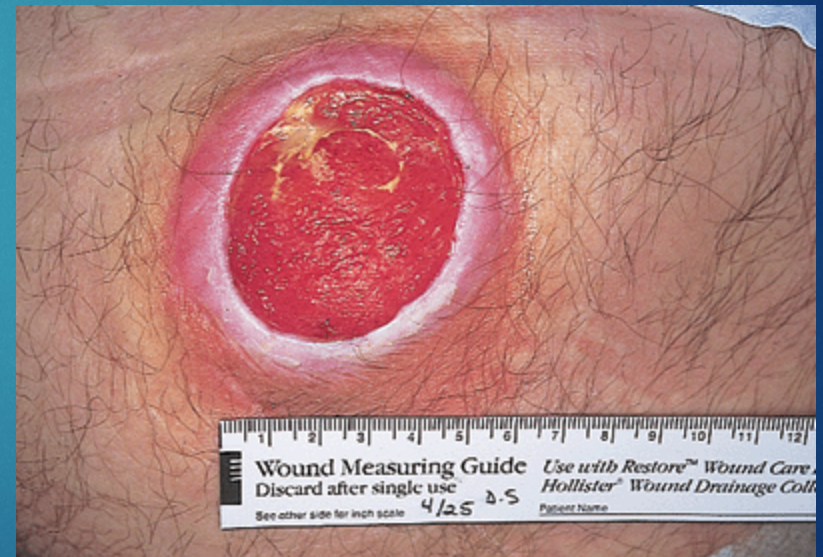
# Pressure Injuries (cont'd)

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## STAGE 2

- A blister that is either broken or unbroken.
- A partial layer of the skin is now injured.
- This is no longer just a superficial wound.





# Pressure Injuries (cont'd)

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Per DSS regulations, Stage 1 and Stage 2 pressure injuries are *restricted conditions*.

Stage 3 and 4 are *prohibited conditions*\*.

\* There are exceptions to this rule....

# Pressure Injuries (cont'd)

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## STAGE 3

- The wound extends through all of the layers of the skin.
- It is a primary site for serious infection to occur.
- This must be treated by a physician/etc.
- In *some* instances, this *MAY* be allowed in an RCFE if the resident is on hospice and the facility has received an exception to keep the resident.



# Pressure Injuries (cont'd)

## STAGE 3

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# Pressure Injuries (cont'd)

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## STAGE 4

- This extends through the skin and involves underlying muscle, tendons and bone.
- The diameter of the wound is not as important as the depth.
- This is very serious and can produce a life threatening infection, especially if not aggressively treated.



## Pressure Injuries (cont'd)

### STAGE 4



# Pressure Injuries (cont'd)

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## Caring for ulcers:

- Changing position every 2 hours or more frequently if needed when in bed.
- Changing position every 15 minutes or more frequently when sitting.
- Protecting and padding to prevent tissue abrasion.
- Maintaining proper hydration, nutrition and hygiene.



# Pressure Injuries (cont'd)

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## Caring for ulcers:

- air mattress with alternating compartments or air flotation mattress
- eggshell mattress or seat cushion
- sheepskin pads over bony protuberances such as the heels and elbows
- active movement at least four times a day when possible and passive range of motion exercises when active movement is not possible
- diligent skin hygiene, including daily cleansing and complete drying



# Pressure Injuries (cont'd)

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## Medical treatment for ulcers:

- Keeping the area clean and removing necrotic (dead) tissue, which can form a breeding ground for infection.
- The use of antibiotics, when appropriate is also part of the treatment.
- Some deep wounds even require surgical removal or debridement of necrotic tissue. In some situations, amputation may be necessary.



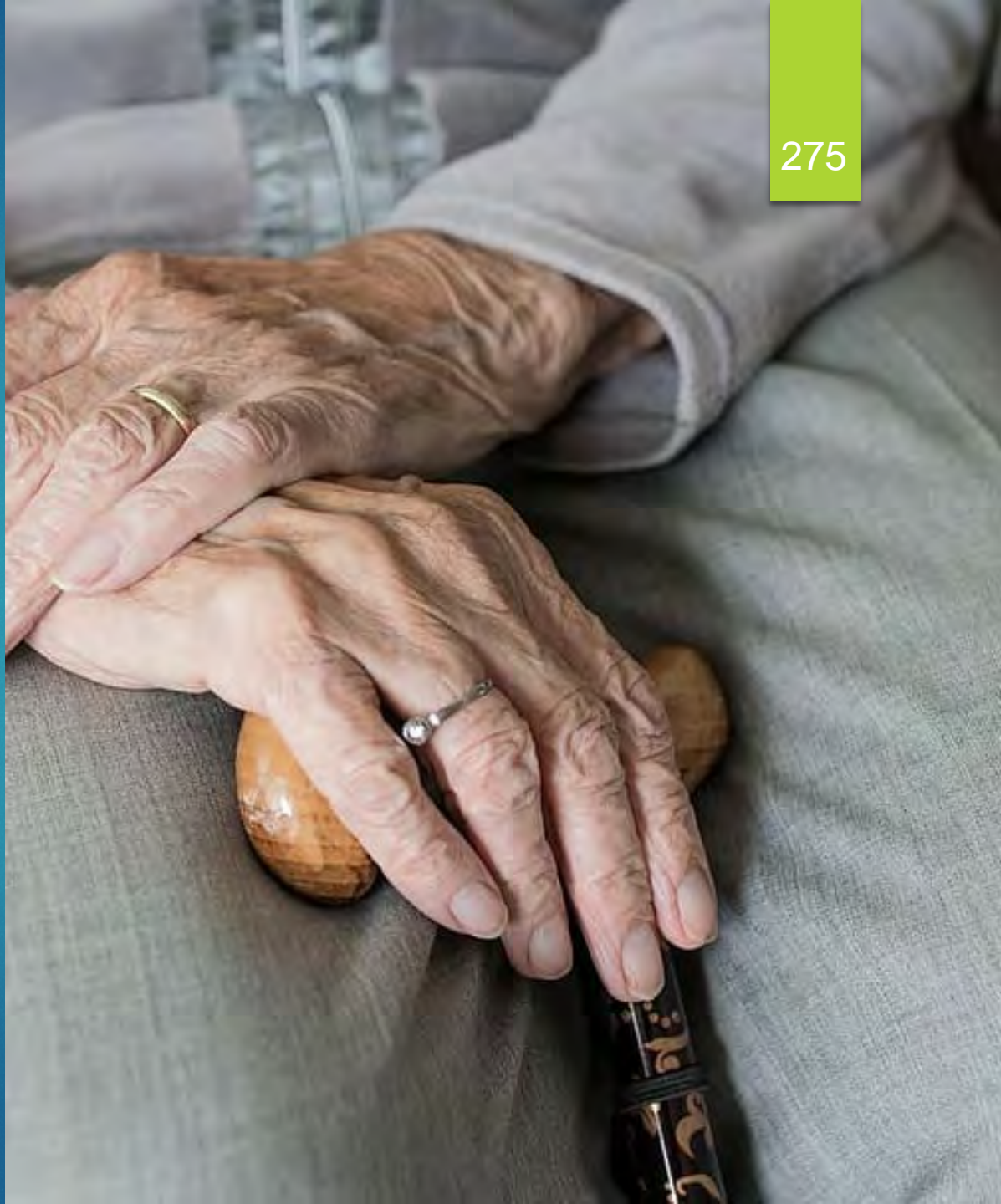
# Pressure Injuries (cont'd)

While about 75% of Stage II ulcers heal within eight weeks, only 62% of Stage IV pressure injuries ever heal, and only 52% heal within one year.\*

This may take more time in the elderly.

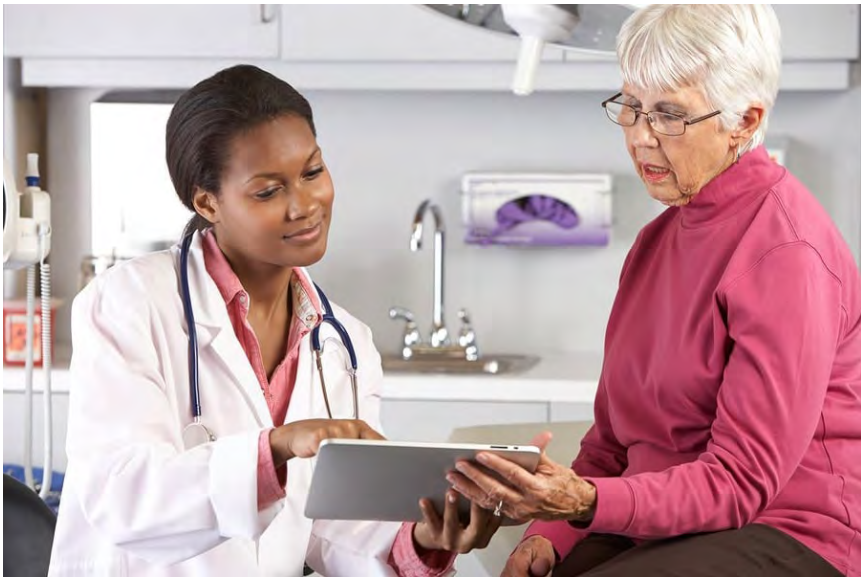
\*Source:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4678450/>



# Pressure Injuries (cont'd)

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So, what do you do if you see a pressure injury forming?

Get the resident to the doctor as soon as possible.

Follow the physician's directives. Utilize home health, when prescribed.



# Urinary Tract Infections

# Urinary Tract Infections

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☆ A urinary tract infection ("UTI") is an infection involving the kidneys, ureters, bladder, or urethra.\*

☆ Any part of this system can become infected. As a rule, the farther up in the urinary tract the infection is located, the more serious it is.

\*These are the structures that urine passes through before being eliminated from the body.)



## UTI's (cont'd)

- ▶ In the United States, urinary tract infections account for more than 7 million visits to medical offices and hospitals each year.\*
- ▶ About 40% of women and 12% of men have a urinary tract infection at some time in their life.

\*Source:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5414046/#:~:text=Urinary%20tract%20infections%20are%20a,2%2C%205%2C%206%5D>.



# UTI's (cont'd)

280

## Causes:

- Urine is normally sterile; an infection occurs when bacteria get into the urine and begin to grow.
- The infection usually starts at the opening of the urethra where the urine leaves the body and moves upward into the urinary tract.
- The culprit in at least 90% of infections is the bacteria *E. coli*.



# UTI's (cont'd)

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## Causes (cont'd):

- If the bacteria reaches the kidneys, it may cause a kidney infection, which can become very serious.
- Men are less likely to develop UTIs because their urethra (tube from the bladder) is longer. There is a drier environment where a man's urethra meets the outside world, and fluid produced in the prostate can fight bacteria.

## Symptoms:



- pain or burning during urination
- more frequent urination, often with only a small amount of urine
- sense of urgency to urinate
- cloudy, bad-smelling, or bloody urine
- lower abdominal pain
- fever, chills or nausea
- change in mental status in AD residents



# UTI's (cont'd)

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A UTI will not go away by itself – you must receive medical treatment.



A culture will be done to detect bacteria and antibiotics will be prescribed.




To alleviate burning pain during urination, phenazopyridine (Pyridium) or a similar drug, can be used for one to two days.

# UTI's (cont'd)

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## Prevention:



Women should wipe from front to back (not back to front) after going to the bathroom; this helps prevent bacteria from the anus entering the urethra.



Empty your bladder regularly and completely.



Drink plenty of fluids.



# UTI's (cont'd)

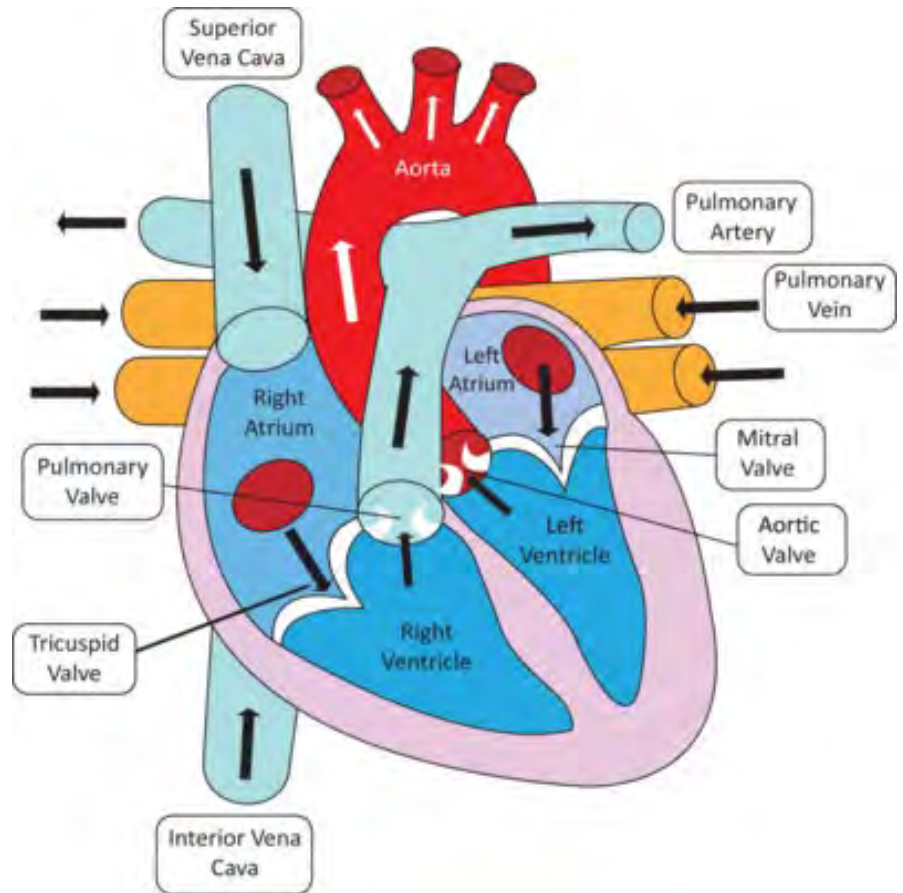
285

**Cranberry juice**, especially, has been shown to help prevent urinary tract infections.

There is evidence that cranberries reduce the risk of the bacteria's adhesion to bladder cells.



# Circulatory Issues





# Circulatory Issues

- The body's circulatory system is responsible for sending blood, oxygen, and nutrients throughout the body.
- When blood flow to a specific part of the body is reduced, one may experience the symptoms of poor circulation.
- Poor circulation is most common in extremities, such as legs and arms.



# Circulatory Issues

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Typical circulatory issues include:

- Diabetes
- Peripheral Artery Disease (leads to poor circulation in the legs)
- Blood clots
- Varicose veins
- Obesity



# Circulatory Issues

Depending on what is causing the issue, remind the resident to:

1. Follow their physician's orders
2. Take medications, as prescribed
3. Exercise, when prescribed
4. Eat a heart-healthy diet

# Circulatory Issues

Do you notice that your residents complain that they are cold often?

Slower circulation can make it difficult to retain heat throughout the body. This could be due to aging or medication side effects.





# Low BMI

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# Low BMI

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A body mass index, or BMI, below 18.5 means a person is underweight and this is associated with health complications such as bone loss, decreased immunity, cardiac problems, and infertility.\*

It can also lead to bone fractures, falls, fainting, anemia, malnutrition, and even death.

\*Source:

<https://www.betterhealth.vic.gov.au/health/healthyliving/body-mass-index-bmi>



# Low BMI

## Causes:

1. Not consuming enough calories
2. An underlying medical condition, like thyroid disorders, diabetes, cancer or digestive diseases.
3. Certain medications or treatments, such as chemotherapy



Assisting your resident:

1. Encourage them to eat by making their favorite foods
2. Adding just 500 calories to their diet will help them gain about 1 pound per week!
3. Exercise, especially muscle-building exercises



# Polypharmacy

# Polypharmacy

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According to the National Center for Biotechnology Information\*, “polypharmacy” is defined as:

**the use of 5 or more medications**

Per the National Institute on Aging\*\*, this is a growing concern for older adults. Polypharmacy is more common among older adults, many of whom have multiple chronic conditions (MCC), defined as two or more chronic conditions such as arthritis, asthma, chronic obstructive pulmonary disease, coronary heart disease, depression, diabetes, and hypertension. But taking too many drugs can lead to safety concerns.

\*Source: <https://www.ncbi.nlm.nih.gov/books/NBK532953/>

\*\*Source: <https://www.nia.nih.gov/news/dangers-polypharmacy-and-case-deprescribing-older-adults>



# Polypharmacy (cont'd)

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Up to 91% of patients in long-term care take at least five medications daily.\*  
Why is this an issue?

Per the American Academy of Family Physicians, patients taking more than four medications have an increased risk of injurious falls, and the risk of falls increases significantly with each additional medication, regardless of medication type.\*

\*Source:

<https://www.aafp.org/pubs/afp/issues/2019/0701/p32.html>



## Using Home Health Using Hospice

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# Outside Services

## Utilizing Home Health and Hospice:

1. Contracted by resident through the Home Health or Hospice Agency;
2. The facility must be in substantial compliance with DSS;
3. A Hospice Care Waiver must be approved by DSS prior to using hospice;
4. The use of home health care does not exceed the scope of care we are allowed to give (i.e., regulations).

# Sources

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- WebMD
- American Cancer
- Mayo Clinic online
- U.S. National Library of Medicine from the National Institutes of Health
- American Academy of Health & Fitness (online)
- National Eye Institute (online)
- MedlinePlus.com
- Wikipedia
- LiveStrong



# Conclusion

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thanks you for attending this  
Class.

We look forward to seeing you again at another of  
our Courses!

