



# Arthritis

## Lesson Plan

*To use this lesson for self-study, participants should read the material, do the activity, and take the test. For group study, the leader may give each participant a copy of the Learner's Guide and follow this plan to conduct the lesson. Copy certificates for everyone who completes the lesson and passes the test.*

**Approximate time: One hour.**

### Objectives

At the conclusion of this lesson, participants will be able to:

1. Name the symptoms of arthritis.
2. Describe different types of arthritis.
3. Discuss how to prevent arthritis from occurring or getting worse.
4. Explain how to treat and care for people with arthritis.



### Preparation

1. Copy the materials for each participant.
2. If desired, arrange for someone to speak to the group about his or her personal experience with arthritis. The Arthritis Foundation (1-800-283-7800) may be able to direct you to a volunteer speaker in your area, or one of your clients or team members with arthritis might be willing to talk about the condition. Secure the speaker several weeks before the meeting.

### Activity

1. Hand out the Case Study Learning Activity to participants. Ask them to do the activity based on what they already know. Tell them they will learn the correct answers during the lesson.

### Lesson

1. If you secured a speaker, ask him or her to address the group. Or, ask if any participant has arthritis and is willing to talk about it. If someone responds, ask them to tell the group what kind of arthritis they have, what it feels like, and how it affects them.
2. Ask participants to look at the picture of a normal joint in the Learner's Guide. Review together the information in "Who Gets Arthritis?" "What Happens in Arthritis?" and "What Are the Symptoms?"
3. Talk about the preventative measures discussed in the Learner's Guide. Tell participants that research has shown that middle-aged and older women who lose 11 pounds or more over 10 years cut their risk of knee osteoporosis in half.
4. Discuss or lecture on the different types of arthritis from the Learner's Guide.
5. Go over the treatment options in the Learner's Guide in detail. Be sure participants understand each of the 6 treatments. Review the Case Study Learning Activity again and discuss the answers.
6. Emphasize how participants can assist clients with care and treatments. Depending on the plan of care and your policies, participants may be able to help with exercises, passive range of motion, medication assistance, heat and cold applications, pacing activities, joint protection, and self care.

### Evaluation

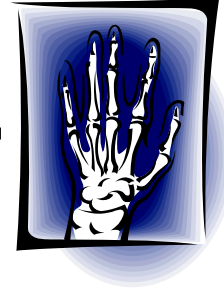
Ask participants to complete the test and grade their work. Distribute certificates to those who complete the test with at least 8 correct answers.

**Answers:** 1. pain, stiffness, swelling, difficulty moving a joint; 2. a.; 3. d.; 4. b.; 5. c.; 6. b.; 7. joint protection, self-care skills.



# Arthritis

## Learner's Guide



**ARTHR:** The word means “joint,” which is where a bone meets with, or joins, other bones.

**ITIS:** The word means “inflammation.” The symptoms are redness, heat, swelling, and pain.

### Who Gets Arthritis, and Why?

Arthritis describes a group of more than 100 different conditions that affect the body's joints, as well as other parts of the body. It is one of the most common chronic health problems. Arthritis is the leading cause of disability in the U.S.



People of all ages can have arthritis, but it occurs more often among older people. Nearly 46 million Americans are affected by this condition, or 1 in 5 adults. This equals 21% of U.S. adults.

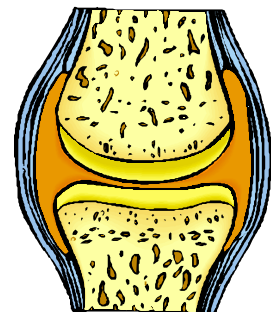
Researchers expect that number to increase to 67 million by the year 2030, or 25% of the adult American population. More than half of those affected will be older than age 65. About one-third of cases will be individuals aged 45 to 64.

We do not know the cause of all types of arthritis. There are different causes for different types of the disease. Sometimes there is a genetic link. Sometimes the condition is caused by an infection, a virus, or an injury.

Many times we provide care for people who have illnesses that are more serious or life-threatening than most arthritis conditions. Although a client may be sick with something else, he or she may also have arthritis.

We need to pay attention to the special needs of someone with arthritis, even when it is not the main reason we are providing care. Arthritis is painful and can cause significant disabilities that affect every part of life.

***Arthritis is usually chronic.  
It lasts a long time and may never go away.***



## What Happens in Arthritis?

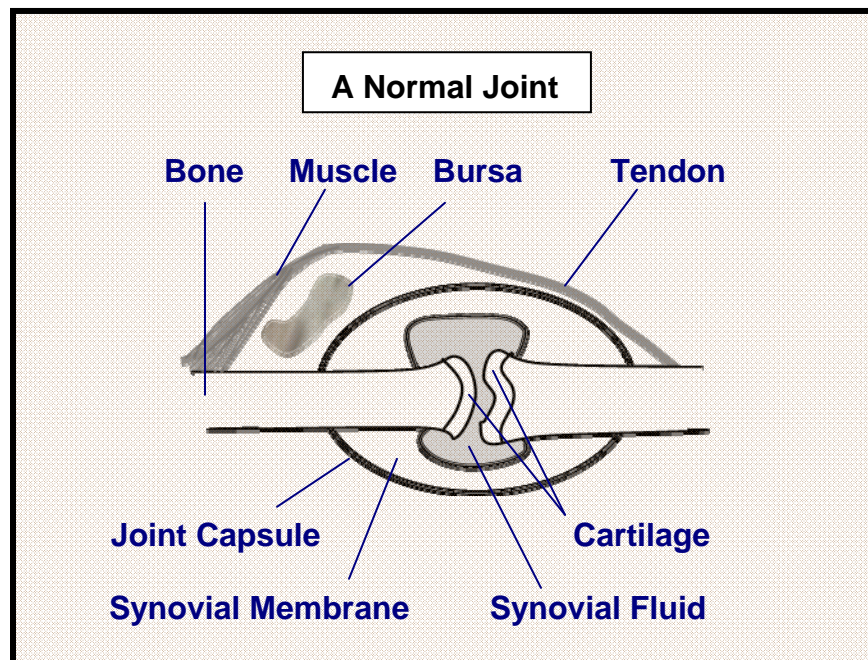
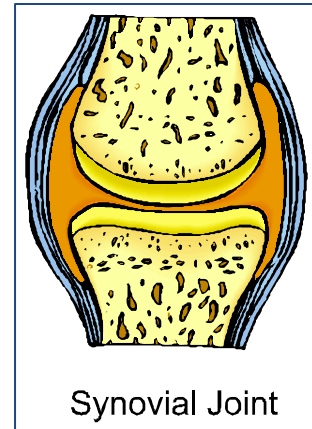
Arthritis usually affects areas in or around joints. Joints are parts of the body where bones meet. The ends of the bones are covered by cartilage, a spongy material that works as a shock absorber to keep bones from rubbing together.

Joints are enclosed in a capsule, called the joint capsule. The joints are lined with tissue, called the synovium or synovial membrane. The synovial membrane releases a slippery fluid that “greases” the joint and helps it move smoothly and easily.

Different types of arthritis can affect one or more different parts of a joint. When arthritis affects a joint, it can change the shape and alignment of the bones or the joints.

Muscles and tendons are connected to the bones. They support the joints and help with movement.

Certain types of arthritis can also affect other parts of the body besides the joints, such as the skin and internal organs.



Arthritis can make it hard for people to do many of the daily tasks they used to do easily by themselves. This causes loss of independence and a need to rely on others.

## What Are the Symptoms of Arthritis?

There are four main signs of arthritis. They usually occur in or around a joint. The symptoms are:

1. Pain
2. Stiffness
3. Swelling (sometimes)
4. Difficulty moving a joint



Arthritis symptoms can vary widely among individuals. For example:

- Symptoms can develop suddenly, or they may develop slowly.
- Pain can be constant, or it can come and go.
- Pain may occur when the person is moving, or after being still for some time.
- Pain may be felt in one spot, or it may be felt in many parts of the body.
- Sometimes the skin over the joint may appear swollen and red, and feel warm to the touch. Sometimes it doesn't.
- Some types of arthritis are associated with fatigue. Others aren't.
- Often the pain and stiffness are more severe in the morning or after a period of inactivity.

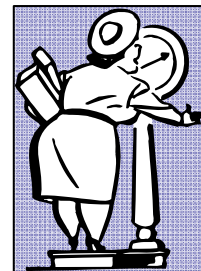


## Can You Prevent Arthritis?

There are things we can do to reduce the risk of getting certain kinds of arthritis. These things also help reduce the level of disability in people who have arthritis, and may keep the condition from getting worse.

### 1. Maintain recommended weight.

- People who are overweight have a higher frequency of osteoarthritis, especially in the weight-bearing joints (knees and hips).
- Women are especially at risk for developing osteoarthritis from being overweight.
- In men, excess weight increases the risk of developing gout.



### 2. Guard against injury.

- Joint injuries caused by accidents or overuse increase the risk of osteoarthritis.
- Keep the muscles around joints strong by exercising, to reduce the risk of wear on the joint and to help prevent injury.
- Get adequate calcium and vitamin D to protect against bone fractures.

## Types of Arthritis

There are more than 100 different types of arthritis and related conditions. Here are a few of the more common kinds:

### 1. Osteoarthritis (OA): Also called *degenerative arthritis*.

- OA is the most common arthritis, affecting many older people. It usually occurs after age 45, in both men and women.
- In OA, the cartilage and bones begin to deteriorate or break down. This means the bones might rub together or not move smoothly within the capsule. The result is pain and stiffness.
- Osteoarthritis usually affects the fingers and the weight-bearing joints, such as the knees, feet, hips, and back.



### 2. Rheumatoid Arthritis (RA)

- RA is another common arthritis. It occurs 3 times more often in women than in men, and usually begins in the young or middle adult years.
- In RA, something goes wrong with the body's immune system. The immune system is how the body defends itself against bacteria and viruses. In RA, the immune system mistakenly attacks the body's own joints and organs.
- RA causes warmth and swelling (inflammation) of the joint lining (synovium). This can cause damage to the cartilage, bone, and tendons of the joint.
- RA often affects the same joints on both sides of the body. Hands, wrists, feet, knees, ankles, shoulders, neck, jaw, and elbows may be affected.



### 3. Fibromyalgia

- Fibromyalgia is a common condition that usually afflicts women. It affects muscles and the points where they attach to bones.
- Fibromyalgia creates tender points in the body that are more sensitive to pain and touch. It also causes pain throughout the entire body. Fatigue, stiffness, restless sleep, and psychological distress are common.



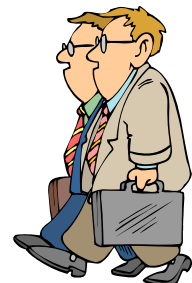
### 4. Lupus

- Lupus is a type of arthritis that causes inflammation of the skin, body tissues, and organs such as the kidneys, lungs, or heart.
- Lupus affects women 8-10 times more often than men, and often first appears between the ages of 18 and 45. Arthritis in the joints can be a symptom of lupus. Lupus can be fatal, but treatments often help.



### 5. Gout

- Gout causes severe pain and swelling in the big toes, ankles and knees. It is more common in men than women.
- Gout results when the body produces or retains too much uric acid, a natural substance in the body. The excess uric acid forms needlelike crystals in the joint, causing pain. Losing weight and limiting alcohol intake are helpful.

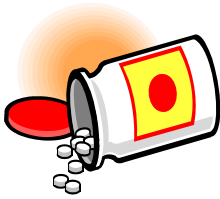


## Treatments that Work

There are several things we can do to help most types of arthritis. First, anyone who has symptoms of arthritis should see a doctor for a correct diagnosis. Only a doctor can decide if a person has arthritis or not, and what kind it is. It is important to know the type of arthritis, because there are different treatments for different types.



1. **Medication** is important for reducing the pain and inflammation of arthritis. Doctors often prescribe the following:



- Aspirin-free pain relievers such as acetaminophen (Tylenol)
- Anti-inflammatory drugs such as aspirin, ibuprofen (Advil), and naproxen (Aleve). These reduce the warmth and redness (inflammation) in the joints or skin, and also relieve pain.
- Sleep aids

If you are helping someone take medication, you should know the name of the medicine, how much the individual is supposed to take, how and when they should take it, how quickly it works, what it does, and side effects to watch for. Anti-inflammatory drugs can cause stomach pain and bleeding, and can also thin the blood so that a person bleeds excessively. Always report complaints of stomach pain to your supervisor.

2. **Exercise** is one of the best treatments for arthritis.

There are different ways to exercise:

| Type of Exercise             | What It Does  | How to Do It  | How Often          |
|------------------------------|---|---|--------------------|
| <b>Range of Motion (ROM)</b> | <ul style="list-style-type: none"> <li>– Reduces stiffness.</li> <li>– Keeps joints flexible.</li> </ul>  | Gently move each joint through all the possible ways it can move. An assistant can do <i>passive ROM</i> , or the client can do <i>active ROM</i> alone if he/she is able to. | Daily              |
| <b>Strengthening</b>         | <ul style="list-style-type: none"> <li>– Builds muscle strength, which helps keep joints stable. Strong muscles make it easier to do things.</li> </ul> | Lift light weights in sets of 8 to 10 repetitions. Start with weights no heavier than one to three pounds each.   | Every other day    |
| <b>Endurance</b>             | <ul style="list-style-type: none"> <li>– Builds fitness.</li> <li>– Keeps heart healthy.</li> <li>– Helps control weight.</li> </ul>                    | Walk or do something that raises the heart rate a little above normal for 20 to 30 minutes. Don't exercise so hard that it is difficult to talk.                              | Three times a week |

3. **Heat and Cold** applications can provide relief from some of the symptoms of arthritis.

- Heat relaxes aching muscles, and can be applied with warm compresses and warm water soaks. Never use heat with rubs or creams. The combination of heat and creams can burn the skin.
- Cold numbs the area and reduces pain. It can be applied with ice or cold packs.
- Either heat or cold are fine to use, depending on the individual's preference.
- It is helpful to use heat or cold before exercising, to prepare the joints and muscles.

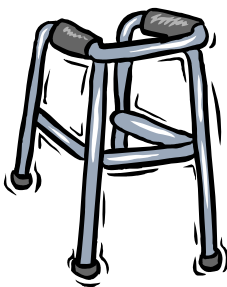


- Be safe! Don't leave a hot or cold treatment on the skin for more than 20 minutes at a time. Let the skin return to its normal temperature between treatments. It is possible to cause burns or frostbite if you overdo a heat or cold application.

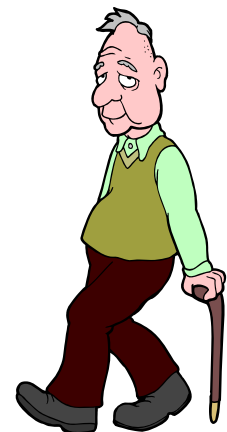
4. **Pacing Activities** saves energy, reduces fatigue, and protects joints from stress and injury.

- Alternate heavy or repeated tasks with easy tasks.
- Switch periods of activity with periods of rest.
- Change tasks often so the joints don't stay in one position for a long time.

5. **Joint Protection** uses the joints in ways that avoid stress and can make it easier to do tasks.



- Pay attention to joint position and use the joints in the best way. Use larger or stronger joints to carry things, such as carrying a grocery bag with the forearms, not the hands.
- Use walking or assistive devices to reduce stress on the joints and to make tasks easier. Use canes, walkers, and reachers. Use thick pens for writing. Only carry lightweight items.



6. **Self-Care Skills** means taking care of oneself by planning activities for the best times, when feeling more flexible or in less pain. The person should do enjoyable things and learn how to manage stress.



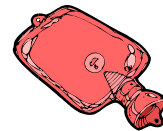
## Arthritis Case Study Learning Activity

Each of these case studies presents a situation that might face someone with arthritis and their caregivers. Based on what you already know, choose the best solution. After you have completed the activity you will study the Learner Guide for answers.

1. Mrs. Jones has arthritis in both of her knees. She complains often about how much it hurts to walk. She is inactive because of another illness. What do you think might help Mrs. Jones? Circle all the answers that apply.

- a. Nothing will help her, because arthritis is part of growing old.
- b. Don't move the joints.
- c. Range of motion exercises.
- d. Using a walker.

2. Warm compresses are applied to Mrs. Jones' knees several times a day. She says it doesn't help her knees feel better at all. What else might be tried for pain relief?



- a. Warm packs are the best thing there is.
- b. Cold compresses help some people and might help Mrs. Jones.
- c. Probably neither heat nor cold are going to help.
- d. She should keep warm compresses on the knees all day.

3. Mrs. Jones doesn't like to take a bath early in the day because she usually wakes up feeling stiff, with pain in her joints. What should you do?

- a. Let her bathe later when she feels more flexible and less uncomfortable.
- b. Tell her that she will feel better if she gets moving.
- c. Bathe her in bed so she doesn't have to get up.

4. Mrs. Jones likes to do needlework, and she will sit and work on her projects for long periods of time. She complains that her fingers hurt, but she doesn't want to give up her hobby. What might help her with this problem? Circle all that apply.



- a. She needs to stop doing needlework.
- b. She should change to a different kind of hobby or craft that doesn't require repetitive finger movements.
- c. She should alternate a period of needlework with a time of rest.
- d. She should alternate needlework with something that doesn't use the fingers as much.





## Arthritis Case Study Learning Activity: Answers

1. Mrs. Jones has arthritis in both of her knees. She complains often about how much it hurts to walk. She is inactive because of another illness. What do you think might help Mrs. Jones? Circle all the answers that apply.

- a. Nothing will help her, because arthritis is part of growing old.
- b. Don't move the joints.
- c. Range of motion exercises.
- d. Using a walker.

**Answer: c and d.** Exercise can strengthen the muscles around the knees and improve support to the joint. Using a walker can reduce pressure on the knees.

2. Warm compresses are applied to Mrs. Jones' knees several times a day. She says it doesn't help her knees feel better at all. What else might be tried for pain relief?

- a. Warm packs are the best thing there is.
- b. Cold compresses help some people and might help Mrs. Jones.
- c. Probably neither heat nor cold are going to help.
- d. She should keep warm compresses on the knees all day.

**Answer: b.** Either warm or cold compresses are good, depending on what helps the individual the most. Neither heat nor cold should be left on for more than 20 minutes at a time.

3. Mrs. Jones doesn't like to take a bath early in the day because she usually wakes up feeling stiff, with pain in her joints. What should you do?

- a. Let her bathe later when she feels more flexible and less uncomfortable.
- b. Tell her that she will feel better if she gets moving.
- c. Bathe her in bed so she doesn't have to get up.

**Answer: a.** She should be allowed to schedule her bath for a time when she has more freedom of movement and less pain, a little later in the day.

4. Mrs. Jones likes to do needlework, and she will sit and work on her projects for long periods of time. She complains that her fingers hurt, but she doesn't want to give up her hobby. What might help her with this problem? Circle all that apply.

- a. She needs to stop doing needlework.
- b. She should change to a different kind of hobby or craft that doesn't require repetitive finger movements.
- c. She should alternate a period of needlework with a time of rest.
- d. She should alternate needlework with something that doesn't use the fingers as much.

**Answer: c and d.** Switching between a repetitive activity such as needlework and something that uses the joints less will help reduce the pain in Mrs. Jones' fingers. Periods of rest are also good.





## Arthritis: Test

Name \_\_\_\_\_ Date \_\_\_\_\_ Score \_\_\_\_\_  
(8 correct answers required)

**Directions: Circle the best answer or fill in the blanks.**

1. Write the four main symptoms of arthritis (four points):

- |          |          |
|----------|----------|
| a. _____ | c. _____ |
| b. _____ | d. _____ |

2. What is the most common kind of arthritis?

- |  |          |
|--|----------|
| a. Osteoarthritis (degenerative arthritis) | d. Lupus |
| b. Rheumatoid arthritis                    | e. Gout  |
| c. Fibromyalgia                            |          |

3. What are the two main things that can help prevent arthritis or keep it from getting worse?

- |   |  |
|---|--|
| a. Vitamins and vigorous exercise.                    | c. Avoid alcohol and don't smoke.                        |
| b. Daily meditation and at least eight hours of rest. | d. Maintain recommended weight and guard against injury. |

4. Which kind of exercise should people with arthritis do every day?

- |                                    |  |
|------------------------------------|--|
| a. Aerobic exercises for endurance | c. Muscle strengthening exercises with weights |
| b. Range of motion exercises       |  |

5. Two side effects of some arthritis medicines are:

- |                               |                               |
|-------------------------------|-------------------------------|
| a. Confusion and dizziness    | c. Stomach upset and bleeding |
| b. Liver disease and jaundice | d. Kidney failure and gout    |

6. How should cold or warm compresses be used?

- |  |  |
|--|--|
| a. Alternate heat with cold.                               | c. Use a muscle rub under a warm compress. |
| b. Apply either one for no more than 20 minutes at a time. | d. Keep them on continuously.              |

7. There are six main treatments for arthritis. They are (fill in the blanks—two points):

- |                      |          |
|----------------------|----------|
| a. Medication        | e. _____ |
| b. Exercise          |          |
| c. Heat or Cold      | f. _____ |
| d. Pacing Activities |          |





# Certificate of Completion

Awarded to: \_\_\_\_\_  
(Name of Participant)

**For Completing the  
One-Hour Course Entitled  
*Arthritis***



Date of Course: \_\_\_\_\_

Organization: \_\_\_\_\_

Presented by: \_\_\_\_\_  
(Signature of presenter, or write "self-study")

