### When You Have Frozen Shoulder

Is your shoulder stiff and painful? If so, you may have frozen shoulder (sometimes called adhesive capsulitis). Frozen shoulder can interfere with work and daily activities. Your shoulder will likely loosen on its own in time. But treatment may relieve symptoms and help your shoulder heal faster. This booklet explains frozen shoulder and your role in getting better.



### Stages of Frozen Shoulder

Frozen shoulder typically occurs in stages. The length of each stage varies for each person, but is often months or longer.

- During the painful stage, you may have shoulder pain that slowly worsens. The pain may increase when you move your arm or when you sleep at night.
- During the frozen stage, pain gradually lessens. Your shoulder may stiffen until it becomes hard to move. You may not be able to raise or rotate your arm beyond a certain point. Daily tasks, such as getting dressed, may be difficult.
- During the thawing stage, pain and stiffness in your shoulder should gradually improve. In time, you will likely regain normal or close to normal movement and use of your shoulder.

### Risk Factors for Frozen Shoulder

Frozen shoulder may or may not happen as a result of an injury. Certain factors are more common in patients who develop frozen shoulder. These may include:

- Being a woman
- Being 40 to 60 years old
- Having certain health conditions, such as diabetes or thyroid disease
- Not using the shoulder for a prolonged period of time, such as after an injury or surgery

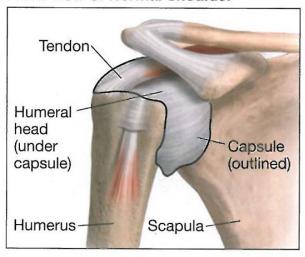
### **Tendons** connect muscle to bone. **Ligaments** connect bone to bone.



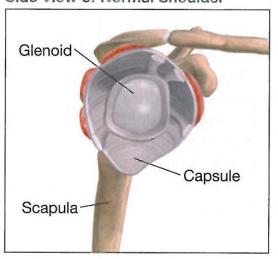
#### Normal Shoulder

- The humeral head is the ball at the top of the humerus (arm bone).
- The scapula is the shoulder blade.
- The glenoid is a shallow socket on the scapula.
- The capsule is a sheet of tough tissue that encloses the joint and joins the ball to the socket.

Front View of Normal Shoulder



Side View of Normal Shoulder



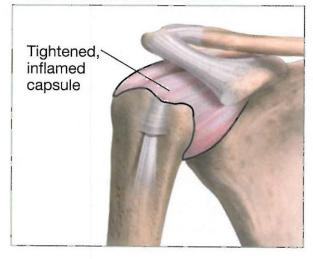
### Frozen Shoulder

With frozen shoulder, the capsule thickens and contracts (tightens). This may be due to inflammation and formation of scar tissue in the joint. Over time, this may result in pain, stiffness, and loss of movement in the shoulder and arm.

### Diagnosing Frozen Shoulder

To diagnose frozen shoulder, the doctor asks about your symptoms and health history. The doctor also examines your shoulder and checks its range of motion. In some cases, imaging tests, such as x-ray or MRI, are done. These can help the doctor rule out other problems.

Front View of Frozen Shoulder



## Treating Frozen Shoulder

Loosening of a frozen shoulder can take a year or longer. Treatment helps speed healing, so you can return more quickly to movement. There are a number of treatments for frozen shoulder. You and your doctor can discuss the options and create the best plan for your needs.

### **Nonsurgical Treatments**

- Medications are often tried first.
   They help relieve pain and reduce inflammation. Medications may be over the counter or prescribed.
- Physical therapy is usually prescribed. For this, you learn shoulder stretches to help improve movement and lessen pain (see pages 6 and 7). You may also be referred to a physical therapist. He or she can teach shoulder stretches and help restore movement in your shoulder.
- Cortisone injections into the joint are sometimes done. They won't cure frozen shoulder. But they may offer enough pain relief to help you do your physical therapy.



#### Ice and Heat

The following treatments can also help relieve symptoms.

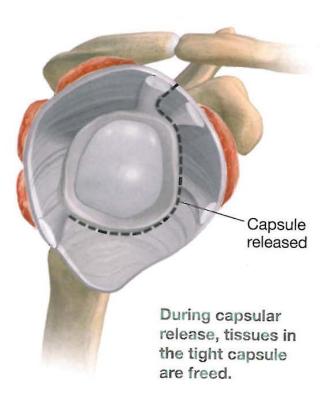
- Ice can help reduce pain and swelling. Use a bag of ice, an ice pack, or a bag of frozen peas. Apply the ice source for about 15 minutes, 2 or 3 times a day. Keep a thin towel between the ice source and your shoulder to prevent skin damage.
- Heat can help soothe aching shoulder muscles. Use as needed for warming up before activity. You can use a heating pad or take a warm shower or bath.



### **Surgical Treatments**

If nonsurgical treatments aren't enough to relieve your symptoms, surgery may be needed. One or both of the procedures below may be done. In either case, you are given **anesthesia** (medication to prevent pain) before the procedure. Soon after surgery, you may need to start physical therapy for your shoulder.

- Manipulation. During this procedure, the surgeon carefully raises your arm and moves your shoulder. This frees (releases) the capsule and nearby tissues.
- Capsular release. This surgery is usually done through several small incisions (arthroscopy). In some cases, it may be done through a single large incision (open surgery). With either technique, the surgeon uses surgical tools to cut and release the tissues in the tight capsule.



# Risks and Complications

- of surgery include:
- Infection
- Bleeding or blood clots
- Damage to nearby nerves, blood vessels, or tissues
- Continued pain, stiffness, or instability in the shoulder
- Fracture in upper arm
- Risks of anesthesia

# When to Call the Doctor

- After this procedure, call your doctor if you have:
- Increasing pain, redness, swelling, warmth, bleeding, or drainage at incision site
- Fever of 100.4°F (38°C) or higher
- Chest pain or shortness of breath
- Dizziness or fainting
- Pain that cannot be controlled with medications

### Improving Movement

Shoulder stretches are an important part of treatment. They help improve movement and relieve pain over time. Below are examples of stretches you may be told to do. They may be done at home. Or, they may be done in a formal program run by a physical therapist.

### Tips for Stretching

- Breathe normally while doing these stretches. Don't hold your breath.
- Do each stretch as often as directed by your doctor or physical therapist.
- These stretches may cause some discomfort, especially when you first get started. Talk to your doctor or physical therapist if you have concerns.

#### Pendulum

- 1. Relax the arm on the frozen side, letting it hang straight down. Lean slightly forward and hold a table or chair for support with your good arm.
- 2. Slowly move the injured arm in a small circle. Reverse direction and repeat. Then, slowly swing the arm back and forth and side to side.

Note: Do this stretch as a warm-up before starting the rest of your stretching program.

### Elevation (Reaching Up)

- Raise the hand on the frozen side as high as you can. Then grasp a stable surface, such as a bookcase, with the same hand.
- Keeping your arm straight, lower your body by bending your knees. Stop when you feel the stretch in your shoulder.

**Note:** Your back should remain straight. To enhance the stretch, bend your knees lower.





# For each of the 4 stretches: Stretch to the point of maximal tightness 3 Sets of Each Stretch 3 Times per Day

### Adduction (Reaching Across)

- 1. Put the hand from the frozen side on the opposite shoulder. Your elbow should point away from your body. Raise your elbow as close to shoulder height as you can.
- 2. With your other hand, push the raised elbow toward the opposite shoulder. Stop when you feel the stretch in the painful shoulder.

**Note:** Push your elbow across your chest, not up toward your chin. To enhance the stretch, try to push your elbow farther across your chest.

### Internal Rotation (Turning In)

- While seated, move the arm on the frozen side toward the middle of your back. The palm of your hand should face out.
- Cup your other hand under the hand that's behind your back. Gently push your cupped hand upward until you feel the stretch in your shoulder.

**Note:** Keep your back straight. It's okay if your hand can't reach the middle of your back. Instead, start the stretch with your hand as close as you can get it to the middle of your back.

### External Rotation (Turning Out)

- 1. Stand in a doorway. Grasp the doorjamb with the hand on the frozen side.
- 2. With the other hand, hold the elbow on the frozen side against your body.
- 3. Standing in the same spot, rotate your body away from the doorjamb. Stop when you feel the stretch in your shoulder.

**Note:** Keep your arms as still as you can. To enhance the stretch, rotate your body a little more. But be careful not to twist your back.







### Talk with Your Doctor

There are several treatments for frozen shoulder. Some people may need only physical therapy and medications to help improve movement and lessen pain. Others may need additional treatments. Talk with your doctor to learn more about your options and what they may mean for you. By being informed, you can help your doctor ensure that your needs are met.

### Stick to Your Stretching Program

Doing certain shoulder stretches each day can help treat frozen shoulder. It may take several months before you notice results. But be patient. In the long run, stretches will reduce pain and help give you a fuller range of motion. With time and effort, you'll soon get back to doing the activities you enjoy.