

Taking hold of shoulder pain



Your guide to
shoulder replacement
surgery

Taking hold of life



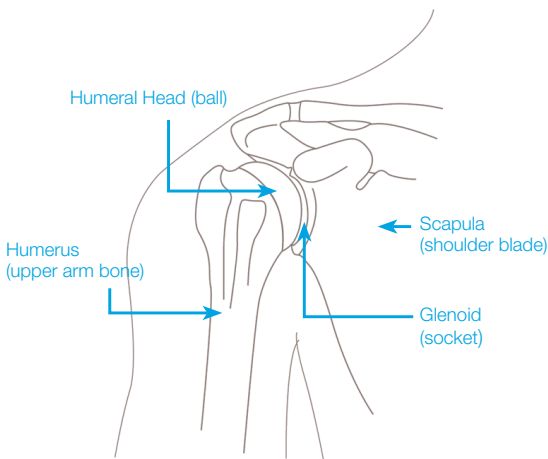
Brushing your hair. Getting dressed. Carrying groceries. Sleeping through the night. These are just a few of the life basics that can be difficult without full use of your shoulder. Fortunately, there are many ways to treat shoulder pain, depending on the cause.

One option is shoulder replacement surgery. More than 70,000 patients choose it every year, and although nobody can guarantee a perfect outcome, shoulder replacement is designed to reduce pain, allow greater strength, and provide better movement.

Of course, having shoulder replacement is a serious decision that you should discuss with your doctor at length and think over carefully. This brochure may help answer some of your questions, and further information is available online at zimmer.com.

Why Does My Shoulder Hurt?

The shoulder is a ball and socket joint that is made up mainly of two bones. The ball portion of the joint is part of the upper arm bone (humerus). The socket portion is part of the shoulder blade. The ball fits into the socket, allowing the shoulder to move. The two bones rub together as the shoulder moves, and in a healthy shoulder, that movement is painless.

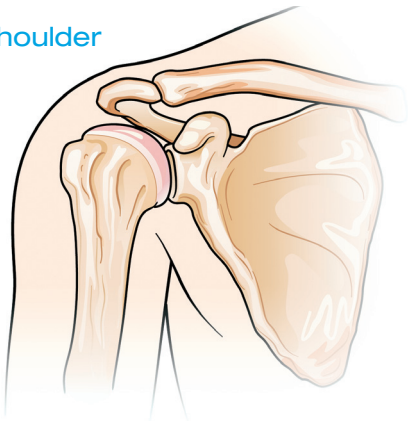




Unfortunately, over time, regular wear and tear or injury to the joint can result in significant pain. There are three common conditions that damage the shoulder:

- Osteoarthritis
- Proximal humeral fracture
- Rotator cuff arthropathy

Healthy Shoulder

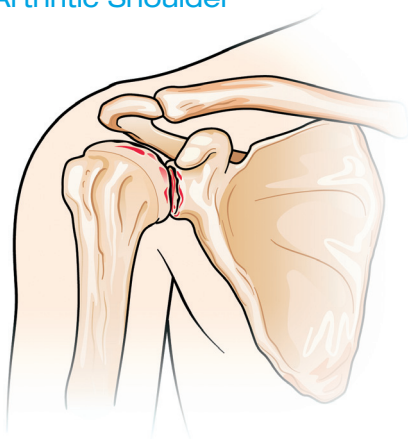


Osteoarthritis

In a normal, healthy shoulder joint, the surfaces of the ball and socket bones are very smooth and covered with a tough, protective tissue called cartilage. The cartilage prevents direct contact between these bones and allows them to move smoothly over each other, without friction or wear on the bone surfaces.

The problems start when that cartilage is injured or worn away—which is actually the *definition* of osteoarthritis. The bones grind against each other, and that grinding *hurts*. Eventually, all that friction causes the bone surfaces to deteriorate. Unfortunately, there is no medication or treatment that will make damaged cartilage grow back.

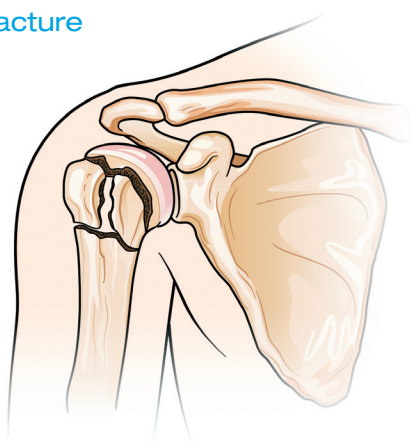
Arthritic Shoulder



Proximal Humeral Fracture

A *proximal humeral fracture* is just the medical name for a broken shoulder. (Specifically, it means a fracture of the upper arm at the shoulder joint.) The injury is especially common among older people who suffer from osteoporosis, which causes the bone to become more fragile over time—making it vulnerable to fractures caused by falls or direct blows, like a car accident.

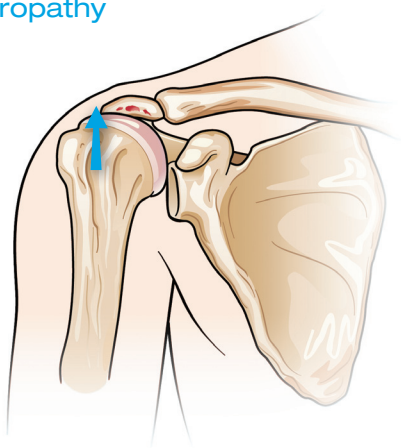
Proximal Humeral Fracture



Rotator Cuff Arthropathy

The rotator cuff is a group of muscles and tendons that holds the shoulder together and helps stabilize it and give it strength. Rotator cuff arthropathy is a combination of two types of damage—not only has the cartilage been damaged or worn away, the rotator cuff tendon that connects the muscle to the bone has also been severely worn or torn.

Rotator Cuff Arthropathy





Depending on the extent and cause of the shoulder damage, your orthopedic surgeon can recommend a variety of treatments, including oral medications or injections for pain and inflammation, physical therapy, and various types of surgery. But if those treatments have failed, or you aren't a candidate for them, your doctor can help you determine if it's time to consider shoulder replacement surgery.

What Is Shoulder Replacement?

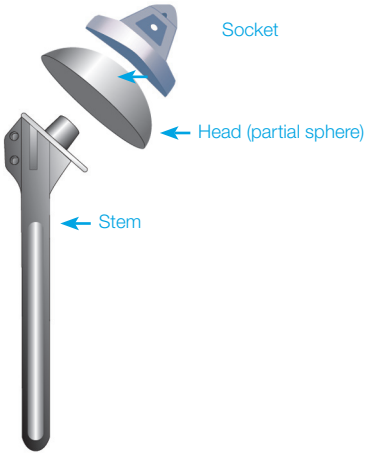
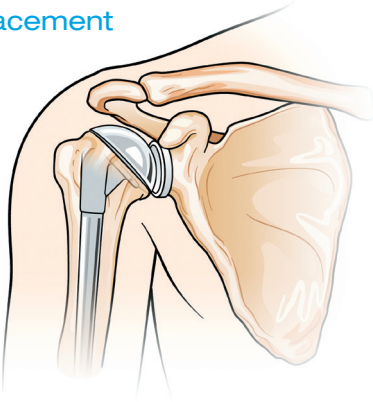
It's the same idea as having most things fixed—worn parts are taken out, and new parts are installed in their place. In shoulder replacement surgery, the parts of the bones that rub together or have been broken are replaced with metal and plastic parts.

The part that replaces the ball consists of a partial sphere made of metal. This partial sphere sits on top of a metal stem that fits down into the shaft of the upper arm bone.

The part that replaces the socket consists of an oblong plastic disk with a cupped surface, which lines the socket and replaces the damaged cartilage. The partial sphere fits into this cupped surface to re-create the joint.

Different versions of shoulder replacement surgery are available, depending on your situation. For instance, sometimes it may be necessary to replace only the ball portion of the joint. Your surgeon will advise what is best for you.

Total Shoulder Replacement





How Will I Know If I Should Have Shoulder Replacement?

Your orthopedic surgeon will perform a very thorough examination of your shoulder. This will include a check of the muscles and tendons to determine how much strength and range of movement you have.

In addition, your surgeon will take X-rays, a CT scan (computed tomography), or an MRI (magnetic resonance imaging), which will be used to further assess the condition of your shoulder joint. If you decide on shoulder replacement surgery, these images also will be used to help your surgeon select the best type and size of shoulder implant.

Based on the examination and tests, your surgeon will determine whether you are a candidate for shoulder replacement. Although widely available, shoulder replacement is a major surgical procedure and should be considered only when all other treatment methods have failed.

What Risks Are Involved?

It's important to understand the risks involved. There are potential complications both during and after surgery. Generally, these include infection, blood clots, pneumonia, implant loosening, and nerve damage. Your surgeon can answer your specific questions about these risks.

What Is It Like To Have Shoulder Replacement Surgery?

Before Surgery

If you and your surgeon decide that shoulder replacement is right for you, a surgery date will be scheduled. Several things might be necessary to prepare for surgery. For example, your surgeon might ask you to have your primary care physician perform a physical examination.

During Surgery

On the day of surgery, a small tube (intravenous line) will be inserted into your arm. This tube will be used to administer fluids, antibiotics, and other medication during your surgery. Then you will be taken to the operating room and given anesthesia. After the anesthesia takes effect, your shoulder will be scrubbed and sterilized with a special solution.

The surgery will begin with an incision over your shoulder that will expose the joint. When the bones are fully visible to the surgeon, special precision guides and instruments will be used to remove the damaged parts of the bones and shape the remaining bones to accept the implants.

The implants are then secured to the bones, either by using a special cement or by setting the implants so tightly into the bone that they are held in place just by the fit. It might also be necessary to adjust the ligaments that surround the joint, in order to achieve the best possible shoulder function. When the surgeon is satisfied with the fit and function of the implants, the incision will be closed.

A tube may be inserted into the wound to drain the fluids that naturally develop at the surgical site. A sterile bandage and ice pack will then be applied, and you will be taken to the recovery room, where you will be closely monitored. Your surgery will likely take between two and three hours.

Immediately After Surgery

As your anesthesia wears off, you will slowly regain consciousness. A nurse will be with you and may encourage you to cough or breathe deeply to help clear your lungs. You also will be given pain medication. When you are fully awake and stable, you will be taken to your hospital room. Your shoulder will remain swollen and tender for a few days and, initially, may appear bruised.

What Can I Expect After Surgery?

When you are back in your hospital room, your nurses will check your bandages and give you pain medication as needed. Your arm will likely be in a sling or brace to help protect your shoulder and make you more comfortable. You may be asked to sit on the edge of your bed or even get out of bed and take a few steps.

Soon after your surgery, you will begin a gentle exercise program that will help you regain strength and range of movement in your shoulder. This program will be designed specifically for you and may begin with simple movements of your fingers, wrist, and elbow, building up to movement of your shoulder itself. You can expect to stay in the hospital anywhere from one to three days after surgery. Your bandages may be removed before you leave, but your stitches probably won't be taken out for 10 to 14 days.

At home, you will need to continue your exercises. Your physical therapist will give you detailed instructions and may continue to work with you at home. In fact, your therapy may continue for several weeks after surgery. Your doctor or therapist will tell you when you can begin to drive and perform other activities.

Hopefully, you'll be well on your way back to the life a healthier shoulder can help you enjoy.



This brochure is intended to provide an overview of shoulder pain, treatment options, and Zimmer shoulder implants and should be reviewed with your orthopedic specialist. It does not include all of the information needed to determine eligibility for shoulder replacement or for the proper use and care of a prosthetic shoulder implant. Please consult your orthopedic specialist for more information. Information may also be obtained by calling the toll-free number or visiting the Web site. The toll-free number also can be called to obtain complete product contraindications, warnings, precautions, and possible adverse effects.

Individual results may vary. Your results will depend on your personal circumstances. How long a shoulder replacement will last varies from patient to patient. It depends on many factors, such as the patient's physical condition, activity level, and body weight and the surgical technique. Replacement joints are not as strong or durable as natural, healthy joints, and there is no guarantee that a prosthetic joint will last the rest of a patient's life. All shoulder replacements may need to be replaced at some point.

To receive more information on Zimmer's latest joint replacement technology, please fill out the reply card.



Yes! I would like to receive more information on Zimmer's latest joint replacement technology. [Please print clearly.]

First and Last Name _____

Street Address _____

City State ZIP _____

Phone _____

E-mail _____

In order to send you the most relevant information, please complete the short questionnaire below. Please choose your level of agreement by circling a number in the scale below.

1. My shoulder causes me difficulty in doing everyday things, like lifting shopping bags.

Do not agree 1 2 3 4 5 6 7 Completely agree

2. Joint replacement surgeries have a very high success rate.

Do not agree 1 2 3 4 5 6 7 Completely agree

3. My pain is not severe enough to have the replacement surgery yet.

Do not agree 1 2 3 4 5 6 7 Completely agree

4. My doctor has told me that I am not old enough to have the surgery yet.

Do not agree 1 2 3 4 5 6 7 Completely agree

5. I am a caregiver for someone and am concerned about who will take care of them during rehab from the shoulder replacement surgery.

Do not agree 1 2 3 4 5 6 7 Completely agree

6. I am still looking for a surgeon whom I can trust and feel comfortable with.

Do not agree 1 2 3 4 5 6 7 Completely agree

Zimmer, Inc. respects your interest in keeping your personal information private. We will not sell your information to any third parties or outside mailing lists. For more information, see our Privacy Notice at zimmer.com. By checking YES above, I understand that the information I've provided may be used to contact me by phone, e-mail, or regular mail. It may also be used for market research and analysis to develop services and products. To be removed from our mailing list, please call 877-336-5633. Please note that you may receive information during the period of time before we receive and process your request.

Shoulder

Possible complications of shoulder replacement surgery include loosening or fracture of the shoulder components and dislocation and/or joint instability of the prosthetic shoulder. Additional surgical procedures may be required to address these and other complications. Excessive physical activity, injury, and obesity also can result in loosening, wear, and/or fracture of your shoulder implant. Failure to follow through with the required rehabilitation program or failure to govern your physical activities as directed by your physician also may cause your shoulder implant to fail.

Shoulder implants are available only on the order of a physician.

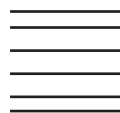
Take hold of *your* shoulder pain

To learn more about Zimmer orthopedic implants, obtain helpful information for patients and caregivers, or for assistance in finding a surgeon familiar with our products and surgical techniques,

call toll free: 877-447-5634
or visit zimmer.com



This brochure is intended to provide an overview of shoulder replacement surgery. It is not intended to promote shoulder replacement surgery or provide instructions for preoperative preparations or postoperative recovery.



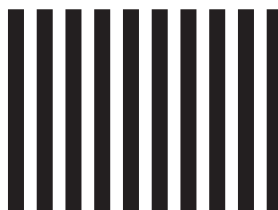
BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT # 39 WARSAW IN

POSTAGE WILL BE PAID BY ADDRESSEE

ZIMMER
ATTN: CONSUMER RELATIONS
PO BOX 708
WARSAW, IN 46581-9944



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



+H124972100546001/\$100317R5C10L