

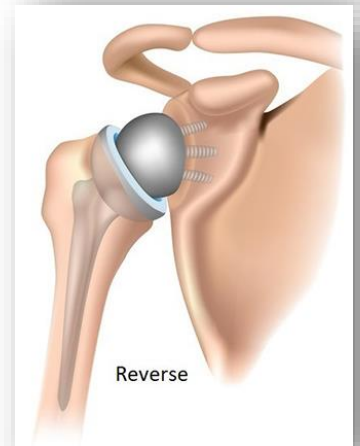
Total Shoulder Arthroplasty (TSA) (Shoulder Replacement)

A standard (or anatomic) shoulder replacement involves making an incision on the front of the shoulder to access the joint. Your surgeon will then remove the arthritic surfaces in your shoulder and replace the joint with metal and plastic implants. The new components are aligned and secured to the humerus (arm bone) and the scapula (shoulder blade). The surgery takes approximately 1.5 hours.



Reverse Total Shoulder Arthroplasty (RTSA)

For patients with large rotator cuff tears and/or an arthritic condition called complex rotator cuff arthropathy, a *reverse* total shoulder replacement may be the better option. In a reverse total shoulder replacement, the ball and socket joint of the shoulder are switched compared to normal anatomy and the deltoid muscles are used to move the arm instead of the rotator cuff. The head of the humerus becomes the socket, and the glenoid becomes the ball of the shoulder.



Recovery

A shoulder replacement is an extensive surgery. **It is important to read through this document** to ensure your shoulder replacement is a positive experience and leads to a better quality of life. You should expect post-operative pain, which can vary for each patient. It can take 3 months to 1 year before you are pain free and back to all activities. Recovery times and pain relief vary for each patient. We expect that you will begin to wean from your pain medication as soon as tolerated after surgery.

Prior to Surgery

Share the information in this document with anyone who will be supporting you through this process. Additionally, **read the “PREPARING FOR SURGERY” document** for greater details on surgery preparation. Ask your surgical team for the “Preparing for Surgery” document if you have not received it.

IMPORTANT: Your surgery may be postponed if there is a change in your health status before surgery. If you begin experiencing a fever, rash, or cold, call our office immediately at (928) 773-2280.

You must NOT have dental cleanings or dental procedures performed within 2-weeks prior to surgery.

Pre-Operative Testing

Prior to surgery, you will be required to go to a laboratory or testing center for basic pre-operative (pre-surgery) testing. Tests ordered may include blood tests, nasal swab tests, and electrocardiogram (EKG). Tests will be ordered at your pre-op visit, or sooner, and are expected to be done the same day at a designated outpatient service facility.

Office Visit- Pre-Surgery

You will be scheduled for a **mandatory pre-operative clinic visit** at Flagstaff Bone and Joint, approximately **2-3 weeks prior to surgery**.

During this office visit you can expect the following:

- Review of your current medications and discussion of medications to discontinue before surgery.
- Discussion of all necessary medications to be prescribed after surgery.
- Review of any pre-surgery studies ("Pre-Operative Testing") for surgery clearance.
- Review of surgery clearance information from your primary medical physician and/or specialist.
- The surgery facility team will ensure you will be discharged after surgery with any required post-surgery medical equipment such as a sling.
- Cold therapy units are optional and available for purchase (cash-pay only). These devices provide cold therapy to your shoulder by circulating cold water from a main unit into a pad, which is placed around the shoulder. If you are interested, call our office at (928) 213-6231 to connect with our DME technician.

What to Expect Day of Surgery

The Hours Before Surgery

- Surgical and anesthesia consent forms will need to be signed.
- Pre-surgery sedatives and antibiotics will be administered to you through an IV.
- A nerve block will be performed by the anesthesiologist.
- Your shoulder will be shaved and cleaned with topical antiseptics Betadine, Hibiclens, and Chlorhexidine.
- You will meet with your surgeon in the pre-op area and your surgeon will answer any remaining questions you may have before surgery.
- Your surgeon will confirm and mark your surgical arm.
- You will be transferred to the operating room for your surgery.

Immediately After Surgery

After surgery is completed, the anesthesiologist will gradually bring you out of anesthesia. You will be transferred to a recovery room, where you will wake up. Your surgical arm will be in a sling.

You will be monitored in the recovery area for a few hours. Nurses will monitor your vital signs and keep you comfortable, administering any medications necessary for your post-surgery pain and/or nausea. The medications administered at the surgery center and the nerve block should provide excellent pain relief.

You will be discharged home once the medical staff determines your pain is well managed, you can walk safely to your method of transport, and all necessary medical equipment is acquired.

Plan to have someone drive you home and stay with you the first night (for at least 24 hours).

If you have surgery at Flagstaff Medical Center (FMC), or at the Arizona Specialty Hospital (in Phoenix), you might be admitted as inpatient to **stay overnight (or to stay a few nights). Speak with your surgeon about your plan.**

For 24 hours after anesthesia, and while taking opioid pain medication, you are deemed to be under the influence of drugs: do NOT drive, run machinery, drink alcohol, smoke, or make final decisions during this time.

Night of Surgery

- Take your prescribed pain medication for the first 24 hours after surgery.
 - Take first dose immediately upon arriving home, unless instructed otherwise.
 - Pain medications will not take away all the pain but should increase your comfort level.
 - Take pain medication with food, allowing 30-45 minutes for the medication to be effective.
- Take prescribed medication as indicated on page 4.
- Keep the surgical incision bandaging dry and intact.
- Continue to wear your sling, including while at rest and sleeping.
 - Sling may be temporarily removed to change clothes. Have help available to remove and re-apply your surgical sling (do not use your surgical arm).
- Note: the muscles in your surgical arm/hand/or fingers may still be weak from the nerve block for approximately 24-hours following your surgery.

Call Our Office IMMEDIATELY if ANY of the following arise after surgery:

- Chills or fever above 101°F.
- Severe nausea, vomiting, rash, and/or itching.
- Pain not relieved by oral pain medication.
- Sudden increase in arm pain and sudden increase in arm or hand swelling.
- Inability to urinate or empty your bladder.
- Signs or symptoms of infection including excessive redness, drainage, or significant arm swelling.
- Discharge from the surgical incision that has an offensive odor.
- Opening (or pulling apart) of the surgical incision.
- If you have trouble breathing or chest pain, call 911.
- If you feel you need URGENT MEDICAL HELP, call 911 or go to the nearest emergency room.

IMPORTANT GUIDELINES Post-Surgery

Dentist or Colonoscopy

Do NOT go to the dentist (even for a routine cleaning) or have a colonoscopy performed **for 3 months following surgery** due to risk of infection. These procedures may increase the risk of bacteria entering the bloodstream and traveling to your new shoulder joint.

Icing the Shoulder

Ice the shoulder at least every 1-2 hours for 15-20 minutes at a time for **at least the first 3-days** after surgery. Continue to ice as needed throughout the first two-weeks. Always place a barrier between the ice pack and your skin to prevent freezing the skin. **Do not** place a heating pad over the incision/surgical wound. You may use a heating pad on other areas like the neck or back for aches or muscle spasms.

Swelling, Bruising, Numbness

Swelling into the arm, hands, or fingers, is common following surgery. The arm, hands, or fingers may become very discolored and bruised and you may have pain away from the surgery site. It is common for your shoulder and arm to feel warm. You may have numbness and tingling into the arm while wearing the sling. If numbness or tingling occurs, remove the sling, and perform the pendulum passive motion exercise on page 6, and/or adjust the forearm position in the sling to relieve the numbness and tingling. If swelling, bruising, or numbness significantly worsen or appear severe, call the office.

Showering

You may shower the day after surgery, removing any bulky surgical dressings (gauze, etc.) and letting water run off the surgical bandage and patting the area dry afterwards. Reference page 5 for more details on taking care of your incision, showering, and bandaging after surgery. Ensure all surfaces inside and outside of your shower are non-slip. Consider using non-slip safety shower mats to decrease risk of falling. **No soaking of the shoulder** (no pools, hot tubs, baths, etc.) **until cleared after 6-week** follow-up appointment.

Medications to Take After Surgery

You will be prescribed medications to take post-surgery. These medications include pills to help with pain, a stool softener (laxative) to relieve constipation, as well as an anti-nausea pill to take as needed.

We request 72-hours to process medication refills. Please notify us if you need a refill before you run out.

Pain Relievers (non-opioids): *take both medications on a scheduled basis after surgery.*

- **NSAID (non-steroidal anti-inflammatory drug):** *for pain relief and to reduce inflammation.*
 - BE SURE TO TAKE WITH FOOD TO AVOID UPSET STOMACH
- **Tylenol (Acetaminophen):** *for pain relief.*

*Ice is also very beneficial to help to control post-operative pain.

Narcotic (opioid) Pain Medication: *you'll be prescribed one of the following to take as needed.*

- **Oxycodone:** opioid medicine; take as prescribed for moderate to severe pain.
OR
- **Percocet:** opioid medicine that also contains Tylenol; take as prescribed for moderate to severe pain.

*If your pain remains poorly controlled despite taking your medication as instructed, please call our office so the appropriate changes can be made. Opioid medications may also cause constipation.

Stool Softener/Laxative: *treats constipation by softening your stool to make bowel movements easier.*

- **Colace 100 mg:** take 1 tablet, by mouth, twice daily (as needed for constipation)
- To help prevent constipation, drink plenty of water, about 8 glasses a day or more, and eat foods that are high in fiber such as whole grains, beans, fruits, and vegetables while limiting dairy products.

*If constipation persists despite taking Colace, MiraLAX and/or Senna may be added. If these do not work, milk of magnesia and enemas may be used. These medications are available at your local pharmacy over the counter (*do not require a prescription*).

Anti-Nausea Pill: *to use as needed if the narcotic pain medication causes nausea or vomiting.*

- **Zofran:** take as prescribed when needed for nausea/vomiting.

*Most nausea is relieved by reducing oxycodone dose or frequency.

Activity Immediately After Surgery

Do

- Perform the pendulum passive motion exercise on page 6 throughout the day.
- Actively move your elbow, wrist, hand/fingers throughout the day **without moving the shoulder**.
- Go on short walks throughout the day (walk on flat and stable surfaces to avoid slips or falls).

Do NOT

- Do NOT lift or push any objects with your surgical arm.
- Do NOT use your arm to support your body weight.
- Do NOT progress activity or exercises unless instructed by your surgical team or physical therapist.

Sling & Immobilization

Standard (anatomic) Total Shoulder Replacement: You will be in an arm **sling for 6 weeks** after surgery. This timeframe is important to protect the rotator cuff while healing.

Reverse Total Shoulder Replacement: you will be in an arm sling for **at least 2 weeks** after surgery to protect the surgical site.

It is important to **wear your sling at all times** for the prescribed number of weeks protect your new joint and allow for healing. The sling may be removed when carefully getting dressed, performing your pendulum exercise on page 6, and when showering. Have help available for removing and replacing the sling on your surgical shoulder.

Wound Care & Bandage

- You will have a waterproof surgical bandage directly over your surgical wound after surgery. Keep this bandage in place until your first follow-up appointment (usually 2-weeks after surgery). Any bulky dressings (gauze, etc.) over top of the surgical bandage may be removed the day after surgery.
 - You may notice some discoloration or staining underneath the bandage, this is normal.
 - If you notice the *entire* dressing is stained or saturated, call the office as it may need to be changed.
 - The waterproof surgical bandage also has antibiotics in it to reduce the chance of infection.
- Wear clean clothing and use clean bedding to avoid infection.
- You may shower, letting water run off the waterproof bandage, and patting the bandage dry afterwards.
- Do not apply any creams, lotions, or ointments to the shoulder or surgical incision.
- On the rare occasion that bloody drainage is noted coming from the surgical wound after you return home, CALL US IMMEDIATELY at (928) 773-2280.

Post-Surgery Timelines

Most people can return to work within 1-2 weeks as tolerated. You should expect post-surgery pain, which varies for each person. On average, patients return to most activities 4-6 months post-surgery with a **lifetime restriction of no lifting greater than 20 pounds overhead**.

Physical Therapy: it is important to start formal physical therapy **as prescribed** after surgery. You will continue formal physical therapy until your therapist feels comfortable releasing you to perform exercises on your own. If you are unable to secure travel to physical therapy appointments and need to be admitted to a Skilled Nursing Facility (SNF) after surgery, discuss with your physician.

Follow-up Appointments: Below are the typical scheduled follow-up appointments after surgery.

- 2 weeks (with x-rays)
- 6 weeks
- 3 or 6 months (with possible repeat x-rays)
- Annually (with x-rays)

IMPORTANT: although you may feel you are doing very well after surgery, it is important to still attend all routine follow-up appointments.

2-Week Follow-Up Visit

During your scheduled office visit at 2-weeks after surgery, you can expect the following:

- Removal of your bandage, and assessment of your surgical incision.
- Evaluation of your pain levels and your day-to-day function.
- Assessment of your shoulder motion (your arm will be moved passively by your provider during the visit).

Long Term Expectations

The components of your new shoulder joint are the result of extensive research, but, like any device, its lifespan depends on how well you care for it. To ensure longevity of your new shoulder, it is important you take care of it appropriately.

Illness/Sickness: Infections of the shoulder joint after surgery are not common. However, bacteria from other wounds or infections can travel to, and gather around, the metal components of your replacement, infecting the joint. If at any point you become sick with an infection or high fever, you should contact your primary care physician immediately for early treatment.

Deep/Dirty Cuts or Infected Bug Bites: After having a shoulder replacement, if you sustain a deep and dirty cut, or have an infected bug bite, you will need to take antibiotics. Please call our office to obtain a prescription.

Future Surgeries: Moving forward, if you undergo *any type* of surgical procedure, no matter how minor, you must take antibiotics both before and after your scheduled surgery. Prior to having another surgery performed, inform your surgeon that you've had a shoulder replacement.

Sports & Activities: Your new shoulder is designed for activities of daily living. Staying active is highly recommended for mobility and to be in good health. However, activities such as lifting greater than 20 pounds overhead and certain weight-lifting exercises may compromise the function and longevity of your new shoulder. Speak with your surgeon about your activities and restrictions after your shoulder replacement.

Passive Motion Exercise

The following exercise will help you recover from your Shoulder Replacement. **Perform at least twice a day.**

Pendulum Circles - Start this exercise immediately after surgery.



Set Up: Carefully remove your surgical sling using your non-surgical arm or with help from another person. Support yourself with your non-surgical arm on a countertop, table, or other stable surface. Then, lean forward at your waist, letting the surgical arm hang freely.

How to Perform: Keeping the surgical shoulder fully relaxed, shift your bodyweight to make your freely hanging arm start to swing in a circle.

Remember: this is a “passive” motion exercise, meaning your shoulder muscles should be relaxed. Gravity and body motion will move the shoulder. Consider practicing this exercise prior to surgery.

Make at least 10 circles increasing in size of circle as tolerated.

Perform throughout the day.