

DID YOU KNOW?

Back pain is the leading cause of disability between the ages of 19 and 45 and the second most common cause (after headaches) of missed work days.



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Spinal Fusion





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Spinal Fusion with Mazor X[™]

What is spinal fusion?

Spinal fusion is the process of two or more vertebrae fusing together, immobilizing them to create a single continuous bone. It is used to treat broken vertebra, a spinal deformity, spinal weakness, spinal instability, or chronic low back pain.

Surgeons use a bone graft—extra bone tissue, either from the patient (autograft) or a donor (allograft)—in conjunction with the body's natural bone growth (osteoblastic) processes so that spinal fusion can occur. This bone graft may be in a preformed shape or contained in a cage made of plastic, carbon fiber, or metal. Surgeons often use implanted plates, screws, or rods to hold the vertebrae and graft to promote healing. Once this bone graft heals, the vertebrae are permanently fused.



What type of surgery is needed for spinal fusion?

Surgeons sometimes perform this procedure using an "open" technique, creating an incision that provides a direct line-of-sight to the vertebra, which simplifies the process of inserting the bone graft and implants.

Minimally-invasive surgery (MIS) uses smaller incisions and usually results in less postoperative pain and faster recovery.¹ However, when MIS is performed without a guidance system, many intraoperative X-rays (fluoroscopy) are required to compensate for the surgeon's lack of visualization.

Mazor Robotics technology further enables surgeons to overcome these limitations and perform precise spinal fusion.

What are the advantages of spinal fusion with Mazor X?



In both open and minimally-invasive (MIS) procedures, Mazor Robotics technology can demonstrate greater accuracy when compared to freehand conventional spine surgery.² This can result in fewer complications, less postoperative pain, and a faster recovery. In addition, with Mazor Robotics technology, the surgeon may require less fluoroscopy during surgery.³

Ask your doctor about the benefits of Mazor Robotics Spine Surgery.

PLANNING Surgeon pre-plans the surgery

GUIDANCE

Precise guidance of surgical tools and implants VERIFICATION

verification of the Surgical Arm positioning