Men's Health

Signs, Symptoms and Treatment Options for Erectile Dysfunction and Stress Urinary Incontinence

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Learning about erectile dysfunction

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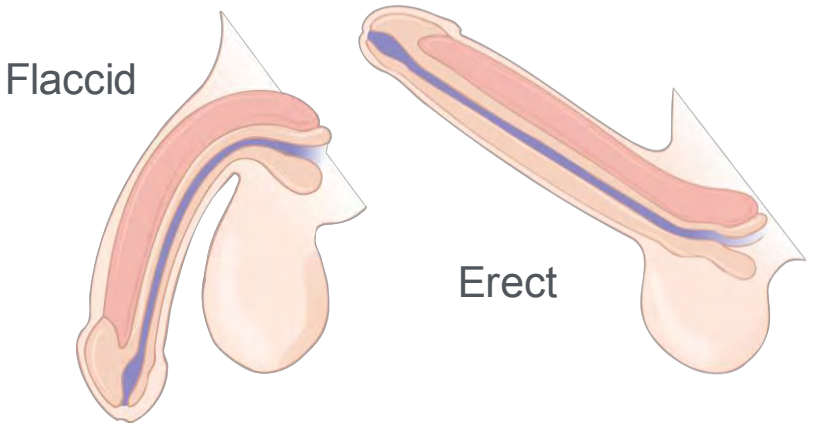
Erectile dysfunction (ED)

What is it?

- The inability to achieve or maintain an erection firm enough to have sexual intercourse[1]



How common is it?

- About 1 in 5 American men 20 years or older experience ED in their lifetime[2]
- More than half of men over 40 have some degree of ED[3]
- Affects approximately 39 million American men[4]

Erection process[5]

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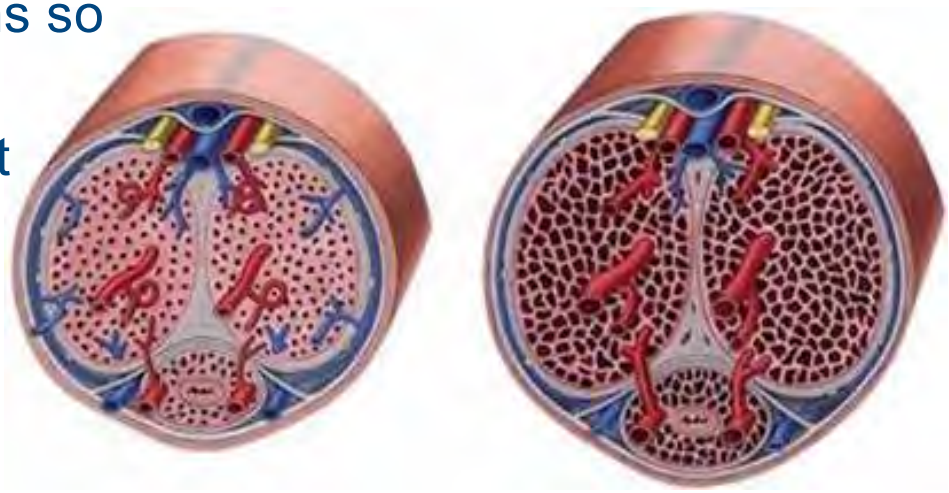
- With arousal, the nerves around the penis become activated
- Muscles relax and blood flows into the penis
- The additional blood causes the penis to stiffen
- The erection compresses the veins so the blood can't leave the penis, enabling the penis to remain erect



Flaccid Erect

Causes and comorbidities associated with ED[6]

Top three physical causes are:

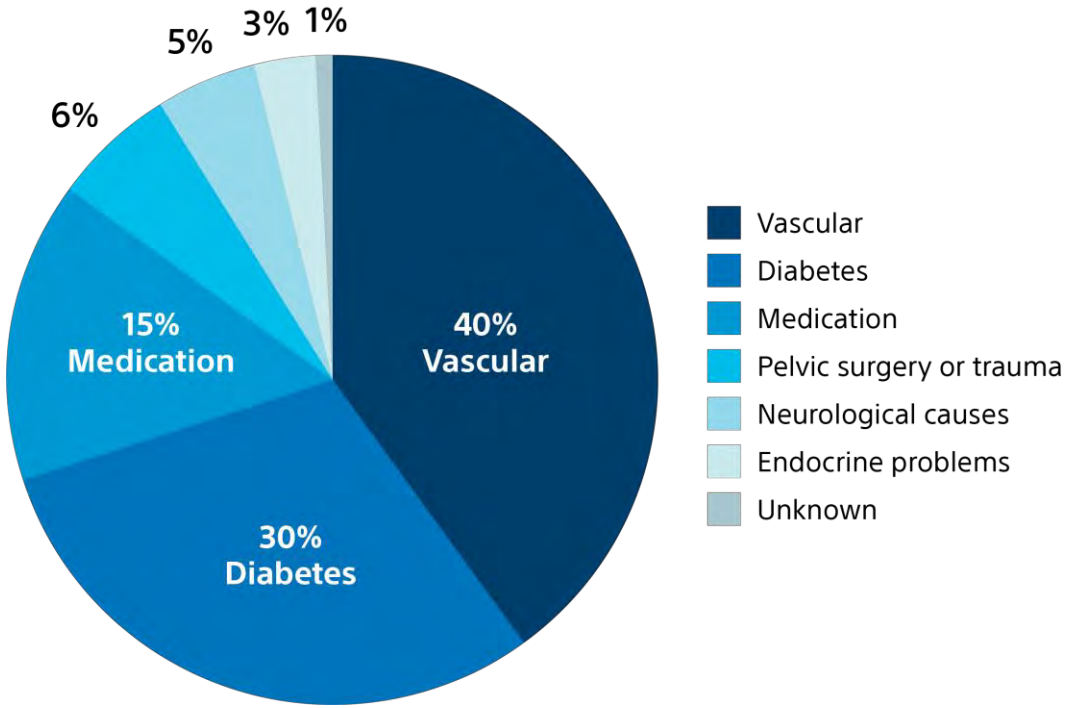
- Vascular
- Diabetes
- Medication

ED can be a result of:

- Prostate cancer treatment
- Pelvic surgery, trauma

Or precursor to:

- Diabetes
- Heart disease



ED can have a broad negative impact on the health-related quality of life.[7-9]

Erectile dysfunction and diabetes

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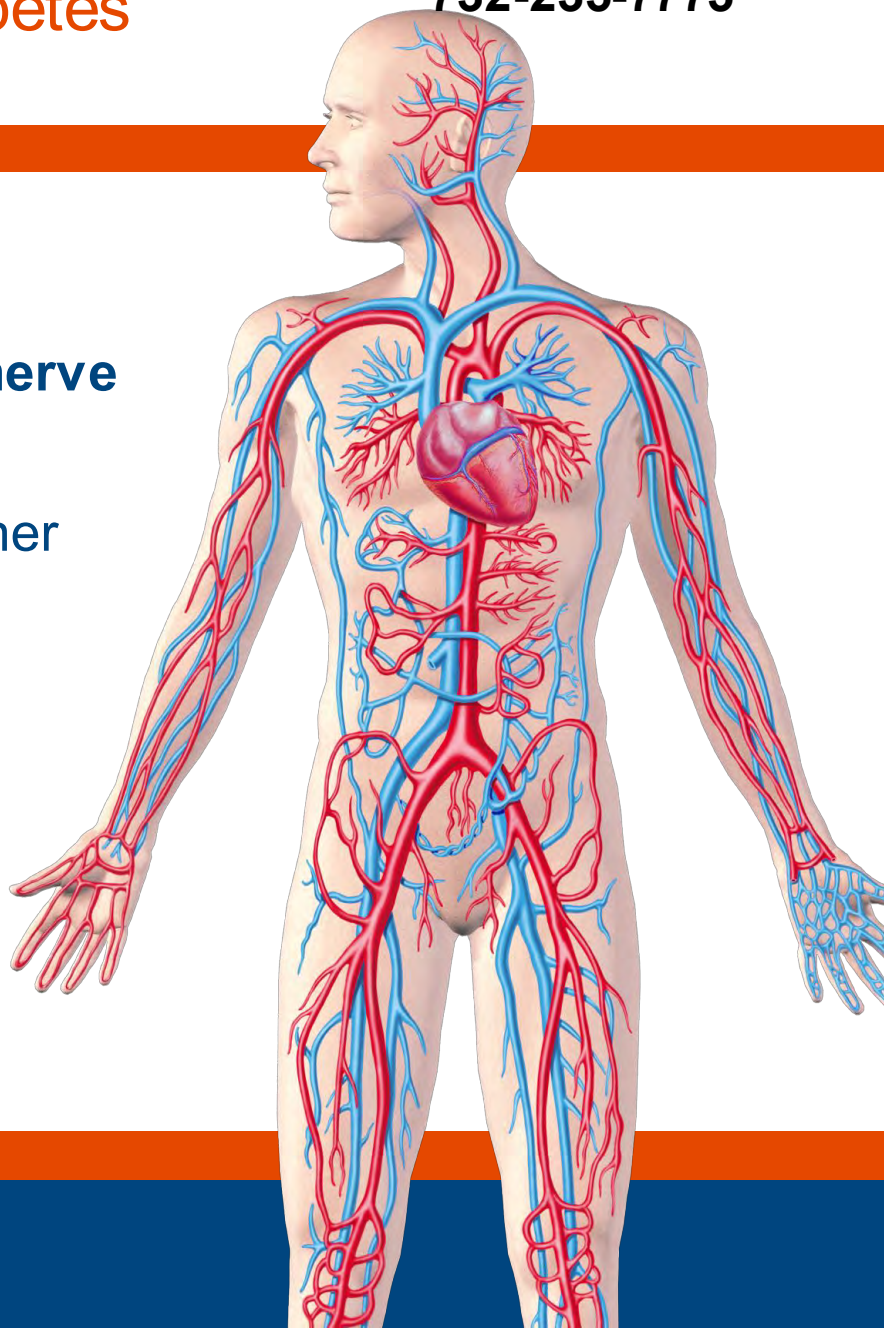
ED can be a result of having diabetes

The reasons why ED can emerge:

- 60–70% of people with diabetes have **nerve damage** or neuropathy[12]
- Diabetes accelerates damage to the inner lining of small arteries.[13]
- ED pills require stimulation (nerves) and healthy blood vessels. If these are damaged due to diabetes, pills may not be as effective.[14,15]



Erectile dysfunction and heart disease

ED before heart disease symptoms

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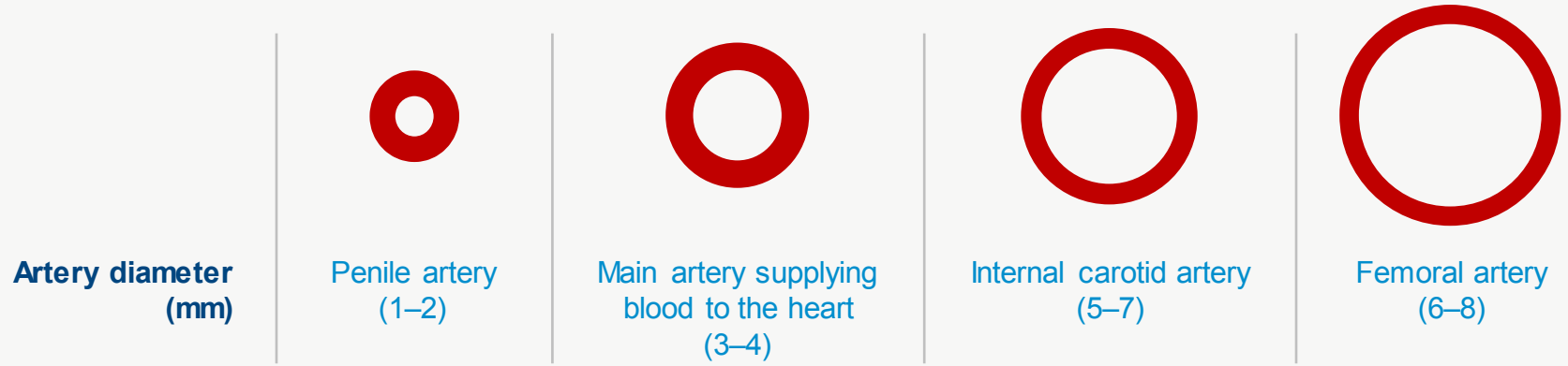
Arteries supplying the penis are smaller than those to the heart. Blockage creates reduced blood flow. Smaller arteries may be affected ***before*** heart disease symptoms.[17,18]

At 50% obstruction, the penile artery may cause symptoms of erectile dysfunction.[21]



Artery size hypothesis at 50% lumen artery narrowing[22]

Erectile dysfunction and low testosterone

Low testosterone and ED[24]

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Low testosterone (low T) occurs when a man's body produces less testosterone than normal.

It's more common in men with:

- Obesity
- Diabetes
- High blood pressure
- High cholesterol
- Prostate disease
- Asthma or COPD
- Anemia

How many men are estimated to have low T?

Approximately 4 in 10 men over the age of 45 may have low T.

For every 10-year increase in age, the risk of low T increases by 17%.

Treatment options for low T[25]

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If you are diagnosed with low T, treatment options may include:

- Testosterone gels
- Patches
- Oral medications
- Injections
- Nasal sprays
- Pellets

Erectile dysfunction and prostate cancer treatment

ED from prostate cancer treatment

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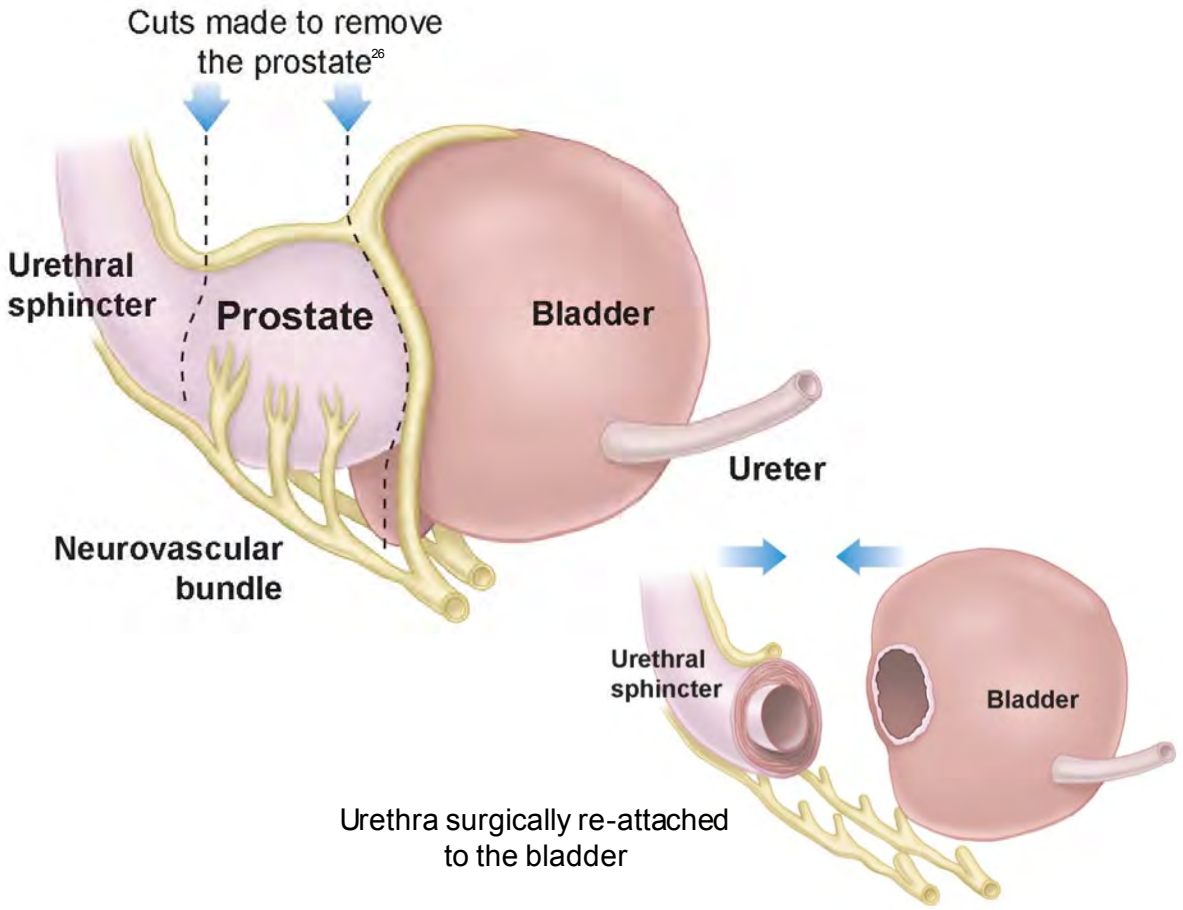
- The nerves and some blood vessels that supply blood to the penis for an erection lie very close to the prostate and may be injured during prostate cancer treatment[26]
- Prostate cancer treatments can affect a man's ability to achieve an erection on a temporary or permanent basis[26]



Erectile dysfunction and Peyronie’s disease

Peyronie's disease[31]

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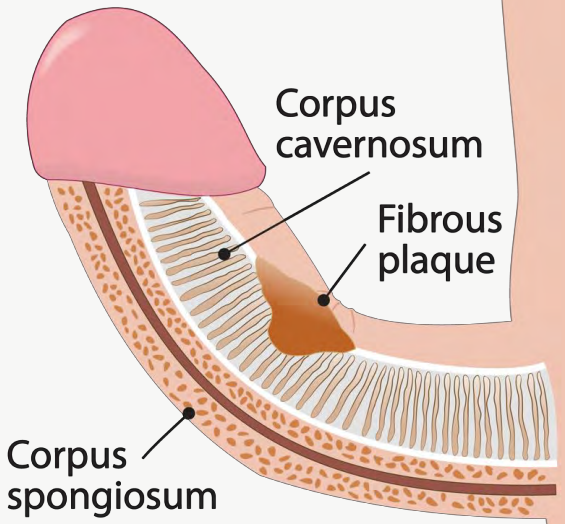
Fibrous scar tissue inside the penis can cause curved, painful erections

Complications

- Inability to have sexual intercourse
- Difficulty achieving or maintaining an erection (erectile dysfunction)
- Anxiety or stress about appearance
- Stress on the partner relationship

Treatment options

- XIAFLEX™
- Plication, incision or excision and grafting surgery
- Penile implants – if you have ED and Peyronie's disease



Alternative treatment options – investigational

The American Urological Association (AUA) reports the following should be considered investigational.[32]

- Extracorporeal Shock Wave Therapy (ESWT)
- Intracavernosal stem cell therapy
- Platelet-rich plasma (PRP) therapy

Treatment options you may be familiar with

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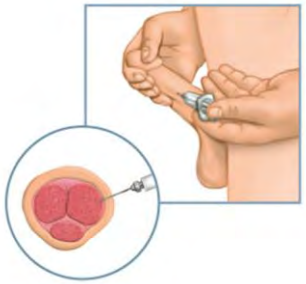
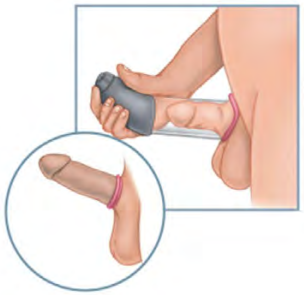
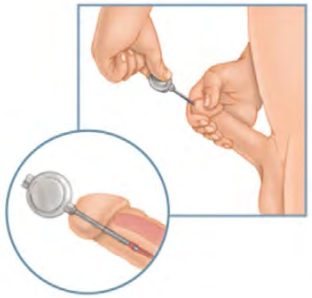
Oral Medications



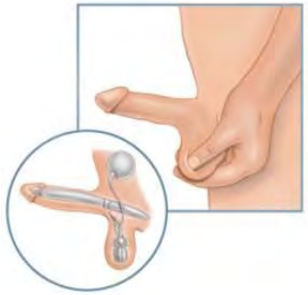
Injections



Vacuum Erection Devices



Urethral Suppositories



Penile Implants

Oral medications (PDE-5 inhibitors)

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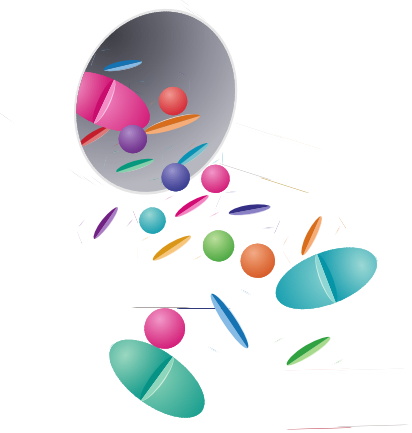
How do they work?[33-35]

- Increases blood flow to the penis



How effective are they?

- Effective in approximately 60–80% of cases[33-35]
- Efficacy can be affected by food[35]

Most common side effects:[33-35]

- Headache, facial flushing, upset stomach

Some cautions:[33-35]

- Consult doctor if on alpha-blocker therapy or taking nitrates

- **Almost half of some men with ED who try oral medications give up on the pills or they stop working.[29]**
- **Men with diabetes are up to 2 times more likely to move on to other treatments.[15]**

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Intracavernous injection therapy

How does it work?[36]

- Self-inject medication directly into penis, erection may develop within 5 to 20 minutes

How effective is it?

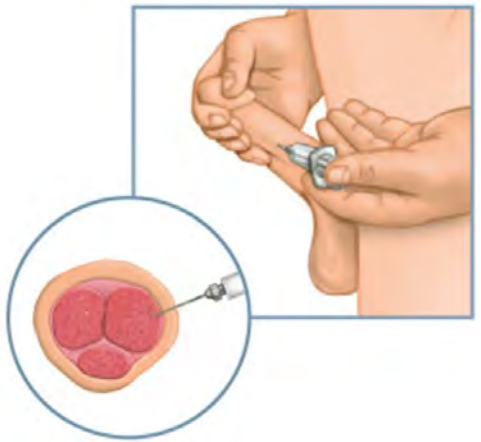
- Despite success rates, approximately 40% of men discontinue the therapy, typically within 6 months[37]

Most common side effects:[36,38]

- Penile pain, prolonged erection, scar tissue blood collection under the skin at injection site

Most common reasons for discontinuation:[38,39]

- Failed erections
- Pain
- Dislike of injections



- **A large number of studies have demonstrated that withdrawal rates are relatively high among injection therapy patients.[38]**

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Vacuum erection device (VED)

How does it work?

- A pump creates a vacuum that pulls blood into the penis and an elastic tension ring is placed at the penis base to maintain an erection[40]

How effective is it?

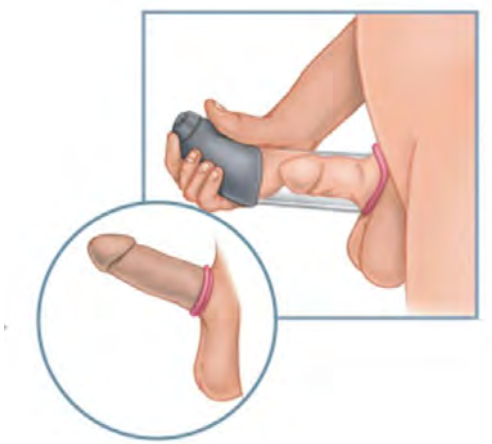
- Patient satisfaction rates range from 68–80%[41]

Most common side effects:[40,42]

- Blocked ejaculation, bruising, discomfort, pain penile numbness or coldness

Most common reason for discontinuation:[19,43]

- Inability to achieve and maintain a full erection
- Pain or discomfort



- **In one study, 86% of radical prostatectomy patients decided to move on to other sexual aids.[44]**

Vacuum erection device (VED)

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But! Can be helpful to protect penile anatomy

- Post-prostatectomy, decrease in length and girth by 8- 9%
- 3 months post-op, 48% had >1 cm length loss

Maintain tissue elasticity and blood flow

- **VEDs help to maintain a healthy penis**

Urethral suppository

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How does it work?[45]

- After urination, insert the applicator stem into the urethra to deliver pellet; erection develops within 5 to 10 minutes

How effective is it?

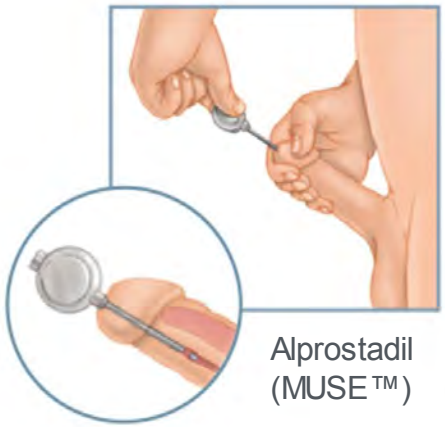
- Success rates are reported at 40–66%[46,47]

Most common side effects:[45,48]

- Genital pain; minor urethral bleeding/spotting; low blood pressure; dizziness

Most common reasons for discontinuation:[49]

- Insufficient erections
- Urethral pain and burning
- Switch to other ED therapy
- Natural return of erections



Alprostadil (MUSE™)

- **Unopened suppositories must be refrigerated.[45]**
- **75% drop-out rate of post-prostatectomy patients after 15 months.[50]**

Penile implant

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How does it work?[51]

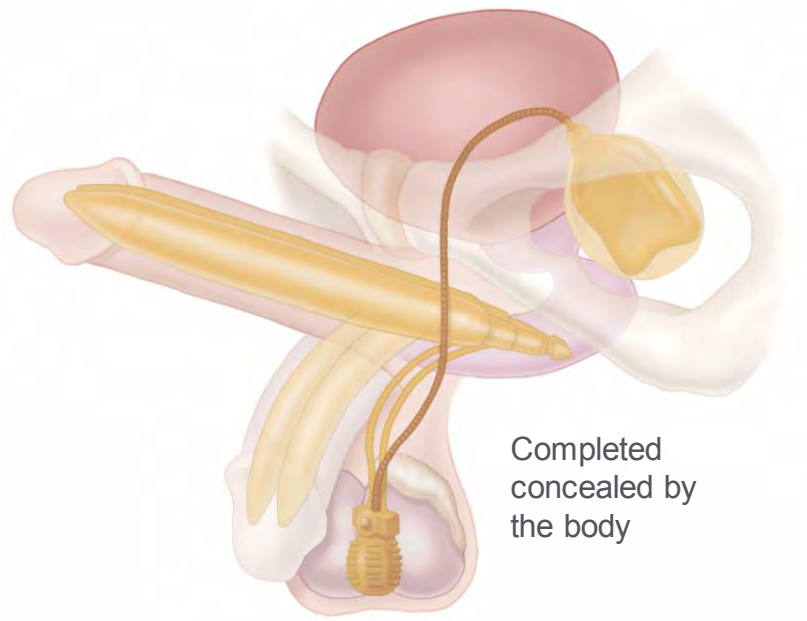
- Squeezing the pump moves fluid to create an erection; the penis returns to a flaccid state by pressing the deflate button

How effective is it?

- 98% of patients reported erections to be "excellent" or "satisfactory"[52]

Most common side effects/complications[51]

- Post-operative genital pain or infection
- Mechanical malfunction



Completed concealed by the body

- **At 7 years, 94% are still fully working.[53]**

Penile implant

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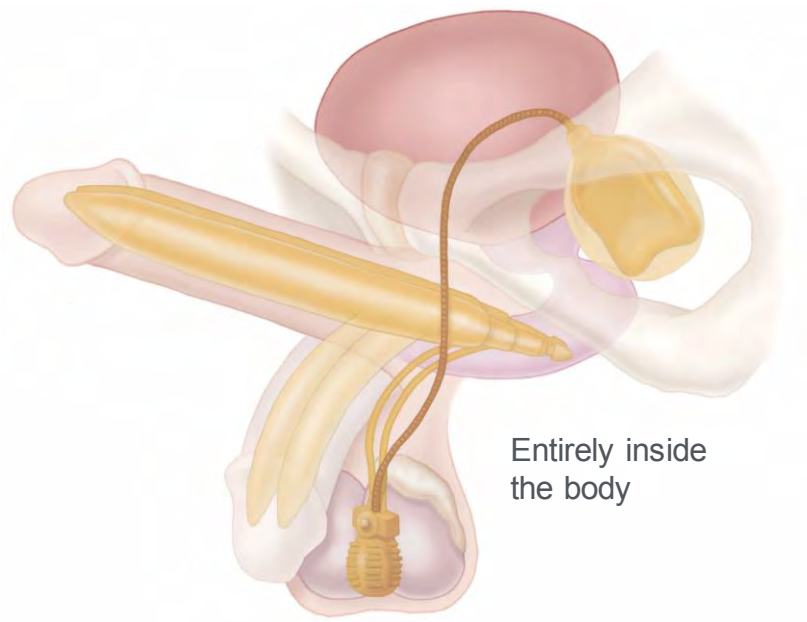
How does it work?

How effective is it?

Most common side effects/ complications



- **At 7 years, 94% are still fully working.[53]**

Penile implants

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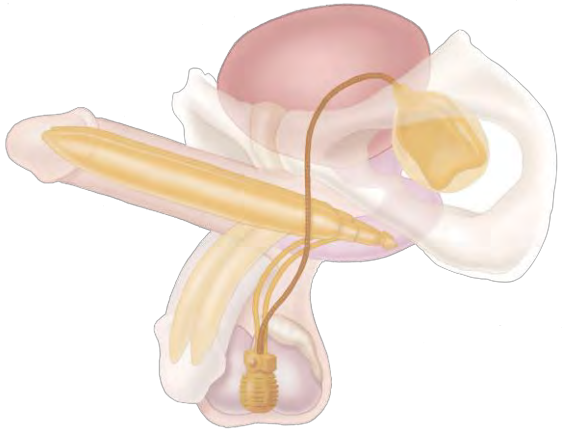
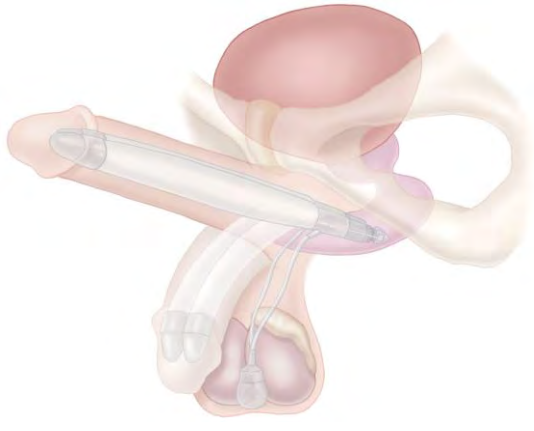
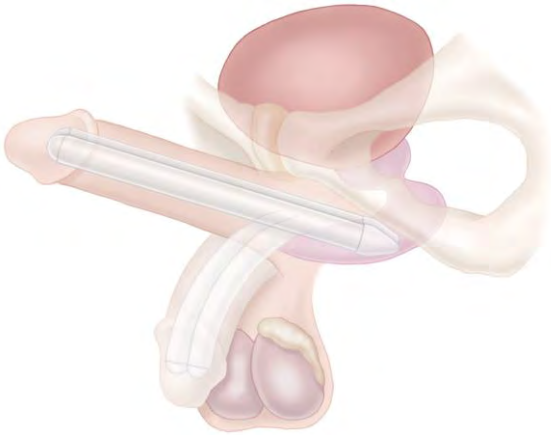


Three-piece Inflatable Penile Implant



Two-piece Inflatable Penile Implant



Malleable Penile Implant

Three-piece Penile Implant

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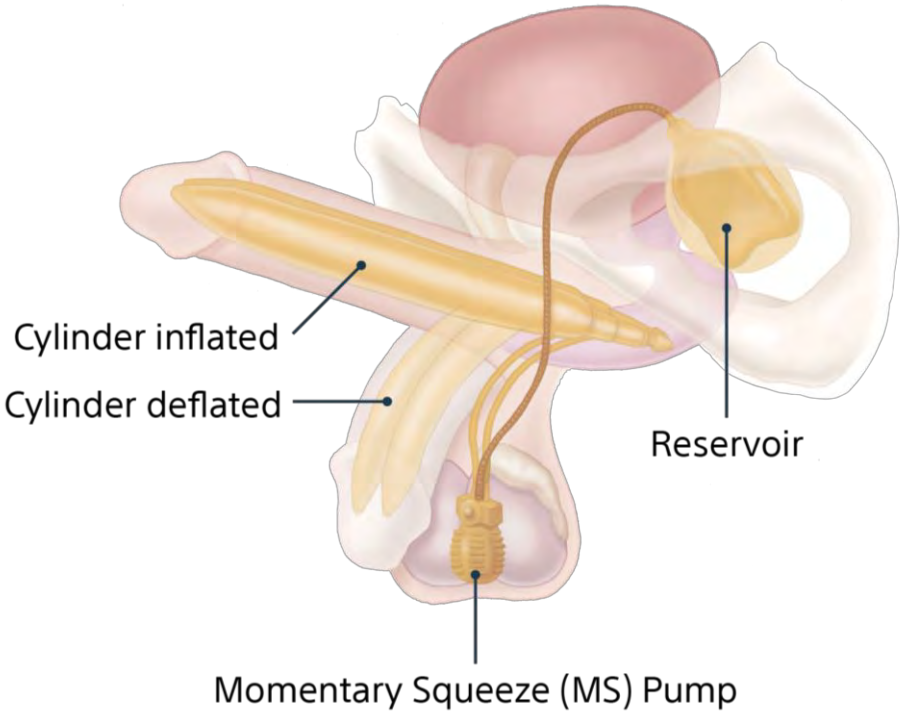
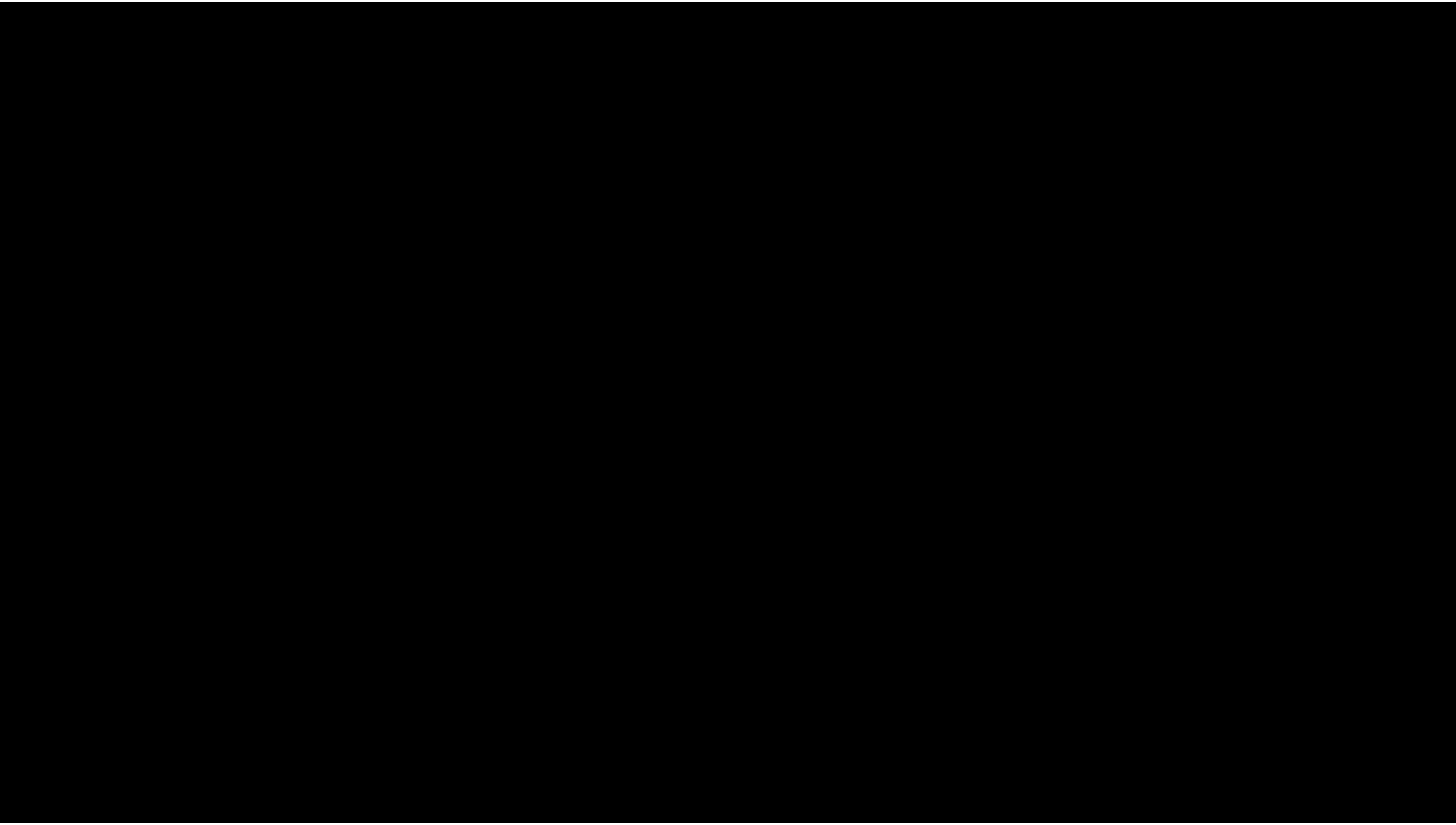
Most implanted and only with built-in antibiotic treatment[4,54]

- Clinically proven to reduce the risk of infection[54]
- Designed to most closely mimic a natural erection[4]
- Provides rigidity when inflated[4]
- Natural flaccid appearance when deflated[4,55]

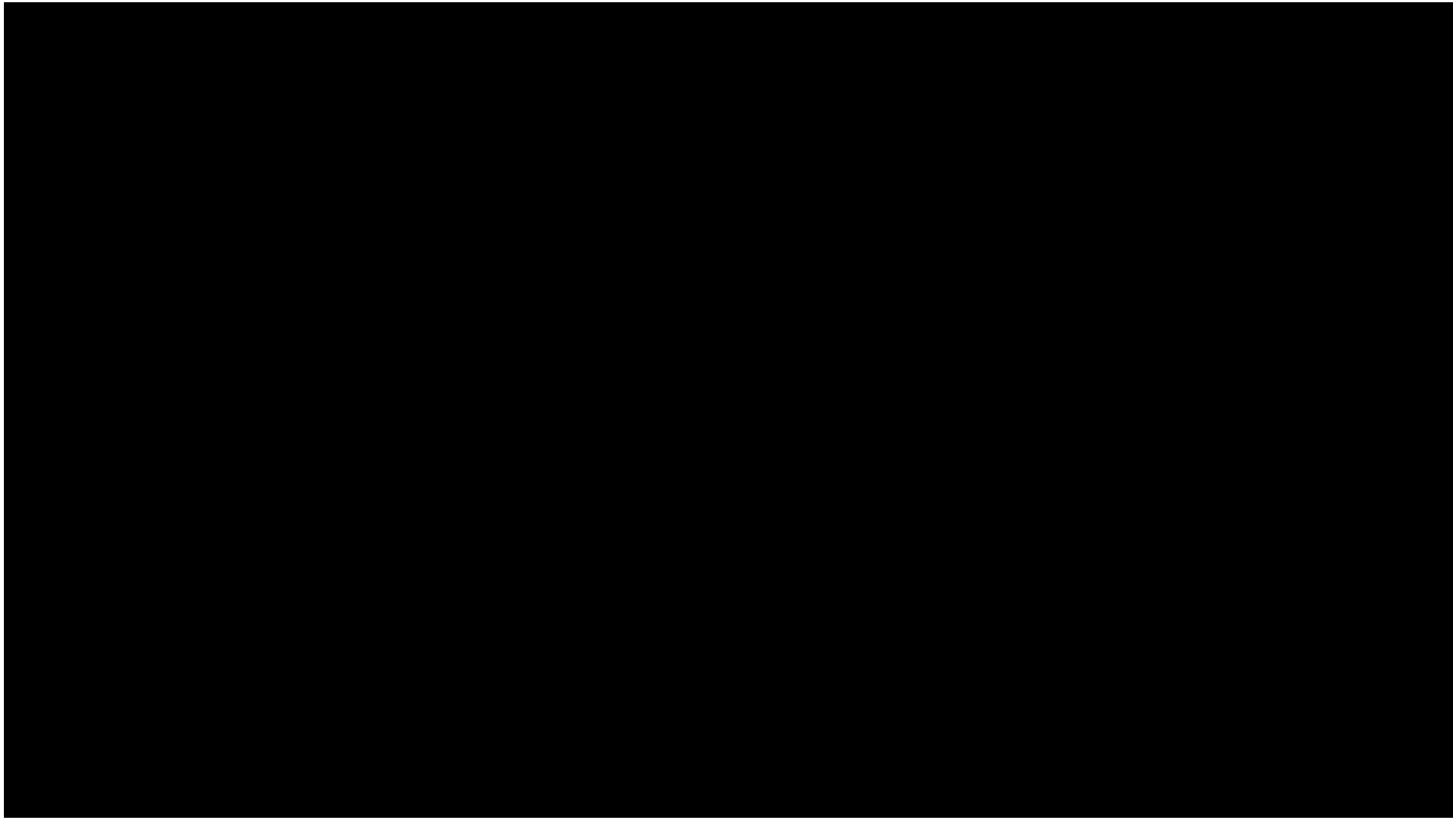


- **Penile implants have been in clinical use for over 45 years[56] and more than 500,000 men have received a penile implant.[4]**

How it works



How it works



What to expect for the procedure[57,58]

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- General anesthesia, 1 night stay in the hospital
- Small incision in the scrotum or above the pubic bone
- Generally, a few days to return to your regular routine of light activity
- 6 weeks before using the implant for sexual intercourse

Cost and coverage

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- Insurance coverage for ED treatment varies
- Incontinence treatment is commonly covered by insurance
- Coverage may be available under Medicare and Medicare Advantage

Don’t let cost be a barrier – treatment can be affordable!

- Talk to your specialist – they can work with your insurance and the manufacturer to verify benefits, even helping to resolve coverage exclusions in some cases
- Ask your specialist about financial assistance options – you may be eligible for payment options through a program offered by the manufacturer

Benefits of penile implants

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Proven
- 97% patient satisfaction, 98% partner satisfaction with the Three-piece Penile Implant[52]
- Clinically proven to reduce the risk of infection[54]

Affordable
- Typically covered by insurance and/or Medicare*

Long lasting
- Permanent and concealed solution[51,58]
- Durable – 89% still in use after 10 years[59]

Natural
- Designed to maintain a natural appearance in the erect and flaccid state[4]
- Typically does not interfere with ejaculation or orgasm[60,61]
- Spontaneous – you can have sex when the mood strikes[32]

*Check with your insurance provider

As a surgical procedure, there are possible risks

There are risks involved with any surgery. Not all patients are candidates for a penile implant. Discuss all the risks and benefits of this procedure in more detail with your doctor.

Some risks of a penile implant may include:

- Will make natural or spontaneous erections as well as other interventional treatment options impossible[51]
- There may be mechanical failure of the implant, which may require revision surgery[51,58]
- Pain (typically associated with the healing process)[51,58]
- Men with diabetes, spinal cord injuries or open sores may have an increased risk of infection[51]
- There is a 1.2–2.5% risk of infection with inflatable penile implants[51]

Erectile dysfunction summary

- ED is a common problem and may be associated with other conditions
- There are a variety of treatment options
- Penile implants could offer a long lasting and satisfactory solution

Learn more

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YOUR ED QUESTIONS ANSWERED

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Caution: U.S. Federal law restricts this device to sale by or on the order of a physician.

OPTIONAL SLIDE

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Questions?

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Thank you!