When you have stress incontinence, you accidentally leak urine during normal everyday activities (for instance if you cough, sneeze, laugh, exercise or change position).

What you do about stress incontinence will depend on how far it affects you and what you feel you can cope with. Physiotherapy and/or practical advice from a continence nurse specialist on managing your daily life may help.

Not everyone with stress incontinence needs surgery, but if your problems persist, your doctor may suggest it.

Surgery for stress incontinence aims to give you more control over your bladder. It cannot always cure the problem completely.

There are a number of possible operations; what is suitable for you will depend on your circumstances.

Surgical procedures for stress incontinence are not usually suitable if you still plan to have children, or think you might want to in the future.
About this information

This information is intended to help women who have stress incontinence and are considering whether to have surgical treatment for it. It is based on the Royal College of Obstetricians and Gynaecologists (RCOG) guideline *Surgical Treatment of Urodynamic Stress Incontinence* (published by the RCOG in October 2003).

It tells you:

- what stress incontinence is
- the recommendations the guideline makes for the UK about the most effective surgical treatments for stress incontinence.

It aims to help you and your health care team to make the best decisions about your care. It is not meant to replace advice from a doctor, nurse or continence adviser about your own situation. It does not look at treatments for stress incontinence that do not involve surgery.

Some of the recommendations here may not apply to you; this could be because of some other illness you have, your general health, your wishes, or some or all of these things. If you think the treatment or care you get does not match what we describe here, talk about it with your doctor or with someone else in your healthcare team.

What is stress incontinence?

The muscles of the pelvic floor (see diagram on page 3) support the bladder and usually help keep it closed or open as necessary. Stress incontinence usually happens when these muscles become weak. So when there is sudden extra pressure ('stress') on your bladder, it cannot stay closed as it should and some urine leaks out. This leakage happens during normal everyday activities, and most often when you cough, sneeze, laugh, exercise or change position. Whether you leak a small or large amount of urine, stress incontinence can be embarrassing and distressing.

Stress incontinence can be triggered by pregnancy, childbirth or the menopause. If the problem develops while you are pregnant or after you have a baby, it usually improves with time for most women. Sometimes it happens again later on and a few women may need to consider surgery.
Do I need an operation?

Many treatments for stress incontinence do not involve surgery. Not everyone with stress incontinence needs an operation. Whether you choose to have surgery will depend on how far stress incontinence affects your daily life and what you feel you can cope with. You may want to consider surgical options if other things (such as exercises to help strengthen the muscles in the pelvic floor) have not helped.

Surgical procedures for stress incontinence are not usually suitable if you still plan to have children, or think you might want to in the future.

Your doctor or nurse should already have asked you about the problems you have been having. You may have had a urine test to check for infection. You may also have had special bladder tests (known as urodynamics).

You should already have had advice from your doctor or a continence nurse specialist about:

- adjusting your daily routines to help you cope better
- how you can help yourself by losing weight if you are overweight
- managing a chronic cough if you have one
- special physiotherapy exercises to make your pelvic floor muscles stronger and improve control of your bladder
- giving up smoking.
These things will also help to improve the results of surgery, if you have it.

If you have seen no improvement after doing pelvic floor exercises, your doctors may suggest you consider surgery. If you are offered the choice of surgery, it is up to you to decide if and when you should have it.

**What operation will I be offered?**

Surgical procedures for stress incontinence aim to improve support for the muscles around the bladder entrance, in order to help the outlet (known as the urethra) to stay closed when it should and prevent it leaking.

No operation can be guaranteed to cure your stress incontinence, but most offer a good chance of making an improvement. The benefits of some last longer than others. The risk of developing extra problems (known as complications) also varies depending on the procedure.

You can find more information about the main operations used to help stress incontinence in the tables on the following pages. They are:

- Burch colposuspension
- Tension-free vaginal tape (TVT).

You can also find out about procedures that are used less often. They are:

- Bulking agents
- Sling procedures
- Artificial sphincters
- Anterior vaginal repair.

Your surgeon may offer you a choice of one or two methods, depending on your circumstances and his or her own expertise. He or she will take into account such things as your general health, age, weight and previous operations and should explain the reasons for recommending a particular operation to you. Some operations are very specialised and are only offered in special centres.

If your surgeon is not able to offer the operation that best meets your individual needs, you may be able to find another who can. You should discuss this with your GP.

With some operations you may need to have a temporary catheter. This is a tube which is put into your urethra (the tube leading out of the bladder) or your lower abdomen, in order to empty your bladder when necessary. The length of time you need to spend in hospital after the operation will vary depending on the type of operation and how quickly you recover.
What might happen if I don’t have an operation?

Your problems may remain the same, or get worse, or improve over time. There is no sure way of predicting this.

What does the operation involve?

<table>
<thead>
<tr>
<th>Name</th>
<th>What it involves</th>
<th>Benefits</th>
<th>Disadvantages</th>
<th>Suitable…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burch colposuspension</td>
<td>Creates a cradle of threads, like a hammock, from back to front of the pelvic area to provide support for the urethra, the entrance of the bladder. Can be done through a 'bikini line' cut just below the line of the pubic hair or through 'keyhole' surgery (laparoscopic colposuspension); this takes a little longer, but you recover more quickly.</td>
<td>The most effective treatment, although it is a major operation. Restores continence in 85-90 women out of 100 for the first year, and in around 70 out of 100 for the first five years. More effective in the long term than other procedures.</td>
<td>Less effective if you have had surgery before. Some women get extra problems; about 10 in every 100 have trouble emptying their bladder properly; about 17 out of 100 pass water very often, or get little warning of needing to do so, or have trouble getting to the toilet in time. About 13 in every 100 women have a prolapse (where part of the rectum or small bowel pushes through the wall of the vagina) within five years. Extra problems more likely with laparoscopic method.</td>
<td>for most women</td>
</tr>
<tr>
<td>Tension-free vaginal tape (TVT)</td>
<td>A special kind of synthetic sling (see next section). The surgeon makes small cuts just above the pubic area and passes synthetic tape through them. The tape supports the bladder entrance (urethra) and remains permanently in place. Body tissue soon grows around it (this is normal and not harmful).</td>
<td>Simpler than colposuspension; you may not need a general anaesthetic or overnight stay. Restores continence in about 80 women out of 100. 94 out of 100 see some improvement in bladder control. We need to know more about long-term effectiveness.</td>
<td>About 4 out of every 100 women initially have problems with fully emptying the bladder, but does not seem to be a long-term problem. 3 to 15 in every 100 women pass water very often, or get little warning of needing to go to the toilet or have trouble getting to the toilet in time.</td>
<td>for most women</td>
</tr>
</tbody>
</table>
### Other procedures

<table>
<thead>
<tr>
<th>Name</th>
<th>What it involves</th>
<th>Benefits</th>
<th>Disadvantages</th>
<th>Suitable ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulking agents</td>
<td>Takes just a few minutes. Natural or synthetic materials (such as collagen, fat, silicone or Teflon) are injected around the bladder entrance to help keep it closed when necessary.</td>
<td>Few side effects. Up to two years afterwards 48 out of 100 women are completely dry, and 76 out of 100 are dry or have improved bladder control. More research needed.</td>
<td>Less successful than other operations. Benefits do not usually last. The material may be gradually absorbed or broken up inside the body, and so becomes less effective; you may need to have the operation done again.</td>
<td>when other methods have failed, or you want to avoid or are not fit enough for more invasive surgery.</td>
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<tr>
<td>Natural tissue sling</td>
<td>Uses a wide sling to support the bladder, make the urethra narrower and so prevent leaking. The sling is usually made of your own tissue (taken from muscles in your abdomen) or other human or animal tissue.</td>
<td>Slings usually give good bladder control in the long term, but more research is needed. Slings made from a woman’s own body tissue are generally more effective and cause fewer problems than synthetic ones.</td>
<td>Slings using other human or animal tissue fail eventually for 20 out of every 100 women. Some risk of sling material moving into the vagina, of problems in fully emptying the bladder or of needing a long-term catheter, though less than for synthetic slings.</td>
<td>when other surgery has failed to help.</td>
</tr>
<tr>
<td>Synthetic sling</td>
<td>As for natural tissue slings, except that the material used is manmade.</td>
<td>Good long-term bladder control. More research is needed.</td>
<td>More risk of extra problems than natural tissue slings. For up to 16 in every 100 women the sling material moves into the vagina. Up to 11 in every 100 women may have problems in fully emptying the bladder. About 2 in every 100 women need a long-term catheter. May reduce quality of life.</td>
<td>when other surgery has failed to help.</td>
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<tr>
<td>Artificial sphincter</td>
<td>A circular sac is placed around the bladder entrance (the urethra). You open and close it manually to control the flow of urine. Only done in specialist centres.</td>
<td>Cures 80 women out of 100 and improves bladder control for 92 out of 100.</td>
<td>Major operation with a high risk of further problems. You may need more check-ups afterwards or a further operation (or operations).</td>
<td>when other surgery has failed to help.</td>
</tr>
</tbody>
</table>
Are there any alternatives?

There is often no need to rush into having surgery. Some people prefer not to have an operation and find ways of adapting. Your continence adviser can tell you more about this.

New surgical techniques are being developed all the time. You should talk to your continence adviser and/or your consultant to find out if there is anything new that might be more suitable for you.

There is not yet enough evidence about a procedure called paravaginal repair to show how effective it is. More research is needed.

Women who have a prolapse, where part of the bladder pushes through the vaginal wall, may be offered a procedure known as anterior repair. The surgeon makes a cut inside the front of the vaginal wall, to remove the extra tissue from the prolapse and restore the muscle support. If you also have stress incontinence, however, sling procedures are more effective than this operation.

Some operations are no longer recommended:

- Marshall-Marchetti-Krantz (MMK) colposuspension used to be common but has been replaced by other methods.
- Needle suspension has been replaced by safer, more effective procedures.

Is there anything else I should know?

As you can probably tell from previous sections, all operations carry some risks. Your doctors should discuss with you the risks of any operation they offer you.

- You have a right to say whether there are any procedures you do not want the surgeon to carry out.
- You have the right to be fully informed about your health care and to share in making decisions about it. Your health care team should respect and take your wishes into account.
- No treatment can be guaranteed to work all the time for everyone.