

# Thrush and other vaginal infections

Three common vaginal infections in women are bacterial vaginosis, candidiasis (also known as thrush), trichomoniasis and chlamydia. The most typical symptom of a vaginal infection is an abnormal vaginal discharge. Recognising what is 'abnormal', however, is sometimes difficult for women, as vaginal discharge differs in consistency and amount during different phases of the menstrual cycle and different life stages.

Normal vaginal discharge can range from clear and slippery, like raw egg white (around the time of ovulation) to sticky and yellow/white or cloudy (just before and after a period). The discharge can have an odour. Women who take the oral contraceptive pill may experience an increase in vaginal discharge, while menopausal women commonly report a reduction.

Women who suspect they may have a vaginal infection should visit their doctor. If possible, women should abstain from vaginal intercourse for at least 24 hours prior to the visit as the presence of semen, lubricants or spermicides can make the diagnosis of a vaginal infection more difficult. Women should also avoid douching, using a tampon or vaginal medications (e.g., thrush medication) prior to the visit.

If a woman decides to self-medicate for a condition and symptoms persist or recur, it is important to visit the doctor. The condition may be something else, such as bacterial vaginosis, dermatitis, lichen sclerosis or genital herpes; these conditions are caused by different organisms and require specific treatment. It is important to speak to your doctor or pharmacist regarding treatment if you are pregnant and/or breastfeeding.

## Bacterial vaginosis

Bacterial vaginosis (BV) is caused by an overgrowth in bacteria that occur naturally in the vagina. BV is, therefore, not actually an infection as such, but rather an imbalance. Normally, the bacteria which cause BV are kept in check by the presence of 'good' bacteria, lactobacilli, which keep the vagina acidic.

A number of studies have demonstrated a correlation between smoking and an increased risk of BV and other vaginal infections. Douching (rinsing the vagina out with water or a solution)

also increases the risk of BV. While it is unclear if BV is actually sexually transmitted, it is associated with sexual activity. That is, sexual activity, particularly with a new partner, multiple partners, or female sexual partners, appears to increase a woman's risk of BV. It is thought that sexual intercourse can impact the level of the good bacteria, in the vagina, as semen is alkaline.

### SYMPTOMS

Around 50% of women with BV will be asymptomatic (experience no symptoms).

If present, symptoms can include:

- Fishy smelling vaginal discharge (smell often worse at menstruation or after unprotected vaginal intercourse)
- Grey or white vaginal discharge, thin or watery in consistency
- Vaginal itching (although not particularly common) or
- Burning while urinating.

### DIAGNOSIS AND TREATMENT

Women who suspect they may have BV or a vaginal infection should visit their doctor. A doctor will examine the genital area to look for signs of other conditions and take a swab of the vaginal discharge for laboratory testing. Taking a swab is an important step in obtaining a diagnosis.

BV is usually treated with either oral or vaginal antibiotics or antibacterial creams. Treatment is aimed at alleviating symptoms; asymptomatic women do not require treatment. Recurrence of BV is common; 50% of women treated for BV will develop the condition again in the next 6 to 12 months. Recurrence of BV can also be treated with antibiotics or antibacterial creams.

### What happens if I receive no treatment?

While BV can sometimes go away on its own, especially following menstruation, it is recommended to visit a doctor for treatment. If left untreated, this can increase the risk of contracting sexually transmitted infections (STIs) such as human immunodeficiency virus (HIV), genital herpes, chlamydia and gonorrhoea. BV is associated with pelvic inflammatory disease (PID), which is linked to fertility difficulties. BV can also increase the risk of late miscarriage and preterm delivery for pregnant women. Treatment is also recommended in women with BV who are undergoing invasive gynaecological procedures.

### PREVENTION

To reduce the risk of recurrence, women should avoid practices that upset the natural bacterial balance in the vagina. It is best to avoid douching, using perfumed talcs and deodorants in the genital area and using bubble-bath, soap, bath

**Women's Health Queensland Wide Inc (Women's Health) is a not for profit, health promotion, information and education service for women and health professionals throughout Queensland.**

**Health Information Line**  
3216 0376 in Brisbane  
1800 017 676 toll free outside Brisbane

**Website**  
[www.womhealth.org.au](http://www.womhealth.org.au)

**Email**  
[admin@womhealth.org.au](mailto:admin@womhealth.org.au)

**WOMEN'S HEALTH**  
QUEENSLAND WIDE INC  
Information and Education since 1985

salts and shampoo when taking a bath (sitting in water that contains these products can disturb the natural environment in the vagina). It is recommended to practice safe sex, using a condom/dam to reduce the risk of transmitting BV. Quitting smoking may also reduce the risk of acquiring BV.

## Candidiasis (Thrush)

Candidiasis or thrush, is caused by the overgrowth of yeast-like fungi called *Candida*. *Candida* normally inhabits the vagina, mouth and digestive tract in small numbers and is normally harmless. When the balance of naturally occurring organisms in the vagina is disrupted, an overgrowth of *Candida* can occur.

Thrush can develop as a result of the use of antibiotics, oral contraceptives or steroids. It is also more prevalent in those with diabetes, a weakened immune system, iron deficiency, or in those who are pregnant. Although thrush is not considered an STI, sexual activity can worsen thrush.

### SYMPTOMS

Thrush is a very common condition; 70-75% of women will experience thrush at least once throughout their lifetime. Some people may experience no symptoms of thrush. Symptoms are often worse in the week before menstruation.

Symptoms may include:

- A thick white or creamy vaginal discharge (may be cottage-cheese like in appearance)
- Itchiness and redness in and around the vagina and vulva
- Discomfort and/or pain during sexual intercourse
- Burning on urination.

### DIAGNOSIS AND TREATMENT

Women who suspect they may have thrush should visit their doctor, who will examine the genital area; a swab of the area can also be taken and tested. Treatment for thrush involves the use of anti-fungal creams inserted in the vagina with an applicator, vaginal pessaries and/or oral medication. Many of these treatments are now available over-the-counter (no prescription required). Pregnant women should only use topical treatments not oral therapies.

Women who choose to self-treat with over-the-counter thrush preparations should see their doctor if symptoms persist or recur. They may have a different condition or a resistant strain of thrush. Up to half of women self-medicating for thrush, have a different condition, such as lichen sclerosis (LS) or dermatitis. All these conditions generally share the symptom of itching; which can lead to the misdiagnoses and incorrect treatment. If LS is left untreated, this can lead to severe scarring and possible changes to the normal anatomy of the vulva. Refer to the 'Vulval Conditions' fact sheet available at [www.womhealth.org.au](http://www.womhealth.org.au) for more information on these conditions.

Recurrent thrush infections (four to six episodes a year and confirmed by a doctor) may require a longer course of oral antifungal treatment before it resolves. Less than 5% of women will experience recurrent thrush. In some cases, longstanding thrush (months to years) can be associated with chronic vulval pain. Visiting the doctor is important for a woman experiencing recurrent thrush to ensure the correct diagnosis has been made and appropriate treatment is prescribed.

Asymptomatic male partners do not require treatment for thrush.

### What happens if I receive no treatment?

Thrush generally has no long-term health complications and is likely to resolve on its own. Thrush can cause significant discomfort and influence a woman's self-esteem and sex life.

### PREVENTION

There are a number of practices that are thought to reduce a woman's chance of getting thrush.

Practices include:

- Avoid wearing tight fitting clothing like jeans and pantyhose, wet swimwear, underwear made from synthetic fibres and panty liners (as these create a moist, warm environment which may encourage the growth of *Candida*)
- Avoid antibiotics where possible, use low dose oral contraception or avoid them
- Avoid douching and taking baths with bubble-bath, soap, bath salts (these can upset the natural balance in the vagina)
- Wear cotton and change underwear daily and wash underwear in hot water
- Maintain a strong immune system by eating a well-balanced diet, getting enough sleep, not smoking, drinking to extreme or taking drugs and managing stress levels
- Consuming yoghurt or other products (e.g., capsules) containing the 'good' bacteria, lactobacilli.

There is insufficient evidence to support dietary changes such as eliminating high sugar foods and/or foods containing yeast in the prevention of thrush.

### SELF-HELP TREATMENTS FOR THRUSH

Self-help treatments for thrush are popular amongst women. The most commonly used treatments are yoghurt, vinegar, honey, garlic, essential oils (e.g., tea-tree oil) and dietary changes.

There is currently limited evidence to support vinegar, garlic or tea-tree oil in the treatment of thrush. In addition, self-help treatments such as tea-tree oil can be too irritating to the sensitive vaginal area.

There is some evidence that yoghurt used in combination with honey improves the symptoms of thrush. Several studies found that a vaginal cream made from honey and yoghurt gave similar results to that of an antifungal cream. One of the studies found the yoghurt and honey mixture provided better relief from symptoms such as itching.

The studies used a vaginal cream containing honey and yoghurt made up in a laboratory for the purposes of the research. The women in the study applied the cream into their vagina with the use of an applicator (like that used with antifungal creams). Women using this home remedy, therefore, may not receive the same benefit, depending on the ingredients used in their remedy and how they administer it.

However, women who have recurrent thrush infections, women who wish to avoid antifungal creams and those who can't afford them, might benefit from trialling a yoghurt and honey remedy. To get the best results, women should choose a raw honey (a honey that has not been heated or pasteurised) and a plain yoghurt that is labelled 'probiotic'.

## Chlamydia

Chlamydia is a common STI caused by the bacteria, *Chlamydia trachomatis*. Chlamydia predominantly affects those aged 25 years old and under. It can be transmitted through vaginal, oral or anal sex with an infected person. It may also be transmitted from the genitals to the eye and from mother to baby during birth.

A pregnant woman infected with chlamydia has an increased risk of:

- premature delivery
- having a baby of low birth weight
- developing a pelvic infection after delivery.

### SYMPTOMS

It is very common for someone to have no symptoms of chlamydia, leaving them unaware of the fact that they have the infection. Around 70% of women and 50% of men with chlamydia experience no symptoms. In women, symptoms of chlamydia can be similar to those of other conditions (e.g., thrush, cystitis), they may also be overlooked. If symptoms do occur in women, they can include:

- pelvic pain
- painful and heavy periods
- deep pain with vaginal sex
- bleeding between periods or after having sex
- frequent and burning urination
- unusual vaginal discharge.

### DIAGNOSIS AND TREATMENT

Women who suspect they may have chlamydia or a vaginal infection should visit their doctor. Considering a majority of those with chlamydia show no symptoms, asking the doctor to be tested for chlamydia while already at an appointment would be beneficial, especially if the woman feels she may be at risk. Chlamydia is diagnosed using either a swab or urine test. A physical examination may also be performed to check for signs of inflammation and tenderness in the pelvic area.

Chlamydia is usually treated with a single dose of antibiotics. If complications have occurred from the infection (e.g., pelvic inflammatory disease (PID)) additional antibiotic treatment may be necessary. Treating current or recent sexual partners is also important to avoid re-infection.

During treatment, people should abstain from having sex. Alcohol should also be avoided as it may interfere with the effectiveness of the treatment. People are usually asked to return to their health practitioner six weeks following treatment for tests to ensure the infection has been cleared.

### What happens if I receive no treatment?

Chlamydia causes inflammation of the urethra (tube from the bladder to the urinary opening) and/or the cervix (neck of the uterus). If left untreated, the infection can travel to the uterus, fallopian tubes and ovaries. When the infection progresses to these areas it is referred to as PID. PID may form scar tissue and adhesions which can result in serious health issues including chronic pelvic pain, ectopic pregnancy and fertility problems.

For those women who have been tested for chlamydia, it is important to have another test three months following treatment, to check you have not been re-infected.

### PREVENTION

The best protection from chlamydia and other STIs, whatever your sexual preference, is to always practice safe sex. Barrier protection (condoms/dams) should always be used when having sex with a partner whose previous sexual habits or partners are unknown.

## Trichomoniasis

Trichomoniasis is caused by a small parasite, *Trichomonas vaginalis*, and is almost always sexually transmitted, rarely transferred through non sexual activity, such as wet towels/washcloths or a toilet seat. The most common part of the body infected by trichomoniasis is the vagina or male urethra; infection in other body parts is very unlikely.

### SYMPTOMS

Around 70% of people with trichomoniasis are asymptomatic.

When present, symptoms may include:

- Yellow, green or grey coloured vaginal discharge
- Vaginal discharge which is frothy or has an unpleasant odour
- Irritation or itching around the outside of the vagina
- Burning sensation when urinating
- Lower abdominal pain
- Discomfort and/or pain during sexual intercourse.

### DIAGNOSIS AND TREATMENT

Women who suspect they may have trichomoniasis or a vaginal infection should visit their doctor. The doctor will assess the area, and a laboratory test can provide a diagnosis. Women who are found to have trichomoniasis should also consider being tested for other STIs.

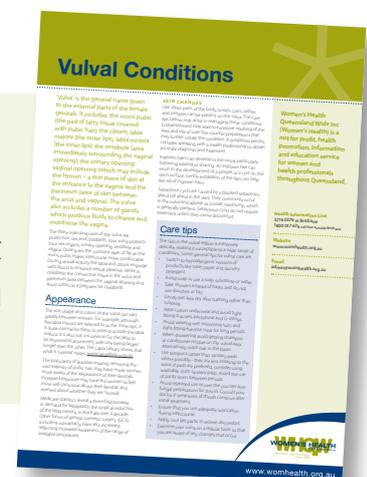
Trichomoniasis is treated with antibiotics or antibiomatic agents. One in five people who are treated for trichomoniasis will get the condition again within three months. It is important that current sexual partners are treated at the same time to prevent a woman becoming re-infected. Alcohol should also be avoided during treatment as combining alcohol with some antibiotics can cause severe nausea and vomiting.

### What happens if I receive no treatment?

Untreated trichomoniasis has been linked with an increased risk of acquiring HIV and of transmitting other STIs. Trichomoniasis is also associated with preterm delivery and low birth weight in pregnant women.

### PREVENTION

The best strategy to avoid being infected with Trichomoniasis is to always practice safe sex. Barrier protection (condoms) should always be used when having sex with a partner whose previous sexual habits or partners are unknown.



Call 3216 0976 or  
1800 017 676 (toll free  
outside Brisbane) or visit  
[www.womhealth.org.au](http://www.womhealth.org.au)  
for a free copy.

## Sexual health checks

It is important for a woman to visit a doctor if she suspects she may have a vaginal infection or STI. Because many women with a vaginal infection or STI may not have any symptoms, regular checkups are important, particularly if a woman has engaged in unsafe sexual activity, sexual activity with a new partner or with a partner who may have other partners.

Women can contact the Women's Health Information Line on (07) 3216 0376 or 1800 017 676 (toll free from outside Brisbane) for further information on where to access sexual health checks, vaginal health checks and Pap smears in Queensland.

## Further Reading

Australian STI Management Guidelines for use in Primary Care.  
[www.sti.guidelines.org.au](http://www.sti.guidelines.org.au)

Queensland Health's Sexual Health website:  
[www.qld.gov.au/health/staying-healthy/sexual-health](http://www.qld.gov.au/health/staying-healthy/sexual-health)

For help understanding this fact sheet or further information on thrush or other vaginal infections, women in Queensland can contact the Health Information Line on 3216 0376 (within Brisbane) or 1800 017 676 (toll free outside Brisbane).

This is one of a series of women's health information fact sheets available at [www.womhealth.org.au](http://www.womhealth.org.au).

call our Health Information Line

A free information and referral service for Queensland women

3216 0376  
1800 017 676

(toll free outside Brisbane)

Staffed by nurse/midwives

**Disclaimer** The content of this publication ("the information") is provided for information purposes only. The information is provided solely on the basis that recipients should verify all the information provided. The information is not intended to be used to diagnose, treat, cure or prevent any disease or condition, nor should it be used for therapeutic or clinical care purposes. The information is not a substitute for your own health professional's advice and treatment in relation to any specific patient issue. Women's Health Queensland Wide Inc. does not accept any liability for any injury, loss or damage incurred by the use of or reliance on the information. While we have made every effort to ensure the information is accurate, complete and current, Women's Health Queensland Wide Inc. does not guarantee and assumes no legal liability or responsibility for the accuracy, currency or completeness of the information. External resources referred to in this publication should not be taken to be an endorsement or a recommendation of any third party products or services offered and the views or recommendations provided by these external resources do not necessarily reflect those of Women's Health Queensland Wide Inc.