



MetroGel-Vaginal[®]
(metronidazole vaginal gel)
0.75% Vaginal Gel

Bacterial Vaginosis

The most common vaginal infection

About vaginal infections

Most women will experience a vaginal infection at least once in their lives. In the United States, women seek medical help for these infections 10 million times a year. In fact, in adult women, vaginal infections are the most common reason to seek medical attention.

These infections can be accompanied by a variety of symptoms, including:

- Abnormal discharge
- Odor
- Itching
- Burning
- Pain or irritation with intercourse or urination

Some women, however, might not experience any of these symptoms, might be unaware of these symptoms, or might confuse these symptoms with another type of infection.

Only a healthcare provider can know for sure if a woman has a vaginal infection.

The three most common vaginal infections are:

- Bacterial vaginosis (vaji-no-sis), or BV
- Candidiasis (kan-dah-di-a-sis), or yeast infection
- Trichomoniasis (trick-a-mon-i-a-sis), or trich

What is bacterial vaginosis?

Bacterial vaginosis is now widely considered to be the most common type of vaginal infections - even more common than yeast infections. In various studies, bacterial vaginosis has been found in anywhere from 10% to 64% of women visiting health clinics.

Bacterial vaginosis is a condition in which the natural balance of organisms in the vagina is changed. The healthy vagina normally contains a variety of bacteria. One type of bacteria, *Lactobacillus* (lack-toe-bah-sil-us), is particularly important. Lactobacilli keep the vagina slightly acidic to reduce the growth of potentially harmful organisms. Women who have bacterial vaginosis lose this protection. Potentially harmful bacteria increase, and normal protective organisms (such as lactobacilli) decrease.

In the past, bacterial vaginosis was called *Gardnerella* vaginitis, nonspecific vaginitis, *Haemophilus* vaginitis, anaerobic vaginosis, and *Corynebacterium* vaginitis.

What are the symptoms of bacterial vaginosis?

It is possible for women to be unaware of symptoms of vaginal infections, to accept these symptoms as normal, or attribute these symptoms (such as vaginal odor) to poor hygiene. Of women who are aware of bacterial vaginosis symptoms, the most common complaint is a foul or fishy vaginal odor. This odor often becomes stronger after sexual intercourse. Women might also experience a thin, milky white or gray discharge, which might stain undergarments. While many vaginal infections cause inflammation of the

vagina and symptoms such as itching and irritation, bacterial vaginosis does not usually cause these symptoms.

What causes bacterial vaginosis?

The exact cause of bacterial vaginosis is unknown. It's possible that there are a variety of causes rather than a single organism to blame. It seems to occur more frequently in women who have new sexual partners or more than one partner, or those who have had multiple partners in the past; however, bacterial vaginosis is also found in women who are not sexually active.

Signs and Symptoms of the Most Common Vaginal Infections*

	BV (Bacterial Vaginosis)	Yeast Infection (Vaginal Candidiasis)	Trichomoniasis (<i>Trichomonas vaginalis</i>)
Cause	Bacteria	Yeast	Parasitic trichomonads
Vaginal Odor	“Fishy” or musty Unpleasant	None	“Fishy” Unpleasant
Vaginal Itching/ Irritation (Often Accompanies Urination or Sexual Intercourse)	Sometimes present	Usually present	Usually present and pronounced
Vaginal Discharge	Thin Milky white or gray	Thick Cottage cheese-like White	Frothy Yellow-green
Treatment	Requires specific antibacterial treatment, available only by prescription	First-time sufferers must be diagnosed by a healthcare professional Recurrent infections can be treated with over-the counter preparations	Requires specific antibacterial treatment, available only by prescription

*Sometimes more than one infection may be present, so examination by a qualified healthcare provider is needed.

How is bacterial vaginosis different from other common vaginal infections, such as yeast infections or trichomoniasis?

Yeast infections are usually caused by fungus called *Candida* (kan-di-dah). Its symptoms usually include intense itching and a thick cottage cheese-like discharge. Burning during

urination, sexual intercourse, or both, is also common. Yeast infections generally have no odor.

Unlike bacterial vaginosis or yeast infections, trichomoniasis is a sexually transmitted disease. It is caused by a parasitic organism called trichomonad. The organism can survive on moist towels, washcloths, or bathing suits, although transmission by these nonsexual routes is extremely rare. Symptoms usually include a yellow-green vaginal discharge with a foul odor, itching, burning, irritation, and painful urination. Trichomoniasis is the least common of the three vaginal infections.

How is Bacterial vaginosis diagnosed?

A physician or qualified healthcare provider can detect bacterial vaginosis with a few simple tests. He or she will:

- Check the consistency and color of the vaginal secretions:
Vaginal secretions in women with bacterial vaginosis often appear milky white or gray, thin, and might be increased in amount.
- Measure the acidity of the vaginal secretions:
Acidity is determined by pH paper; women with bacterial vaginosis will have an elevated pH.
- Perform a “whiff test”:
A chemical called potassium hydroxide is added to vaginal secretions, then sniffed for foul odor.
- Examine the discharge sample to detect clue cells:
A vaginal secretion sample is placed under a microscope; certain cells are a “clue” to the presence of bacterial vaginosis.

Are there any complications associated with bacterial vaginosis?

If left untreated, bacterial vaginosis may cause complications. In pregnancy, bacterial vaginosis has been associated with premature birth and low-birth-weight infants.

There may also be a risk of gynecologic complications. Bacterial vaginosis has been associated with abnormal Pap smear results, including inflammation and other cervical changes. Women with bacterial vaginosis may have increased risk of developing pelvic inflammatory disease, a condition that can require hospitalization. Complications associated with pelvic inflammatory disease include infertility, pelvic pain, and ectopic (or tubal) pregnancy. Untreated bacterial vaginosis has also been associated with an increased risk of sexually transmitted diseases and infections following gynecologic surgery.

How is bacterial vaginosis treated?

A variety of antibacterial medications are used to treat bacterial vaginosis. Metronidazole is the most commonly prescribed medication. Both oral (tablets) and intra-vaginal treatments (gels or creams inserted into the vagina) are available. A healthcare provider can provide the best information on which form is the most appropriate. Over-the-counter yeast treatments are not effective in treating bacterial vaginosis. Medications that treat bacterial vaginosis are available only by prescription.

Other over-the-counter products (such as douches and feminine hygiene sprays) should not be used to treat bacterial vaginosis. In fact, these products may actually contribute to the development of bacterial vaginosis. It is especially important for women not to douche or use sprays before seeing a healthcare provider, because these products can mask features that help diagnose the infection.

In order to achieve a cure and avoid a recurrence of the infection, it is essential to finish all of the medication, even if symptoms have disappeared.

Do my partners need to be treated?

Most providers will not treat sexual partners. However, if the infection returns, a healthcare provider might recommend it.

Do healthcare providers regularly check for bacterial vaginosis?

Many healthcare providers recommend that all women having vaginal exams be tested for bacterial vaginosis. Others support annual testing at the same time a woman has a Pap smear. In addition, some providers recommend testing before any pelvic surgery and during pregnancy.

How can future vaginal infections be prevented?

- Avoid douching. Douching upsets the normal balance in the vagina and might lead to the development of bacterial vaginosis.
- Avoid perfumed soaps and feminine hygiene sprays - they can irritate the vagina.
- Wipe from front to back, especially after a bowel movement, to avoid spreading bacteria from the rectum to the vagina.
- Avoid tight, hot clothing that can trap moisture and create a good growth environment for infections.