



# Vulvovaginal Disorders: An algorithm for basic adult diagnosis and treatment

## BACTERIAL VAGINOSIS (BV)

### What is bacterial vaginosis?

Bacterial vaginosis (BV) is the most common cause of abnormal vaginal discharge in women of childbearing age, accounting for up to 50 percent of cases. It is a sign of an imbalance in the vaginal ecosystem. It is normal for women to have many different bacteria growing in their vagina without any feelings of discomfort. Under normal circumstances, the lactobacilli (known as the “good vaginal bacteria”) outnumber the other bacteria and this natural balance makes the vagina slightly acidic. The symptoms of BV occur when the non-lactobacilli bacteria overgrow, causing the vaginal secretions to become more alkaline.

### How do women get bacterial vaginosis?

The cause is not fully understood. In many cases, BV is associated with having new, or multiple, sexual partners. However, BV can also occur in women who have never been sexually active. The natural balance of bacteria in the vagina may also be upset by douching and cigarette smoking,

### What are the signs and symptoms?

If BV is present, you may notice one, or more, of the following symptoms:

- A white or gray discharge that can be mildly irritating
- A fishy odor that is more noticeable after intercourse
- Burning during urination, itching around the outside of the vagina, or both
- BV does not cause pain and painful sex.

Although these are the most common symptoms, BV can be present without causing any symptoms. The symptoms of BV can also be recurrent requiring additional evaluation and treatment.

### How is bacterial vaginosis diagnosed?

BV is diagnosed by a vaginal exam. Your clinician may check the acidity of your vagina (vaginal pH), but pH alone is not diagnostic. Often a specimen taken with a swab will be examined under the microscope to look for findings characteristic of bacterial vaginosis.

### How is it treated?

BV is usually treated with antibiotics given either orally or vaginally (metronidazole or clindamycin). BV is sometimes recurrent, and may be managed with either boric acid capsules to acidify the vagina or other vaginal acidifying agents. Be sure to take all the medicine prescribed for you, even if you think you are cured. Treatment is not necessary for male sexual partners of affected women, but condom use can reduce the likelihood of recurrence. Women with BV who have sex with women should be encouraged to inform their sexual partner(s) regarding the need for screening, diagnosis, and treatment.



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In pregnancy, oral treatment with seven days of metronidazole is preferred over vaginal treatments. It is effective and has not been associated with adverse fetal or obstetrical effects.

### What can happen if bacterial vaginosis is left untreated?

Having BV can increase a woman's chance of getting sexually transmitted infections such as, HIV, herpes, *gonorrhea*, and *chlamydia*. In pregnant patients, it can possibly increase the chance of premature delivery. BV has also been associated with an increase in infections following surgical procedures such as hysterectomy, vaginal delivery, or abortion.

### How can I avoid getting bacterial vaginosis?

The best way to prevent BV is not known. However, a few basic recommendations can be made.

- Do not douche. Douching is the use of a solution to rinse the inside of the vagina. Some women douche to feel "clean", although there is no proven benefit of douching. The vagina is normally able to maintain a healthy balance of bacteria; douching can upset this balance and potentially flush harmful bacteria into the upper genital tracts (uterus, fallopian tubes).
- Limit your number of sexual partners. Women with multiple sexual partners are at higher risk of developing bacterial vaginosis and sexually transmitted infections.
- It is best to always practice safe sex; condom use can help to reduce the likelihood of getting BV and sexually transmitted infections.
- Finish the entire course of treatment for BV, even if the symptoms resolve after a few doses.

### What are the risks and side effects of treatment?

- A few women may be allergic to the treatment chosen.
- Antibiotics may cause yeast infections.
- Metronidazole (Flagyl®), a frequently prescribed antibiotic, can cause a metallic taste. Do not drink any alcohol if you are given metronidazole pills or gel as the interaction can cause severe nausea and vomiting.
- Clindamycin (Cleocin®) can cause diarrhea. Call your clinician if you have diarrhea three to five times a day while taking it.

### How can I get more information?

- Ask your healthcare provider
- Visit the CDC website: <http://www.cdc.gov/STD/BV/STDFact-Bacterial-Vaginosis.htm>
- Visit <http://www.womenshealth.gov/publications/our-publications/fact-sheet/bacterial-vaginosis.html>