CONDITION

Bacterial vaginosis

Learn about bacterial vaginosis symptoms, causes, testing, treatment, recurrence, pregnancy concerns, and when to seek medical care.

WHAT IT IS
Vaginal condition caused by bacterial imbalance

BODY SYSTEM
Reproductive system

MAIN SYMPTOMS
Thin vaginal discharge, fishy odor, mild itching, burning during urination

WHAT CAUSES IT
Bacterial imbalance, exact trigger unknown

HOW IT IS DIAGNOSED
Vaginal fluid testing with Amsel criteria, Gram stain or NAAT

MAIN TREATMENT
Antibiotics

CAN IT BE CURED?
Yes, but recurrence is common

IS IT AN EMERGENCY?
Sometimes, with severe pain or fainting

LONG-TERM OUTLOOK
Often resolves with treatment but commonly recurs

Overview

Bacterial vaginosis, often called BV, is a common vaginal condition caused by a change in the usual balance of bacteria in the vagina. Protective bacteria called Lactobacillus normally help keep the vagina mildly acidic. With BV, these bacteria decrease and other types of bacteria increase.

BV is not simply an infection with one germ. It is a shift in the vaginal microbiome, meaning the community of microorganisms that normally live in the vagina. This shift can cause a thin discharge and a noticeable odor, although many people have no symptoms.

BV is associated with sexual activity, but it is not classified as a traditional sexually transmitted infection, or STI. It can occur without recent sexual activity. It also cannot be caught from toilet seats, bedding, or swimming pools.

BV matters because symptoms may resemble those of yeast infection, trichomoniasis, or another vaginal or cervical infection. The correct treatment depends on the cause. BV can also come back after treatment and is associated with a higher chance of acquiring some STIs. During pregnancy, symptomatic BV deserves timely medical attention because it has been associated with pregnancy complications.

BV is treatable. A clinician can help confirm the cause of symptoms and discuss an appropriate antibiotic like amoxicillin or doxycycline option.

Symptoms

Many people with BV do not notice any symptoms. When symptoms occur, they may include:

Severe itching, marked swelling, sores, fever, or significant pelvic pain are not typical features of uncomplicated BV. These symptoms may point to another condition or to more than one condition at the same time.

Vaginal symptoms are difficult to identify by appearance alone. A thick, clumpy discharge with intense itching may be more suggestive of a yeast infection, while a yellow-green or frothy discharge can occur with trichomoniasis. However, symptoms often overlap. Using an over-the-counter yeast treatment without confirming the cause may delay effective care if BV or an STI is present.

Arrange a routine medical visit if you develop a new or persistent odor, discharge, itching, or burning. Testing is especially useful after a new sexual exposure or when symptoms return after treatment.

Seek prompt medical care if vaginal symptoms occur with fever, worsening lower abdominal or pelvic pain, pain during sex, vomiting, or bleeding that is not expected. These are not usual symptoms of BV and may require evaluation for pelvic inflammatory disease or another problem.

During pregnancy, contact a prenatal care professional promptly about new vaginal odor, discharge, burning, bleeding, contractions, or fluid leaking from the vagina. Severe pain, fainting, heavy bleeding, or difficulty breathing requires emergency care.

- Thin, smooth vaginal discharge that may look white, gray, or slightly green
- A strong or "fishy" vaginal odor, sometimes more noticeable after sex or during menstruation
- Mild vaginal itching, burning, or irritation
- Burning during urination

Causes and risk factors

BV develops when the balance of vaginal bacteria changes. The exact reason this happens is not always clear, and having BV does not mean someone has poor hygiene.

Factors associated with a greater likelihood of BV include:

BV can occur in people who have sex with men, women, or partners of any gender. It is less common in those who have never been sexually active, but sexual contact is not required in every case.

Douching can remove protective bacteria and disrupt the vagina's natural acidity. Scented washes, deodorant sprays, and other products used inside the vagina may also cause irritation. The vagina cleans itself, so internal washing is not needed. Gently cleaning the external genital area with water, with or without a mild unscented cleanser, is generally enough.

BV is not caused by a toilet seat, towel, swimming pool, or bedding. It is also not a sign that a person or their partner is "unclean."

Researchers continue to study why BV returns so often. Possible reasons include difficulty restoring protective bacteria, persistence of a bacterial layer called a biofilm, and exchange of bacteria between sexual partners. These factors do not mean that recurrence is anyone's fault.

- Having a new sexual partner or multiple partners
- Having sex without condoms
- Having female sexual partners
- Douching or placing cleansing products inside the vagina
- A previous episode of BV
- Natural changes related to menstruation

Diagnosis

A clinician usually begins by asking about the discharge, odor, irritation, menstrual cycle, sexual exposures, pregnancy possibility, medications, and any treatments already tried. A pelvic examination may be recommended, depending on the symptoms and clinical setting.

A sample of vaginal fluid can be tested in several ways. Traditional diagnosis may look for a combination of findings known as the Amsel criteria:

A laboratory may instead use a Gram stain and Nugent score to measure the types of bacteria in the sample. Molecular tests, often called nucleic acid amplification tests or NAATs, can

detect bacterial patterns linked with BV. Some tests check for BV, yeast, and trichomoniasis from the same sample.

Vaginal pH alone cannot confirm BV because menstruation, semen, trichomoniasis, and other factors can also raise pH. Cervical screening tests such as a Pap test are not intended to diagnose BV.

STI testing may be offered based on symptoms, age, pregnancy, sexual history, and recent exposures. This is not because BV proves that an STI is present. The conditions can occur together, and testing can prevent a second infection from being missed.

- Thin, evenly distributed discharge
- Vaginal pH above the usual acidic range
- A characteristic odor during testing
- Vaginal cells coated with bacteria, called clue cells, seen under a microscope

Treatment and management

Antibiotics are used to treat symptomatic BV. Common options include metronidazole or clindamycin, taken by mouth or used inside the vagina. Other antibiotics, such as tinidazole or secnidazole, may be considered in some situations.

The best option depends on factors such as pregnancy, medication interactions, previous side effects, treatment history, cost, and personal preference. A clinician or pharmacist can explain how to use the selected medicine safely. Follow the prescribed course even if symptoms improve early, unless a healthcare professional advises otherwise.

Some vaginal clindamycin products can weaken latex condoms or diaphragms temporarily. Product instructions explain how long this effect may last. Alcohol advice can differ among specific medicines and product labels, so ask a pharmacist rather than assuming all drugs in this group have the same instructions.

During treatment, the Centers for Disease Control and Prevention advises avoiding sexual activity or using condoms consistently and correctly. Douching is not recommended and may increase the chance of recurrence.

Routine treatment of male sexual partners has not been shown to prevent BV from returning and is not generally recommended in current CDC guidance. Female partners can also have BV. A partner with vaginal symptoms should arrange their own evaluation rather than sharing medicine.

Some probiotic products are marketed for BV, but evidence varies by product and formulation.

They should not replace an antibiotic when treatment is indicated. Boric acid is sometimes used as part of clinician-directed care for repeated BV, but it can be toxic if swallowed and is not appropriate for everyone. It should not be started without medical guidance.

Pregnant patients with BV symptoms are generally treated because symptomatic BV has been associated with pregnancy complications. The choice of medicine should be discussed with a prenatal care professional. Routine screening and treatment of every pregnant person without symptoms has not been shown to provide consistent benefit, so screening decisions depend on the clinical situation.

Complications

BV often resolves with treatment, but recurrence is common. A return of symptoms does not necessarily mean that treatment was used incorrectly.

BV is associated with a higher likelihood of acquiring infections such as HIV, gonorrhea, chlamydia, trichomoniasis, and herpes simplex virus type 2 after exposure. BV does not itself prove that any of these infections are present. Condoms and recommended STI testing can help reduce or identify risk.

BV-associated bacteria may also contribute to pelvic infection after some gynecologic procedures. Clinicians may test or treat vaginal infection before certain procedures based on symptoms and the planned care.

During pregnancy, symptomatic BV has been associated with premature rupture of membranes, preterm birth, and infection around the time of delivery. An association does not mean that every person with BV will have a complication. Most symptoms can be evaluated and treated through routine or prompt prenatal care.

Fever, increasing pelvic pain, vomiting, or feeling seriously unwell should not be assumed to be BV. These symptoms need timely assessment for pelvic inflammatory disease or another illness.

Follow up

A routine follow-up test is usually not needed if symptoms completely resolve. Return to a healthcare professional if odor, discharge, or irritation continues after treatment or comes back later.

Recurrent BV may be treated again with the same medicine or a different recommended regimen. For people with multiple recurrences, clinicians may discuss a longer suppressive

plan. This requires individualized medical supervision and should not be attempted with leftover antibiotics.

Avoid using someone else's medicine or saving part of a prescription for later. Incomplete or incorrect treatment can make it harder to identify the true cause of future symptoms.

Ways to support ongoing vaginal health include avoiding douching, not placing scented products inside the vagina, and using condoms correctly if desired for STI risk reduction. There is no need to scrub or repeatedly wash the vagina.

Arrange routine follow-up when:

Seek urgent medical assessment for fever, worsening pelvic or lower abdominal pain, repeated vomiting, or new symptoms after a gynecologic procedure. Seek emergency care for severe pain, fainting, heavy bleeding, trouble breathing, or other signs of a medical emergency.

- Symptoms are new, mild, or recurring
- Treatment has ended but odor or discharge remains
- You are unsure whether symptoms are BV, yeast, or an STI
- A sexual partner has been diagnosed with an STI
- You are pregnant and notice vaginal symptoms

Sources

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