STI TRENDS:

Bacterial Vaginosis - Positivity Trends Report

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HEALTHTRACKRx

Bacterial vaginosis (BV) is the most common cause of vaginitis.[1] It results from a disruption of the normal vaginal microbiota, leading to a decrease in protective lactobacilli and an overgrowth of anaerobic bacteria. This imbalance can result in symptoms such as fishy-smelling discharge, as well as vaginal irritation, burning, and itching. BV has been associated with adverse outcomes, including obstetric complications (e.g., preterm birth, chorioamnionitis) and increased susceptibility to sexually transmitted infections, such as human immunodeficiency virus (HIV).[1,8] Below are the four strains of BV causing organisms that HealthTrackRx tests for:

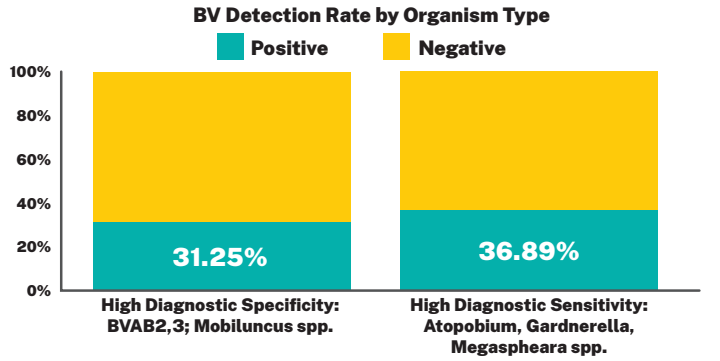
Gardnerella vaginalis: Historically considered the primary pathogen in BV, Gardnerella is a facultative anaerobe capable of forming biofilms, which can protect other BV-associated bacteria and contribute to treatment resistance. While Gardnerella is present in many healthy individuals, its overgrowth is a hallmark of BV.[2] This translates to Garderella vaginalis having a high sensitivity for a BV clinical diagnosis, which means that a higher microbial load can be indicative of BV.

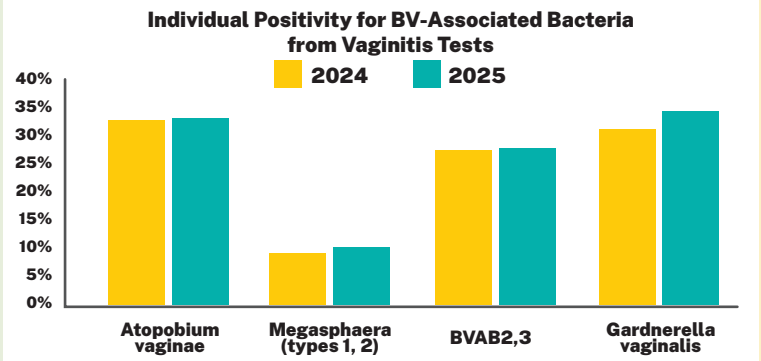
Atopobium vaginae: Atopobium vaginae is frequently found alongside Gardnerella vaginalis in BV cases and is considered a strong marker for the condition. Its presence has been linked to increased resistance to metronidazole, a common BV treatment, potentially leading to higher recurrence rates.[3] Similar to Gardnerella, Atopobium vaginae also has high sensitivity for BV.

Megasphaera species (type 1, 2): Megasphaera types 1 and 2 are anaerobic bacteria associated with BV. Megasphaera type 1 is rare in women without sexual exposure, supporting its role as a sexually associated organism and a marker of BV-related dysbiosis.[5] Megasphaera species are also classified by having a high clinical sensitivity for BV diagnosis.

BV-Associated Bacteria 2,3 (BVAB 2,3) & Mobiluncus species: BVAB species are anaerobic bacteria that were originally detected in patients with a clinical BV diagnosis. This grouping of organisms has shown a strong association with BV and may serve as a specific marker for the condition. Unlike the other BV organisms tested on the HealthTrackRx Vaginitis menus, detection of BVAB and Mobiluncus organisms have a high clinical specificity.

Looking at positivity rate based on the organisms classified as high sensitivity vs high specificity, we don't see significant differences in detection rate. The three organisms associated with high sensitivity, including Atopobium, Gardnerella, and Megasphaera, are detected at a slightly higher frequency (36.89% in 2024). While BVAB and Mobiluncus, those organisms with high specificity, had a slightly lower detection rate.





Prevalence of Bacterial Vaginosis in the US

The prevalence rates of BV can vary based on factors such as race, sexual activity, and geographical location. For instance, some studies have noted higher prevalence rates of BV-associated bacteria among Black and Hispanic women compared to White women.[6,7] Despite these variations, the overall global prevalence of BV ranges from 25-30 percent in females of reproductive age.[8] When examining the rates of different BV strains between 2024 and 2025, the positivity rates remain steady among the four strains of BV, with the highest positivity rates seen with Atopobium vaginae and Gardnerella vaginalis. Here is a look at positivity rates for the different strains of BV in 2024 compared to 2025 so far. For patients receiving vaginitis testing in 2024, 60.4% were positive for at least one BV-associated bacteria.

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