

# Inflammatory bowel disease varies by race, sex and birthplace, researchers find

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Researchers from Rutgers and other institutions have uncovered significant variations in how inflammatory bowel disease (IBD) affects people of different races, sexes and places of birth.

The [study](#), published in *Gastro Hep Advances*, may assist caregivers and help shed light on how diet, lifestyle and genetics can affect the

development and disease course of IBD, a term for two conditions—Crohn's disease and [ulcerative colitis](#)—that cause chronic inflammation in the gastrointestinal tract.

"IBD has historically been a disease of Caucasian populations in Europe and North America, but now we're seeing it among all races and in people all over the globe, so it's now important to study how it manifests in different groups," said Lea Ann Chen, an assistant professor of medicine and pharmacology at Rutgers Robert Wood Johnson Medical School and senior author of the study.

The researchers reviewed records from all patients who underwent treatment for IBD at New York's Bellevue Hospital between 1997 and 2017, excluding any cases with insufficient data to confirm the diagnosis and looked for patterns among the remaining 525 patient files. As these patients were treated at a safety-net public hospital, they were of similar socioeconomic status, a factor that has complicated previous studies. This pool of patients was also very racially diverse: 29.8 percent white, 27.4 percent Hispanic, 21.7 percent Black and 13 percent Asian.

Among the most notable ways immigrants and minority patients differed from native-born whites (who were used as a reference group for comparison) were the following:

- Asian patients were more than twice as likely as white patients to be men, regardless of whether they had been born in the U.S. or immigrated.
- Black patients were more than twice as likely to undergo intestinal resection (surgery to remove part of the bowel) as white patients.
- US-born Black patients were more likely to suffer from Crohn's disease, while Black patients who had immigrated to the U.S. were more likely to suffer ulcerative colitis.

- Foreign-born patients of all races suffered milder disease. They developed problems later in life, tended to suffer ulcerative colitis rather than Crohn's disease, required less surgery and medication and endured fewer complications.

The study's findings suggest cultural and environmental factors also influence IBD progression.

"Foreign-born patients who immigrate from low-prevalence IBD countries have a milder IBD phenotype compared to patients of the same race who were born in this country," Chen said. "This is particularly true among Black patients. Those who were born here were far more likely to develop Crohn's disease and its complications compared to those who were born abroad."

Other findings suggest [genetic differences](#) may affect patient vulnerability to IBD.

"The difference in case numbers between Asian men and women was striking, and that difference appeared both among US-born and foreign-born patients," Chen said. "It appears that East Asian women—because most of the Asian patients in our study population were East Asian—may have some sort of genetic protection against IBD."

**More information:** Ali Khalessi et al, Differential Manifestations of Inflammatory Bowel Disease Based on Race and Immigration Status, *Gastro Hep Advances* (2023). [DOI: 10.1016/j.gastha.2023.11.021](https://doi.org/10.1016/j.gastha.2023.11.021)

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