

INVESTMENT IN RESEARCH SAVES LIVES AND MONEY

Crohn's and Colitis

Inflammatory bowel disease (IBD) is an umbrella term used to describe two high-burden health conditions: Crohn's disease (CD) and ulcerative colitis (UC). Both of these conditions involve chronic, potentially debilitating and even deadly inflammation of the gastrointestinal (GI) tract.^{1,2} While more research is urgently needed to fully understand how CD and UC develop and what affects their progression, research indicates that interactions between a person's genes, their microbiome, environmental triggers, and abnormal immune responses likely all play roles in this high-burden health threat.¹

TODAY

It is estimated that Crohn's disease and ulcerative colitis affect approximately

3.1 million Americans.³

The most recent data available suggests that in the U.S. more than

56,000 people per year are hospitalized for CD and over

33,000 are hospitalized for UC.⁴

According to the Crohn's and Colitis Foundation, between

1.5% and **28%** of people with IBD also have a close family member with the condition.⁵

COST

\$2,213 vs. \$979:

IBD patients' out-of-pocket costs per year compared to people without IBD.⁶

\$22,987 vs. \$6,956:

IBD patients' annual direct cost of care (paid claims per-member per-year), including expenses such as hospitalizations, prescription drugs, and other health care services compared to people without IBD.⁶

\$71.3 billion:

Roughly how much the U.S. spends every year on IBD-related direct costs.^a

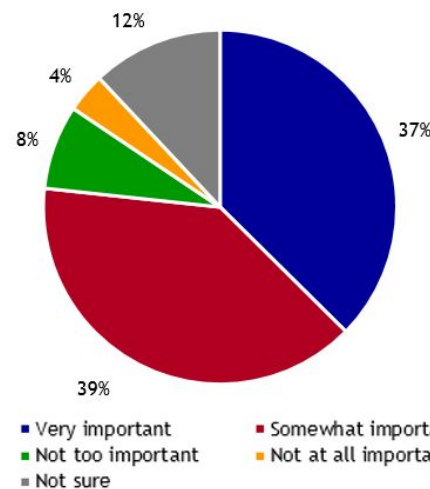
Research Delivers Solutions

While there is not yet a cure, various treatments have been developed which allow IBD patients to manage their symptoms and prevent flare-ups. **Infliximab (IFX)** is one of the major drugs used in the treatment of UC. However, it is not effective in many patients, and up to half of IFX-treated patients eventually develop an intolerance or become unresponsive to it. One 2019 study compared the efficacy of two other drugs, **adalimumab (ADA)** and **vedolizumab (VDZ)** in patients who failed IFX treatment. Researchers found the two drugs to be equally effective in patients who had to stop IFX treatment due to a drug-related adverse event, but determined that VDZ may have a greater efficacy in patients whose bodies stopped responding to IFX.⁷

Recent research has shown that **smoking** causes many complications for CD patients, including an up to **85% increase in flares**, but that quitting smoking can reduce these negative effects.⁸ Continued research on behavioral risk factors such as smoking is important for both preventing and mitigating the symptoms of IBD.⁹

As part of the **Rochester Epidemiology Project (REP)**, researchers have studied the medical data of a group of Olmsted County, Minnesota residents over several decades, yielding results that can be applied to larger populations. Researchers found that CD rates were the same for men and women and that disease prevalence increased by 41% from 2001-2011. Slightly more males than females were found to have UC and this condition also increased in prevalence by 33% over this period.¹⁰ Scientists can use data from the REP to further investigate causes of certain diseases and how patients respond to medical and surgical treatments.

How important is it for the federal government to incentivize greater private sector investment in new treatments and cures?



Source: A Research!America poll of U.S. adults conducted in partnership with Zogby Analytics in January 2019

a. Estimate calculated by extrapolating from the data presented referencing per-member per-year paid claims and IBD prevalence.^{6,3}

Crohn's and Colitis

Then. Now. Imagine.

THEN

Before 2001, no specific gene mutations related to Crohn's disease or ulcerative colitis susceptibility had been discovered.^{11,12}

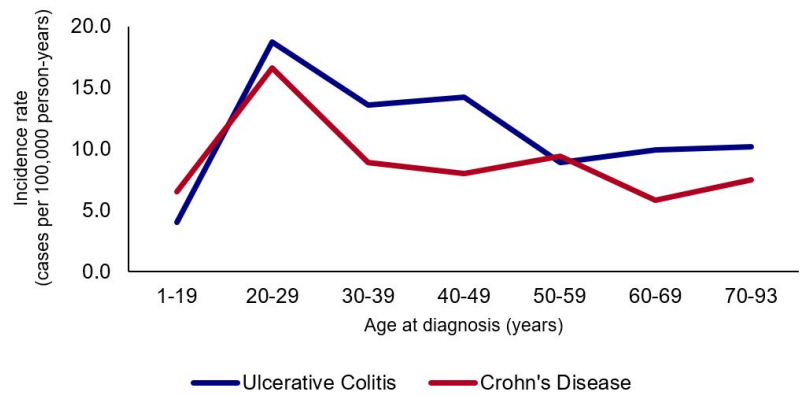
NOW

Advancements in genetics have helped researchers identify 163 parts of the genome that relate to IBD risk.¹³

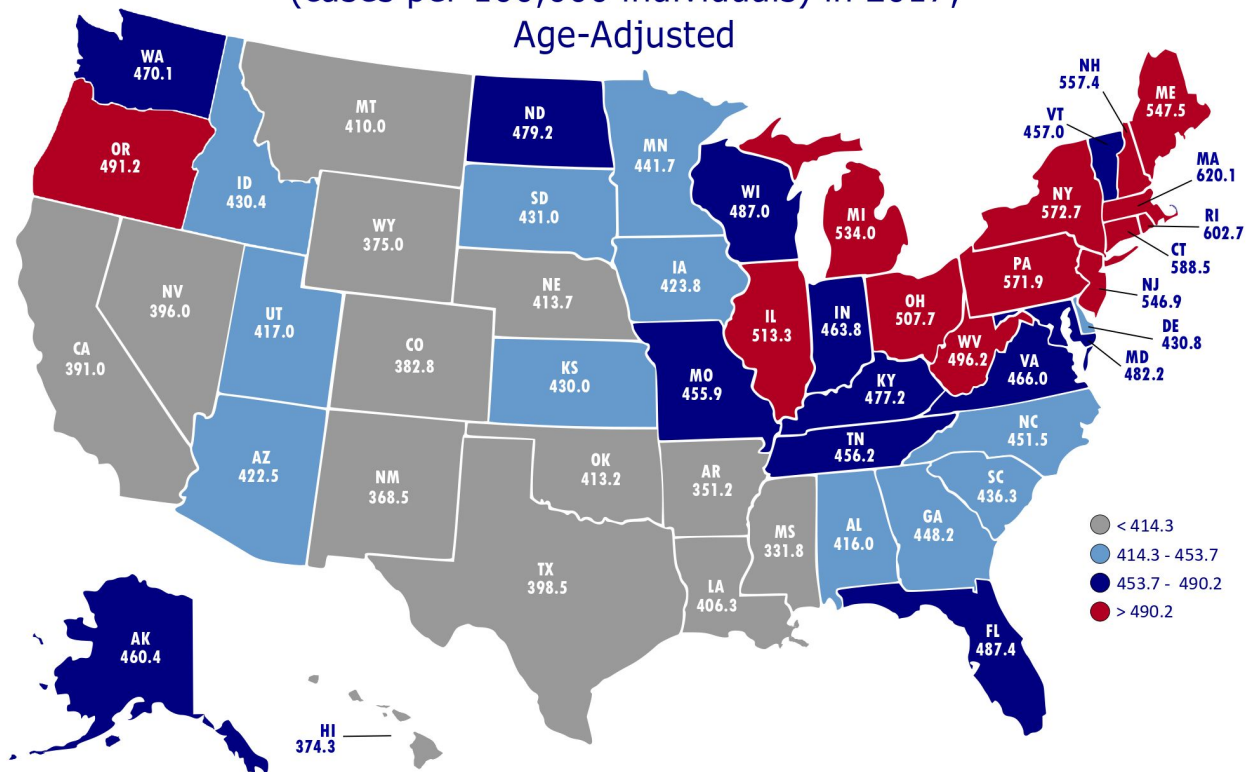
IMAGINE

A cure.

Crohn's Disease and Ulcerative Colitis Incidence by Age in Olmsted County, MN (1970-2010)¹⁰



Estimated Prevalence of Inflammatory Bowel Disease (cases per 100,000 individuals) in 2017, Age-Adjusted



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SOURCE: Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization.

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