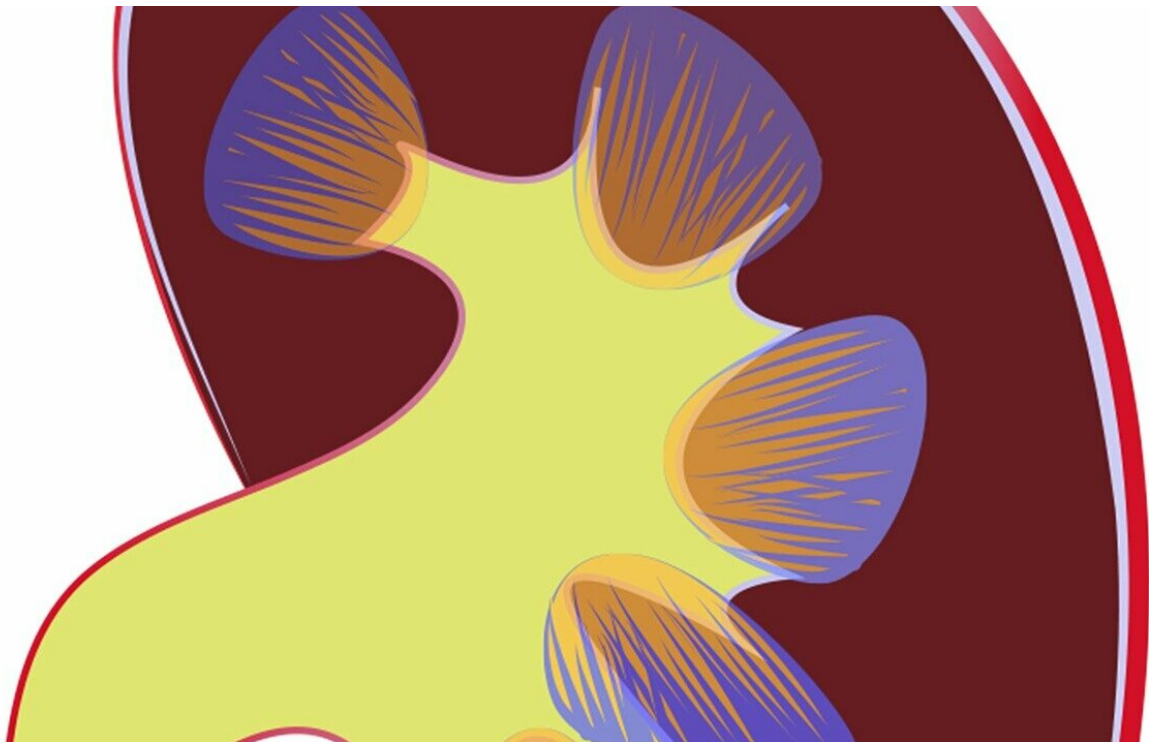


# Research ties common heartburn medications to kidney disease and failure

March 18 2019, by Marcene Robinson

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Common medications prescribed to treat heartburn, acid reflux and ulcers are linked to increased risks for kidney failure and chronic kidney disease, found a recent University at Buffalo study.

Use of proton pump inhibitors (PPI), a group of drugs that reduce the

production of stomach acid, increases the risk of [chronic kidney disease](#) by 20 percent and raises the risk of [kidney failure](#) by four times. Risks were highest among people at least 65 years old.

The research, published in February in *Pharmacotherapy*, is one of the first large, long-term studies to examine the effects of PPIs on kidney function. Researchers examined the [health data](#) of more than 190,000 patients over a 15-year period.

"This study adds to a growing list of concerning side effects and adverse outcomes associated with PPIs," says David Jacobs, PharmD, Ph.D., lead investigator and assistant professor of pharmacy practice in the UB School of Pharmacy and Pharmaceutical Sciences.

"Given the increasing global use of PPIs, the relationship between PPIs and renal disease could pose a substantial disease and financial burden to the health care system and public health."

PPIs are one of the most commonly prescribed medications in the U.S., with an estimated 113 million prescriptions filled in 2008, costing patients nearly \$14 billion, says Jacobs.

Due to [acid reflux](#) and related conditions only requiring short-term treatment with PPIs, he adds, up to 70 percent of patients overuse these medications without benefit and are subjected to unnecessary adverse effects.

The prevalence of PPI use in the U.S. could have a devastating effect on [public health](#). Because these drugs are still considered safe, education and deprescribing initiatives are needed to raise awareness among health care providers, says Jacobs. Deprescribing may involve reducing dosage or stopping usage.

Data for the investigation was gathered from medical insurance and prescription claims from a Western New York insurer. Researchers examined [medical history](#) from 1993-2008 of adult patients with no history of kidney disease.

Kidney health was compared between patients who underwent PPI therapy and those who were unexposed. Examined PPIs included esomeprazole, lansoprazole, omeprazole, pantoprazole and rabeprazole (commonly known by brand names as Vimovo, Prevacid, Prilosec, Protonix and Aciphex, respectively).

**More information:** Emily Hart et al, Proton pump inhibitors and risk of acute and chronic kidney disease: a retrospective cohort study, *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy* (2019). [DOI: 10.1002/phar.2235](https://doi.org/10.1002/phar.2235)

Provided by University at Buffalo

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