SIGNIFICANCE STATEMENT

Kidney stones are a disorder of crystallization related to the supersaturation of solutes in urine. For reasons that remain ill-defined, the prevalence has increased 70% over the past 30 years. Perturbations in the intestinal and urinary microbiome are associated with nephrolithiasis, but it is uncertain whether antibiotics are a risk factor for nephrolithiasis. This article reports that oral cephalosporins, fluoroquinolones, sulfas, nitrofurantoin, and broad-spectrum penicillins are associated with increased adjusted odds of nephrolithiasis among children and adults. The greatest risk was estimated for prescriptions at younger ages and for more recent exposures. Exposure to some oral antibiotics may represent a novel risk factor for nephrolithiasis and might contribute to the rising incidence of kidney stones, particularly among children.