INTRODUCTION: Gastritis is the inflammation of the mucosa that lines the inner walls of the stomach. Duodenitis consists of an inflammation of the duodenum. The main complaints are abdominal pain and epigastric burning. One of the main risk factors for these diseases is infection with the bacterium Helicobacter pylori. In Brazil, it is estimated that 80% of the population is a carrier of the bacteria, which is alarming if compared to the world average. Objective: Analyze prevalence data of new gastritis and duodenitis cases from 2013 to 2017 per sample of municipalities in the State of Pernambuco with more than 100 new cases in the period. Methodology: It is a study in secondary databases, conducted from the Basic Data indicators of Brazil, an integral tool of the health information system, using quantitative analysis of variables. Results: The new cases in 2013 halved in 2017. The municipality of Petrolândia obtained the largest relative reduction of the new cases in the period, from 38 in 2013 to 1 new case in 2017. Recife presented 96 new cases less when comparing 2017 and 2013, which is the largest absolute reduction among municipalities. Afogados da Ingazeira, Jaboatão dos Guararapes and Pesqueira also reduced the number of new cases in the period. On the other hand, the municipality of Buíque maintained the same rate of new cases in the period. Discussion: With the exception of the municipality of Buíque, it is generally observed that there were significant reductions in the number of new cases when evaluating the totality of the municipalities of Pernambuco, which may possibly be associated with the expansion of preventive public health education policies aimed at awareness of the population about adequate food hygiene, with a view to reducing the number of infections and reducing public spending on procedures and treatments. Conclusion: Data analysis showed the efficiency of public policies and programs related to gastritis and duodenitis in Pernambuco. The decreasing number of new cases over the years is evident and reflects a direct reduction in complaints of abdominal and epigastric pain.