

# HEPATITIS A IN PORTUGAL – EPIDEMIOLOGICAL OVERVIEW OF INCIDENCE IN THE LAST DECADE

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## BACKGROUND

Hepatitis A is an acute liver disease with faecal-oral transmission caused by a hepatotropic picornavirus - Hepatitis A Virus (HAV). Food contamination with HAV can occur at any time: cultivation, harvesting, processing, handling and even after cooking.<sup>1,2</sup> Food and water contamination take place more frequently in developing countries where the disease is common but can also occur in developed countries. Although uncommon, foodborne outbreaks have also occurred due to people consuming contaminated fresh and frozen imported food products. Therefore, monitoring the disease is an essential tool for the early implementation of preventive measures, applying the One Health approach to both the human and environmental dimensions to mitigate the impact that an outbreak may have on the population.<sup>3</sup>

## AIM

To characterize the evolution of the incidence of Hepatitis A cases in Portugal between the years 2012 and 2022.

## METHODS

- Retrospective observational study, which analyses the incidence of reported cases of Hepatitis A in Portugal between 2012 and 2022
- Data presented were collected from the Directorate-General for Health (DGS) and the European Center for Disease Prevention and Control (ECDC)
- Descriptive statistics were performed using Microsoft Excel® software

## RESULTS

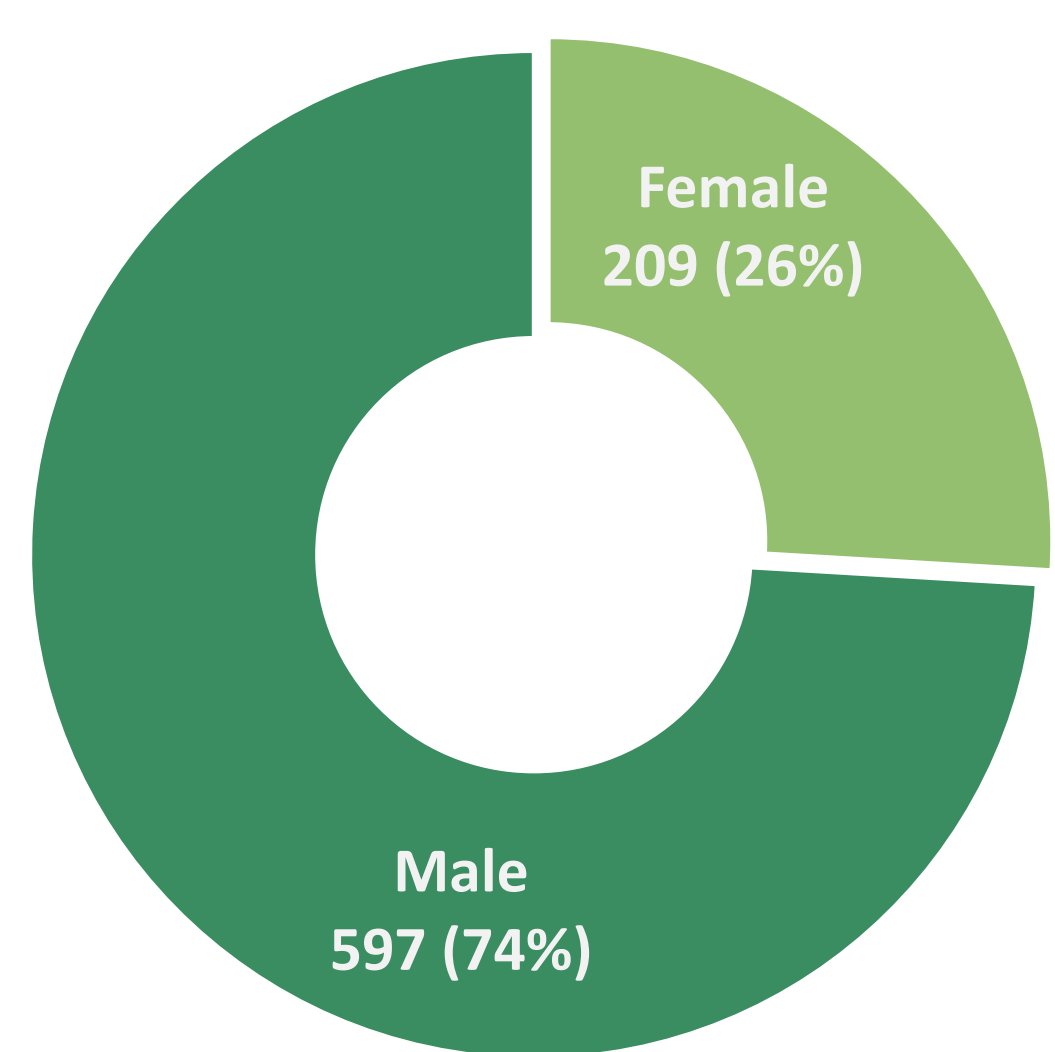


Figure 1. Total number of Hepatitis A cases by sex (2012-2022)

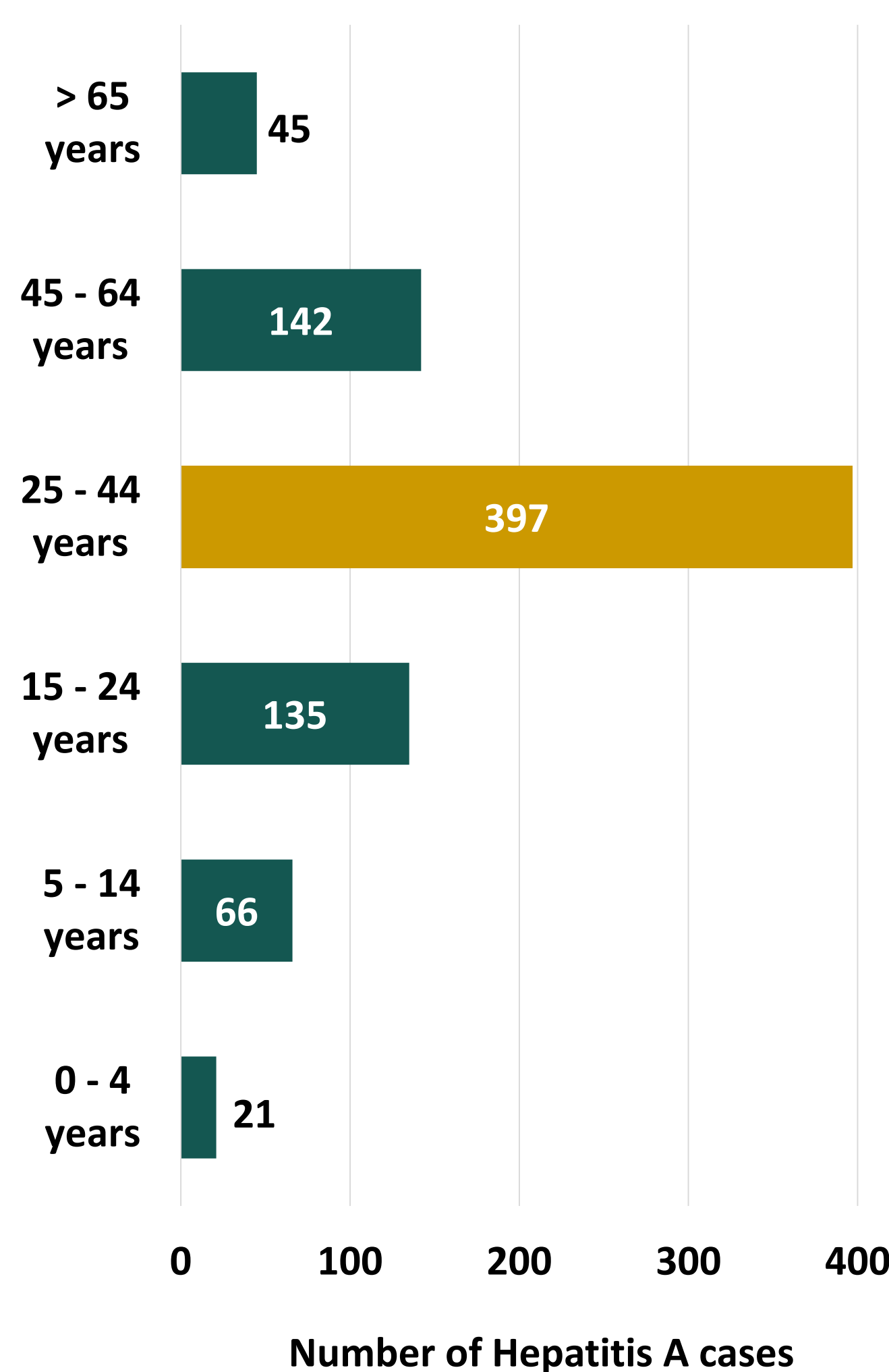


Figure 2. Total number of Hepatitis A cases by age group (2012-2022)

Portugal had 806 cases of Hepatitis A between 2012 and 2022, the majority of which were male (n=597, 74.1%), aged between 25 and 44 years (n=397; 49.3%) - Figure 1 & 2.

Between 2012 and 2016, there was a gradual increase in incidence, from 0.1 in 2012 to 0.5 per 100000 population in 2016. In 2017, there was a peak in incidence (4.7 per 100 000 population), corresponding to an outbreak of Hepatitis A that occur that year. After 2017, the incidence gradually decreased. However, the incidence never reached lower values than in 2012, even during the years of the COVID-19 pandemic - Figure 3.

During the study period, the incidence in men and women was similar, except between 2016 and 2019, where the incidence in men was higher. In terms of age, the incidence of Hepatitis A by age group showed high heterogeneity over the years, without a predominance of a particular age group being observed.

In the 2017 outbreak, the most affected individuals were men aged between 15 and 45 years.

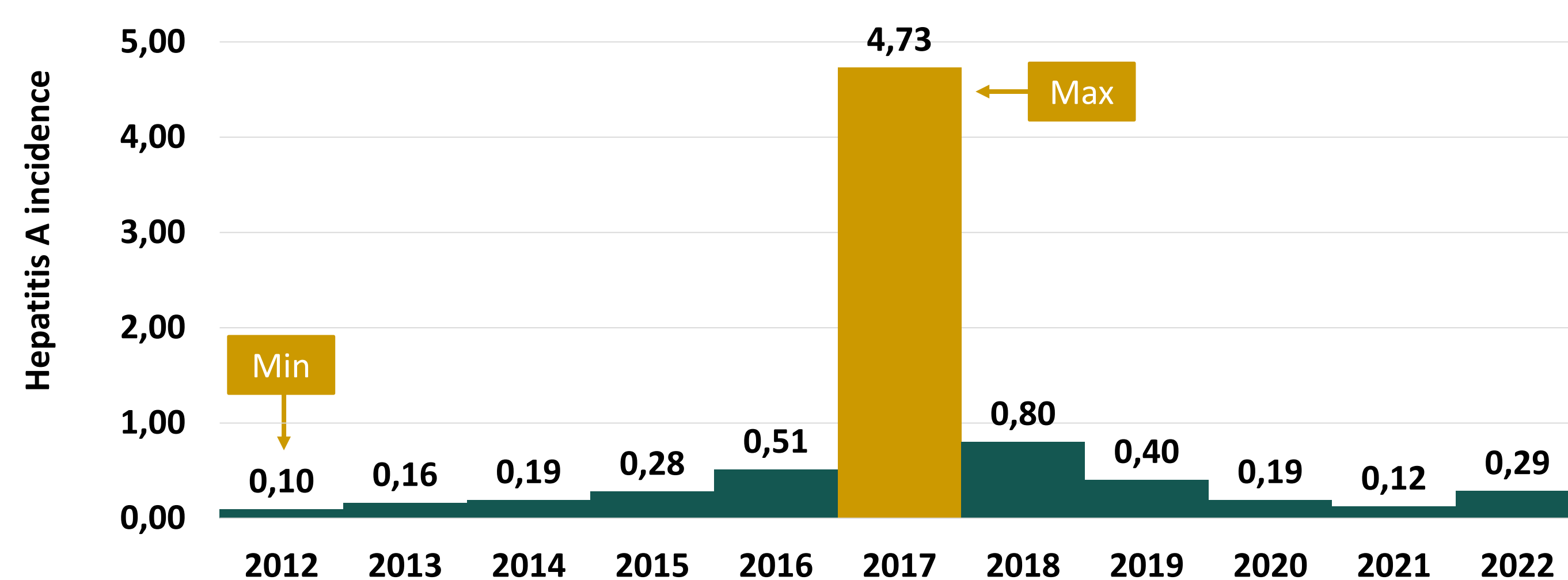


Figure 3. Annual incidence of Hepatitis A per 100 000 inhabitants

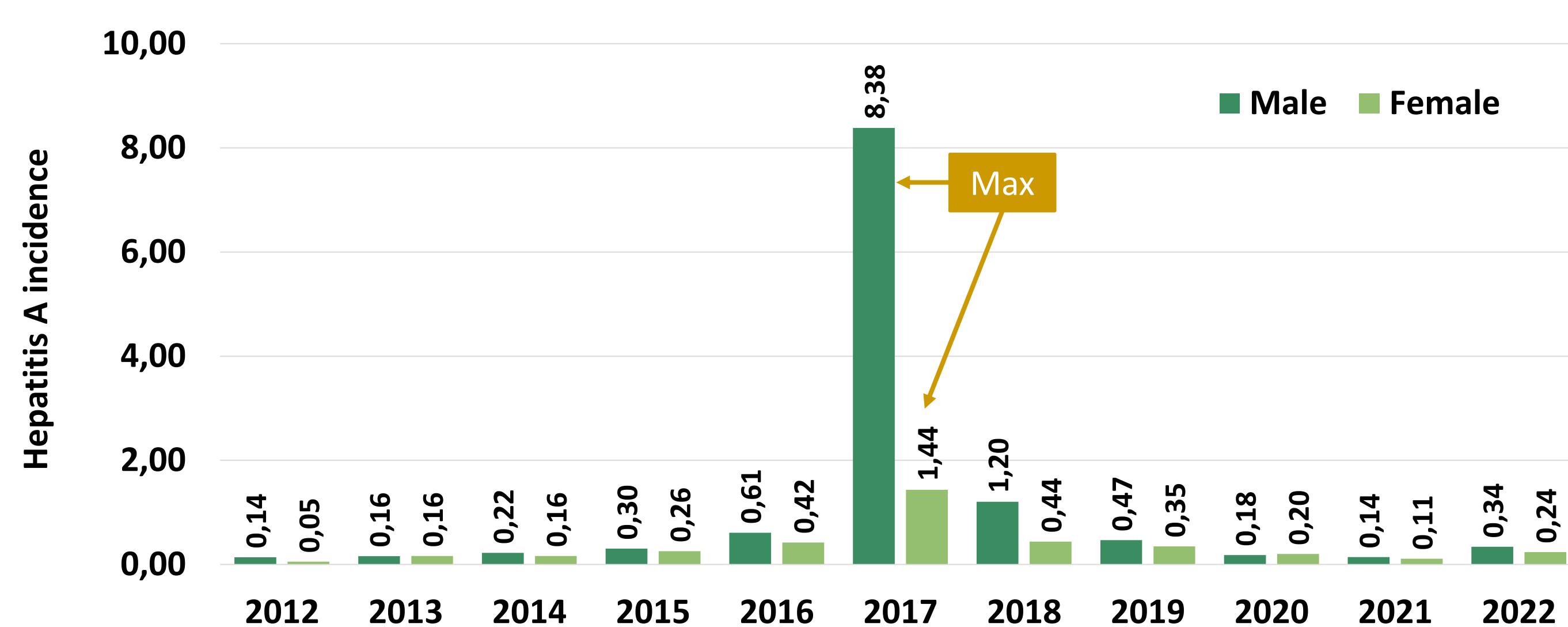


Figure 4. Annual incidence of Hepatitis A per 100 000 inhabitants by sex

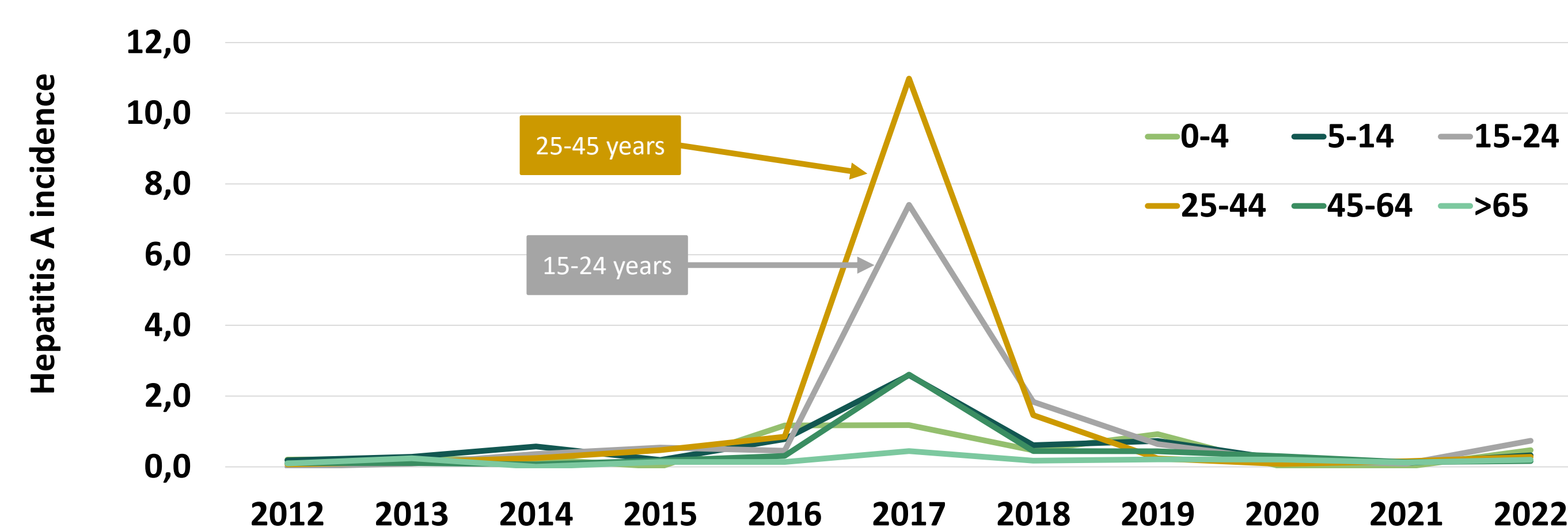


Figure 5. Annual incidence of Hepatitis A per 100 000 inhabitants by age group

## CONCLUSIONS

In Portugal, the incidence of Hepatitis A between 2012 and 2022 was relatively low, with the exception of 2017 due to the occurrence of an outbreak. However, most diagnoses occurred in adults when the disease can present greater severity, with consequences in terms of morbidity and mortality. The decrease in incidence is a good indicator of improved hygiene and sanitary conditions, but it increases the possibility of outbreaks since the population tends to see its natural immunity against the disease reduced. It is essential to monitor the incidence of the disease in the Portuguese population to develop timely public health strategies to control potential outbreaks of Hepatitis A. Strategies to be implemented must take into account not only the human dimension in terms of prevention with vaccination, diagnosis and treatment of the disease but also measures in the environmental dimension, since transmission of the disease occurs via the faecal-oral route, it is essential to implement legislation and measures that promote food and water safety and alert the population to risk behaviors.