



## Department of Epidemiological Surveillance and Intervention

### EPIDEMIOLOGICAL DATA FOR HEPATITIS A IN GREECE, 2000-2010

#### (MANDATORY NOTIFICATION SYSTEM)

##### Main points

- The notification rate of hepatitis A is quite stable and has declined in recent years.
- Based on data for the period 2004-2010:
  - The disease was more frequent among children younger than 14 years old.
  - One third of the notified cases were Roma.
  - Distribution of gender and age differs between the Roma and the general population.

Hepatitis A is an acute, self-limited disease of the liver, which is caused by the hepatitis A virus (HAV). It has been classified as a member of the Picornaviridae family [1,2]. In Greece, hepatitis A is a mandatory notifiable disease.

##### Time trend

During the period 2000-2010, 1549 cases of hepatitis A were reported (median number of reported cases per year: 120, range: 52-283). The temporal distribution of hepatitis A notification rate for the period 2000-2010 is depicted in **Graph 1**. The mean annual notification rate was 1.3 cases per 100,000 population. The notification rate has decreased during the last three years, however in 2002 and 2007 it was increased (2.2 and 2.5 cases per 100,000 population, respectively).

##### Age and gender distribution\*

For the 2004-2010 period, children had the highest notification rate of Hepatitis A (**Graph 2**). The mean annual notification rate was 3.7 and 3.5 cases per 100,000 population in the age groups of 0-4 and 5-14 years old, respectively. No significant difference was noted in the disease's gender distribution (57.6% of the reported cases were male).

##### Geographical distribution

The mean annual notification rate, by geographical region, is depicted in **Figure 1**. The geographical area of Eastern Macedonia-Thrace had the highest mean annual notification

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\* The following data concern the period 2004-2010, as Mandatory Notification System was reorganized in 2004.

rate (4.8 cases per 100,000 population), and Western Macedonia the lowest (0.2 cases per 100,000 population).

### Seasonal distribution

The mean monthly notification rate for the period 2004-2010, increased during winter (**Graph 3**).

### Risk factors

For the 2004-2010 period, 248 (28.6%) of the notified cases of hepatitis A reported the presence of another person with similar symptoms among their contacts. Eighty one (9.3%) of the reported cases had travelled abroad within the incubation period of the disease. Twenty nine cases reported that they had been vaccinated against hepatitis A. Two hundred and sixty (30.0%) of the reported cases were Roma. Among Roma cases the difference in the disease's gender distribution (male/female ratio: 1.1) was not as high as in the rest of the population (male/female ratio: 1.5). Regarding the age distribution, 93.8% of Roma cases were children  $\leq 14$  years old, while in the rest of the population, only 23.6% belonged to this age group.

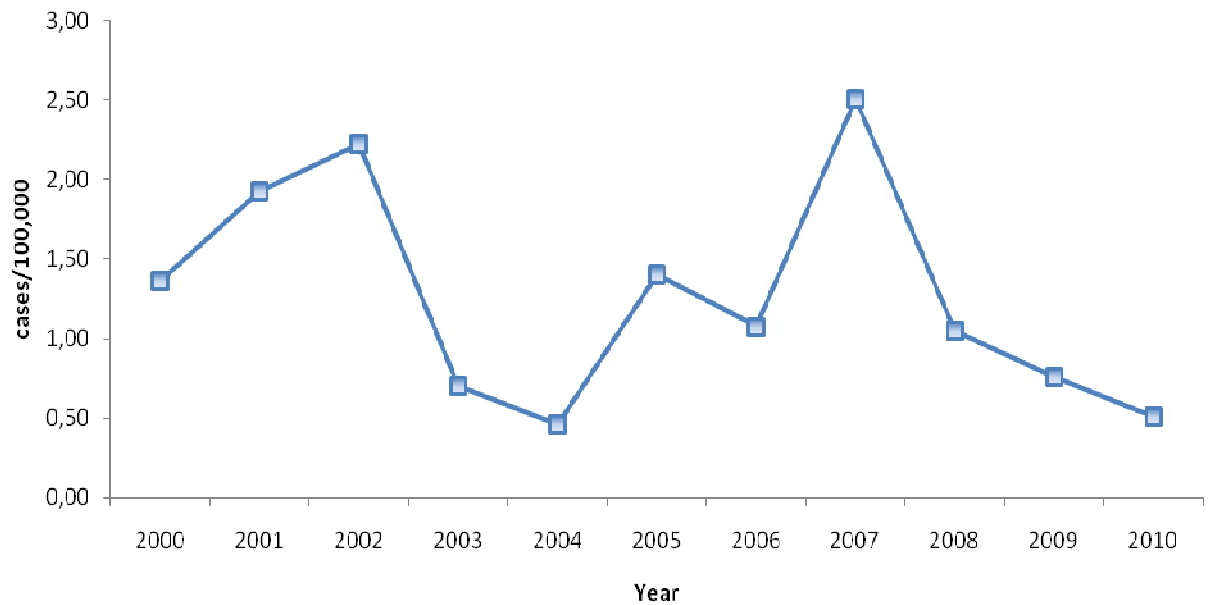
### Conclusion

The mean annual notification rate for hepatitis A in Greece, for the period 2004-2010, was lower than that reported by the EU and EEA/EFTA countries (3.3 cases per 100,000 population for the year 2008) [3]. When interpreting this difference, the surveillance systems' probable under-reporting should be taken into account. In 2002 and 2007, two hepatitis A outbreaks occurred in Greece with the majority of cases in the population of Roma. Hepatitis A is still a childhood disease among Roma, while in the general population cases often occur among susceptible adults. Hepatitis A continues to be a public health concern in Greece, especially in Roma population. This fact stresses the need for monitoring the populations' vaccination coverage and implementing measures in order to improve it.

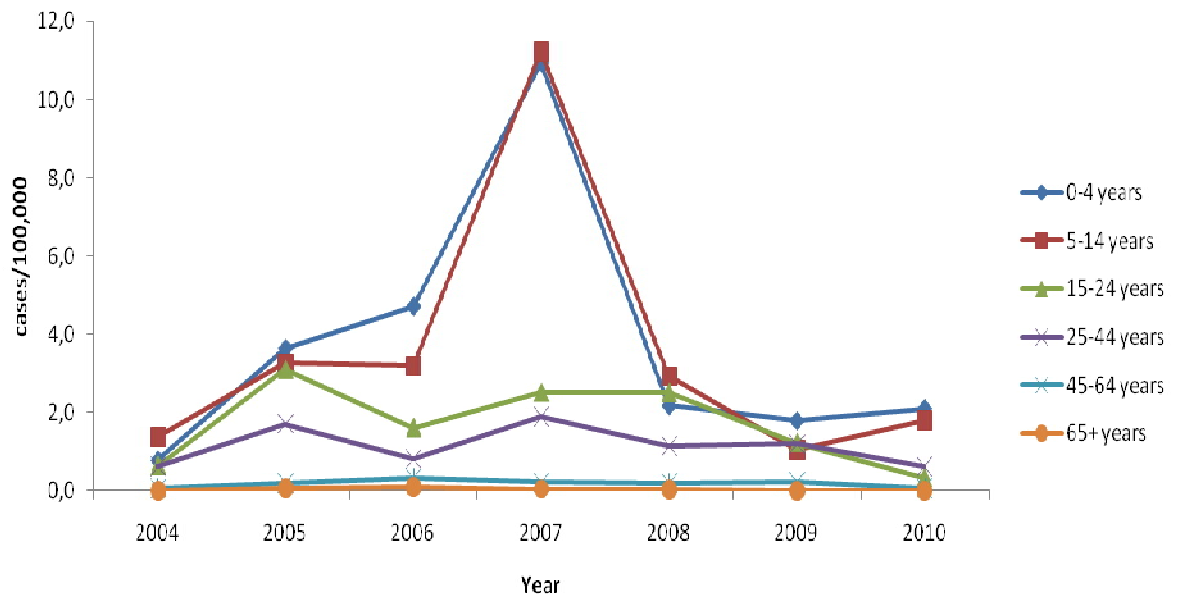
### References

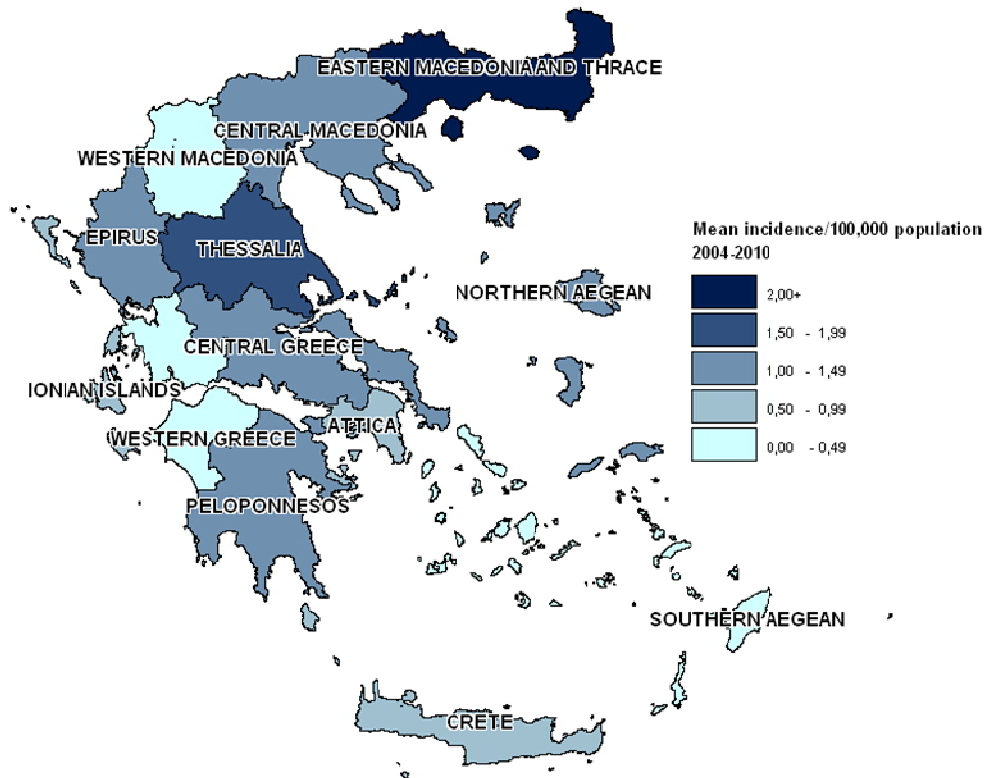
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3. European Centre for Disease Prevention and Control: Annual Epidemiological Report on Communicable Diseases in Europe 2010. Stockholm, European Centre for Disease Prevention and Control, 2010. Available from: [http://www.ecdc.europa.eu/en/publications/Publications/1011\\_SUR\\_Annual\\_Epidemiological\\_Report\\_on\\_Communicable\\_Diseases\\_in\\_Europe.pdf](http://www.ecdc.europa.eu/en/publications/Publications/1011_SUR_Annual_Epidemiological_Report_on_Communicable_Diseases_in_Europe.pdf)

**Graph 1.** Time trend of hepatitis A notification rate (number of cases per 100,000 population), Mandatory Notification System, Greece, 2000-2010.



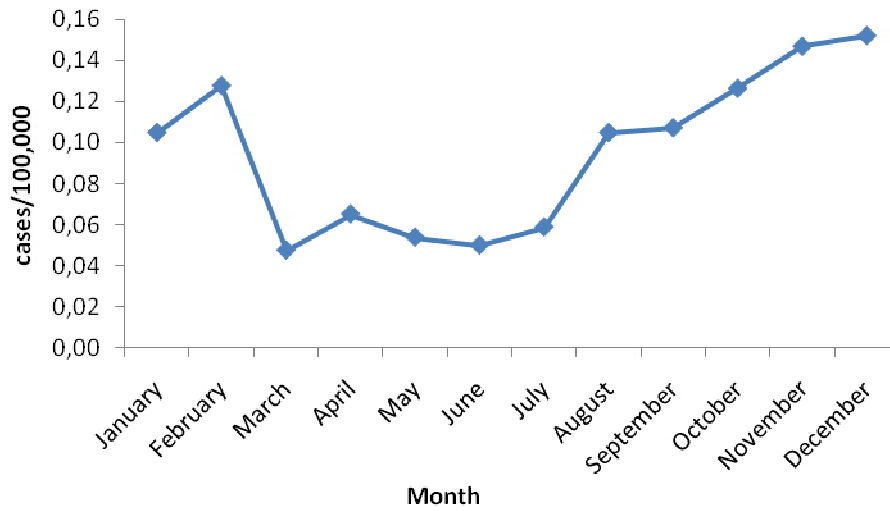
**Graph 2.** Mean annual notification rate (number of cases per 100,000 population) of hepatitis A by age group, Mandatory Notification System, Greece, 2004-2010.





**Figure 1.** Mean annual notification rate of hepatitis A by region (number of cases per 100,000 population), Mandatory Notification System, Greece, 2004-2010.

**Graph 3.** Mean notification rate (number of cases per 100,000 population) of hepatitis A by month, Mandatory Notification System, Greece, 2004-2010.



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