

CURRENT OUTBREAK OF HEPATITIS A IN BULGARIA, 2006

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Hepatitis A is the most common type of viral hepatitis in Bulgaria, and accounts for more than 75% of all cases of viral hepatitis. Bulgaria is a country with intermediate endemicity of hepatitis A viral (HAV) infection. Between 1984 and 2005, incidence has varied between 27 – 80 cases per 100 000 population during non-epidemic periods, but has reached 234 cases / 100 000 during epidemic periods. Since 1983, all acute cases of jaundice due to hepatitis A virus have been subject to mandatory notification in Bulgaria. Since 2005, the European Union case definition and case classification have been adopted.

Since the beginning of 2006, 4793 viral hepatitis cases have been reported in Bulgaria (1498 cases more than the same period in 2005, when a total of 3295 cases occurred) (Figure 1). The increase of viral hepatitis incidence in 2006 is related mainly to two hepatitis A outbreaks in the regions of Sofia and Plovdiv.

Outbreak in Sofia Region, 2006: probably waterborne

The first outbreak occurred in Svoge municipality (Sofia region) in July – August 2006, and was probably associated with contamination of the drinking water supply. The incidence in the area has now returned to pre-outbreak levels (Figure 2).

Outbreak in Plovdiv, 2006

The second hepatitis A outbreak began at the end of June 2006 in Plovdiv, a city in southern central Bulgaria. Since the beginning of the year, 1727 cases of acute jaundice due to hepatitis A virus have been reported in the Plovdiv region, including 1393 cases notified between 23 June and 26 September 2006. This compares with 179 cases reported during the same period in 2005 (Fig. 3)

FIGURE 1

Weekly number of cases of acute viral hepatitis in Bulgaria, 2005 and 2006

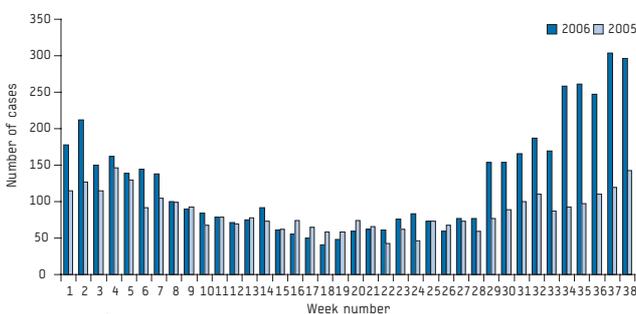


FIGURE 2

Number of cases of acute hepatitis in Sofia region, 2005 and 2006

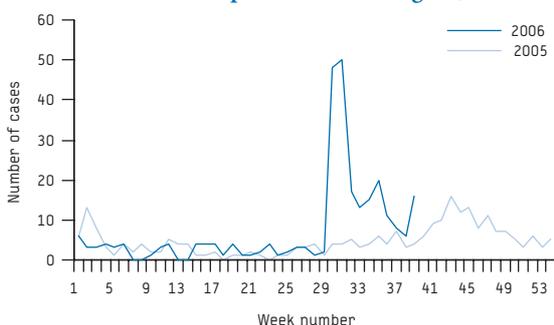


FIGURE 3

Number of cases of acute hepatitis in Plovdiv region, weeks 1 - 37, 2005 and 2006

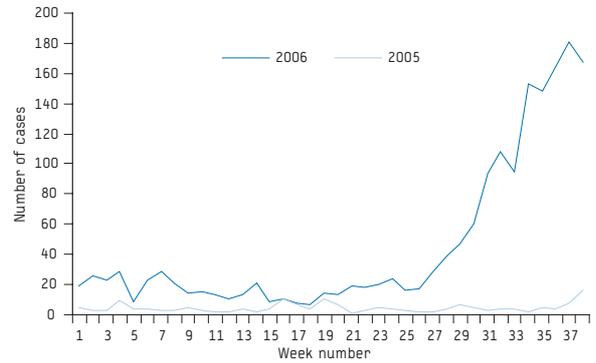
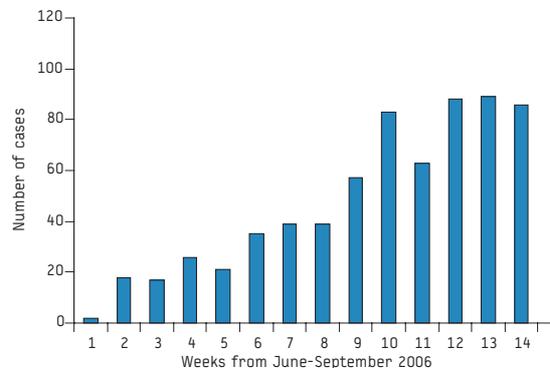


FIGURE 4

Weekly number of cases of acute viral hepatitis in Stolipinovo, Plovdiv, June – September 2006



The majority of the recent cases (975) occurred in Plovdiv, and 794 (81%) of these occurred in two neighbourhoods where people belonging to the Roma ethnic minority live: Stolipinovo (701 cases) and Sheker Mahala (93 cases). In Stolipinovo, 75% of cases were in children aged 1-9 years, and since the beginning of September, an average of over 80 cases has been notified each week (Figure 4). One hundred and ninety patients are currently admitted to hospital. Hepatitis A virus infection has been confirmed by serological tests on samples from the majority of patients admitted.

Sanitation and hygiene conditions in the Plovdiv area are poor, and include illegal dung hills, a substandard sewage system, and an irregular water supply. In response to the outbreak, the Bulgarian government is releasing emergency funds to help improve sanitation and food safety [1].

The Bulgarian Ministry of Health, in collaboration with Roma non-governmental organisations, launched an immunisation campaign against hepatitis A in Plovdiv on 13 September 2006. The immunisation campaign is targeting all children 2 to 18 years of age, living in Stolipinovo neighbourhoods.

Hepatitis A viral infections occur worldwide. In highly endemic regions (such as Africa, Asia, and Central and South America) outbreaks of disease are uncommon because infection occurs during early childhood, when it is mostly asymptomatic. Outbreaks of symptomatic disease are more common in countries where the economy is in transition, as a decrease in hepatitis A circulation increases the susceptibility of the population, and increases the proportion of symptomatic cases [2]. This is currently being seen in some eastern European countries such as Bulgaria, and in some regions of southern Europe.

References:

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2. WHO. Hepatitis A factsheet. (http://www.who.int/csr/disease/hepatitis/HepatitisA_whoocscsredc2000_7.pdf)