

## Rapid communications

# INCREASE IN HEPATITIS A CASES IN THE CZECH REPUBLIC IN 2008 - PRELIMINARY REPORT

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The public health protection authorities in the Czech Republic report a rise in cases of viral hepatitis A (HAV) since the end of May 2008. In total, as many as 602 HAV cases have been reported in 2008 until the end of calendar week 39 (28 September).

In the Czech Republic, hepatitis A is a mandatorily reportable disease and its prevention is specified in the guidelines of the Ministry of Health [1]. When suspecting or diagnosing HAV the attending physician (usually a general practitioner) refers the patient to the hospital where the patient is isolated in an infectious diseases ward. The physician reports the case to the public health protection authority without delay. All patients with suspected hepatitis A or quarantined persons are screened for diagnostic markers of HAV. The confirmed case of HAV is a case that meets the clinical case definition and is laboratory-confirmed in accordance with the European Union (EU) case definition [2].

### The current situation of viral hepatitis A in the Czech Republic

Since the end of May 2008, a rise in HAV cases has been observed in the Czech Republic (Figure 1). As many as 602 HAV cases were reported between calendar weeks 1 and 39 of 2008, eight times more than in the same period of 2007 (when 75 HAV cases were reported until week 39). It is about a six-fold rise in comparison with the average number of cases reported in the same period in 2003-2007 (mean 96, range 75 - 198 cases reported).

The highest numbers of cases have been reported from two of the 14 administrative regions: Prague region with 346 HAV cases (57.5% of the reported total number of cases) and the neighbouring Central Bohemian region with 83 cases (13.8%). In the other regions, only sporadic HAV cases and small outbreaks (mainly in household clusters) have been reported, similarly as in previous years. The absolute numbers of HAV cases by region are shown in Figure 2.

### Age and sex distribution

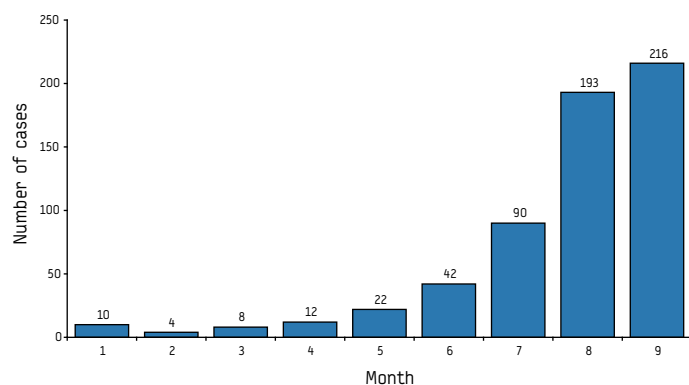
Of the total of 602 cases, 364 (60.5%) have been reported in males and 238 (39.5%) in females.

As to age distribution, most (78.5%) cases have been diagnosed in patients aged from 15 to 64 years. The peak number of cases (166 cases) has been recorded in the age group 25-34 years. The most affected age group with the highest incidence rate of cases is that of 20-24-year-olds. Both the absolute and relative morbidity figures are shown in Figure 3. No death was reported.

Forty-six (7.6%) HAV cases were reported in the age group 0-14 years. An increase in HAV cases in this age group has been observed since July 2008 and is becoming more pronounced with children coming back to school in September. This is consistent with the known seasonal phenomenon of increase in HAV clusters in schools after the summer vacation. Nevertheless, this year the upward trend is expected to continue.

FIGURE 1

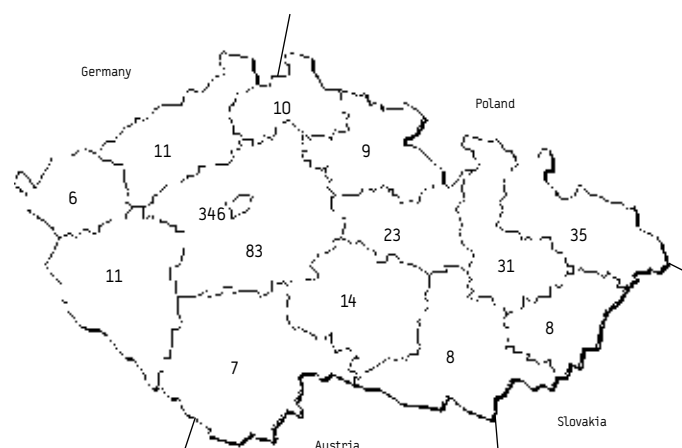
Cases of viral hepatitis A in the Czech Republic, January - September 2008 (n=602)



Note: The number of cases reported in September is not complete

FIGURE 2

Cases of viral hepatitis A by region, Czech Republic, weeks 1-39 of 2008 (n=602)



### Risk groups

A rise in HAV cases has been observed especially since calendar week 26 (starting June 22) of 2008 when injecting drug users (IDUs) were the most affected group. Substantial increase in HAV cases among IDUs was recorded in the age group 25-34 years, in particular in the Prague and Central Bohemian regions with HAV epidemic outbreaks. Until week 39 of 2008 as many as 128 HAV cases, i.e. 21.3% of the reported total, were diagnosed in IDUs and the current situation of HAV occurrence in this group could be considered as an ongoing outbreak. The lack of hygiene is the most probable reason for person-to-person transmission in this group.

The remaining majority of 474 HAV cases occurred in the general population, in clusters (such as e.g. in prisons) and in risk groups (e.g. homeless people, alcoholics). Some of those individuals could be unidentified IDUs.

### Imported cases

Investigations revealed 35 HAV cases to have been imported to the Czech Republic from other countries. Ten cases were imported from Egypt, four cases from Slovakia, three from each Croatia and Greece, two cases from each Spain, Tunisia and Turkey, and single cases from nine other countries. No case appeared to be linked to the Latvian outbreak [3,4].

### Conclusions

In the current situation characterised by a rise in HAV cases, the standard anti-epidemic measures are taken, coordinated by the Ministry of Health. They include patient isolation and quarantine, surveillance of contacts, disinfection and targeted vaccination in the outbreak areas. Post-exposure prophylaxis by vaccine was provided to HAV contacts in foci and preventive vaccination was offered to IDUs and homeless people in Prague.

HAV patients' contacts that perform activities at risk of spreading the infection (e.g. food industry) are instructed not to continue such activities and to remain under enhanced surveillance for 50 days after the last contact with the patient. The public health protection authorities issued HAV response information for school facilities and general practitioners (GPs). Information for the general public is available primarily at the websites of the National Institute of Public Health, Ministry of Health of the Czech Republic and

Regional Public Health Authorities and in the mass media. Active surveillance including detailed epidemiological investigation is ongoing.

### References

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**FIGURE 3**  
Cases of viral hepatitis A, by age, Czech Republic, weeks 1-39 of 2008 (n=602)

