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HEPATITIS A IN POLAND IN 2011

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ABSTRACT

AIM. The aim of the article is evaluation of the epidemiological situation of hepatitis A in Poland in 2011.

MATERIALS AND METHODS. Assessment of epidemiological situation of hepatitis A was based on results from analysis of the annual bulletins: "Infectious diseases and poisonings in Poland in 2011", "Vaccinations in Poland in 2011", reports from individual cases and epidemiological investigations of outbreaks linked to hepatitis A, sent by Epidemiological Departments in Sanitary Epidemiological Stations to the Department of Epidemiology at NIZP-PZH.

RESULTS. In Poland, 65 cases of hepatitis A were registered in 2011. The incidence of 0.17/100,000 was lower than in the previous year. The incidence of hepatitis A ranged from 0.07/100,000 in Dolnośląskie province to 0.52/100,000 in Śląskie province. The incidence of hepatitis A in men (0.19) was higher than in woman (0.15). Imported cases constituted 49.2% (32 cases) of the overall number of cases of hepatitis A. There were two outbreaks of hepatitis A involving 7 cases registered in 2011.

CONCLUSIONS. In the year 2011, a decrease in the number of cases was noted in comparison with the median of years 2008 - 2010. Despite the fact that the current epidemiological situation of hepatitis A in Poland is good, the disease still requires monitoring and analysis within the framework of epidemiological surveillance system.

Keywords: *hepatitis A, epidemiology, public health, Poland, 2011*

The purpose of this paper is the evaluation of the epidemiological situation of hepatitis A in Poland in 2011, in comparison with the previous years.

MATERIAL AND METHODS

The evaluation of the epidemiological situation for hepatitis A in Poland in 2011 was based on the results of data analysis from the annual bulletins "Infectious diseases and poisonings in Poland in 2011" and "Vaccinations in Poland in 2011" (Czarkowski MP et al., Warsaw, National Institute of Public Health-National Institute of Hygiene [NIZP-PZH] and Chief Sanitary Inspectorate [GIS]). An additional source were the data from individual cases and epidemiological investigations of outbreaks linked to hepatitis A, sent by Epidemiological Departments in Sanitary Stations to the Department of Epidemiology at NIZP-PZH.

RESULTS

In 2011, 65 cases of hepatitis A were recorded, of which 62 persons required hospitalization. The incidence people amounted to 0.17/100,000 (Tab. I). In 2011, cases of hepatitis A constituted 1.7 % of all the hepatitis cases in Poland.

The cases of hepatitis A occurred in 10 voivodeships. On top of this, in comparison with the previous year, a decrease in the number of cases of hepatitis A was observed; the greatest decrease was noticeable in Wielkopolskie province - five times lower, and also in Dolnośląskie province - four times lower and Mazowieckie province - three times lower. The incidence of hepatitis A ranged from 0.07/100,000 in Dolnośląskie province to 0.52/100,000 in Śląskie province (tab. I).

The incidence of hepatitis A was highest in the age group of 35 to 39 years and amounted to 0.36/100,000; the cases in this age group constituted 17% of all the

Table I. Hepatitis A in Poland in 2010-2011. Number of cases, incidence per 100,000 population and hospitalization by provinces

Province	2010			2011		
	Number of cases	Incidence	Number of hospitalizations (%)	Number of cases	Incidence	Number of hospitalizations (%)
Poland	155	0.41	152 (98.1)	65	0.17	62 (95.4)
Dolnośląskie	9	0.31	9 (100)	2	0.07	2 (100)
Kujawsko-Pomorskie	5	0.24	5 (100)	4	0.19	4 (100)
Lubelskie	2	0.09	2 (100)	-	-	-
Lubuskie	1	0.1	1 (100)	-	-	-
Łódzkie	3	0.12	3 (100)	-	-	-
Małopolskie	6	0.18	6 (100)	7	0.21	7 (100)
Mazowieckie	37	0.71	37 (100)	11	0.21	9 (81.8)
Opolskie	2	0.19	2 (100)	1	0.1	1 (100)
Podkarpackie	6	0.29	6 (100)	3	0.14	3 (100)
Podlaskie	3	0.25	3 (100)	-	-	-
Pomorskie	2	0.09	2 (100)	3	0.13	3 (100)
Śląskie	35	0.75	35 (100)	24	0.52	24 (100)
Świętokrzyskie	1	0.08	1 (100)	-	-	-
Warmińsko-Mazurskie	3	0.21	3 (100)	-	-	-
Wielkopolskie	35	1.03	32 (91.4)	7	0.2	7 (100)
Zachodniopomorskie	5	0.3	5 (100)	3	0.17	2 (66.7)

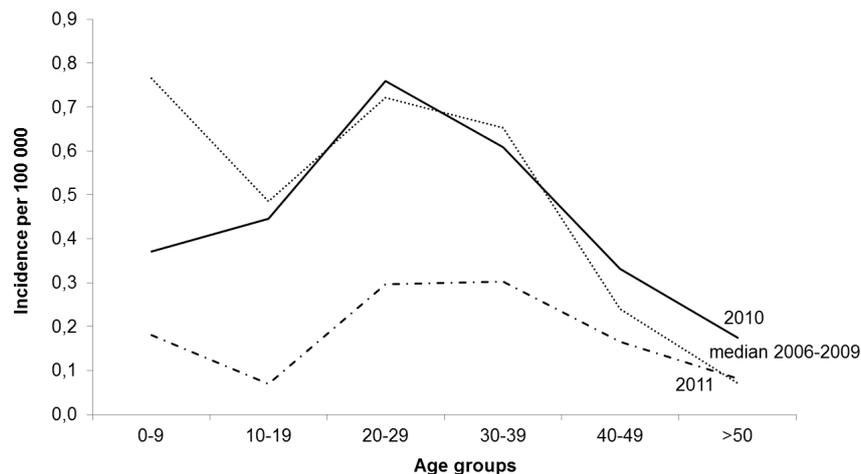


Fig 1. Hepatitis A in Poland in 2006-2011. Incidence per 100,000 population by age

reported cases of hepatitis A (Tab.II). The tendency towards an increase in the frequency of infections observed among persons from the older age groups and in the group of the youngest children has been maintained for several years (fig. 1).

The incidence of hepatitis A in men and women was at an approximate level and amounted to 0.19 and 0.15/100,000 respectively. As in previous year, the highest incidence in women was recorded in the age groups of 5 to 9 years (0.45/100,000), and 40 to 44 years (0.34/100,000). Among men the peak of incidences occurred in the age groups of 25 to 29 years (0.48/100,000) and 35 to 39 years (0.42/100,000). No cases of hepatitis A were registered among persons older than 65 (Tab. II).

In 2011 in total 45 490 of people were vaccinated against hepatitis A. Just as in the previous years, the largest number of persons was vaccinated in Mazowieckie province (41.2 % of all persons vaccinated against hepatitis A in Poland) (tab. III).

In 2011, 49.2% of all cases of hepatitis A were imported. It follows from the epidemiological interviews that most of the patients before infection stayed in areas of high or medium endemic. The most frequently mentioned source country was Egypt (Tab. IV), and the main purpose of travel was tourism. Except for the years 2008-2009, the percentage share of imported cases in the overall cases of hepatitis A stays at a relatively steady level and constitutes about 50% (fig. 2).

In 2011, two outbreaks of hepatitis A were observed, in which 7 persons became ill.

Table II. Hepatitis A in Poland 2010-2011. Number of cases, incidence per 100,000 population and by age, sex

Age group (years)	2010						2011					
	Male		Female		Total		Male		Female		Total	
	Number of cases	Incidence										
0-4	9	0.94	11	1.22	5	0.25	1	0.09	2	0.2	3	0.15
5-9	14	1.48	20	2.23	9	0.5	-	-	4	0.45	4	0.22
10-14	12	1.08	7	0.66	5	0.25	1	0.1	1	0.1	2	0.1
15-19	6	0.44	6	0.46	15	0.61	1	0.08	-	-	1	0.04
20-24	12	0.75	5	0.32	22	0.76	5	0.35	2	0.14	7	0.25
25-29	28	1.73	8	0.51	25	0.76	8	0.48	3	0.19	11	0.34
30-34	16	1.07	9	0.62	14	0.46	5	0.31	3	0.19	8	0.26
35-39	13	1.02	5	0.4	21	0.78	6	0.42	4	0.29	10	0.36
40-44	6	0.5	3	0.25	11	0.47	3	0.25	4	0.34	7	0.29
45-49	3	0.22	4	0.29	5	0.2	1	0.08	-	-	1	0.04
50-54	1	0.07	3	0.19	11	0.37	3	0.21	4	0.27	7	0.24
55-59	4	0.31	x	x	6	0.21	1	0.07	2	0.13	3	0.1
60-64	1	0.12	x	x	2	0.09	-	-	1	0.08	1	0.04
65-74	x	x	1	0.06	4	0.15	-	-	-	-	-	-
75+	1	0.13	x	x	x	x	-	-	-	-	-	-
Ogółem	98	0.53	57	0.29	155	0.41	35	0.19	30	0.15	65	0.17

Table III. Number and percentage of persons vaccinated in Poland against hepatitis A in the years 2010-2011, by provinces

Provinces	2010		2011	
	Number of vaccinated	%	Number of vaccinated	%
Poland	46 758	100	45 490	100
Dolnośląskie	2635	5.6	2891	6.4
Kujawsko-Pomorskie	2102	4.5	1142	2.5
Lubelskie	623	1.3	588	1.3
Lubuskie	716	1.5	447	1.0
Łódzkie	2059	4.4	1983	4.4
Małopolskie	2819	6.0	4517	9.9
Mazowieckie	18907	40.4	18753	41.2
Opolskie	543	1.2	532	1.2
Podkarpackie	780	1.7	964	2.1
Podlaskie	633	1.4	460	1.0
Pomorskie	2327	5.0	3651	8.0
Śląskie	4664	10.0	4089	9.0
Świętokrzyskie	309	0.7	455	1.0
Warmińsko-Mazurskie	1009	2.2	633	1.4
Wielkopolskie	4548	9.7	2780	6.1
Zachodniopomorskie	2084	4.5	1605	3.5

Table IV. Number of imported hepatitis A cases in Poland in 2011 by country of exposure

Continent	Country	Number of cases
Africa n=26	Egypt	15
	Ethiopia	1
	Gambia	1
	Turkey, Cyprus	2
	Turkey	3
	Kenya	1
	Mozambique	1
	Madagascar	1
	Morocco	1
	South America	Venezuela
Europe n=5	Germany	2
	Romania	2
	Italy, Spain, France	1
Total		32

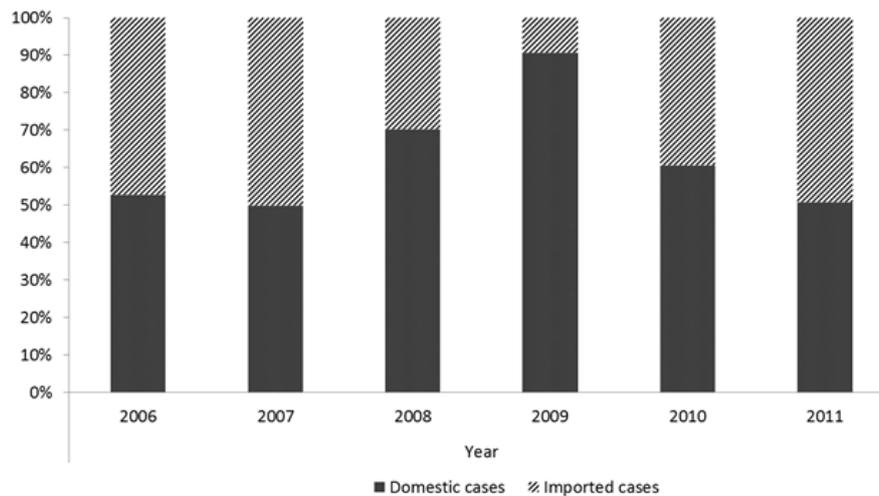


Fig 2. Percentage of imported cases of hepatitis A in Poland in 2006-2011.

Tabela V. The selected outbreaks of hepatitis A registered in Poland in 2011.

Province	number of			Place and circumstances of the outbreak
	exposed	cases	cases up to 14 years old	
Mazowieckie	6	2	0	Imported cases
Śląskie	16	5	5	Not known

SUMMARY AND CONCLUSIONS

In the year 2011, an improvement in the epidemiological situation of hepatitis A was observed in comparison with the years 2008-2010. The low incidence (0.17/100,000), the occurrence of cases mainly in the age group of 5 to 39 years and the high share of imported infections cause the present epidemiological situation of hepatitis A to be identified not as endemic, but as the occurrence of sporadic cases.

A period of decreased incidence facilitates the accumulation of a fairly numerous population of persons susceptible to infection which is connected with the possibility of an increase in the number of affected

persons, or even occurrence of a local or compensatory epidemic in the near future. Therefore, the epidemiological situation of hepatitis A requires further monitoring and analysis within the framework of epidemiological surveillance system.

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