

# Epidemiological Reports

## Influenza and influenza-like illness in Poland

National Institute of Public Health - National Institute of Hygiene • Department of Epidemiology and Department of Influenza Research. National Influenza Center  
Chief Sanitary Inspectorate • Department for Communicable Disease and Infection Prevention and Control

Year: **2012**

Month: **January**

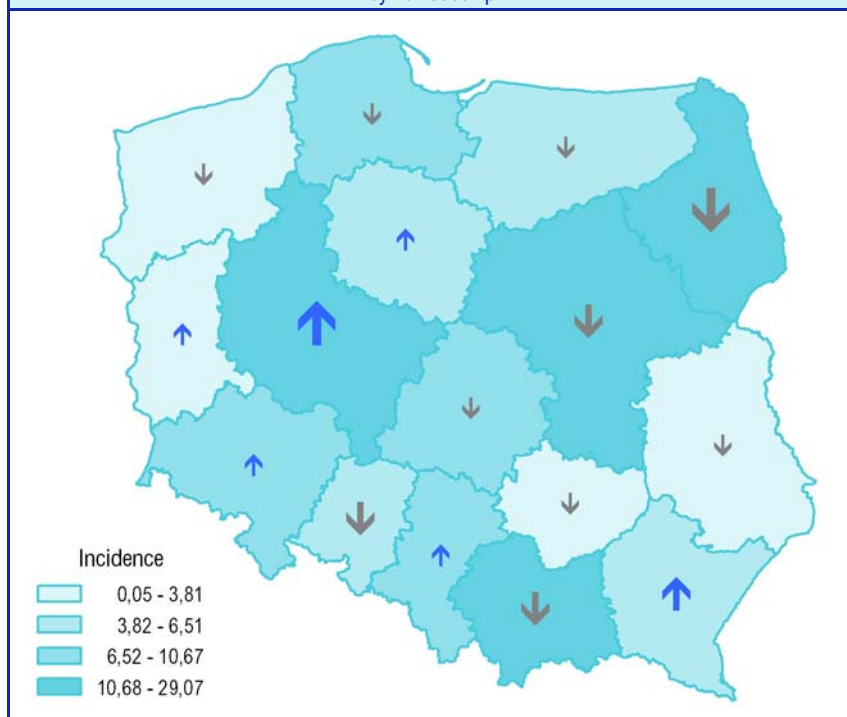
Number: **1D (4)**

Period: **23 – 31 January**

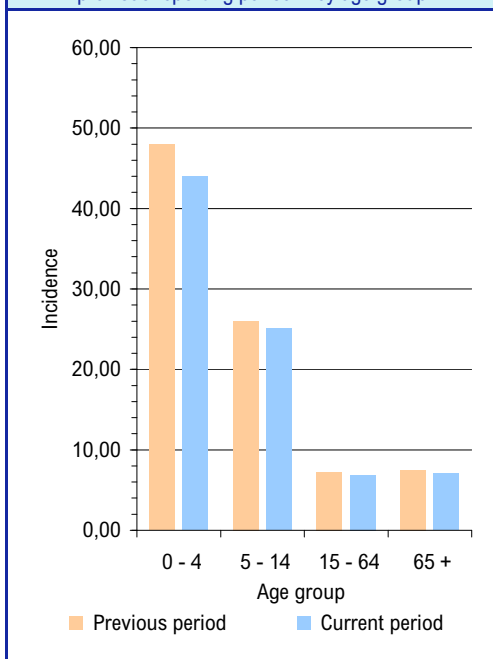
### Cases of influenza and influenza-like illness between 23 and 31 January 2012 by age group and voivodeship

Voivodeship	Total number of cases and incidence			Age (completed years)							
				0 – 4		5 – 14		15 – 64		65+	
	number	incidence <sup>1)</sup>	change in incidence <sup>2,3)</sup>	number	incidence <sup>1)</sup>	number	incidence <sup>1)</sup>	number	incidence <sup>1)</sup>	number	incidence <sup>1)</sup>
POLAND	36576	10,64	-0,61	7957	43,96	8408	25,07	16876	6,89	3335	7,06
Dolnośląskie	2141	8,27	0,06	498	38,35	503	21,74	912	4,86	228	6,48
Kujawsko-Pomorskie	965	5,18	0,89	250	25,07	241	12,83	407	3,05	67	2,81
Lubelskie	697	3,61	-0,26	130	13,18	203	10,39	305	2,25	59	2,09
Lubuskie	53	0,58	0,43	3	0,61	9	1,00	35	0,53	6	0,55
Łódzkie	2430	10,67	-1,16	417	37,44	576	27,96	1134	7,04	303	8,72
Małopolskie	5086	17,05	-3,36	909	55,89	1241	40,09	2604	12,40	332	8,08
Mazowieckie	6787	14,36	-3,55	1612	61,60	1303	28,62	3266	9,85	606	8,75
Opolskie	602	6,51	-2,92	70	17,49	94	11,39	350	5,23	88	6,63
Podkarpackie	978	5,17	2,27	181	18,66	279	13,89	451	3,36	67	2,66
Podlaskie	1421	13,30	-8,10	386	73,93	372	35,43	536	7,12	127	8,01
Pomorskie	2132	10,56	-0,07	523	43,68	473	22,32	799	5,56	337	13,45
Śląskie	3036	7,28	0,47	572	27,69	614	16,54	1539	5,15	311	5,16
Świętokrzyskie	6	0,05	-0,15	-	-	-	-	6	0,07	-	-
Warmińsko-Mazurskie	708	5,51	-1,75	212	30,00	195	14,49	265	2,86	36	2,35
Wielkopolskie	8954	29,07	4,82	2050	115,29	2173	68,63	4011	18,14	720	19,21
Zachodniopomorskie	580	3,81	-0,36	144	18,47	132	8,99	256	2,31	48	2,51

Incidence <sup>1)</sup> between 23 and 31 January 2012 in comparison to the previous reporting period <sup>3)</sup> by voivodeship



Incidence <sup>1)</sup> between 23 and 31 January 2012 and in the previous reporting period <sup>3)</sup> by age group

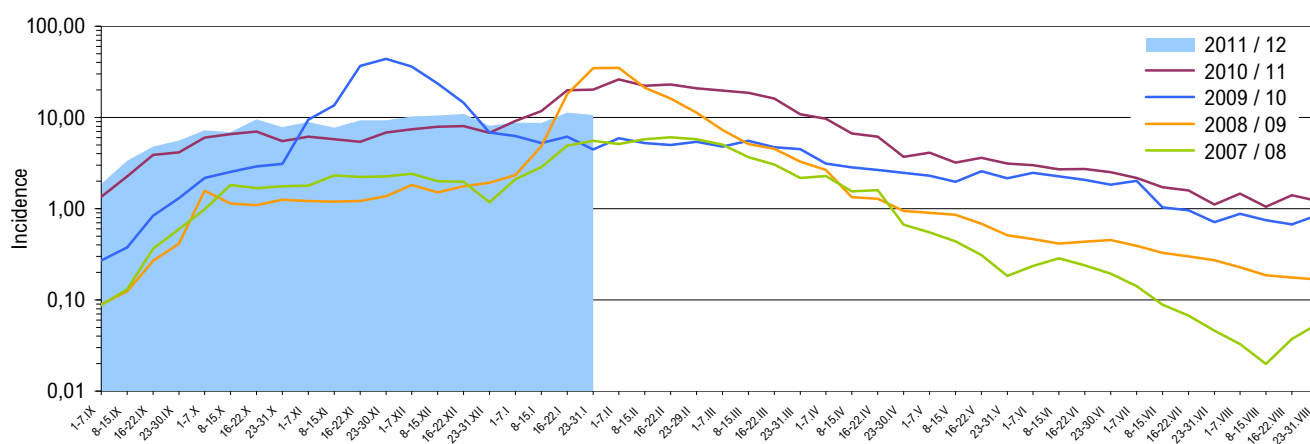


#### Notes:

- 1) Mean daily incidence per 100 000 population (as of 30 June 2011).
- 2) In comparison with the previous reporting period.
- 3) Previous reporting period: 16 - 22 January 2012.

**Symbols used in tables and figures:** Dash (-) event did not occur ("zero"); **Zero (0,0)** event occurred, but in numbers that could not be expressed in digits demonstrated in the table; **Dot (.)** complete lack of information or lack of credible information; **Letter x (x)** considering a layout of the table, filling in of the cell is not possible or inadvisable ("not applicable"); **Comma (.)** represents the decimal point.

Influenza and influenza-like illness incidence <sup>1)</sup> in the epidemic season 2011/2012 when compared with the previous seasons according to the periodical reports



### Vaccination against influenza

Vaccination against influenza recommend in the polish "Vaccination schedule 2011"

The clinical and individual criteria:

- 1) people with chronic medical conditions (asthma, diabetes, cardiovascular, respiratory or renal failure);
- 2) people with immune deficiency;
- 3) elderly individuals, over 55 years.

The epidemiological criteria:

- 1) health care, schools, trade and transport workers and others exposed to contact with large numbers of people;
- 2) health children from ages six months to 18 years.

Statement of the Chief Sanitary Inspector of October 28th, 2010 on Vaccination Schedule per year 2011 (Dz. Urz. MZ. Nr 12, poz. 70)

### Persons referred to hospitals due to influenza or suspicion of influenza between 23 and 31 January 2012 by reason and voivodeship

Voivodeship	Total		Reasons for hospital referrals <sup>2)</sup>					
			cardiovascular symptoms		respiratory symptoms		other reasons	
	number	% <sup>3)</sup>	number	% <sup>4)</sup>	number	% <sup>4)</sup>	number	% <sup>4)</sup>
POLAND	112	0,31	1	0,9	109	97,3	2	1,8
Dolnośląskie	3	0,14	-	-	3	100,0	-	-
Kujawsko-Pomorskie	-	-	x	x	x	x	x	x
Lubelskie	-	-	x	x	x	x	x	x
Lubuskie	1	1,89	-	-	-	-	1	100,0
Łódzkie	1	0,04	-	-	1	100,0	-	-
Małopolskie	33	0,65	-	-	33	100,0	-	-
Mazowieckie	44	0,65	-	-	44	100,0	-	-
Opolskie	1	0,17	-	-	1	100,0	-	-
Podkarpackie	1	0,10	1	100,0	-	-	-	-
Podlaskie	2	0,14	-	-	2	100,0	-	-
Pomorskie	1	0,05	-	-	1	100,0	-	-
Śląskie	3	0,10	-	-	3	100,0	-	-
Świętokrzyskie	-	-	x	x	x	x	x	x
Warmińsko-Mazurskie	6	0,85	-	-	6	100,0	-	-
Wielkopolskie	16	0,18	-	-	15	93,8	1	6,3
Zachodniopomorskie	-	-	x	x	x	x	x	x

### Deaths due to influenza between 23 and 31 January 2012 by age group and voivodeship

Voivodeship	Total	Age (completed years)			
		0 – 4	5 – 14	15 – 64	65 +
POLAND	1	-	-	1	-
Dolnośląskie	-	-	-	-	-
Kujawsko-Pomorskie	-	-	-	-	-
Lubelskie	-	-	-	-	-
Lubuskie	-	-	-	-	-
Łódzkie	-	-	-	-	-
Małopolskie	-	-	-	-	-
Mazowieckie	1	-	-	1	-
Opolskie	-	-	-	-	-
Podkarpackie	-	-	-	-	-
Podlaskie	-	-	-	-	-
Pomorskie	-	-	-	-	-
Śląskie	-	-	-	-	-
Świętokrzyskie	-	-	-	-	-
Warmińsko-Mazurskie	-	-	-	-	-
Wielkopolskie	-	-	-	-	-
Zachodniopomorskie	-	-	-	-	-

### Notes:

1) Mean daily incidence per 100 000 population as of 30 June of a given year (in 2012 population as of 30 June 2011 was used for calculations).

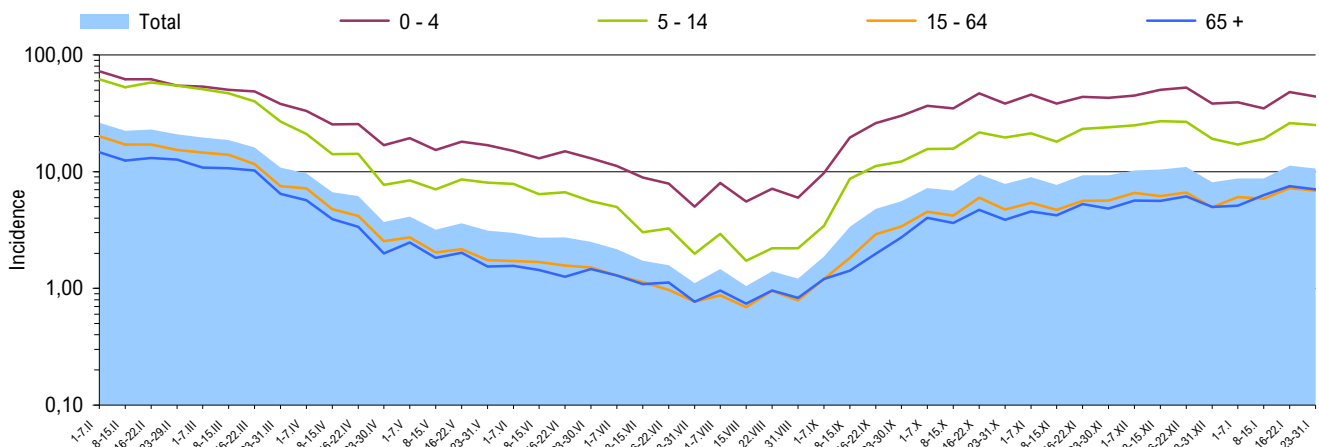
2) One person may be included in more than one column.

3) With reference to the total number of registered influenza cases and suspected cases of influenza.

4) With reference to the total number of persons referred to hospitals due to influenza or suspicion of influenza.

### Data sources (1)

**Numbers of cases, suspected cases and deaths:** Data from the periodical, cumulative reports on influenza and suspected of influenza cases sent to the Poviats Sanitary-Epidemiological Stations by all health care units visited by patients as well as data from death reports sent to the Poviats and/or Voivodeship Sanitary-Epidemiological Stations by physicians, that are then sent by Voivodeship Sanitary-Epidemiological Stations in the aggregated form to the Department of Epidemiology, NIPH-NIH.

Influenza and influenza-like illness Incidence<sup>1)</sup> between 1 February 2011 and 31 January 2012 by age group and according to the periodical reports

## Specimens collected from patients with influenza symptoms or influenza-like symptoms tested in the epidemic season 2011/2012 according to voivodeships

Voivodeship	Specimens collected between 05.09.2011 and 29.01.2012 r. (weeks 36/2011 - 4/2012) <sup>2)</sup>				Of which specimens collected between 23 and 29 January 2012 (week 4/2012) <sup>2)</sup>			
	total		positive <sup>3)</sup>		total		positive <sup>3)</sup>	
	number	frequency of sampl. <sup>4)</sup>	number	%	number	frequency of sampl. <sup>4)</sup>	number	%
POLAND	215	0,5	5	2,3	10	0,4	-	-
Dolnośląskie	-	-	x	x	-	-	x	x
Kujawsko-Pomorskie	3	0,4	-	-	-	-	x	x
Lubelskie	7	0,9	-	-	-	-	x	x
Lubuskie	16	50,8	1	6,3	-	-	x	x
Łódzkie	31	1,1	1	3,2	3	1,6	-	-
Małopolskie	7	0,1	-	-	2	0,5	-	-
Mazowieckie	29	0,3	-	-	-	-	x	x
Opolskie	1	0,1	-	-	-	-	x	x
Podkarpackie	17	1,6	-	-	-	-	x	x
Podlaskie	10	0,7	-	-	2	1,8	-	-
Pomorskie	1	0,1	-	-	1	0,6	-	-
Śląskie	-	-	x	x	-	-	x	x
Świętokrzyskie	4	43,0	1	25,0	-	-	x	x
Warmińsko-Mazurskie	1	0,1	-	-	-	-	x	x
Wielkopolskie	20	0,2	-	-	-	-	x	x
Zachodniopomorskie	68	8,6	2	2,9	2	4,4	-	-

## Data sources (2)

**Numbers of specimens and results of testing:** Data from weekly reports sent to the National Influenza Center, NIPH-NIH by Voivodeship Sanitary-Epidemiological Stations, which received specimens for testing from family physicians participating in the influenza surveillance Sentinel. Specimens are collected from patients suspected to be infected with influenza virus or other respiratory viruses (RSV, parainfluenza, adenovirus).

## SENTINEL

Influenza Sentinel is a system of integrated epidemiological and virological surveillance of influenza that exists in Poland since the epidemic season 2004/2005. The following institutions participate in the system: a representative number of family physicians, sanitary-epidemiological stations and the National Influenza Center, NIPH-NIH as a coordinator.

## Notes:

- 1) Mean daily incidence per 100,000 population (as of 30 June 2011).
- 2) Reporting periods used in the Sentinel influenza surveillance system – calendar numbering of weeks (Monday - Sunday).
- 3) Tests for confirmation of infections with the following viruses: influenza A, influenza B, RSV (Respiratory Syncytial Virus), parainfluenza type 1, parainfluenza type 2, parainfluenza type 3 and adenovirus. Testing to diagnose infections with respiratory viruses other than influenza is not performed routinely.
- 4) Number of the collected specimens per 1000 influenza and influenza-like cases registered in the reporting period.

## Specimens collected from the patients presenting influenza or influenza-like symptoms tested in the epidemic season 2011/2012 by age group

Age (in years)	Specimens collected between 05.09.2011 and 29.01.2012 (weeks 36/2011 - 4/2012) <sup>2)</sup>				Of which specimens collected between 23 and 29 January 2012 (week 4/2012) <sup>2)</sup>			
	total		positive <sup>3)</sup>		total		positive <sup>3)</sup>	
	number	frequency of sampl. <sup>4)</sup>	number	%	number	frequency of sampl. <sup>4)</sup>	number	%
0-4	17	0,1	1	5,9	-	-	x	x
5-14	25	0,2	-	-	-	-	x	x
15-64	156	0,8	4	2,6	6	0,5	-	-
65+	14	0,4	-	-	4	1,5	-	-
No data	3	x	-	-	-	-	x	x
TOTAL	215	0,5	5	2,3	10	0,4	-	-

Number of laboratory confirmed <sup>1)</sup> infections with influenza virus or other respiratory viruses <sup>2)</sup> in the epidemic season 2011/2012 by pathogen and voivodeship

Voivodeship	Specimens collected between 05.09.2011 and 29.01.2012 (weeks 36/2011 - 4/2012) <sup>3)</sup>								
	influenza				RSV	parainfluenza			adeno-virus
	A	A/H1	A/H3	B		type 1	type 2	type 3	
POLAND	-	-	-	1	4	-	-	-	-
Dolnośląskie	-	-	-	-	-	-	-	-	-
Kujawsko-Pomorskie	-	-	-	-	-	-	-	-	-
Lubelskie	-	-	-	-	-	-	-	-	-
Lubuskie	-	-	-	-	1	-	-	-	-
Łódzkie	-	-	-	-	1	-	-	-	-
Małopolskie	-	-	-	-	-	-	-	-	-
Mazowieckie	-	-	-	-	-	-	-	-	-
Opolskie	-	-	-	-	-	-	-	-	-
Podkarpackie	-	-	-	-	-	-	-	-	-
Podlaskie	-	-	-	-	-	-	-	-	-
Pomorskie	-	-	-	-	-	-	-	-	-
Śląskie	-	-	-	-	-	-	-	-	-
Świętokrzyskie	-	-	-	1	-	-	-	-	-
Warmińsko-Mazurskie	-	-	-	-	-	-	-	-	-
Wielkopolskie	-	-	-	-	-	-	-	-	-
Zachodniopomorskie	-	-	-	-	2	-	-	-	-

### Influenza websites

www.ecdc.europa.eu/en/healthtopics/influenza  
ECDC: Influenza

www.who.int/topics/influenza/en  
WHO: Influenza

www.who.int/csr/disease/influenza  
WHO: Epidemic and Pandemic Alert and Response – Influenza / Surveillance

www.euro.who.int/flu  
WHO: Influenza and avian influenza

www.cdc.gov/flu/  
CDC: Seasonal Influenza (Flu)

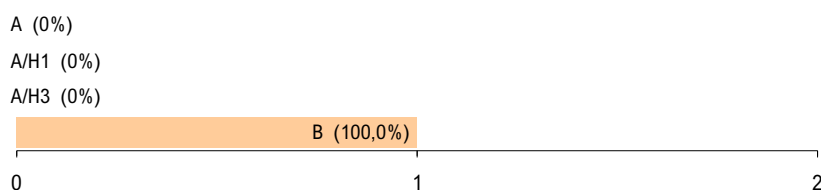
www.pandemicflu.gov  
U.S. Government avian and pandemic flu information

### Explanations:

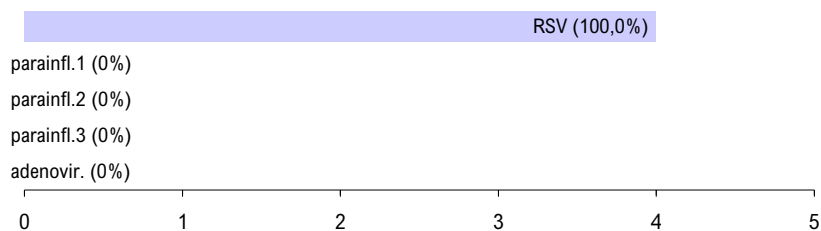
- 1) Isolation of virus, detection of virus antigen by immunofluorescence test (IF), detection of RNA/DNA specific for a given virus by molecular methods (PCR, real-time PCR).
- 2) Testing for infections with respiratory viruses other than influenza is not performed routinely.
- 3) Reporting periods used in the SENTINEL influenza surveillance system – calendar numbering of weeks (Monday - Sunday).
- 4) Identification of the isolated influenza virus strains is performed in the National Influenza Center, NIPH-NIH.

Laboratory confirmed <sup>1)</sup> infections with influenza virus or other respiratory viruses <sup>2)</sup> and strains of influenza virus isolated <sup>4)</sup> in the epidemic season 2011/2012 by pathogen

#### Influenza: number and percentage of laboratory confirmations by type of the virus



#### Other respiratory viruses: number and percentage of laboratory confirmations by pathogen



#### Influenza: number and percentage of the isolated influenza virus strains by type/subtype <sup>5)</sup>



#### Number of influenza virus strains isolated <sup>5)</sup> in the epidemic season 2011/2012 by type and voivodeship

Voivodeship	Specimens collected between 05.09.2011 and 29.01.2012		
	A/H1	A/H3	B
POLAND	-	-	-
Dolnośląskie	-	-	-
Kujawsko-Pomorskie	-	-	-
Lubelskie	-	-	-
Lubuskie	-	-	-
Łódzkie	-	-	-
Małopolskie	-	-	-
Mazowieckie	-	-	-
Opolskie	-	-	-
Podkarpackie	-	-	-
Podlaskie	-	-	-
Pomorskie	-	-	-
Śląskie	-	-	-
Świętokrzyskie	-	-	-
Warmińsko-Mazurskie	-	-	-
Wielkopolskie	-	-	-
Zachodniopomorskie	-	-	-

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