

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: **2017**

Month: **February**

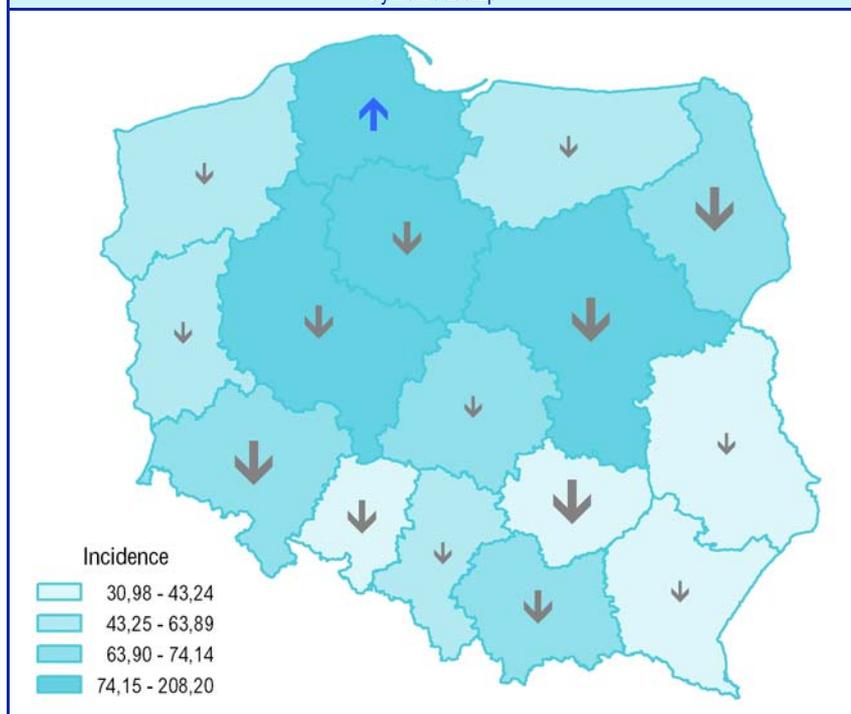
Number: **2B (6)**

Period: **8 – 15 February**

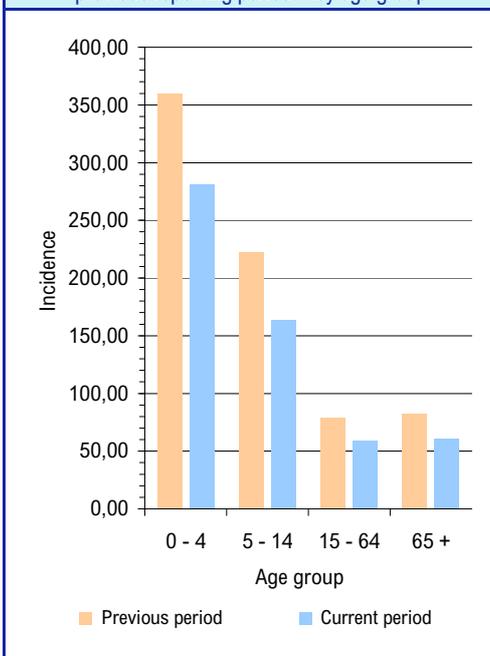
Cases of influenza and influenza-like illness between 8 and 15 February 2017 by age group and voivodeship

Voivodeship	Total number of cases and incidence			Age (completed years)							
				0 – 4		5 – 14		15 – 64		65+	
	number	incidence ¹⁾	change in incidence ^{2,3)}	number	incidence ¹⁾	number	incidence ¹⁾	number	incidence ¹⁾	number	incidence ¹⁾
POLAND	249600	81,13	-26,89	43023	281,37	50501	164,11	127048	59,42	29028	60,79
Dolnośląskie	17233	74,14	-39,64	2573	236,72	3338	153,94	8780	53,85	2542	69,01
Kujawsko-Pomorskie	12923	77,38	-26,91	2368	291,37	2100	122,98	6896	59,06	1559	62,25
Lubelskie	6602	38,51	-14,70	881	108,39	1618	94,23	3363	28,37	740	26,81
Lubuskie	4559	55,90	-17,00	702	173,51	785	94,41	2542	44,25	530	45,09
Łódzkie	13863	69,36	-25,50	1815	195,07	2747	147,02	7075	51,56	2226	64,22
Małopolskie	19286	71,52	-34,92	3934	277,30	3295	116,69	9679	51,86	2378	58,57
Mazowieckie	43020	100,69	-42,42	8024	348,58	9598	218,52	21260	72,82	4138	60,51
Opolskie	3455	43,24	-34,69	513	149,06	582	82,20	1859	32,91	501	38,84
Podkarpackie	5273	30,98	-18,58	629	76,08	1046	59,07	2849	23,89	749	30,01
Podlaskie	6394	67,15	-51,94	1253	283,94	1250	134,32	3108	46,83	783	51,75
Pomorskie	38388	208,20	15,52	7630	760,50	9964	498,20	17377	135,93	3417	128,91
Śląskie	23398	63,89	-16,21	3814	217,97	4683	137,99	12510	49,07	2391	39,96
Świętokrzyskie	3529	35,01	-45,73	649	145,64	552	58,03	1842	26,38	486	28,59
Warmińsko-Mazurskie	6006	52,05	-12,80	898	157,47	1094	90,50	3233	39,55	781	49,32
Wielkopolskie	37462	134,80	-37,96	6256	415,78	6175	208,96	20315	105,01	4716	118,32
Zachodniopomorskie	8209	59,87	-13,78	1084	170,29	1674	124,52	4360	45,08	1091	53,02

Incidence ¹⁾ between 8 and 15 February 2017 in comparison to the previous reporting period ³⁾ by voivodeship



Incidence ¹⁾ between 8 and 15 February 2017 and in the previous reporting period ³⁾ by age group

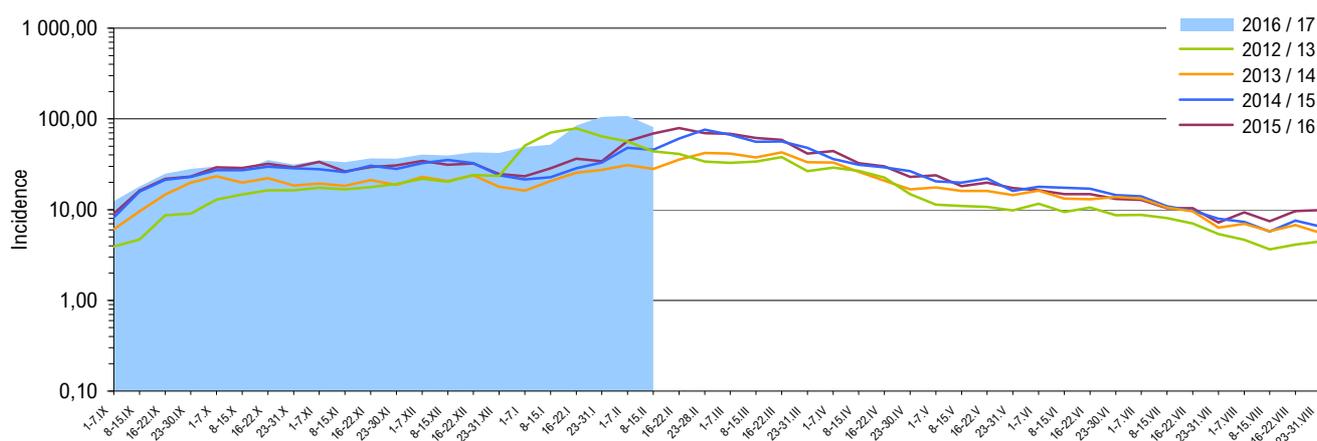


Notes:

- 1) Mean daily incidence per 100 000 population (as of 30 June 2016).
- 2) In comparison with the previous reporting period.
- 3) Previous reporting period: 1 - 7 February 2017.

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 ¹⁾ in the epidemic season 2016/2017 when compared with the previous seasons according to the periodical reports



Vaccination against influenza

Vaccination is the most effective way to prevent infection and severe outcomes caused by influenza viruses.

Vaccination is especially important for people at higher risk of serious influenza complications, and for people who live with or care for high risk individuals.

WHO recommends seasonal influenza vaccination for:

- Highest priority:
 - Pregnant women
- Priority (in no particular order):
 - Children aged 6-59 months
 - Elderly
 - Individuals with specific chronic medical conditions
 - Health-care workers

Source: <http://www.who.int/influenza/vaccines/use/en>

Persons referred to hospitals due to influenza or suspicion of influenza between 8 and 15 February 2017 by reason and voivodeship

Voivodeship	Total		Reasons for hospital referrals ²⁾					
			cardiovascular symptoms		respiratory symptoms		other reasons	
	number	% ³⁾	number	% ⁴⁾	number	% ⁴⁾	number	% ⁴⁾
POLAND	1265	0,51	63	5,0	1195	94,5	140	11,1
Dolnośląskie	89	0,52	3	3,4	86	96,6	-	-
Kujawsko-Pomorskie	81	0,63	1	1,2	77	95,1	13	16,0
Lubelskie	20	0,30	-	-	19	95,0	2	10,0
Lubuskie	31	0,68	-	-	28	90,3	4	12,9
Łódzkie	45	0,32	-	-	44	97,8	1	2,2
Małopolskie	131	0,68	5	3,8	119	90,8	7	5,3
Mazowieckie	134	0,31	6	4,5	115	85,8	13	9,7
Opolskie	5	0,14	-	-	5	100,0	-	-
Podkarpackie	39	0,74	9	23,1	30	76,9	2	5,1
Podlaskie	97	1,52	1	1,0	96	99,0	-	-
Pomorskie	159	0,41	10	6,3	157	98,7	34	21,4
Śląskie	71	0,30	2	2,8	65	91,5	13	18,3
Świętokrzyskie	29	0,82	17	58,6	29	100,0	-	-
Warmińsko-Mazurskie	20	0,33	-	-	20	100,0	-	-
Wielkopolskie	250	0,67	3	1,2	243	97,2	19	7,6
Zachodniopomorskie	64	0,78	6	9,4	62	96,9	32	50,0

Deaths due to influenza between 8 and 15 February 2017 by age group and voivodeship

Voivodeship	Total	Age (completed years)			
		0 – 4	5 – 14	15 – 64	65 +
POLAND	5	-	-	-	5
Dolnośląskie	-	-	-	-	-
Kujawsko-Pomorskie	-	-	-	-	-
Lubelskie	-	-	-	-	-
Lubuskie	-	-	-	-	-
Łódzkie	-	-	-	-	-
Małopolskie	-	-	-	-	-
Mazowieckie	1	-	-	-	1
Opolskie	-	-	-	-	-
Podkarpackie	-	-	-	-	-
Podlaskie	-	-	-	-	-
Pomorskie	-	-	-	-	-
Śląskie	2	-	-	-	2
Świętokrzyskie	-	-	-	-	-
Warmińsko-Mazurskie	-	-	-	-	-
Wielkopolskie	2	-	-	-	2
Zachodniopomorskie	-	-	-	-	-

Notes:

1) Mean daily incidence per 100 000 population as of 30 June of a given year (in 2017 population as of 30 June 2016 was used for calculations).

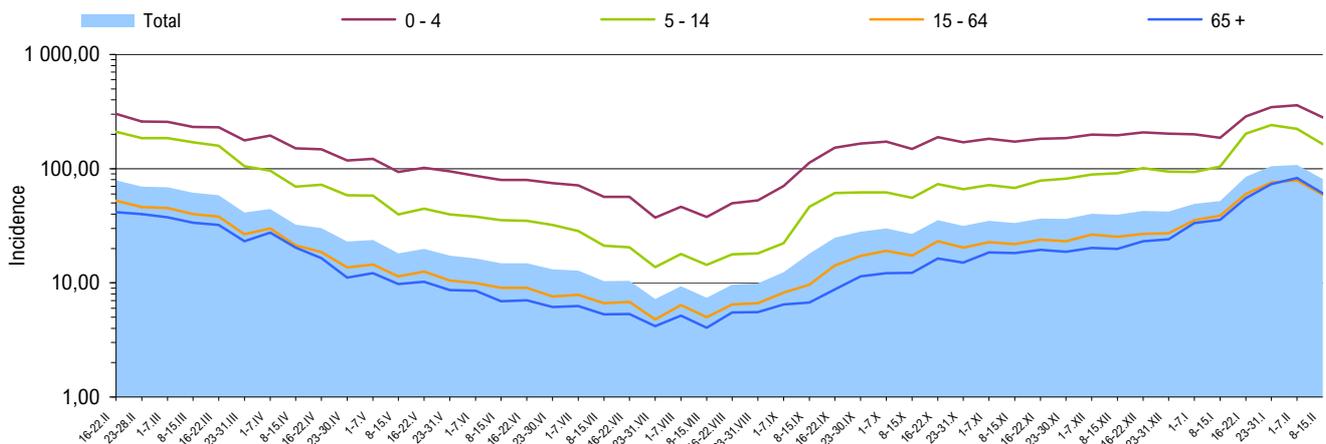
2) One person may be included in more than one column.

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. In "Reports" - according to definition of influenza applied for the surveillance of communicable diseases in the European Union (OJ L 262, 27.9.2012) - is reported influenza (diagnosed clinically and/or laboratory) and all clinically diagnosed influenza-like illness and acute respiratory infections which meet the definition criteria.

Influenza and influenza-like illness Incidence¹⁾ between 16 February 2016 and 15 February 2017 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 2016/2017 according to voivodships

Voivodship	Specimens collected between 05.09.2016 and 12.02.2017 r. (weeks 36/2016 - 6/2017) ²⁾				Of which specimens collected between 6 and 12 February 2017 (week 6/2017) ²⁾			
	total		positive ³⁾		total		positive ³⁾	
	number	frequency of sampl. ⁴⁾	number	%	number	frequency of sampl. ⁴⁾	number	%
POLAND	824	0,3	445	54,0	132	0,6	70	53,0
Dolnośląskie	57	0,4	56	98,2	2	0,1	1	50,0
Kujawsko-Pomorskie	57	0,3	16	28,1	10	0,8	3	30,0
Lubelskie	18	0,2	11	61,1	3	0,5	2	66,7
Lubuskie	10	0,2	2	20,0	-	-	x	x
Łódzkie	32	0,2	19	59,4	1	0,1	1	100,0
Małopolskie	23	0,1	8	34,8	-	-	x	x
Mazowieckie	72	0,1	52	72,2	8	0,2	5	62,5
Opolskie	49	1,1	7	14,3	6	1,6	2	33,3
Podkarpackie	125	2,2	83	66,4	7	1,3	4	57,1
Podlaskie	14	0,2	9	64,3	3	0,4	2	66,7
Pomorskie	9	0,0	8	88,9	1	0,0	1	100,0
Śląskie	46	0,2	26	56,5	1	0,0	-	-
Świętokrzyskie	3	0,1	3	100,0	-	-	x	x
Warmińsko-Mazurskie	24	0,5	17	70,8	4	0,7	3	75,0
Wielkopolskie	110	0,3	53	48,2	28	0,8	9	32,1
Zachodniopomorskie	175	3,1	75	42,9	58	7,6	37	63,8

Data sources (2)

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

SENTINEL

Influenza Sentinel is a selective 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 2016).
- 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 2016/2017 by age group

Age (in years)	Specimens collected between 05.09.2016 and 12.02.2017 (weeks 36/2016 - 6/2017) ²⁾				Of which specimens collected between 6 and 12 February 2017 (week 6/2017) ²⁾			
	total		positive ³⁾		total		positive ³⁾	
	number	frequency of sampl. ⁴⁾	number	%	number	frequency of sampl. ⁴⁾	number	%
0 - 4	62	0,1	33	53,2	13	0,3	6	46,2
5 - 14	94	0,2	59	62,8	15	0,3	9	60,0
15 - 64	591	0,4	306	51,8	92	0,8	49	53,3
65 +	64	0,2	36	56,3	9	0,3	5	55,6
No data	13	x	11	84,6	3	x	1	33,3
TOTAL	824	0,3	445	54,0	132	0,6	70	53,0

Number of laboratory confirmed ¹⁾ infections with influenza virus or other respiratory viruses ²⁾ in the epidemic season 2016/2017 by selected pathogens and voivodships

Voivodship	Specimens collected between 05.09.2016 and 12.02.2017 (weeks 36/2016 - 6/2017) ³⁾								
	influenza				RSV	parainfluenza			adeno-virus
	A	A/H1	A/H3	B		type 1	type 2	type 3	
POLAND	291	-	137	4	4	4	1	3	1
Dolnośląskie	8	-	47	1	-	-	-	-	-
Kujawsko-Pomorskie	15	-	-	1	-	-	-	-	-
Lubelskie	11	-	-	-	-	-	-	-	-
Lubuskie	2	-	-	-	-	-	-	-	-
Łódzkie	19	-	-	-	-	-	-	-	-
Małopolskie	-	-	8	-	-	-	-	-	-
Mazowieckie	52	-	-	-	-	-	-	-	-
Opolskie	-	-	-	2	-	3	1	-	1
Podkarpackie	63	-	18	-	-	-	-	1	-
Podlaskie	9	-	-	-	-	-	-	-	-
Pomorskie	7	-	-	-	1	-	-	-	-
Śląskie	1	-	23	-	-	-	-	2	-
Świętokrzyskie	-	-	2	-	-	1	-	-	-
Warmińsko-Mazurskie	17	-	-	-	1	-	-	-	-
Wielkopolskie	51	-	-	-	2	-	-	-	-
Zachodniopomorskie	36	-	39	-	-	-	-	-	-

Influenza websites

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

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

www.who.int/influenza/en
WHO: Global Influenza Programme (GIP)

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

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

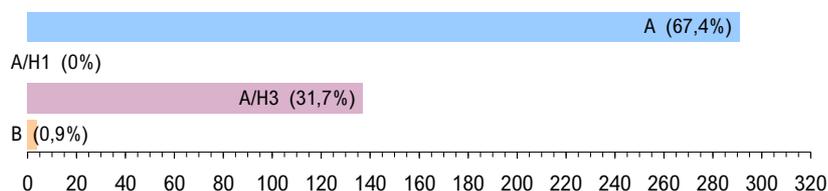
www.flu.gov
U.S. Government flu information

Explanations:

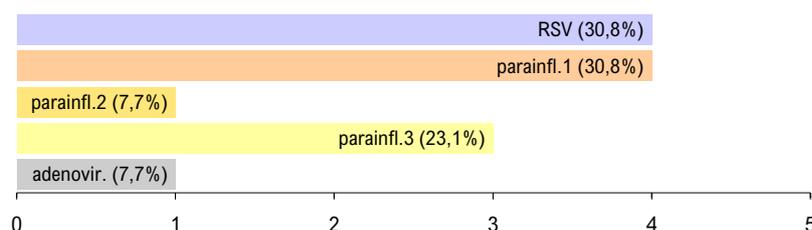
- 1) Isolation of virus, detection of virus antigen by immunofluorescence test (IF), detection of RNA/DNA specific for a given virus by molecular methods (PCR, real-time PCR).
- 2) Testing for infections with respiratory viruses other than influenza is not performed routinely.
- 3) Reporting periods 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 ¹⁾ infections with influenza virus or other respiratory viruses ²⁾ and strains of influenza virus isolated ⁴⁾ in the epidemic season 2016/2017 by selected pathogens

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



Number of influenza virus strains isolated in the epidemic season 2016/2017 by type and voivodship

Voivodship	Specimens collected between 05.09.2016 and 12.02.2017		
	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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