AKTUÁLNÍ INFORMACE O PRŮBĚHU CHŘIPKOVÉ EPIDEMIE 2015

1. ČR

K dnešnímu dni (5.2.2014) bylo pro závažný průběh chřipky, vyžadující intenzivní léčbu hospitalizováno v ČR celkem 18 osob, z nichž ve 3 případech došlo k úmrtí, která jsou hlášena vždy po jednom případu z kraje Plzeňského, Zlínského a Středočeského. Hospitalizace závažných případů je hlášena z Jihočeského kraje (7 případů), Středočeského kraje (3 případy), Královéhradeckého kraje a území hl.m. Prahy po 2 případech, a po jednom případu je hospitalizace závažného případu chřipky hlášena z Libereckého, Pardubického, Plzeňského a Zlínského kraje. Žádný z těchto případů nebyl očkován proti sezónní chřipce a v 10 případech byla podána antivirotika.
Z celkového počtu 18 případů hospitalizovaných osob je u 10 osob je v anamnese závažné základní onemocnění např. diabetes, nebo onkologické onemocnění, případně monstrózní obezita. Věk dosud hospitalizovaných pacientů se pohybuje od půl roku do 74 let.

Ministerstvo zdravotnictví současně upozorňuje na stále trvající možnost očkování proti sezónní chřipce a to zejména u pacientů s vážným základním onemocněním.

Hodnotíme-li situaci v Evropě lze říci, že je značně různorodá, od hlášení nulové chřipkové aktivity po plošný epidemický výskyt, který je hlášen z Anglie, Nizozemí a Dánska. Dalších 8 evropských států hlásí vzestup nemocnosti. Celkově lze konstatovat, že se nacházíme na počátku epidemického šíření chřipky v Evropě

Zdroj: MZČR

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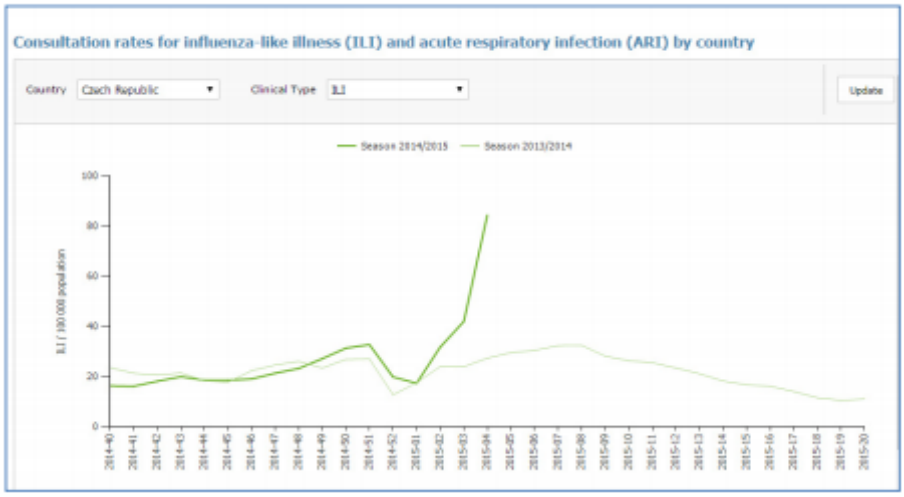
Zdroj: SZU

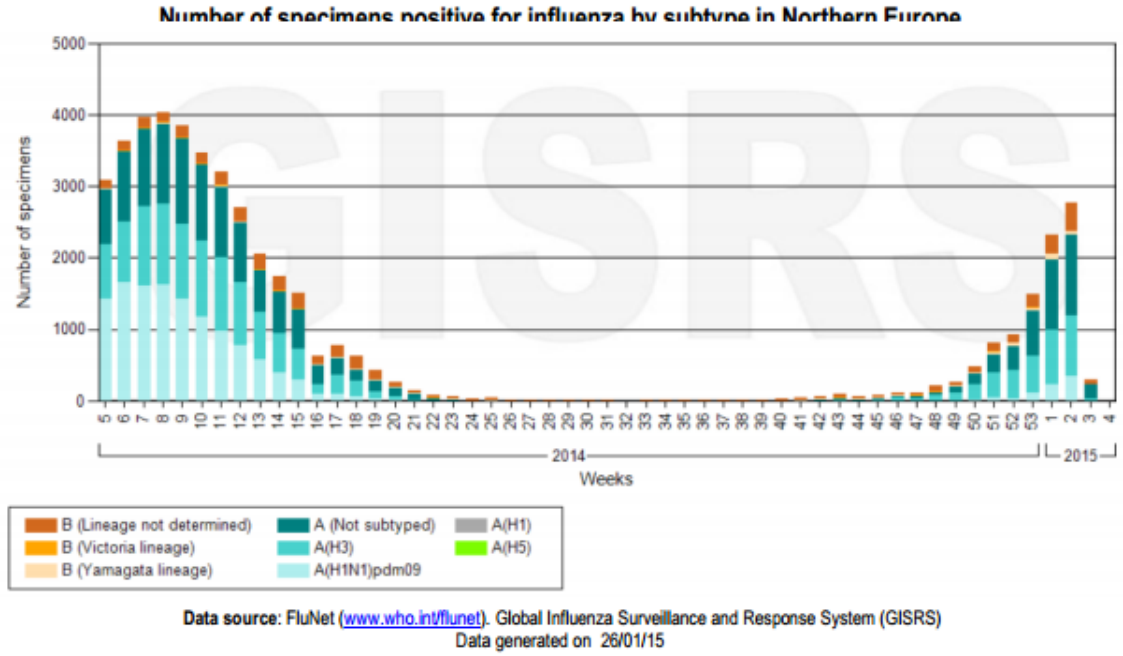
Vývoj ILI v ČR (převzato z TESSy):



2. Europe

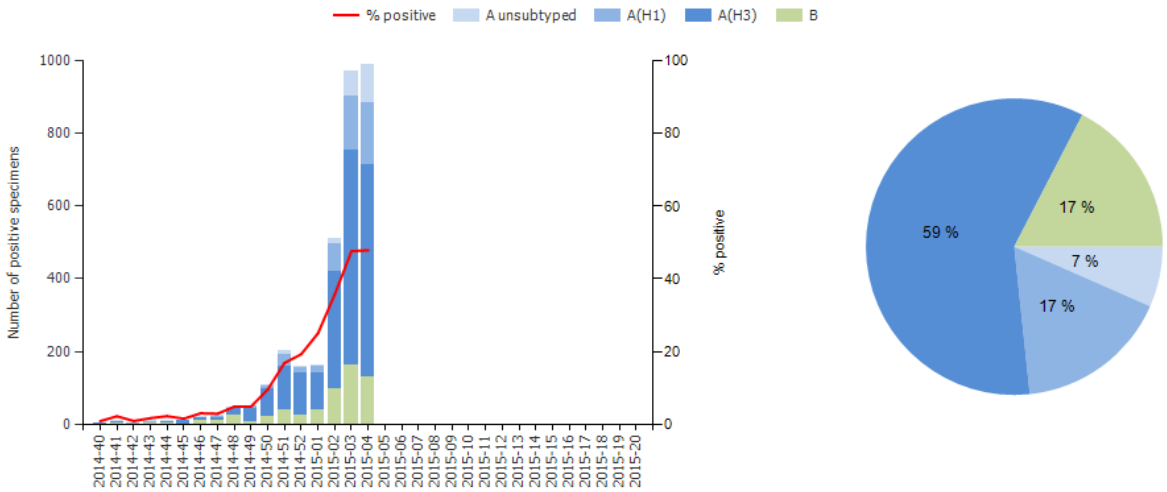
In Europe, the influenza season has started. Compared to the previous report, activity was still increasing, although most countries still reported low intensity of influenza activity. Eighty (16%) of 509 sentinel specimens were positive for influenza virus in 19 of 30 countries that reported virological data for the first week of January 2015. Influenza activity was highest in the northwestern countries. The predominant influenza virus subtype circulating has been A(H3N2). Similar to the findings in the USA, viral characterization data in Europe showed that a proportion of the A(H3N2) viruses has drifted from the H3N2 vaccine virus.

All influenza A(H3N2) (n=79) A(H1N1)pdm09 viruses (n=20) tested this season for neuraminidase inhibitor susceptibility were sensitive to Oseltamivir and Zanamivir.



(source: www.who.org)

- The influenza season is well under way, particularly in western and central European countries.
- For week 04/2015, 26 countries reported increasing influenza activity and the overall proportion of influenza-positive sentinel specimens reached 48%, the same level as in the previous week.
- The circulation of respiratory syncytial virus (RSV) seems to have decreased across Europe, with activity peaking during the first two weeks of 2015.
- Excess all-cause mortality among the elderly (aged ≥65 years), concomitant with increased influenza activity and A(H3N2) viruses predominating, has been observed during recent weeks in France, the Netherlands, Portugal, Spain and the United Kingdom (England, Scotland and Wales) (see the European project for monitoring excess mortality for public health action (EuroMOMO - http://www.euromomo.eu/)).
- Although the majority of A(H3N2) viruses characterized so far exhibit antigenic differences to the virus included in the 2014–2015 northern hemisphere influenza vaccine, vaccination of the elderly and other risk groups is still recommended, since the A(H3N2) component is expected to induce some cross-reactive immunity that can reduce the likelihood of severe outcomes related to influenza infection.



(source: www.who.org)

Globally influenza activity was high in the northern hemisphere with influenza A(H3N2) viruses predominating so far this season. Antigenic characterization of most recent A(H3N2) viruses thus far indicated differences from the A(H3N2) virus used in the influenza vaccines for the northern hemisphere 2014-2015. Based on tests to date, the influenza A(H3N2) viruses are expected to be sensitive to neuraminidase inhibitors.

- In North America, the influenza season was ongoing with still high levels of influenza activity in most countries. Influenza A(H3N2) virus predominated. The influenza activity might have peaked in the USA.

- In Europe influenza activity was still on the rise with highest activity in the north-western part. Influenza A(H3N2) predominated this season.

- In northern and western Africa influenza activity seemed to have peaked with influenza B virus predominating, while Egypt reported mainly influenza A(H3N2) detections.

- In eastern Asia, influenza activity started to decrease with influenza A(H3N2) virus predominating.

– In central Asia influenza activity remained low.

- In western Asia, Bahrain and the Islamic Republic of Iran reported mainly influenza A(H1N1)pdm09 activity.

- In tropical countries of the Americas, influenza activity was low in most countries of the Caribbean, Central America and in the tropical countries of South America.

- In tropical Asia, influenza activity increased slightly, but remained low with influenza B predominating.

- In the southern hemisphere, influenza activity remained at inter-seasonal levels.

- Based on FluNet reporting (as of 23 January 2015 18:05 UTC), during 2014, week 53 and 2015 week 1 (28 December 2014 to 10 January 2015), National Influenza Centres (NICs) and other national influenza laboratories from 88 countries, areas or territories reported data. The WHO GISRS laboratories tested more than 133 812 specimens. 32 903 were positive for influenza viruses, of which 30 926 (94%) were typed as influenza A and 1977 (6%) as influenza B. Of the sub-typed influenza A viruses, 453 (3.4%) were influenza A(H1N1)pdm09 and 12 678 (96.6%) were influenza A(H3N2). Of the characterized B viruses, 495 (98%) belonged to the B-Yamagata lineage and 10 (2%) to the B-Victoria lineage.

3. United States

During week 3 (January 18-24, 2015), influenza activity remained elevated in the USA

(source: www.cdc.com)

Viral Surveillance: Of 23,339 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 3, 4,651 (19.9%) were positive for influenza.

Novel Influenza A Virus: One human infection with a novel influenza A virus was reported.

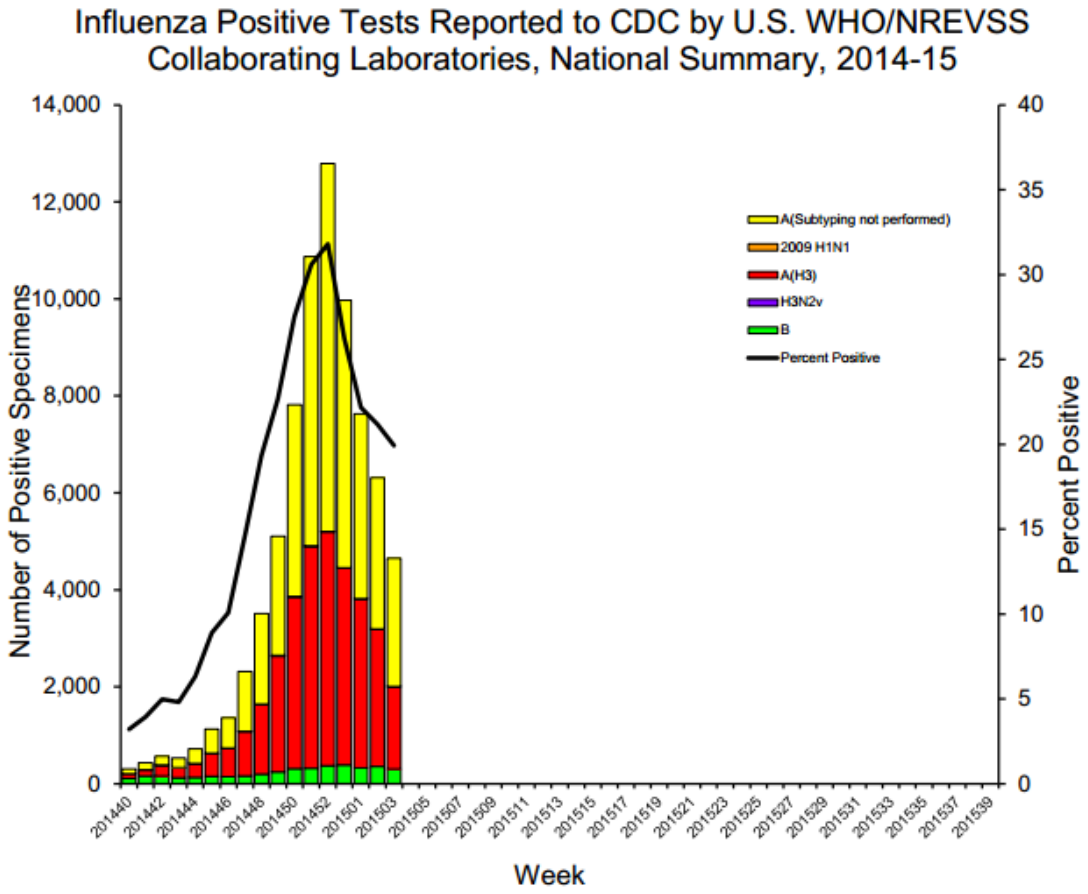
Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.

Influenza-associated Pediatric Deaths: Five influenza-associated pediatric deaths were reported.

Influenza-associated Hospitalizations: A cumulative rate for the season of 40.5 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 4.4%, above the national baseline of 2.0%. All 10 regions reported ILI at or above region-specific baseline levels. Puerto Rico and 29 states experienced high ILI activity; New York City and seven states experienced moderate ILI activity; six states experienced low ILI

activity; eight states experienced minimal ILI activity; and the District of Columbia had insufficient data.



Geographic Spread of Influenza: The geographic spread of influenza in Puerto Rico and 44 states was reported as widespread; the U.S. Virgin Islands and five states reported regional activity; and the District of Columbia, Guam, and one state reported local aktivity.

	Week 3	Data Cumulative since September 28, 2014 (Week 40)
No. of specimens tested	23,339	366,891
No. of positive specimens (%)	4,651 (19.9%)	76,042 (20.7%)
Positive specimens by type/subtype		
Influenza A	4,343 (93.4%)	72,053 (94.8%)
A(H1N1)pmd09	2 (0.05%)	130 (0.2%)
H3	1,698 (39.1%)	31,711 (44.0%)
Subtyping not performed	2,643 (60.9%)	40,211 (55.8%)
Influenza B	308 (6.6%)	3,989 (5.2%)

(source: www.cdc.com)

Influenza Virus Characterization:

CDC has characterized 602 influenza viruses

[21 A(H1N1)pdm09, 478 A(H3N2), and 103 influenza B viruses] collected by U.S. laboratories since October 1, 2014. Influenza A Virus [499]

• A(H1N1)pdm09 [21]: All 21 H1N1 viruses tested were characterized as A/California/7/2009- like, the influenza A (H1N1) component of the 2014-2015 Northern Hemisphere influenza vaccine.

• A(H3N2) [478]: 159 (33.3%) of the 478 H3N2 viruses tested have been characterized as A/Texas/50/2012-like, the influenza A (H3N2) component of the 2014-2015 Northern Hemisphere influenza vaccine. 319 (66.7%) of the 478 viruses tested showed either reduced titers with antiserum produced against A/Texas/50/2012 or belonged to a genetic group that typically shows reduced titers to A/Texas/50/2012. Among viruses that showed reduced titers with antiserum raised against A/Texas/50/2012, most were antigenically similar to A/Switzerland/9715293/2013, the H3N2 virus selected for the 2015 Southern Hemisphere influenza vaccine. A/Switzerland/9715293/2013 is related to, but antigenically and genetically distinguishable, from the A/Texas/50/2012 vaccine virus. A/Switzerland-like H3N2 viruses were first detected in the United States in small numbers in March of 2014 and began to increase through the spring and summer. Influenza B Virus [103] Sixty-nine (67.0%) of the influenza B viruses tested belong to B/Yamagata/16/88 lineage and the remaining 34 (33.0%) influenza B viruses tested belong to B/Victoria/02/87 lineage.

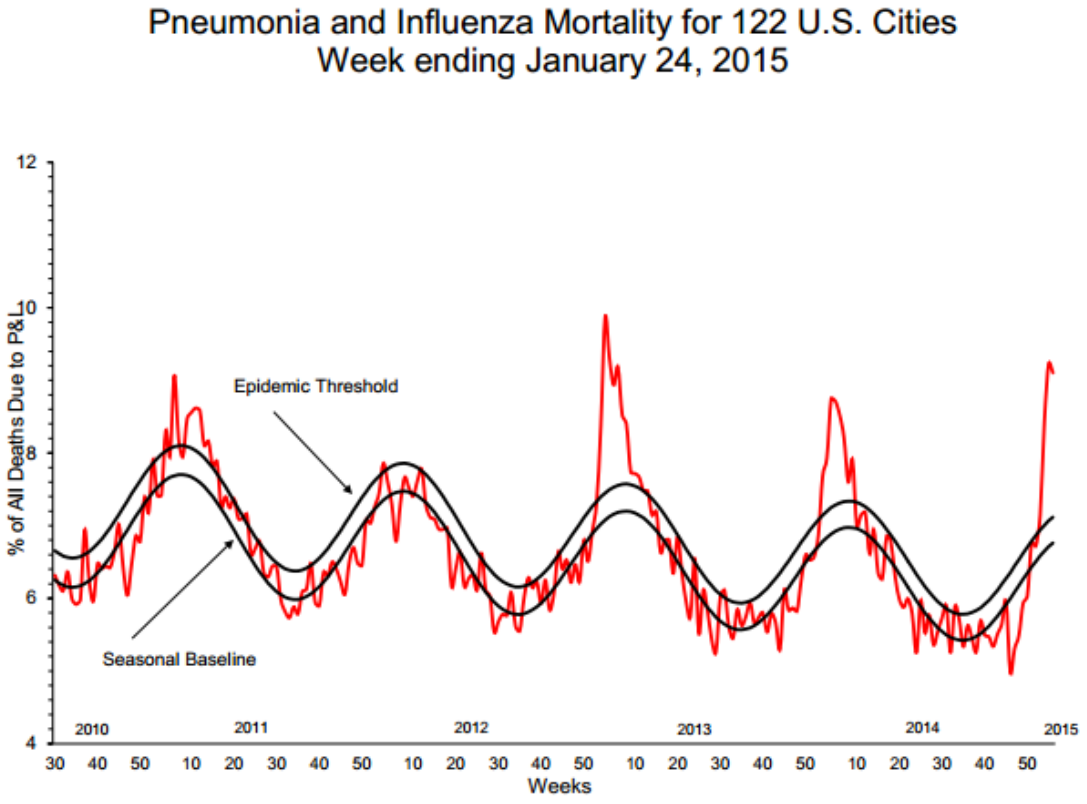
• Yamagata Lineage [69]: All 69 B/Yamagata-lineage viruses were characterized as B/Massachusetts/2/2012-like, which is included as an influenza B component of the 2014-2015 Northern Hemisphere trivalent and quadrivalent influenza vaccines.

• Victoria Lineage [34]: Thirty (88.2%) of the 34 B/Victoria-lineage viruses were characterized as B/Brisbane/60/2008-like, the virus that is included as an influenza B component of the 2014-2015 Northern Hemisphere quadrivalent influenza vaccine. Four (11.8%) of the B/Victoria-lineage viruses tested showed reduced titers to B/Brisbane/60/2008

Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2014

	Oseltamivir		Zanamivir		Peramivir	
	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)
Influenza A (H3N2)	948	0 (0.0)	948	0 (0.0)	740	0 (0.0)
Influenza B	139	0 (0.0)	139	0 (0.0)	139	0 (0.0)
Influenza A(H1N1)pmd09	16	1 (6.3)	13	0 (0.0)	16	1 (6.3)

(source: www.cdc.com)



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