

Influenza activity in Portugal

2012/2013 season

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Background

Influenza activity in Portugal has been monitored since 1953 at the National Institute of Health. Clinical and virological data is analysed and Influenza-like Illness (ILI) incidence rates are estimated weekly. Information is forwarded to National Health Authorities, contributing for the management of the disease. The National Influenza Surveillance Programme collects and integrates information generated through 2 sentinel surveillance structures, the Network of Sentinel Medical Practitioners (since 1990) and the Network of Emergency Units (since 1999). The Programme also integrates the information from the Portuguese component of the IMOVE project. Here we provide a snapshot of the influenza activity in Portugal during the 2012/2013 winter, based on the information generated through the Portuguese Influenza Surveillance System.

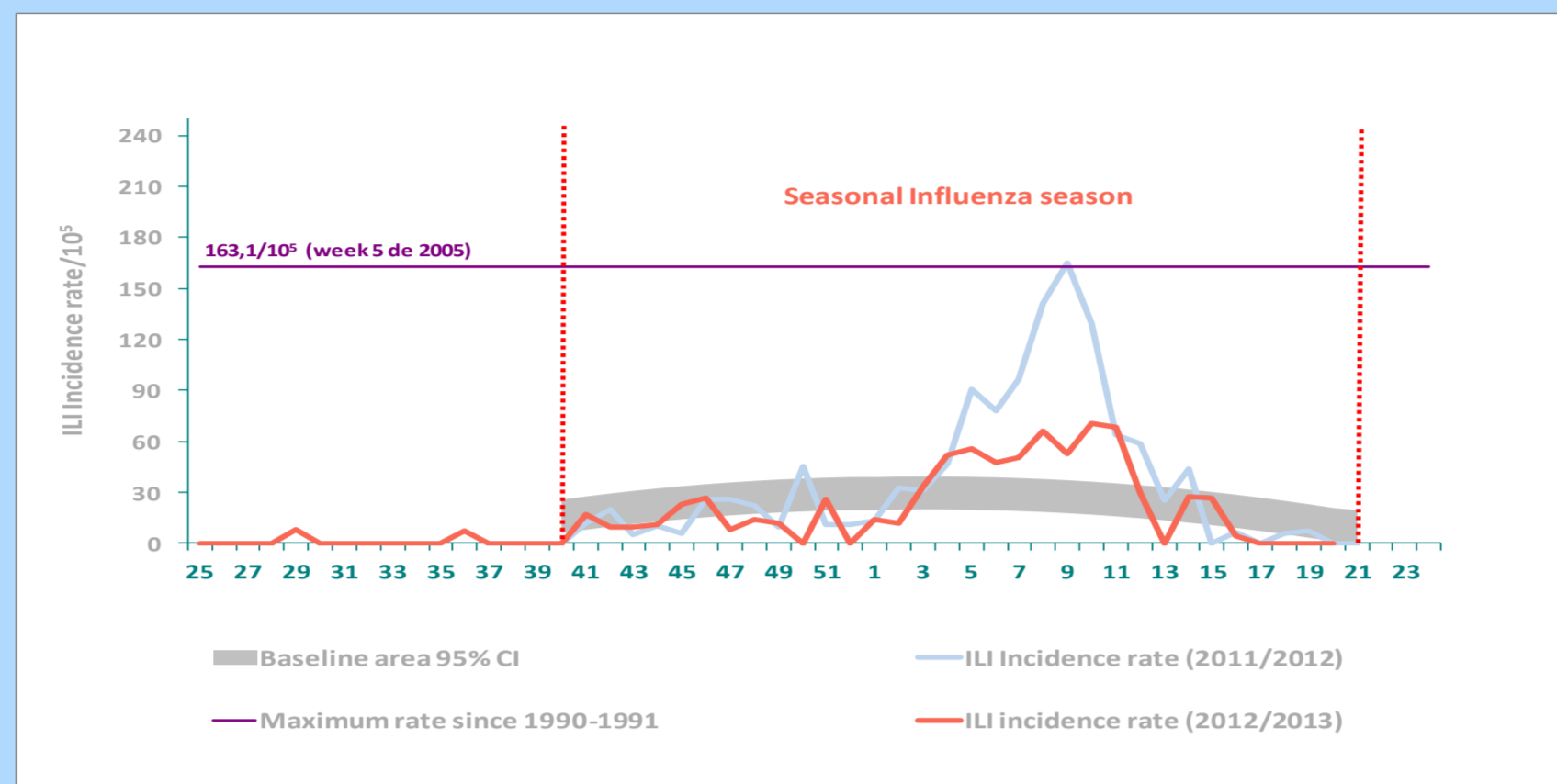
Materials / Methods

ILI cases were reported to the National Influenza Reference Laboratory and to the Epidemiology Department of the National Institute of Health, in the context of the National Influenza Surveillance Programme, from week 40/2012 through week 19/2013. The intensity and duration of the epidemic periods were described based on the weekly incidence rates for ILI. Nasopharyngeal swabs were collected for virological characterisation of influenza viruses circulating during this period. The detection of influenza viruses were performed by real time RT-PCR, the influenza virus culture was performed in MDCK cells and a sample of isolates was taken for sequence analysis of the HA1 gene segment.

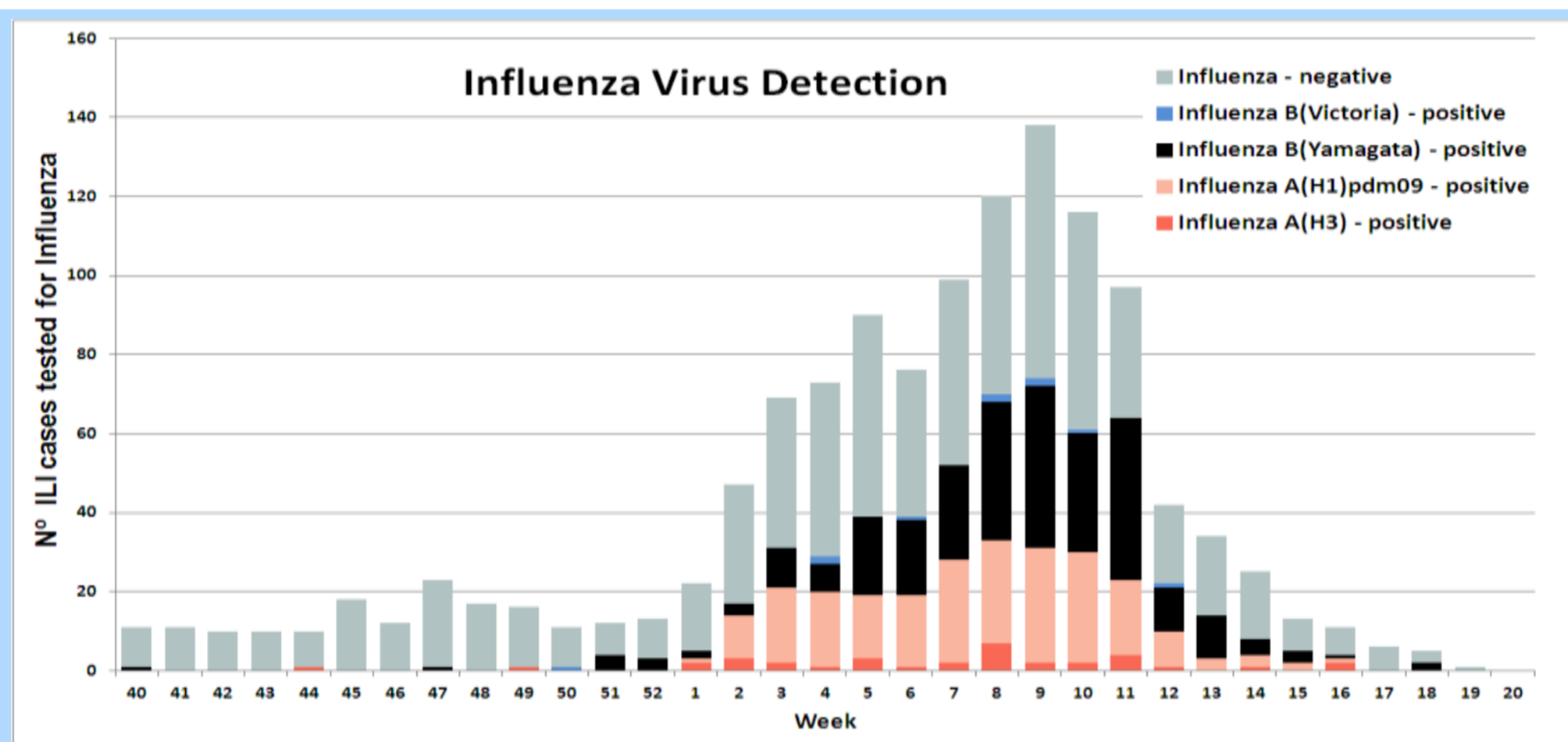
Acknowledgements

The authors would like to thank: To the Sentinel Medical Practitioners and all health professionals that contributed to the clinical and virological components of the National Influenza Surveillance Programme during the 2012/2013 season; To the WHOcc, London team for all the support and reference material; and to Carla Roque and colleagues from Infectious Diseases Department for pre analytical support.

Results



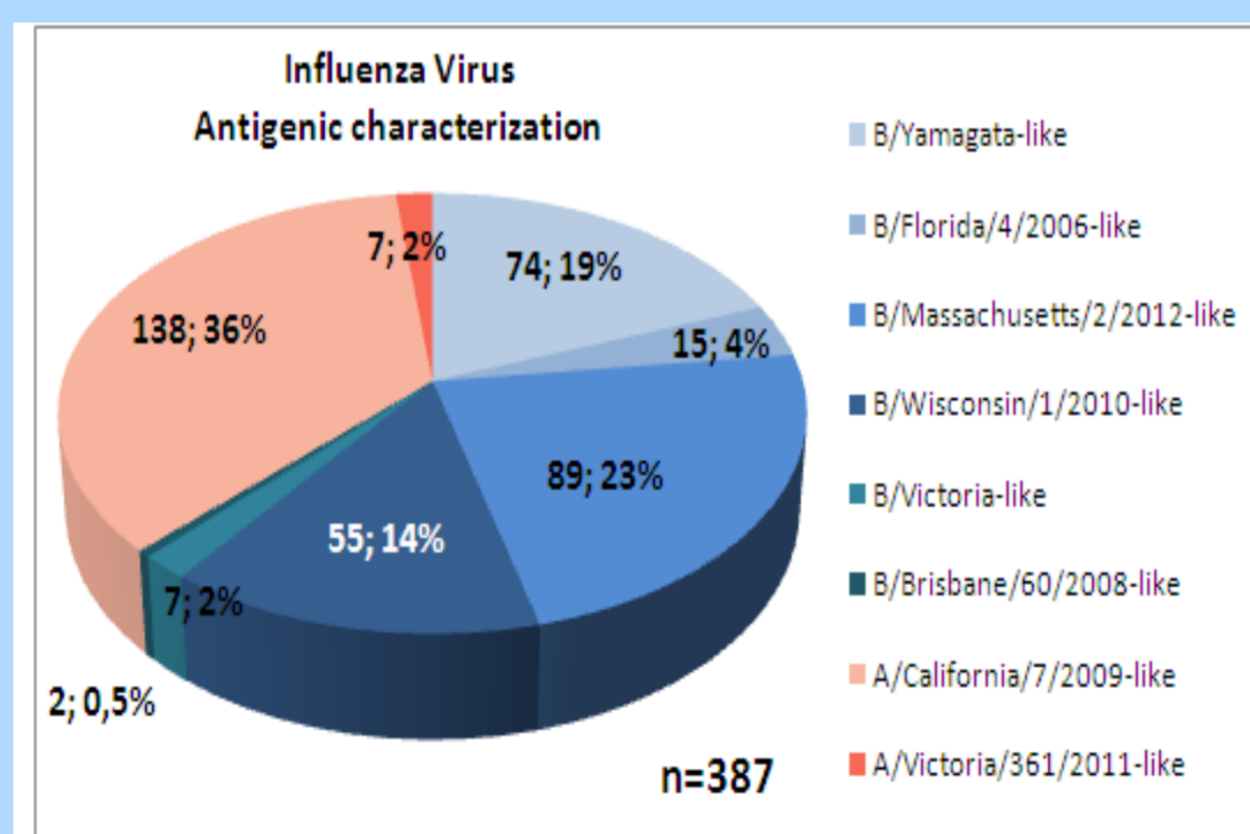
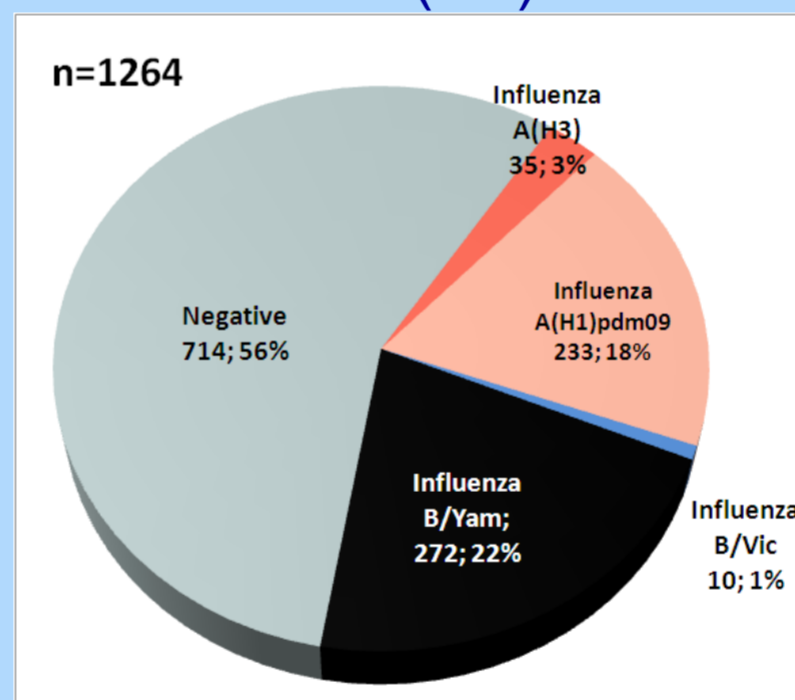
Moderate Influenza activity (max. 70.2 ILI cases / 10⁵ inhabitants on week 10/2013).
Epidemic period of 8 weeks (from week 4/2013 trough week 11/2013).



Influenza A(H1)pdm09 and B/Yamagata co circulated during the winter. Influenza B/Victoria and A(H3) were sporadically detected.

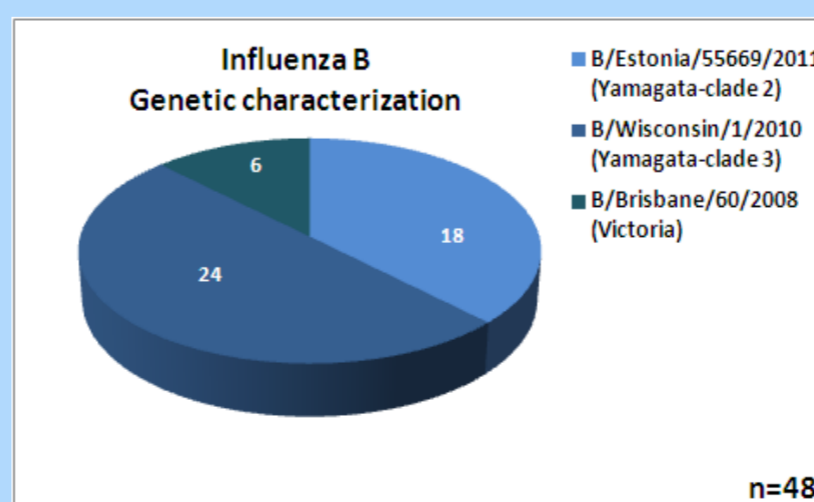
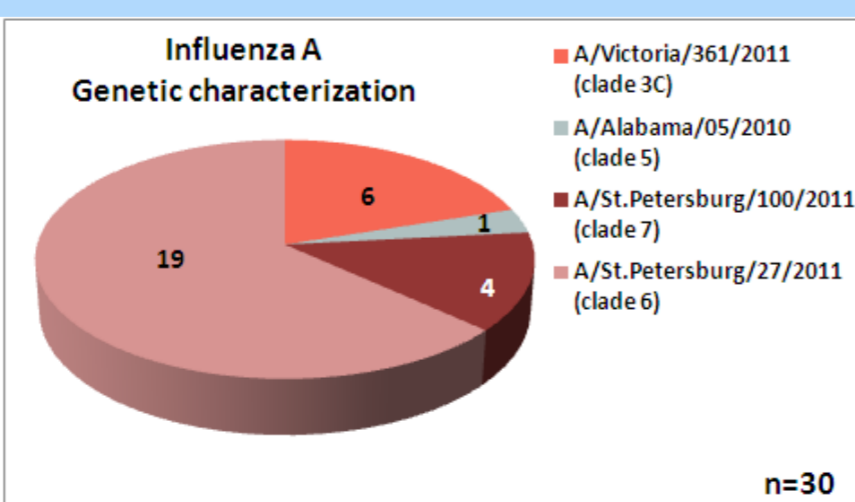
Influenza A was detected in 268 (21%) ILI cases.

Influenza B was detected in 282 (23%) specimens, the majority ascribed to B/Yamagata lineage.



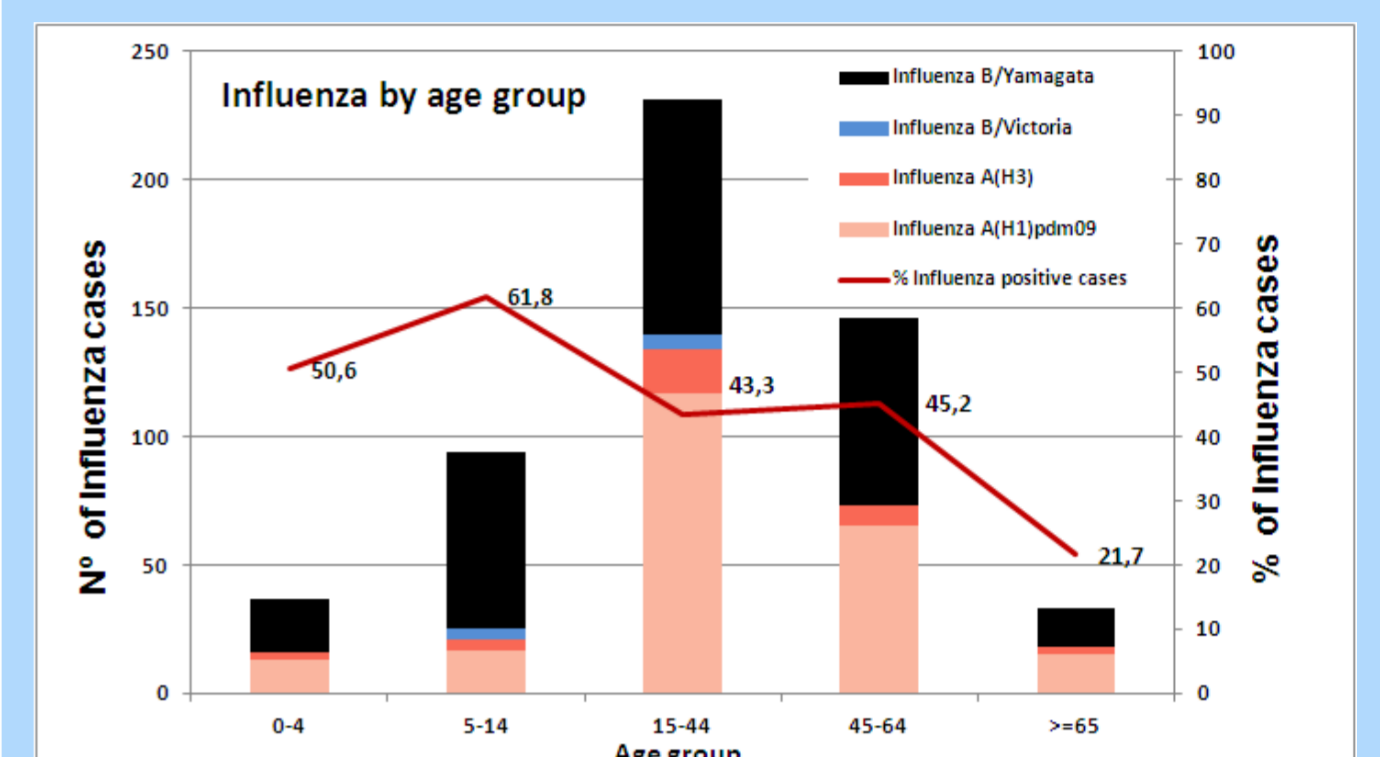
Influenza A viruses were antigenic and genetically similar to the vaccine strains.

Influenza B viruses showed a greater antigenic and genetic variability. The majority were antigenically similar to B/Massachusetts/2/2012.



A total of 248 A(H1)pdm09 and 80 B viruses were tested for antiviral susceptibility, none showed reduced susceptibility to oseltamivir or zanamivir.

Although the majority of ILI cases (43.2%) were from adults (15-44 years), the highest proportion (61.8%) of influenza cases were observed in children (5-14 years old).



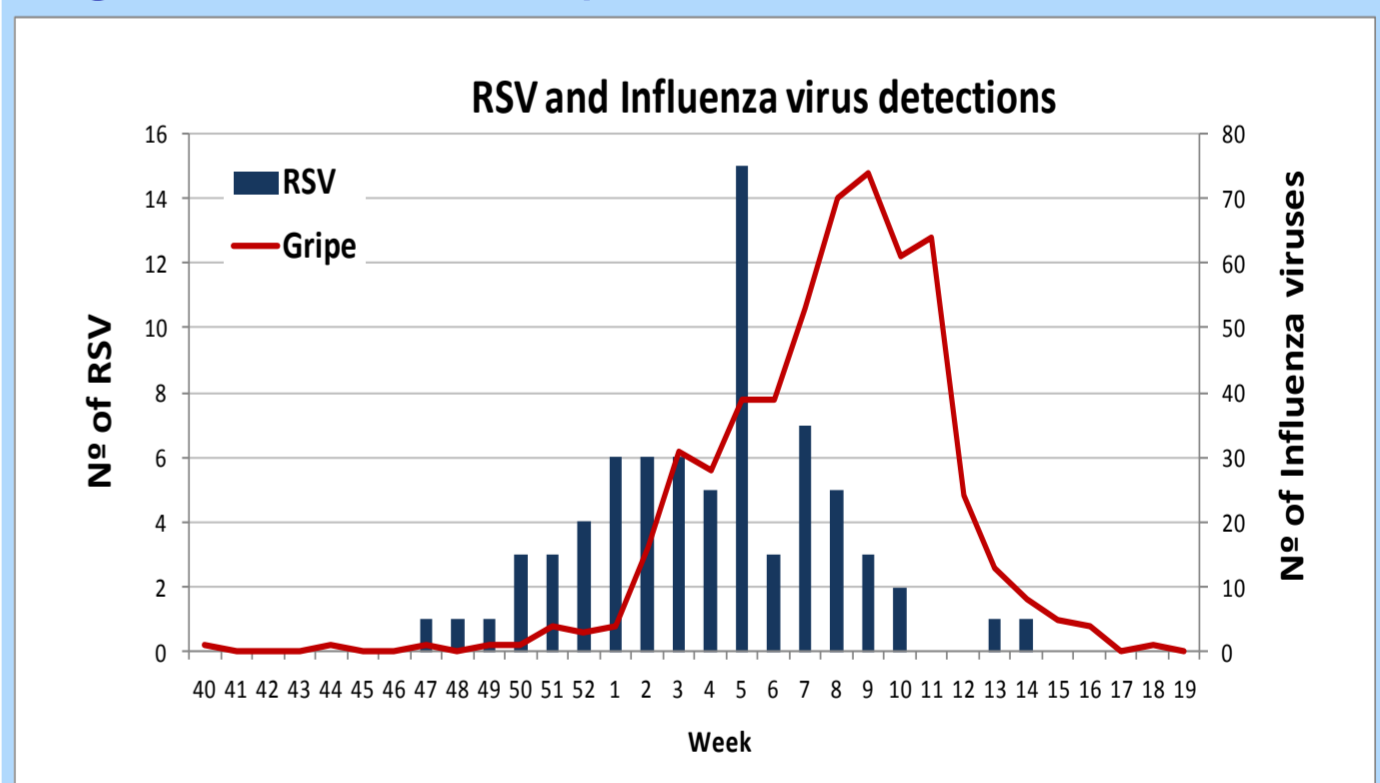
2012/2013	No. ILI cases reported (%)	No. Influenza-positive (%)
Trivalent flu-vaccine administration		
Yes	117 (9.3)	17 (3.1)
No	978 (77.7)	455 (82.8)
Unknown	169 (13.0)	77 (14.1)
Total	1258 (100.0)	549 (100.0)

1258 (99.5%) ILI cases, tested for influenza, reported the vaccination status with the flu trivalent vaccine.

117 (9.3%) of these were vaccinated.

17 (3.1%) of influenza positive cases were vaccinated.

RSV was detected since week 47/2012, with highest number of positives in week 5/2013.



Most of the RSV were detected in the age group of ≥ 65 years.

Comments

Influenza activity was moderate.

Pandemic A(H1)pdm09 virus co-circulated with influenza B, during the 2012/2013 season.

Antigenic variability of influenza B viruses increased during the season.

RSV preceded the first cases of influenza.