

Weekly Virological Surveillance Update

17 June 2010

Overall influenza activity has remained at low levels in most parts of the world. While, in most countries where human infection of influenza virus was reported, the pandemic influenza A(H1N1) continues to be the predominating influenza A viruses subtyped (70.8% globally), in some countries in Africa, however, the proportion of A(H3N2) virus detections increased.

Sporadic influenza A(H3N2) activity was reported from China and Russian Federation and several countries from Africa. Influenza B viruses continued to be predominating in some countries and areas, including Hong Kong SAR of China (70.9% of all influenza detections), Russian Federation (96.1%) and Ukraine (100%). Sporadic influenza B activity has also been observed in some other countries.

Based on FluNet reporting for the week from 30 to 5 June 2010, the total number of specimens reportedly positive for influenza viruses by National Influenza Centres (NICs) from 24 countries was 351. Of these, 112 (31.9%) were typed as influenza A and 239 (68.1%) as influenza B.

From the start of the pandemic in 19 April 2009 to 5 June 2010, based on FluNet reporting by 88 countries, the total number of specimens reported positive for influenza by NIC laboratories was 643,273*. Of these, 488,641 (76.0%) were pandemic A(H1N1), 8,909 (1.4%) were seasonal A(H1N1), 32,590 (5.1%) were A(H3N2), 80,562(12.5%) were A (not subtyped) and 32,452 (5.0%) were influenza B.

Since the beginning of the pandemic on 19 April 2009 to 5th June 2010, cumulatively 155 countries shared a total of 26,105 specimens (19,866 clinical and 6,239 isolates) with WHO CCs for further characterization. The majority of pandemic A(H1N1) 2009 influenza viruses analyzed to date are antigenically and genetically closely related to the recommended vaccine virus A/California/7/2009.

Antiviral susceptibility surveillance has been conducted by the WHO Global Influenza Surveillance Network (GISN) including WHO CCs. So far, pandemic A(H1N1) specimens and isolates from at least 92 countries have been tested. The data showed that oseltamivir resistant pandemic A(H1N1) viruses are sporadically detected with rare onward transmission. So far, 298 cases of oseltamivir resistance have been reported by GISN and other partners. All of these viruses showed the H275Y substitution and all remain sensitive to zanamivir.

WHO, through the GISN, continues monitoring the evolution and global circulation of influenza viruses, including pandemic, seasonal and other influenza viruses infecting, or with the potential to infect humans.

* Some NICs report data to FluNet retrospectively and updates of previous data with new results are frequent.

For more information (links)

FluNet web site: www.who.int/flunet

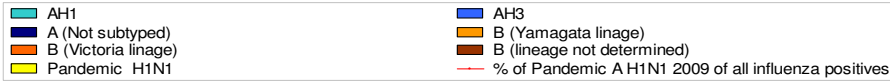
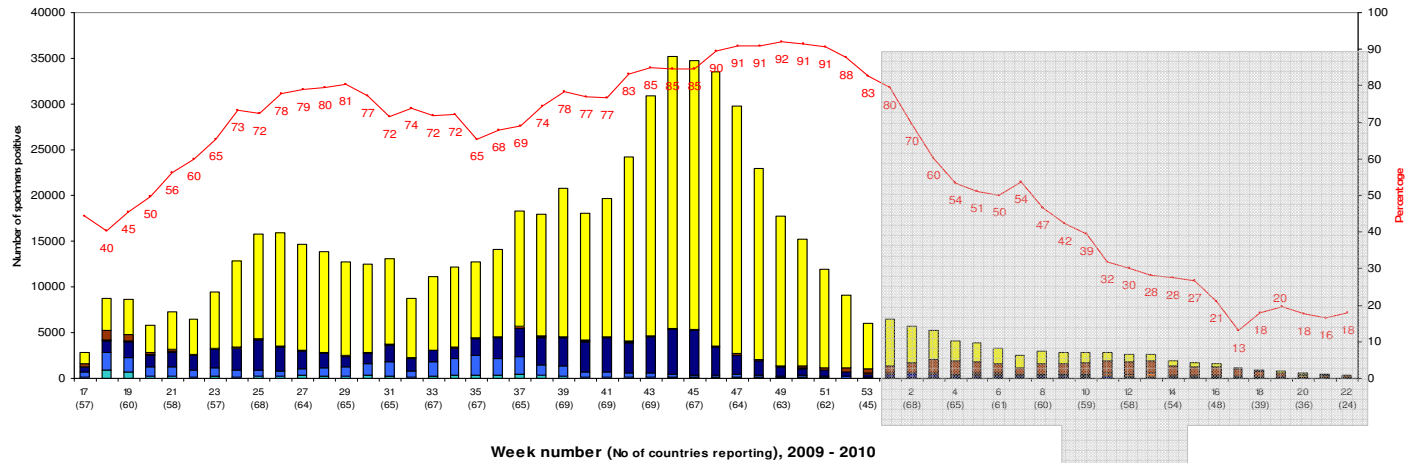
National Influenza Centres: <http://www.who.int/csr/disease/influenza/centres/en/index.html>

EuroFlu Weekly Electronic Bulletin: <http://www.euroflu.org/>

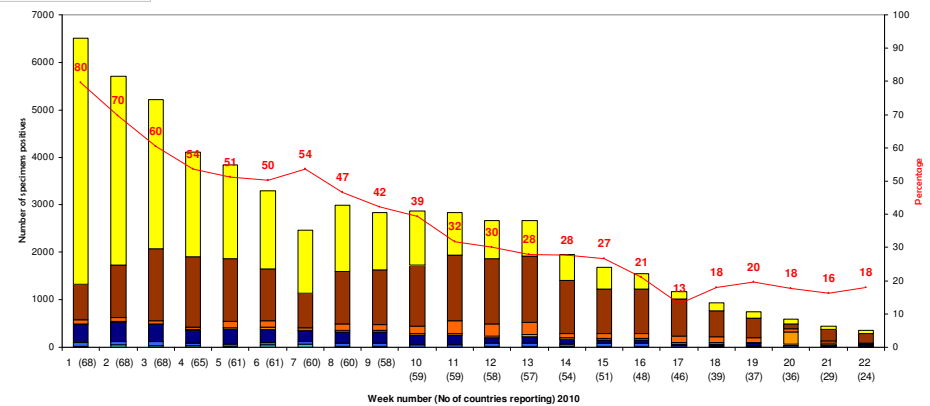
PAHO Weekly Regional Update: <http://new.paho.org/hq/>

Global circulation of influenza viruses

Number of specimens positives for influenza by subtypes
 From week No 17 (2009) to 22 (2010) (19 April 2009 to 5 June 2010)



Detail from week No 1 to 22 (3 Jan 2010 to 5 June 2010)

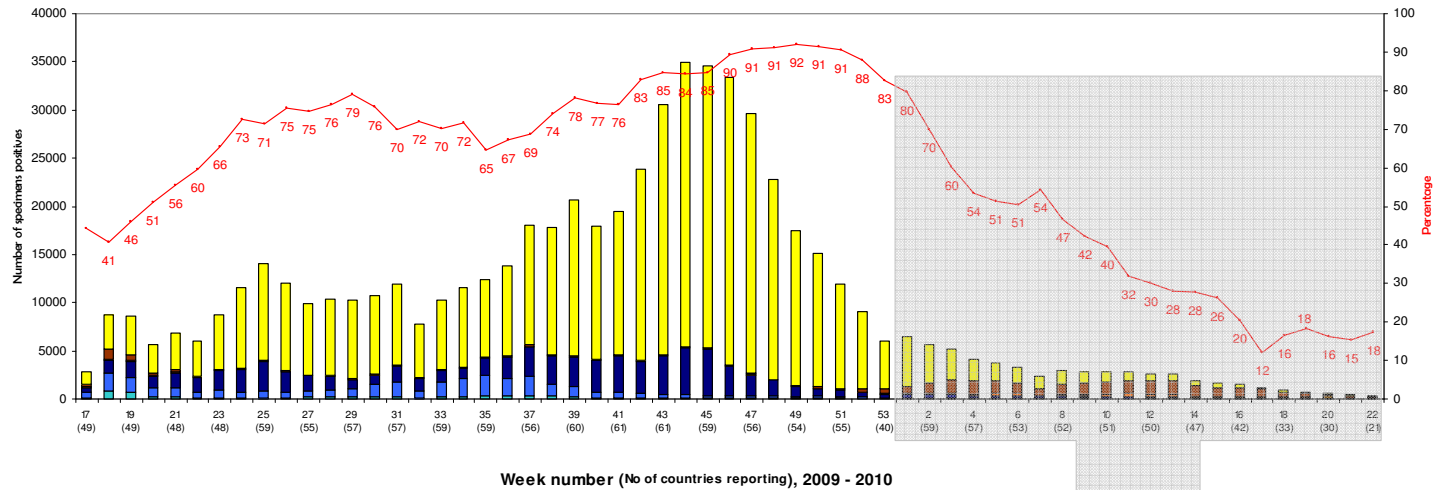


Data source: FluNet, Global Influenza Surveillance Network (GISN)

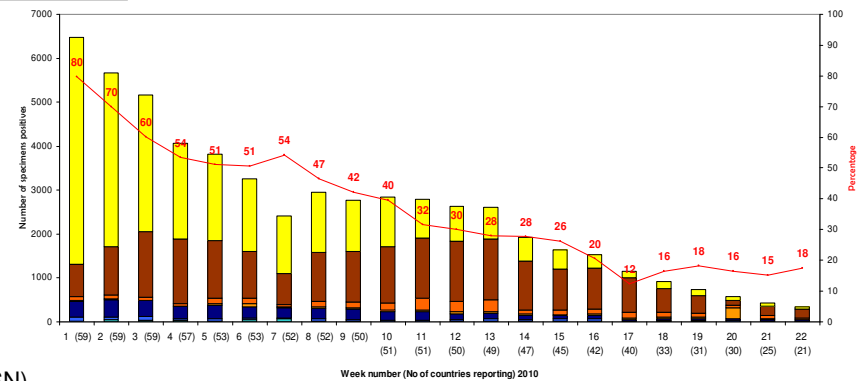
Northern hemisphere circulation of influenza viruses

Number of specimens positives for influenza by subtypes

From week No 17 (2009) to 22 (2010) (19 April 2009 to 5 June 2010)



Detail from week No 1 to 22 (3 Jan 2010 to 5 June 2010)

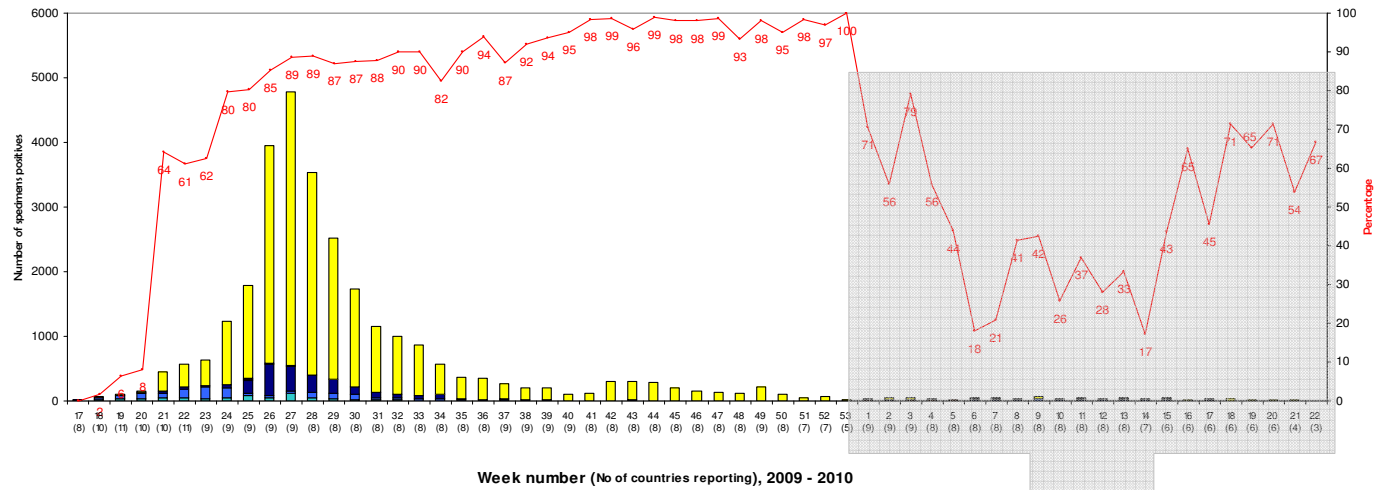


Data source: FluNet, Global Influenza Surveillance Network (GISN)

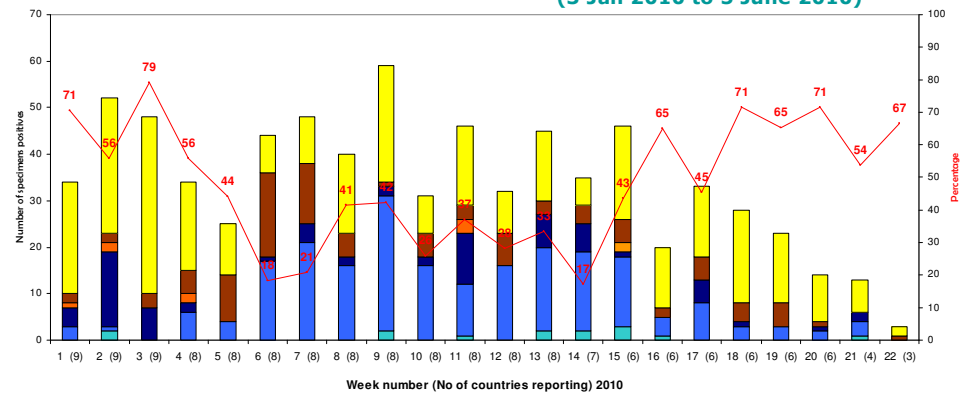
Southern hemisphere circulation of influenza viruses

Graph produced: 14 June 2010

Number of specimens positives for influenza by subtypes
From week No 17 (2009) to 22 (2010) (19 April 2009 to 5 June 2010)



Detail from week No 1 to 22
(3 Jan 2010 to 5 June 2010)



Data source: FluNet, Global Influenza Surveillance Network (GISN)