

Update on oseltamivir resistance to influenza A(H1N1) 2009 viruses

09 February 2011 -- For this reporting period (26 January- 09 February 2011), 30 new cases of influenza A(H1N1) 2009 viruses carrying the H275Y substitution have been reported¹. It brings the cumulative total to 370 so far.

More detailed information on previously reported cases has recently been published:

Barrero PR *et al.* Genetic and Phylogenetic Analyses of Influenza A H1N1pdm Virus in Buenos Aires, Argentina. *Journal of Virology*. 2011; 48 (2), 1058-1066

Moore C *et al.* Evidence of Person-to-Person Transmission of Oseltamivir-Resistant Pandemic Influenza A (H1N1) 2009 Virus in a Hematology Unit. *The Journal of Infectious Diseases*. 2011; 203, 18-24

Lackenby A *et al.* Continued Emergence and Changing Epidemiology of Oseltamivir-Resistant Influenza A (H1N1) 2009 Virus, United Kingdom, Winter 2010/11. *Euro Surveill*. 2011; 16(5):pii=19784. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19784>

Ujike M *et al.* Monitoring and Characterization of Oseltamivir-Resistant Pandemic (H1N1) 2009 Virus, Japan, 2009-2010. *Emerg Infect Dis*. 2011 Mar; [Epub ahead of print]. Available online: <http://www.cdc.gov/eid/content/17/3/pdfs/10-1188.pdf>

Table 1: Geographical distribution of oseltamivir resistance by the WHO regions (as of 09 February 2011)

	WHO Region					
	AFRO	EMRO	EURO	PAHO	SEARO	WPRO
Number of oseltamivir resistant isolates	1	1	146	87	0	135

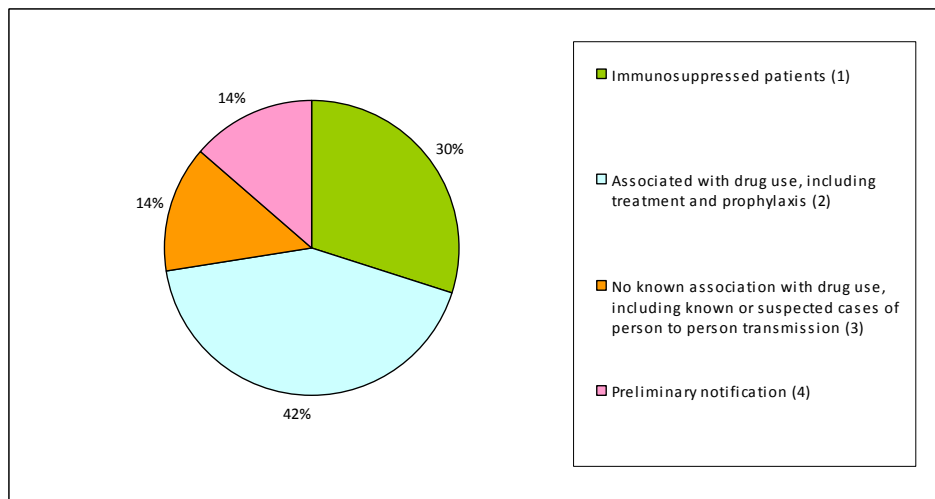


Figure 1: Proportion of the clinical background of reported cases of oseltamivir resistance (n=352). Cases are classified first by identifying those that occur in severely immunocompromised patients (1). The remaining cases are then classified as either associated with drug use, including cases occurring during or after oseltamivir treatment and associated with post-exposure prophylaxis (2), or occurring in patients who had not used antiviral drugs prior to occurrence of the resistant virus (3). The balance of cases (4) is those where insufficient clinical information is available or where investigations are ongoing.

¹ Includes new cases reported from the UK (http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1296680593998) and one new case reported by Hong Kong SAR (<http://www.dh.gov.hk/english/press/2011/110131.html>); also includes cases corresponding to the influenza season 2009/2010 reported from Japan and cases reported in Barrero PR *et al.* Genetic and Phylogenetic Analyses of Influenza A H1N1pdm Virus in Buenos Aires, Argentina. *Journal of Virology*. 2011; 48 (2), 1058-1066