

## ABSTRACT

## Management of pandemic influenza A (H1N1) 2009 in the major University Hospital of Sicily

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### INTRODUCTION

Pandemic is an epidemic of infectious agent that spreads through human populations on a worldwide scale. Pandemics tend to occur at unpredictable intervals and, for these reasons, public health prevention strategies have to be prepared in advance. The influenza A (H1N1) 2009 virus, the causative agent of the last pandemic, is mainly transmitted by respiratory droplets, nasal secretions and, more rarely, contaminated surfaces. The airborne spread and the large amount of international travels are responsible for the fast spreading of influenza virus in the different regions of the world. The first confirmed case of influenza A (H1N1) virus infection was reported in the University Hospital "P. Giaccone" of Palermo (A.O.U.) in July 2<sup>nd</sup> 2009, about three months after its emergence in Mexico.

### MATERIAL AND METHODS

According to the Italian Health Ministry recommendations (Gazzetta Ufficiale July 24<sup>th</sup> 2009), a surveillance system has been implemented in the A.O.U. From July 2009 to March 2010, all subjects with signs or symptoms of influenza-like illness were confirmed by RT-PCR and interviewed using a standard notification schedule.

Moreover, different preventive measures were implemented including the creation of a crisis Unit (August 2009), information campaigns and vaccination free of charge for all A.O.U. health-care workers.

### RESULTS

From October to December 2009, the incidence of influenza A (H1N1) showed a similar trend in Italy, Sicily and A.O.U. In October 2009, 6,367 subjects were positive in Italy, 143 in Sicily and 9 in the A.O.U.; in November 2009, 78,408 subjects were positive in Italy, 3,173 in Sicily and 25 in the A.O.U.; in December 2009, 12,956 subjects were positive in Italy, 534 in Sicily and 26 in the A.O.U. As consequence of the implemented preventive measures, up to 40% of the about 2,000 A.O.U. health-care workers accepted pandemic influenza A (H1N1) vaccination.

### CONCLUSIONS

During an influenza pandemic, the implementation of surveillance and prevention protocols should be encouraged in order to control the influenza spread among general population and priority groups such as health-care workers.