

Comparative analysis of a(H1N1) influenza epidemiological dynamics in Chile

Análisis comparado de la dinámica epidemiológica de la influenza a (H1N1) en Chile

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In order to increase awareness of the pandemic and to streamline control measures before any new outbreak of influenza we analyze the behavior of the cases of Chile and from 9 countries with more cases in 2009. Reproductive numbers, doubling times and estimations of susceptible and infected at the end of the epidemic were estimated. Epidemic curves to the situation in Chile under different initial conditions were adjusted and simulations for different reproductive numbers and notification scenarios were performed. The reproductive numbers varied between 1.37 and 1.82, with doubling times of between 5 and 8 days at 30 days of the epidemic. According to this, the proportions of infected by the end of the epidemic vary between 58% and 78.5%. The transmission coefficient ranged from 2 to 132 new cases per day $\times 10^6$ susceptible individuals. The adjustments showed that the onset of the epidemic probably had more cases than reported. All estimates suggest that there must have been a large nu