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## Morbidity and mortality analysis during the influenza season of 2013-2014, Baja California

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**Introduction & Aim:** Influenza is a respiratory disease that propagates with ease during the winter, in such a way that each year, according to WHO, affects from 10 to 20% of the global population resulting in 250 to 500 thousand deceases each year. Aim of this study is to identify the epidemiological clinical outlook of the cases and deceases related to influenza in Baja California, and export the relevant information to configure useful strategies.

**Methodology:** A descriptive analysis carried out on the information regarding influenza contained in the state databases was, of which universe is delimited in the reported case by the monitoring units of the different institutions; the proportions between the main variables of time, place and people were calculated, the cases and influenza deceases were georeferenced in the state in order to analyze its spatial distribution, then the information was registered in the Epi Info Software which allowed to carry out a bivariate analysis between the cases and associated factors.

**Results:** The temporal distribution shows a conglomerate in 74% of the cases from weeks 2 to 6, 2014, (Fig1), likewise the highest lethality was observed on the third week. In the bivariate analysis there was a trust interval of 95%, where: Influenza patients are four times more likely to suffer complications and become hospitalized compared with negative cases of influenza, of which have shown almost three times the lethality rate; the cases that presented a history of at least one vaccination in the last five years showed a 41% lower opportunity to give positive results on Influenza compared to the non-vaccinated samples; patients that were vaccinated against influenza in the 2013-2014 season had an odds ratio of 0.27 to contract influenza compared to the non-vaccinated patients in the same season; patients that showed any risk factor and were diagnosed with positive influenza, presented almost four times higher chances to die compared with patients with negative influenza results and; patients with active smoking habits presented a three times higher chance to die compared to nonsmokers.

**Conclusions:** The highest morbidity was presented in the 50 year age group, but the highest lethality rate was found in the 60 to 64 year age group. Vaccination demonstrated an important protection even if it was not the seasonal immunization. The most relevant comorbidity to suffer influenza and its unfavorable evolution was obesity and heart disease, although having any comorbidity significantly increased the risk of complications

### Biography

Franco Esquivel Teresa is an indefatigable public health worker in Baja California, Mexico. She was responsible for the influenza monitoring unit in Mexicali, Baja California during the 2009 influenza epidemic; responsible for field brigades in the response to the outbreak of spotted fever in Mexicali, in 2009 and; responsible for epidemiological surveillance of emerging diseases in Baja California 2010-2015. Currently, she is the Coordinator of epidemiological surveillance of communicable diseases in Baja California.

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