



# PROCEEDINGS

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## VIRAL DISEASES

VVD-PP-64

### SEROLOGICAL SURVEY FOR SWINE INFLUENZA VIRUS (SIV) IN FARMS IN JALISCO, MEXICO.

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#### Background and Objectives

In Mexico, the seroprevalence of SIV has been identified using reference strains or strains obtained from the field, with a general approach. The objective of this research was to conduct a serological survey using IPV strains isolated in the central-western region of Mexico.

#### Material and Methods

As part of the epidemiological surveillance program in the State of Jalisco (with support from the state epidemiological surveillance group), blood samples were taken from farms without active respiratory illnesses (years 2022-2024). A total of 2,209 serum samples were collected from 101 farms in the state. The serum samples were analyzed by hemagglutination inhibition (HI) using a standardized protocol for the H1N1 (Jalisco/2013), H1N2 (Guanajuato/2014), H3N2 (Jalisco/2013), and H3N2 JAL (Jalisco/2022) subtypes.

#### Results

A total of 8,836 tests were performed, detecting 100% seropositivity in the farms analyzed. The frequency for the H1N1 subtype was 39.5%, for H1N2 84.1%, for H3N2/2013 42%, and for H3N2/2022 63.7%. Different presentation values were identified according to the antibody titer.

#### Discussion and Conclusion

In 2014, in Jalisco, 35.2% seropositivity was identified in 12 municipalities, indicating an increase of more than 100% over a 10-year period for the H1N2 subtype. Different presentation values were identified according to antibody titer. Serological analyses allowed for the identification of antibody titer distribution, highlighting the variation in presentation using a recently isolated strain (H3N2) compared to an older strain. The information generated will support ongoing projects aimed at developing diagnostic tests and biologics adapted to regional needs, in this case, the state of Jalisco. Funded by INIFAP Fiscal Resources SIGI 7285536076.