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BACKGROUND

The prevalence of influenza A (H1N1) HN1 infection in the past years has been a significant public health concern. The H1N1 virus, which is highly contagious, can lead to severe complications in vulnerable populations. The rapid identification and characterization of influenza strains are crucial for effective public health interventions.

METHODS

The study was conducted at the National Children's Hospital in the United States. The research involved the collection of nasal swabs from children with respiratory symptoms and the subsequent analysis of the samples for the presence of the H1N1 virus using real-time polymerase chain reaction (PCR).

RESULTS

The sensitivity and specificity of the PCR assay were evaluated using a panel of positive and negative control samples. The results showed excellent agreement between the assay and the gold standard methods, with a sensitivity of 98.9% and a specificity of 99.7%.

DISCUSSION

The high agreement between the PCR assay and the control methods suggests that the assay is reliable and can be used for rapid diagnosis of H1N1 infections in clinical settings.

ABSTRACT

This study aimed to evaluate the performance of a rapid PCR assay for the detection of the H1N1 virus in children. The assay was found to be highly sensitive and specific, making it a valuable tool for the rapid diagnosis of H1N1 infections.