

## ABSTRACT

# Tracking H1N1 vaccine doses administered using CRA system

B Nichols<sup>1</sup>, S Waite<sup>2</sup>, H Hill<sup>3</sup>, L Han-Lee<sup>2</sup>, S Sapkota<sup>2</sup>, and J Tropper<sup>1</sup>

<sup>1</sup>Centers for Disease Control and Prevention (CDC), Atlanta, GA, USA; <sup>2</sup>CDC Contractor from SRA International Inc., Fairfax, VA, USA; and

<sup>3</sup>CDC Contractor from McKing Consulting, Fairfax, VA, USA

E-mail: ssapkota@cdc.gov

## Objective

The objective of this paper is to report the use of the Centers for Disease Control and Prevention's (CDC) Countermeasure and Response Administration System (CRA) to track and monitor H1N1 doses administered during the initial weeks of the 2009–2010 H1N1 Vaccine Program when supplies of the vaccines were limited, and before population-based surveys like Behavioral Risk Factor Surveillance Systems, and National H1N1 Flu Survey could effectively monitor vaccine coverage.<sup>1</sup>

## Introduction

The novel strain of H1N1 Influenza A virus, which first caused localized outbreaks in parts of Mexico, was declared a pandemic in June 2009. CDC's CRA was used to track the H1N1 vaccine uptake across population age groups during the first eight weeks of the event (3 October to 21 November 2009). The CRA application was utilized to track vaccine doses administered in the initial period of H1N1 vaccine campaign, as there was no other method available to inform how well the vaccine was reaching target age groups.

## Methods

Through several webinars and conference calls with vaccine-tracking coordinators, Project Areas were required to participate in reporting H1N1 vaccine doses-administered counts on a weekly basis. All 50 states, four major cities (Los Angeles, New York City, Chicago and Washington DC) and eight US islands and territories, also known as Project Areas, participated in the campaign. Reporting occurred along seven Advisory Committee on Immunization Practices (ACIP) recommended age groups: 6–23 months; 24–59 months; 5–18 years; 19–24 years; 25–49 years; 50–64 years; and 65 years and above. Each Project Area was asked to select an option from the following to transmit report/data to CDC: Option 1, data exchange; Option 2, web entry aggregate; Option 3, web entry detail.

## Results

During the initial eight-week-period of the H1N1 vaccine response, from 3 October to 21 November 2009, a total of

14,788,795 vaccines were reported to CDC from 60 reporting Project Areas. Of the total doses reported, 35% of vaccines were administered to children aged 5–18 years, and over 83% were administered to persons less than 65 years. The average delay between administration of H1N1 vaccine and reporting of that data to CRA was from two to four weeks. Overall, by the final week of reporting (21 November 2009), Project Areas reported approximately 4.4% of H1N1 vaccine administered during the first eight weeks of the campaign using the CRA system.

## Conclusions

CRA is a functioning informatics system for monitoring vaccine uptake in different age groups in the early stages of the H1N1 response when vaccine supply is inadequate. This vaccine reporting event demonstrated that CRA application is a useful system for national reporting of aggregate doses administered early on during a pandemic, providing an understanding of vaccine coverage before the traditional surveillance systems. Comparisons of data obtained from NHFS validated data from CRA application.<sup>2</sup> Improvement on individual Project Area automation would contribute significantly towards enhancing doses-administered reporting systems.

## Acknowledgements

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## References

- 1 Tropper J, Shimabukuro T, Sapkota S, Williams W, Williams CE, Stanley T. CDC's Countermeasure and Response Administration system for monitoring H1N1 vaccine doses administered. *Disaster Med Public Health Prep* 2009;2 (Suppl): S107–8.
- 2 CDC. Interim Results: Influenza A (H1N1) 2009 Monovalent Vaccination Coverage—United States, October—December 2009. *MMWR* 2010;59(02):44–8.