

**CDInfo** 



Richard M. Daley, Mayor

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CDInfo is a surveillance newsletter intended to promote prevention of morbidity and mortality by providing useful data and practical recommendations for clinicians, laboratorians and infection control personnel who diagnose, treat and/or report infectious diseases in Chicago.

## Update: Serogroup C invasive meningococcal disease and associated vaccination activities in Chicago, 2008 – 2009

In 2008, 24 cases of serogroup C invasive meningococcal disease (SCIMD) were reported among Chicago residents, six of whom died. This was the highest annual SCIMD case count since 1997, when 26 cases were reported. Vaccination is the best way to prevent invasive meningococcal disease caused by serogroups A, C, Y and W-135, and, since 2005, the Advisory Committee on Immunization Practices (ACIP) has recommended that adolescents, college freshmen living in dormitories, and others who are at high risk for IMD receive a single dose of the meningococcal conjugate vaccine (MCV4 − Menactra<sup>™</sup>).¹ The 2008 SCIMD activity underscored the need for health care providers to offer and administer MCV4 to all their eligible patients (persons 11-18 years of age). Through the first eight months of 2009, just three Chicago SCIMD cases (one resulting in death) were reported. This *CDInfo* provides an update to the December 2008 edition² and summarizes recent CDPH initiatives regarding MCV4.

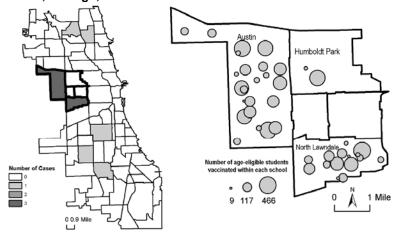
In March and April of 2008, two teenaged residents of Chicago's Austin neighborhood died of SCIMD, and over a 16 week period, six reported cases had occurred in Austin and North Lawndale (a nearby community) with an approximate incidence rate of four per 100,000 residents. Figure 1a displays SCIMD incidence in Chicago during this period. In response to these cases and suspected low immunization coverage among residents of these communities, CDPH amplified existing initiatives and mobilized additional resources to improve meningococcal vaccine coverage rates in these communities.

A vaccination campaign was carried out April 24 – May 8, 2008. A total of 5,343 meningococcal vaccinations were administered in 40 schools – 34 (85%) public, and 6 (15%) private. The number of eligible students vaccinated per school ranged from 9 – 466 (median, 112) and the proportion of ageligible students receiving the vaccine ranged from 5% - 87% (median, 52%) (figure 1b). Overall, 44% of enrolled students aged 11-18 years at the participating schools were immunized in the campaign. In addition, vaccination events were held at city parks in Austin and North Lawndale on April 26, 2008. Vaccinations were given to 464 persons, 403 (87%) of whom were aged 11-18 years.

From the time of the vaccination campaign through the end of 2008, no cases were reported among residents of Austin or North Lawndale (figure 1c); in 2009, one SCIMD case has been reported in a preschool aged Austin resident (figure 1d).

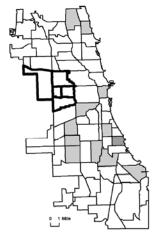
In April and again in December of 2008, CDPH informed 650 Vaccines For Children clinics and 2,700 members of the Illinois Chapter of the American Academy of Pediatrics of the recent trends in the epidemiology of SCIMD and the importance of adhering to the ACIP recommendations regarding MCV4. According to data provided by Sanofi Pasteur, the maker of Menactra<sup>™</sup>, the number of MCV4 doses distributed to providers in Chicago increased 24% from 34,015 in 2007 to 42,235 in 2008. Earlier this month, CDC reported that 41.1% of Chicago adolescents aged 13-17 years had received MCV4, compared to a national average of 41.8%.³ Despite these encouraging findings, more than half of Chicago teenagers likely remain unimmunized. Health care providers should continue to offer and administer MCV4 to all their eligible patients. Chicago residents without a health care provider can call 311 to locate a CDPH Fast Track Immunization clinic.

Figure 1. Serogroup C invasive meningococcal disease (SCIMD) activity and meningococcal conjugate school vaccination results, Chicago, 2008-2009

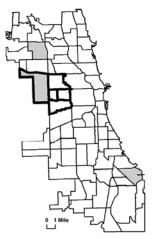


1a. Reported residences of SCIMD case-patients in Chicago with illness onset December 31, 2007 - April 14, 2008 (n=11)

1b. Location of school vaccination sites, April 24 - May 8, 2008. Circle size indicates the number of age-eligible students vaccinated. Two participating schools located outside the area are not displayed.



1c. Reported residences of SCIMD case-patients in Chicago with illness onset April 15 - December 31, 2008 (n=13). One additional case-patient, who was homeless, is not represented.



1d. Reported residences of SCIMD casepatients in Chicago with illness onset January 1 - August 31, 2009 (n=3).