

**Immunization Information Systems (IIS) Sentinel Site – Implementation Grant
Minnesota Department of Health**

The Minnesota Immunization Information Connection (MIIC) is Minnesota’s immunization information system. Starting in 2008 Hennepin County will be our site for the Sentinel Site Implementation Grant. The population estimate for 2005 for **Hennepin County** was 1,150,912, whose county seat is Minneapolis, and it is by far the most populous county in Minnesota as more than one in five Minnesotans live in Hennepin County.

As of the 2000 census², there were 1,116,200 people, 456,129 households, and 267,291 families residing in the county. The racial makeup of the county was 80% White, 9% Black or African American, 1% Native American, 5% Asian, 0.05% Pacific Islander, 2%

from other races, and 2% from two or more races. 4% of the population is Hispanic or Latino of any race. 23% were of German, 12% Norwegian, 8% Irish and 7% Swedish ancestry according to Census 2000.

Hennepin County, as a sentinel site, represents many types of populations that can be seen across the entire state. Minneapolis has a population characteristic of the urban setting with diverse racial/ethnic makeup and socioeconomic status. Suburban areas of Minneapolis are less diverse, with a mostly

white middle-class population.

Table 1- Patients with 2 + shots in MIIC by Age Group , Hennepin county, 1/1/2008

Population Participation:

As seen in Table 1, 95% percent of Hennepin County residents age 0-18 have 2 or more shots in MIIC. Birth certificate data have been imported into MIIC on all children born in Minnesota since 1995. Residents who have moved into Minnesota since birth have had their records created on import of batch data or through direct data entry by participating providers. The records are fully populated for up to 12 years of age.

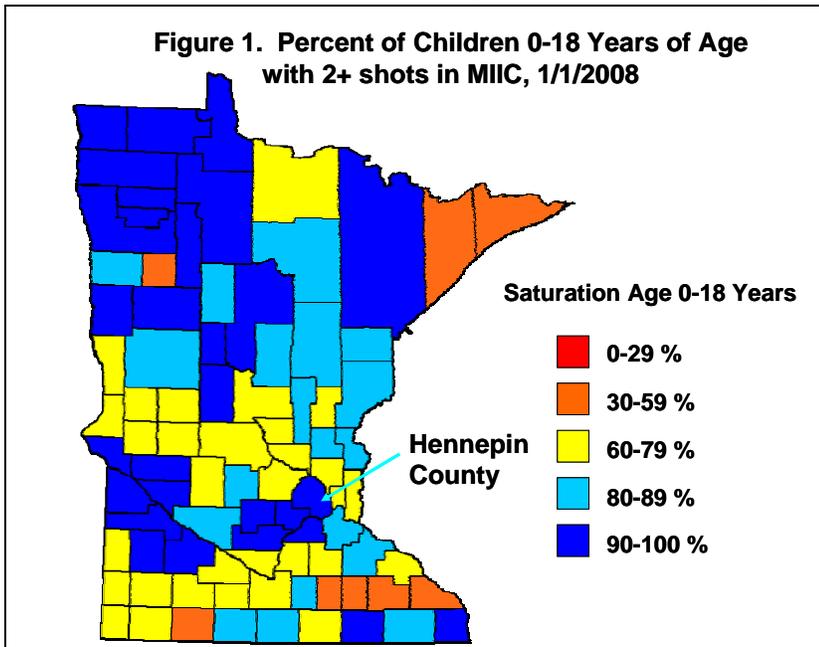


Table 1. Patients with 2+ shots in MIIC by Age Group, Hennepin County, 1/1/2008			
Age Group (Years)	# Vaccinated with 2+ shots	Population	Percent
0-5	91,166	96,652	94.32
6-10	77,031	80,117	96.15
11-12	31,585	32,749	96.45
13-15	45,104	47,674	94.61
16-18	47,290	49,956	94.66
Total	292,176	307,148	95.13

Provider Enrollment: Hennepin County maintains an accurate list of all clinics, including pediatrics, family practitioners, OB/GYN, school-based clinics, internal medicine and Planned Parenthood clinics, from which they base provider enrollment. As of February 2008, the provider participation was at **85%** (Table 2).

Table 2- Hennepin County Provider Enrollment, Public vs. Private Sector

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Public Providers N = 13		Private Providers N = 159		Combined Public and Private N = 172	
Number in MIIC	%	Number in MIIC	%	Number in MIIC	%
13	100	133	84	146	85

Table 3. Time from Vaccination Until Vaccination Event is Recorded in MIIC Hennepin County, Oct-Dec. 2007		
Time from Vaccination to Entry into MIIC (days)	Frequency	Percent
0-30	81,093	80.56
31-60	14,587	14.49
61+	4,987	4.95

Table 3-Time from Vaccination Unit, Vaccination Event is Recorded in MIIC Hennepin County, Oct-Dec 2007

Timeliness: Past analysis has shown that MIIC’s direct data entry users often enter shots within 7 days and even on the same day as a vaccination is given. Batch data providers are not as timely in submitting data (Table 3). Follow-up with batch shot providers during 2008 will address timeliness issues as well as other data completion problems with the goal of 90% of shots entered into MIIC within 30 days of vaccination.

On-going Data Quality Procedures: Provider organizations that submit data in batch mode must pass an initial audit that looks at test files for proper formatting, how well the test files match paper records and whether appropriate vaccination types are submitted for age groups. Also, monthly feedback reports that show similar tests on submitted shots for that month are monitored by Regional Coordinators. Organizations that have large numbers of inappropriate codes are contacted to determine whether there are systematic coding problems or if there are data entry problems that might be solved by educational means.

Data Quality Objectives: Over the next 5 years, Sentinel Site Grant activities will include work on data quality activities for Hennepin County provider organizations to 1) increase the completeness of core data elements; especially lot number and manufacturer fields, 2) implement MIROW data quality, MOGE and shot level de-duplication guidelines, 3)

improve timeliness of vaccination record entry into MIIC and 4) determine the reasons why up-to-date rates from the NIS appear to be different from those calculated using MIIC.

This document can be found on the CDC website at:
<http://www.cdc.gov/vaccines/programs/iis/activities/downloads/MN-sentinel.pdf>