

# CHAPTER 10:

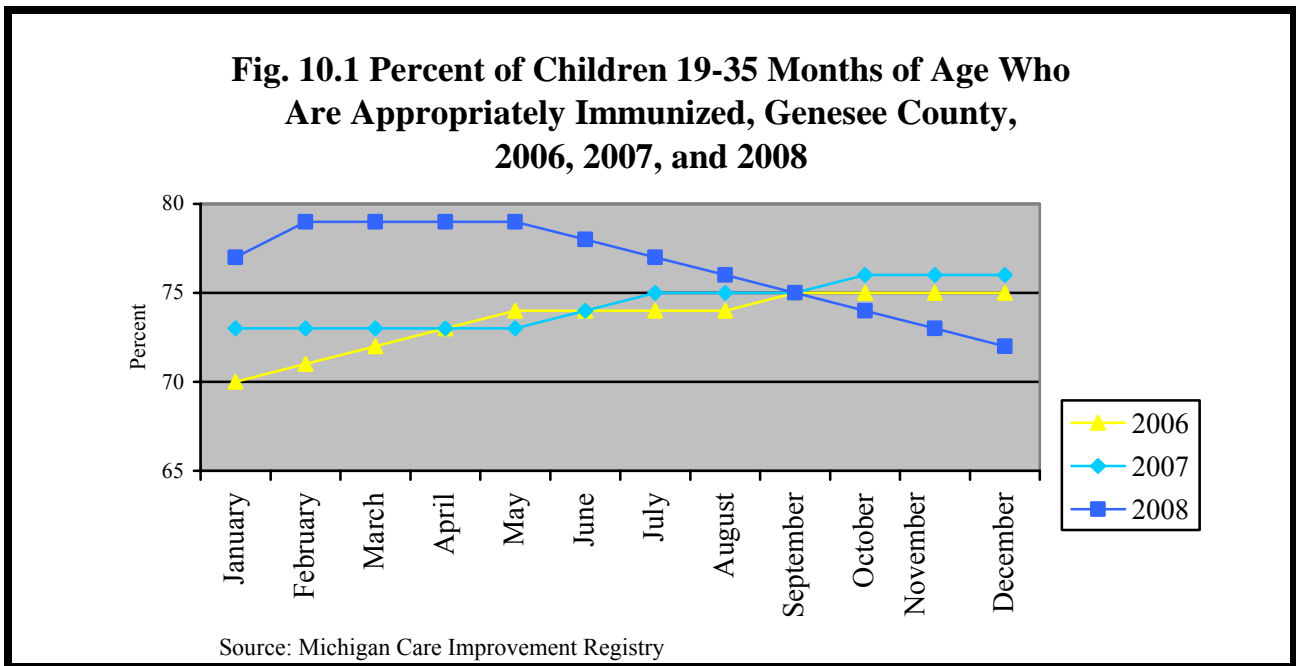
## Communicable Disease

Indicators within this category include diseases which are usually transmitted through person-to-person contact or shared use of contaminated materials. Many of these diseases can be prevented through a high level of vaccine coverage of vulnerable populations or through the use of protective measures, such as condoms for the prevention of sexually transmitted diseases.

Source: Mobilizing for Action through Planning and Partnerships (MAPP), Community Health Indicators, National Association of City and County Health Officials and the Centers for Disease Control and Prevention.

### IMMUNIZATIONS

#### Children



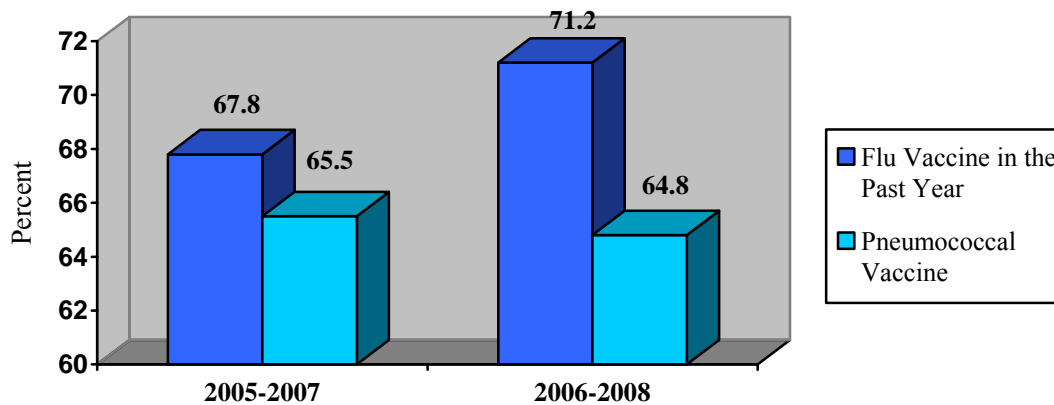
- ◆ Appropriate immunizations for 19-35 month old children are considered:
  - ◆ 4 DTaP (Diphtheria, Tetanus, and Pertussis)
  - ◆ 3 Polio
  - ◆ 1 MMR (Measles, Mumps & Rubella)
  - ◆ 3 Hib (Haemophilus influenzae type B)
  - ◆ 3 Hepatitis B
  - ◆ 1 Varicella (Chickenpox)

- ◆ The goal is to have 100% of children in Genesee County receive all of their age-appropriate vaccinations.
- ◆ In 2007, the average percent appropriately immunized was 74.3% and in 2008 the average percent was 76.5%.
- ◆ There has been impressive progress made over the last few years in Genesee County regarding immunizations. In January 2006, only 68% of 19-35 month olds in Genesee County had received all their age-appropriate immunizations. By the May 2008, 79% of children in that age group were fully immunized.
- ◆ The decline in immunizations during the latter half of 2008 is due to the deferment of the Hib booster dose as a result of a vaccine shortage. A similar decline has been seen statewide.

## Adults

- ◆ Between 2006 and 2008, 71.2% of adults aged 65 years and older in Genesee County reported receiving a flu shot in the past year and 64.8% of adults 65 years and older in Genesee County reported ever having a pneumonia shot.
- ◆ Figure 10.2 illustrates an increase in the percent adults aged 65 years and older who receive a flu shot.

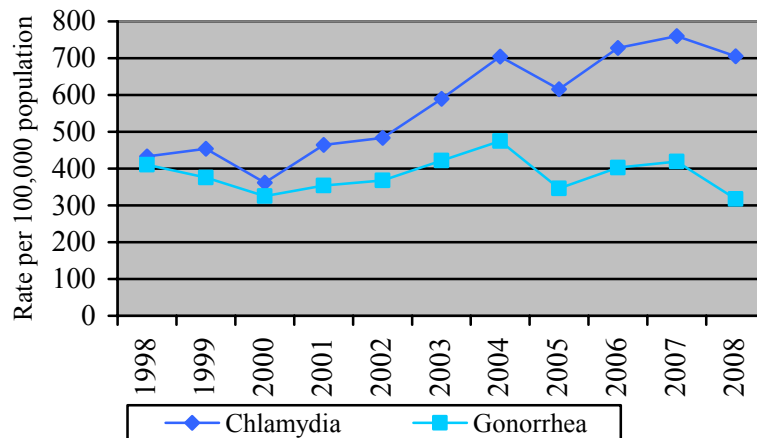
**Fig. 10.2 Immunizations Among Adults Aged 65 Years and Older, Genesee County, 2005-2008**



Source: 2005-2008 Michigan Behavioral Risk Factor Surveys, Michigan Department of Community Health

## SEXUALLY TRANSMITTED DISEASE

**Fig. 10.3 Rates of Sexually Transmitted Diseases, Genesee County, 1998-2008**



\*Rates are per 100,000 population.  
 Source: Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health

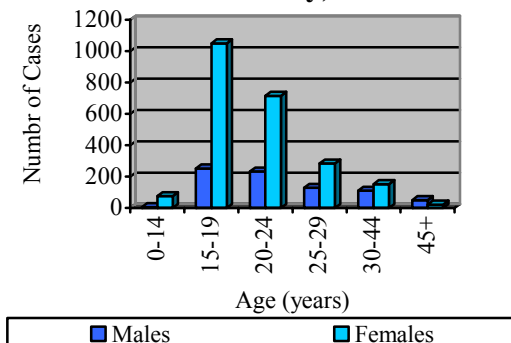
- ◆ In 2008 Genesee County had the 2<sup>nd</sup> highest rate of Gonorrhea in the State of Michigan, after the City of Detroit.
- ◆ In 2008 Genesee County had the 2<sup>nd</sup> highest rate of Chlamydia in the State of Michigan, after the City of Detroit.
- ◆ There are significant gender disparities in rates of Chlamydia and Gonorrhea in Genesee County.

**Fig. 10.4 Overall Rates of Gonorrhea and Chlamydia, Genesee County and Michigan, 2008**

	Genesee County	Michigan
<b>Gonorrhea</b>	317.7	138.5
<b>Chlamydia</b>	705.1	323.3

\*Rates are per 100,000 population.  
 Source: Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health

**Fig. 10.5 Number of Chlamydia Cases by Gender and Age, Genesee County, 2008**

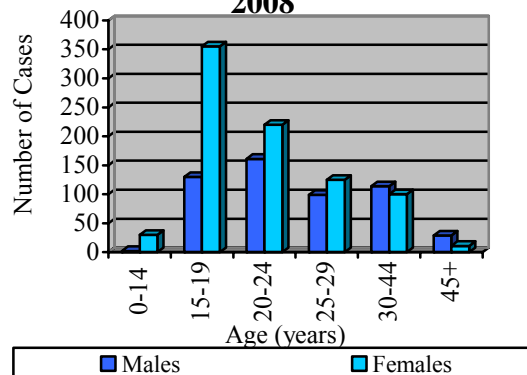


- ◆ Males and females 15-24 years old had the highest incidence of Chlamydia in 2008.

Source: Michigan Sexually Transmitted Disease Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health

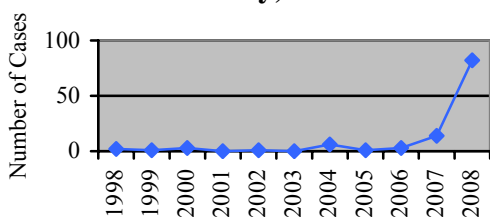
- ◆ Females 15-24 years old had the highest incidence of Gonorrhea in 2008.
- ◆ In 2008, males 20-24 had the highest incidence of Gonorrhea.

**Fig. 10.6 Number of Gonorrhea Cases by Gender and Age, Genesee County, 2008**



Source: Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health

**Fig. 10.7 Number of Cases of Primary & Secondary Syphilis, Genesee County, 1998-2008**

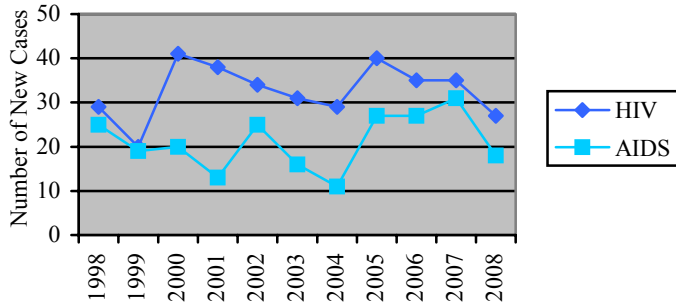


Source: Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health

- ◆ The number of cases of Primary and Secondary Syphilis fell in the range of 0-6 cases between 1998 and 2006 in Genesee County. In 2007 there were 14 and in 2008 there were 82 cases in Genesee County.
- ◆ In April 2008 the Genesee County Health Department reported an outbreak of infectious syphilis occurring in Genesee County.

## HIV/AIDS

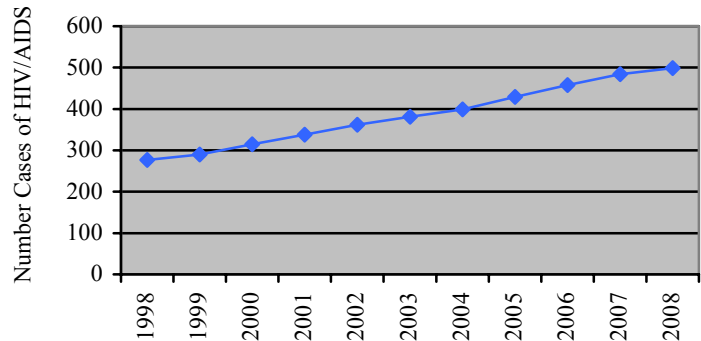
**Fig. 10.8 Number of New Cases of HIV and AIDS, Genesee County, 1998-2008**



- ◆ In 2008, there were 12 HIV/AIDS deaths in Genesee County.
- ◆ Figure 10.8 shows the trend in the number of number of persons newly diagnosed with HIV and AIDS in Genesee County which is greater than the number of deaths each year.

- ◆ The prevalence of HIV/AIDS in Genesee County has steadily increased as shown in figure 10.9.

**Fig. 10.9 Number of Persons Living with HIV or AIDS, Genesee County, 1998-2008**



Source: HIV/AIDS Surveillance Section, Michigan Department of Community Health

## TUBERCULOSIS

**Fig. 10.9 Number of Cases and Rate of Tuberculosis, Genesee County, 2005-2008**

	2005	2006	2007	2008
<b>Number of Cases</b>	5	4	18	5
<b>Rate</b>	1.1 per 100,000	**	4.1 per 100,000	1.1 per 100,000

\*\* Numbers are too low to calculate reliable rates  
Source: Michigan Disease Surveillance System

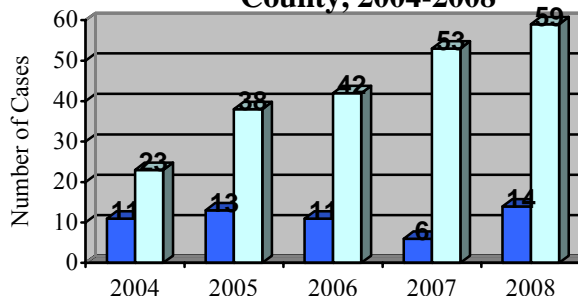
- ◆ A cluster of tuberculosis cases in Flint related to a single source was identified in 2007.

## HEPATITIS

### Hepatitis B

- ◆ In Genesee County, the number of acute Hepatitis B cases reported has remained relatively stable from 2004-2008, with a decrease in 2006, while the number of chronic Hepatitis B cases detected has steadily increased from 2004-2008.
- ◆ 44% of chronic Hepatitis B cases reported from 2004-2008 have been among females and 78% of those have been among women of childbearing age (10-60 years of age).

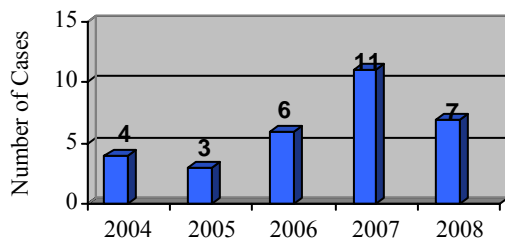
**Fig. 10.10 Number of Acute and Chronic Hepatitis B Cases, Genesee County, 2004-2008**



Source: Michigan Disease Surveillance System

### Hepatitis C

**Fig. 10.11 Number of Acute Hepatitis C Cases, Genesee County, 2006-2008**



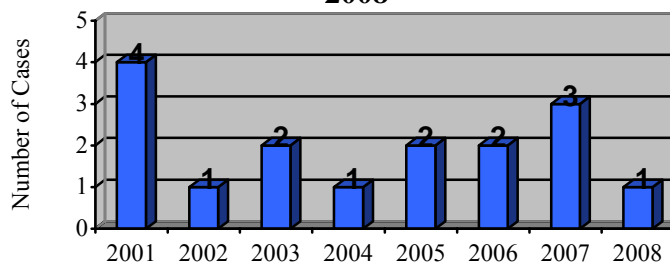
Source: Michigan Disease Surveillance System

- ◆ In Genesee County, the five-year acute case reporting count of hepatitis C for 2004 to 2008 is 31.
- ◆ 58% of the cases have been among females.
- ◆ Approximately half (55%) of the reported acute cases are between the ages of 20-39 years old.

## BACTERIAL MENINGITIS

- ◆ From 2000-2008, there have been few cases of Meningococcal Meningitis in Genesee County.

**Fig. 10.12 Number of Meningococcal Meningitis Cases, Genesee County, 2000-2008**



Source: Michigan Disease Surveillance System