



What is it?

Human immunodeficiency virus (HIV) is the virus that causes acquired immunodeficiency syndrome (AIDS). HIV attacks white blood cells in the immune system (T cells and CD₄ cells) and gradually destroys the body's ability to fight infections. When an individual with HIV develops certain infections, like tuberculosis or *Mycobacterium avium* complex (MAC), or certain cancers (e.g., Kaposi's sarcoma) or whose CD₄ cells drop below 200 (or CD₄% drops below 14%), the person is considered to have progressed to AIDS.ⁱ

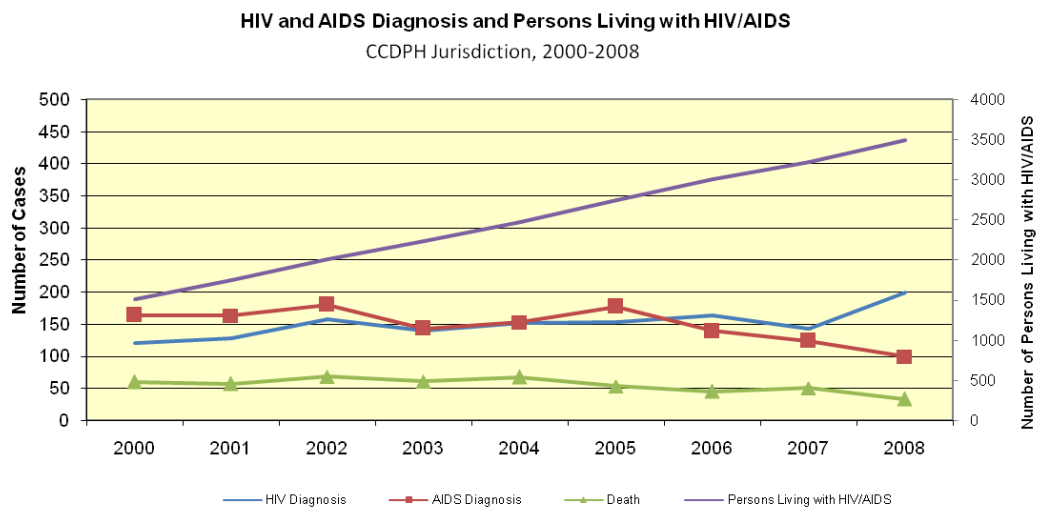
Why is it important?

There is no cure for HIV/AIDS. HIV can spread even when people do not appear sick and does not exert its effects for years after infection. Since 1981, the year HIV/AIDS was first described, more than 20 million people have died from HIV/AIDS worldwide and up to 40 million may be living with HIV/AIDS.ⁱ In the United States, the CDC estimates that 21% of persons with HIV infection do not realize they are infected.ⁱⁱ

2000-2008

Though AIDS diagnoses and HIV/AIDS deaths decreased in the Cook County Department of Public Health's (CCDPH's) jurisdiction since 2005, the number of persons living with HIV/AIDS (PLWHA) continued to increase each year. Every year from 2000 through 2008, nearly 300 additional persons were living with HIV/AIDS in Suburban Cook County (SCC), increasing from 1,510 PLWHA in 2000 to 3,488 PLWHA in 2008.

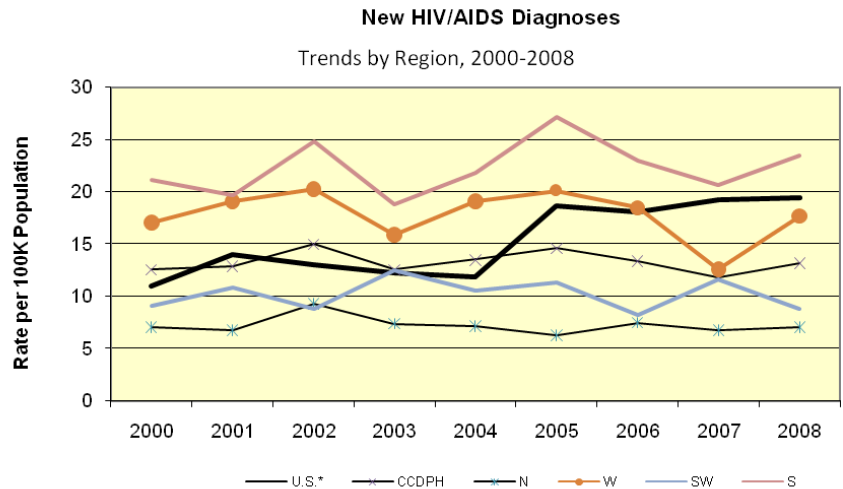
Figure 1



Trends in New HIV/AIDS Diagnoses 2000-2008

Figure 2

Rates of new HIV/AIDS diagnoses were higher in the South and West districts of CCDPH's jurisdiction relative to CCDPH's overall rate and the national rate. The average rate of new HIV/AIDS diagnosis between 2000-2008 in the South district was 22.3 per 100,000 population, 67% higher than the average CCDPH rate (13.3 per 100,000 population) over the same period. Rates were lowest in the North district, averaging 7.3 per 100,000 population, about three times lower than the average rate in the South district.

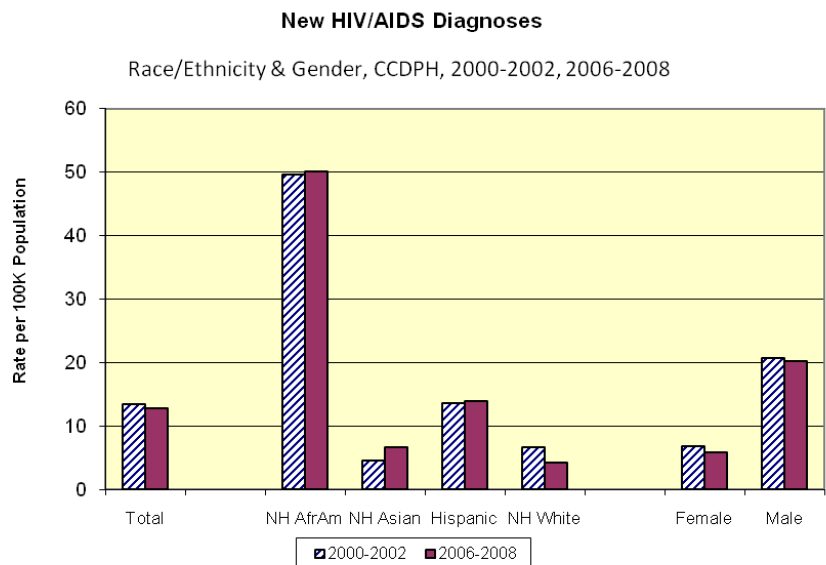


2000-2002 vs. 2006-2008 By Race and Gender

Figure 3

Overall, the rate of new HIV/AIDS diagnosis decreased slightly from 13.5 per 100,000 population between 2000-2002 to 12.8 per 100,000 population between 2006-2008.

Between 2006-2008 in CCDPH's jurisdiction, the rate of new HIV/AIDS diagnoses was highest in non-Hispanic African Americans (50.1 per 100,000 population), 3.6 times higher than the rate of new HIV diagnosis in Hispanics (13.9 per 100,000 population), and 12 times higher than the rate of new HIV/AIDS diagnosis in non-Hispanic Whites (4.2 per 100,000 population).

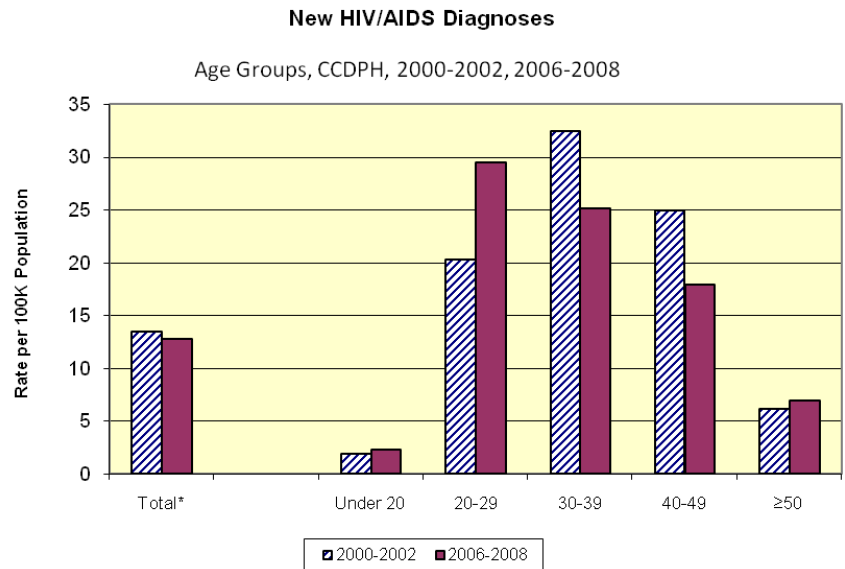


2000-2002 vs. 2006-2008

By Age Groups

The rate of new HIV/AIDS diagnosis increased among those aged 20-29 years, from 20.3 per 100,000 population between 2000-2002 to 29.5 per 100,000 population between 2006-2008. However, the rate of new HIV/AIDS diagnosis among persons aged 30-39 decreased, from 32.4 per 100,000 population between 2000-2002 to 25.1 per 100,000 population between 2006-2008. Together, these data indicate that the average age at which persons received a new HIV/AIDS diagnosis decreased between the two periods.

Figure 4



Reported HIV Infection by Risk Behavior

2000-2008

The number of new HIV/AIDS diagnoses has fluctuated over time, but may be decreasing in suburban Cook County. On average, 300 new HIV/AIDS cases are diagnosed each year. Of these, just over half are in men who have sex with men and 27% are a result of high risk heterosexual contact. The number of new HIV/AIDS diagnoses resulting from injection drug use decreased from 55 in 2000 to 38 in 2008.

Figure 5

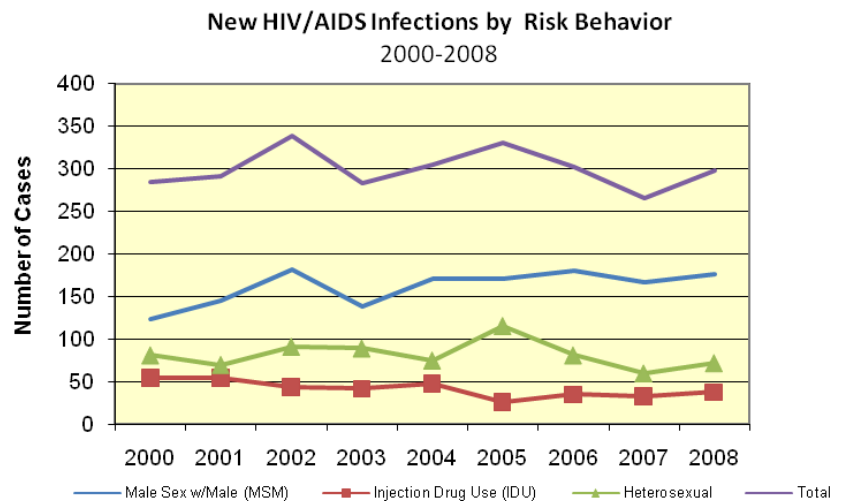


Table 1

HIV and AIDS Diagnosis and Persons Living with HIV/AIDS
Count by Year, CCDPH Jurisdiction
2000-2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
HIV Diagnosis	121	130	160	142	152	155	168	143	205
AIDS Diagnosis	162	161	176	142	151	174	132	119	87
Death	60	57	68	61	67	52	45	49	31
Persons Living with HIV/AIDS	1507	1741	2009	2232	2468	2745	3000	3213	3474

Table 2

**New HIV Diagnoses
Incidence by Region
2000-2008**

	2000		2001		2002		2003		2004		2005		2006		2007		2008	
	n	rate	n	rate	n	rate	n	rate	n	rate	n	rate	n	rate	n	rate	n	rate
U.S.	31,161	11.0	40,007	14.0	37,529	13.0	35,678	12.3	35,053	11.9	38,286	18.6	37,536	18.0	40,478	19.2	41,269	19.4
CCDPH	285	12.6	291	12.9	338	15.0	283	12.6	304	13.5	330	14.6	302	13.4	266	11.8	298	13.2
North	65	7.1	62	6.8	85	9.3	68	7.4	66	7.2	58	6.3	69	7.5	62	6.8	65	7.1
West	87	17.1	97	19.1	103	20.3	81	15.9	97	19.1	102	20.1	94	18.5	64	12.6	90	17.7
Swest	32	9.1	38	10.8	31	8.8	44	12.5	37	10.5	40	11.3	29	8.2	41	11.6	31	8.8
South	101	21.1	94	19.7	119	24.9	90	18.8	104	21.8	130	27.2	110	23.0	99	20.7	112	23.5

Table 3

New HIV DiagnosesTrends, CCDPH By Race/Ethnicity, Gender, & Age Groups
2000-2002, 2006-2008

CCDPH				
	2000-2002		2006-2008	
Total	914	13.5	866	12.8
Race				
<i>NH AfrAm</i>	460	49.7	464	50.1
<i>NH Asian</i>	16	4.6	23	6.6
<i>Hispanic</i>	123	13.6	126	13.9
<i>NH White</i>	303	6.6	192	4.2
Gender				
<i>Female</i>	238	6.8	204	5.9
<i>Male</i>	676	20.7	662	20.2
Age Groups				
<i>Under 20</i>	37	1.9	45	2.3
<i>20-29</i>	169	20.3	245	29.5
<i>30-39</i>	327	32.4	254	25.1
<i>40-49</i>	262	24.9	188	17.9
<i>≥50</i>	119	6.1	134	6.9

Note: NH=non-Hispanic; PI = Pacific Islander.

Rates based on 2000 Census Population for CCDPH.

Table 4

**Reported HIV Infection by Risk Behavior
Count by Year, CCDPH Jurisdiction
2000-2008**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Male Sex w/Male (MSM)	124	145	182	139	171	171	180	167	177
Injection Drug Use (IDU)	55	55	44	42	48	26	35	33	38
Heterosexual	81	70	91	89	75	115	81	60	72
Total	285	291	338	283	304	330	302	266	298

ⁱ CDC. Revised Surveillance Case Definitions for HIV Infection Among Adults, Adolescents, and Children Aged <18 Months and for HIV Infection and AIDS Among Children Aged 18 Months to <13 Years --- United States, 2008. MMWR. 57(RR10):1-8, 2008.

ⁱⁱ CDC. HIV Testing. Available at: <http://www.cdc.gov/hiv/topics/testing/index.htm> Accessed March 2011.