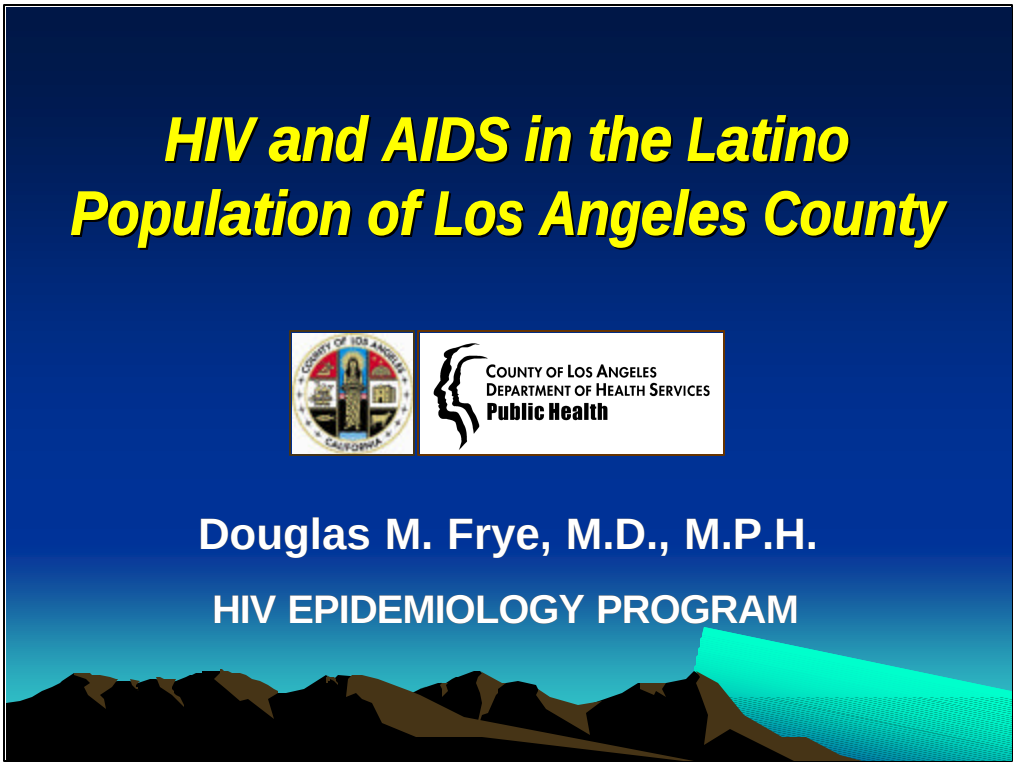
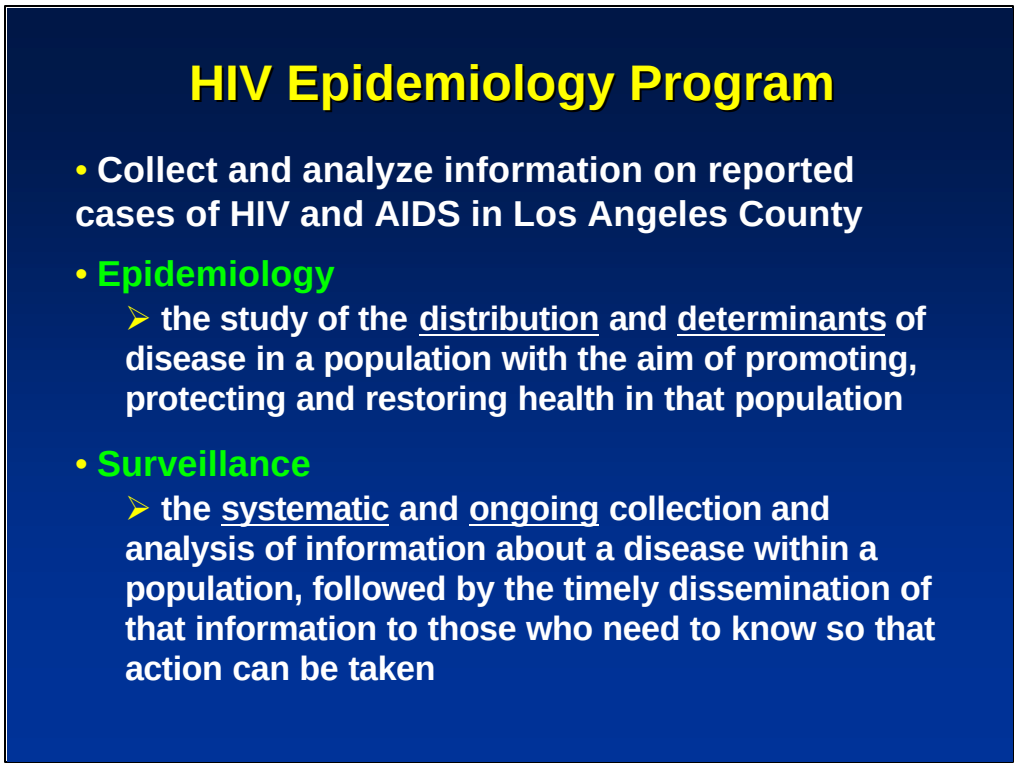


These are the slides for a talk Dr. Frye gave at a meeting of the Los Angeles County HIV Drug and Alcohol Task Force at Precious Blood Catholic Church Parish Hall, Los Angeles, on November 3, 2004. The agenda for that meeting was entitled: “HIV and Latinos: Overcoming the barriers.”

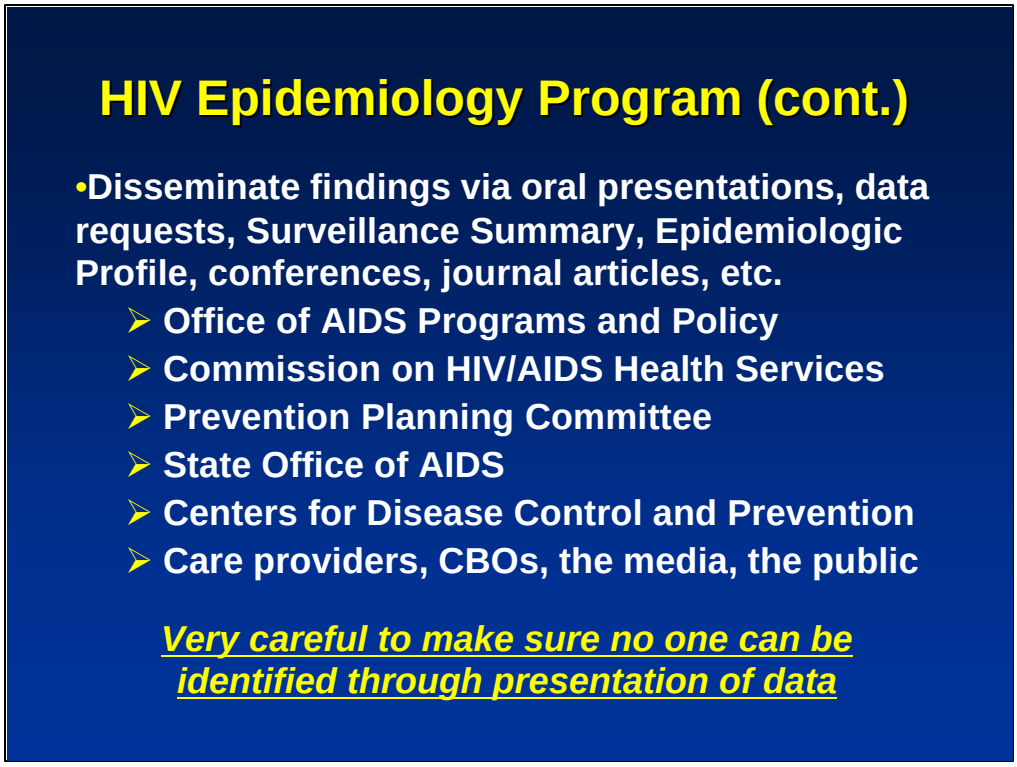


HIV Epidemiology Program (HEP) is a part of Los Angeles County's Department of Health Services/Public Health under the Office of Health Assessment and Epidemiology. HEP's mission is collect and analyze information of reported cases of HIV and AIDS and to conduct HIV-related research.

In the definition of epidemiology, "distribution" refers to where, geographically and demographically, HIV/AIDS is occurring – for example, among men, in SPA 4, among Blacks, etc. - while "determinants of disease" refers to how persons are contracting the virus – for example, through sex, injection drug use, transfusion, etc.

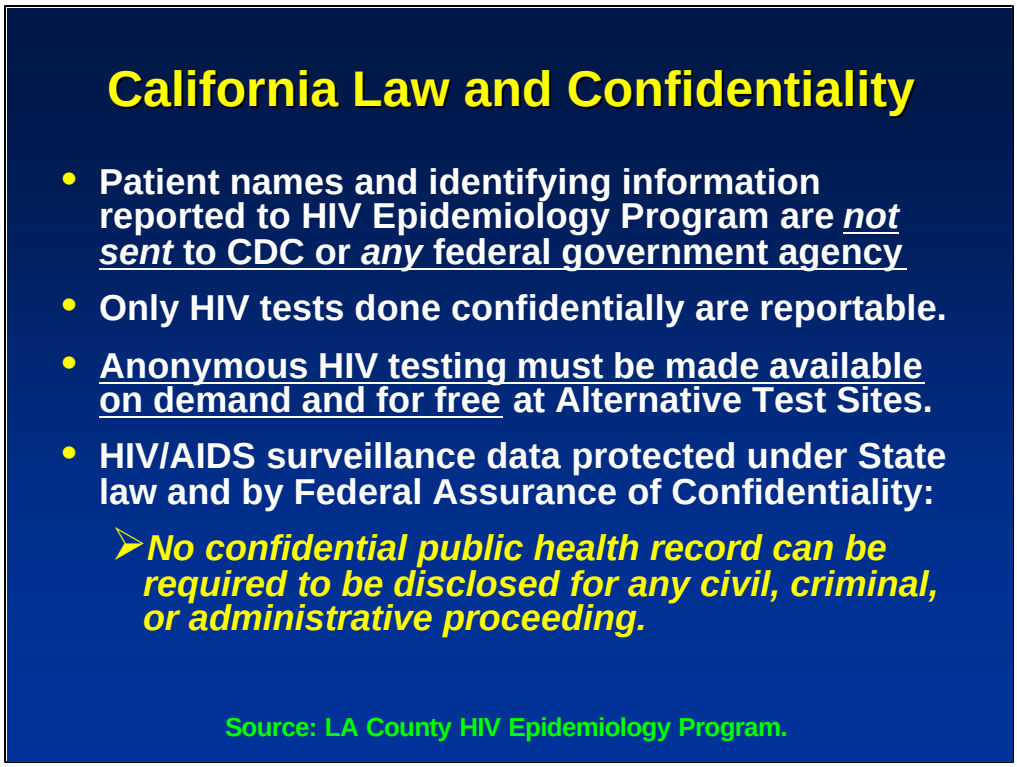
In the definition of surveillance, "systematic" refers to the collection and analysis being done the same way every time – for example, using the same case report form for all cases – while "ongoing" means we will be doing surveillance for HIV/AIDS until it is eradicated.

Finally, dissemination of the information we have collected and analyzed is essential to inform those who would use this information to make evidence-based decisions on where to allocate funding for HIV prevention, education, and care services.



Using various means, HIV Epidemiology Program disseminates its findings to its local, state, and federal partners, interested health care providers, community-based organizations, the media, and the public.

HIV Epidemiology Program takes every care to make sure no person with HIV and AIDS, living or dead, can be recognized through the dissemination of the information we collect.



Some have expressed the concern that people may avoid getting tested for HIV out of fears that their name and other personal identifying information will be reported to the federal government – for example, the Centers for Disease Control and Prevention (CDC) or the Immigration and Naturalization Service (INS). This is not the case.

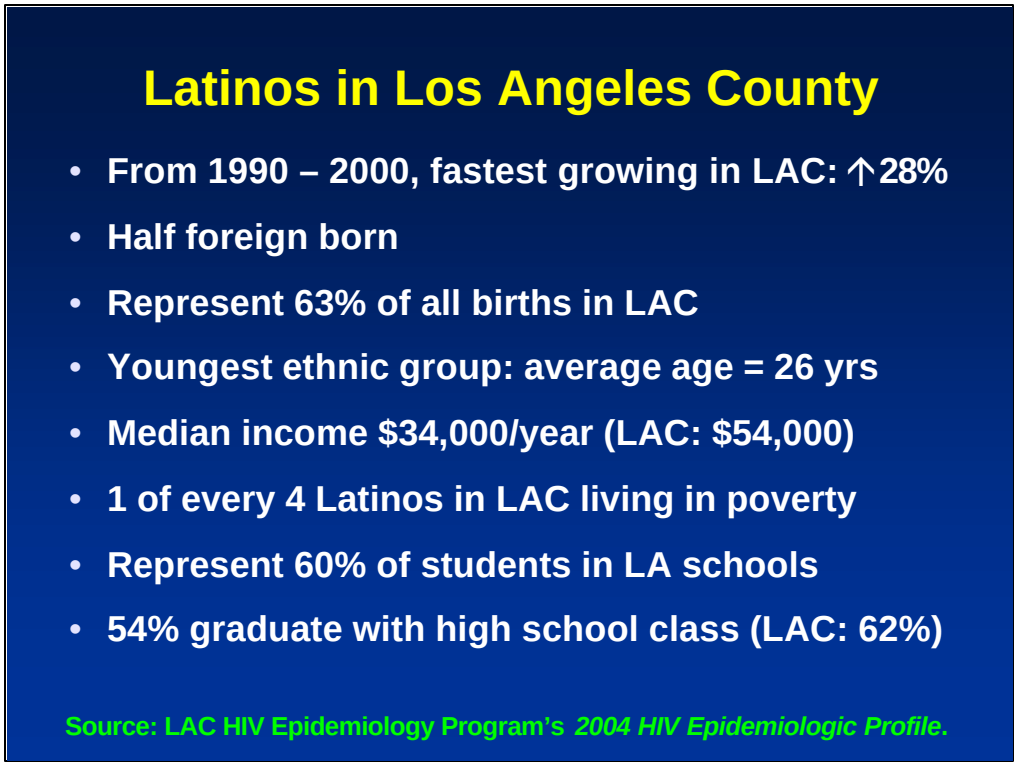
Named data is kept at HIV Epidemiology Program and sent to the California State Office of AIDS in Sacramento.

For surveillance data, no names, addresses, Social Security numbers, or other personal identifying information is ever transmitted to the federal government.

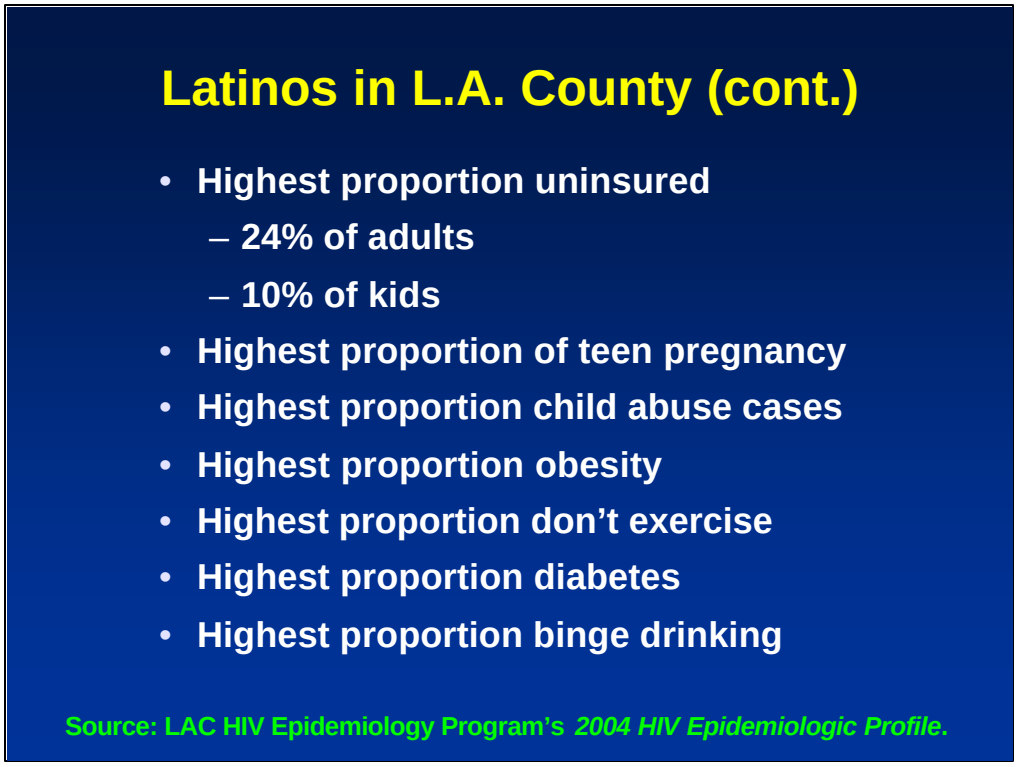
Further, only confidential tests are reportable. By state law, anonymous testing must be made available for those who are concerned about the confidentiality of their test results.

Also, there are state and federal laws that strictly prohibit the disclosing of names or other personal information to anyone without the expressed written permission of the person who has been reported.

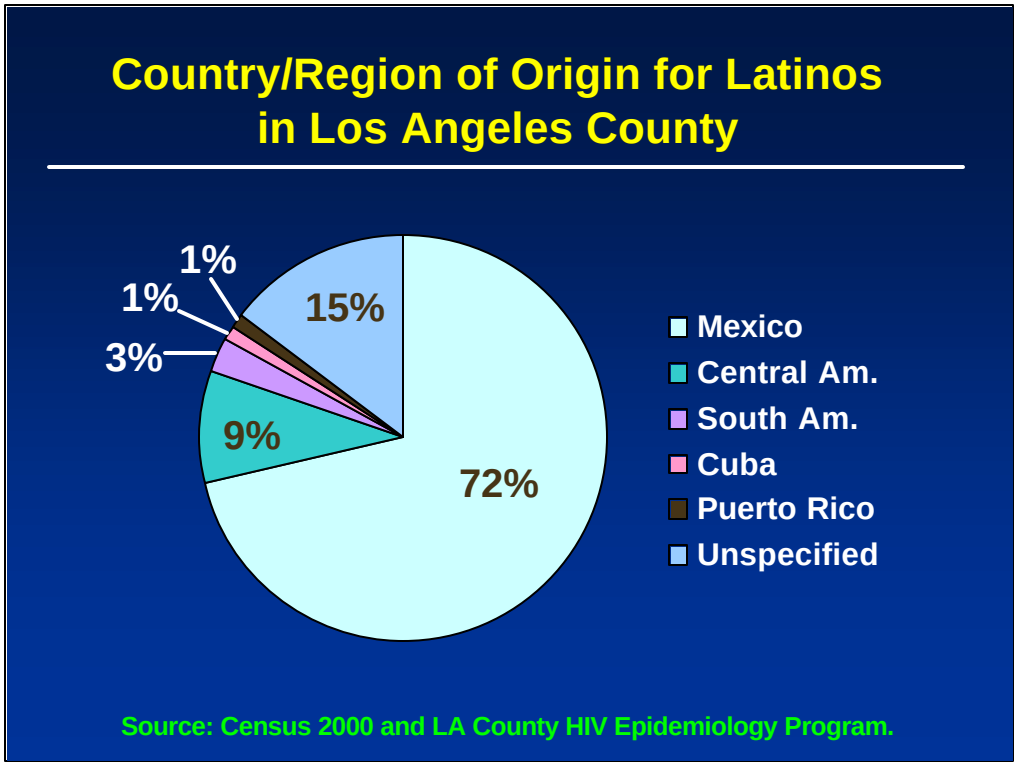
Finally, surveillance information cannot be subpoenaed for any legal proceeding whatever.



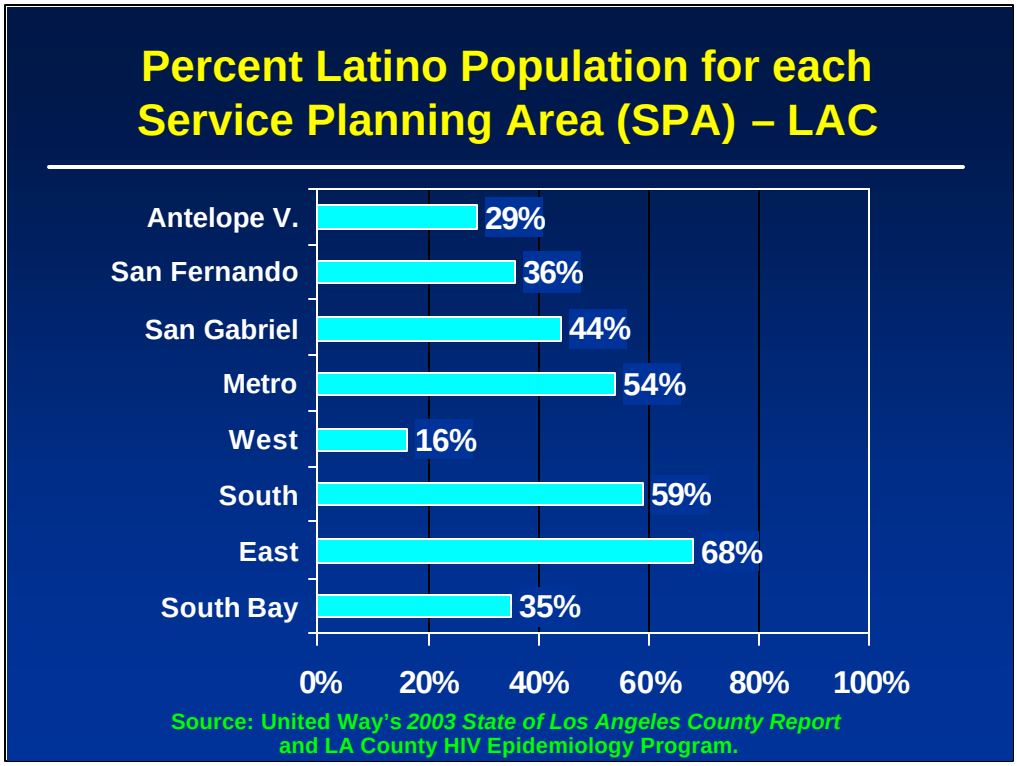
Latinos in Los Angeles County face many challenges today: they are the fastest growing segment of the population, half are foreign born, they have the lowest average income among racial/ethnic groups in the county and lowest percent of students graduating with their class from high school.



Latinos also have the highest percent of uninsured adults and children among racial/ethnic groups in the county, as well as the highest proportion with a myriad of public and personal health problems – such as obesity and diabetes.



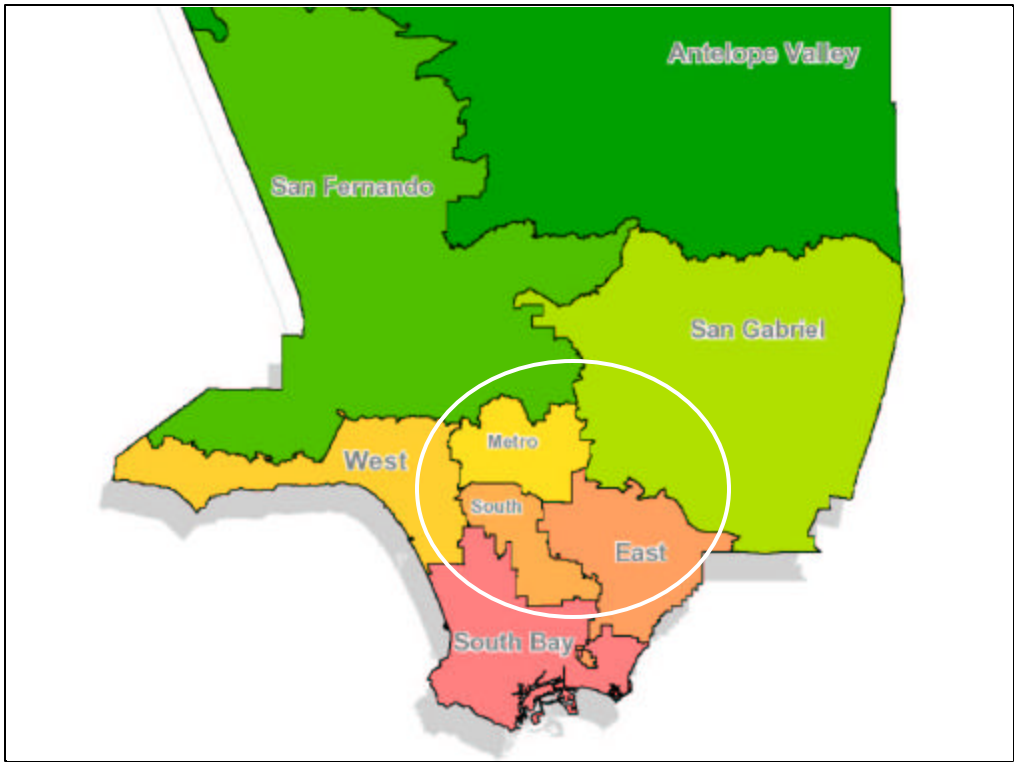
Nearly 3 of 4 Latinos living in Los Angeles County identified by the 2000 US Census are from Mexico (72%), while a sizable proportion are from Central America (9%) and South America (3%). One percent are from Puerto Rico and 1% from Cuba. Many (15%) did not report a specific country of origin.



The Department of Health Services has divided the county into 8 Service Planning Areas, or "SPAs".

Latinos constitute the majority of residents in three of these SPAs: Metropolitan (SPA 4), which includes West Hollywood, Hollywood, Los Feliz, Echo Park, Silver Lake, Wilshire Center, and Downtown; South (SPA 6), which includes Adams-La Brea, Compton, Crenshaw, Inglewood, Lynwood, West Adams, and Watts; and East (SPA 7), which includes East LA, Bell, Bell Gardens, Commerce, Downey, Monterey Park, Montebello, Huntington Park, City Terrace, and Belvedere Gardens.

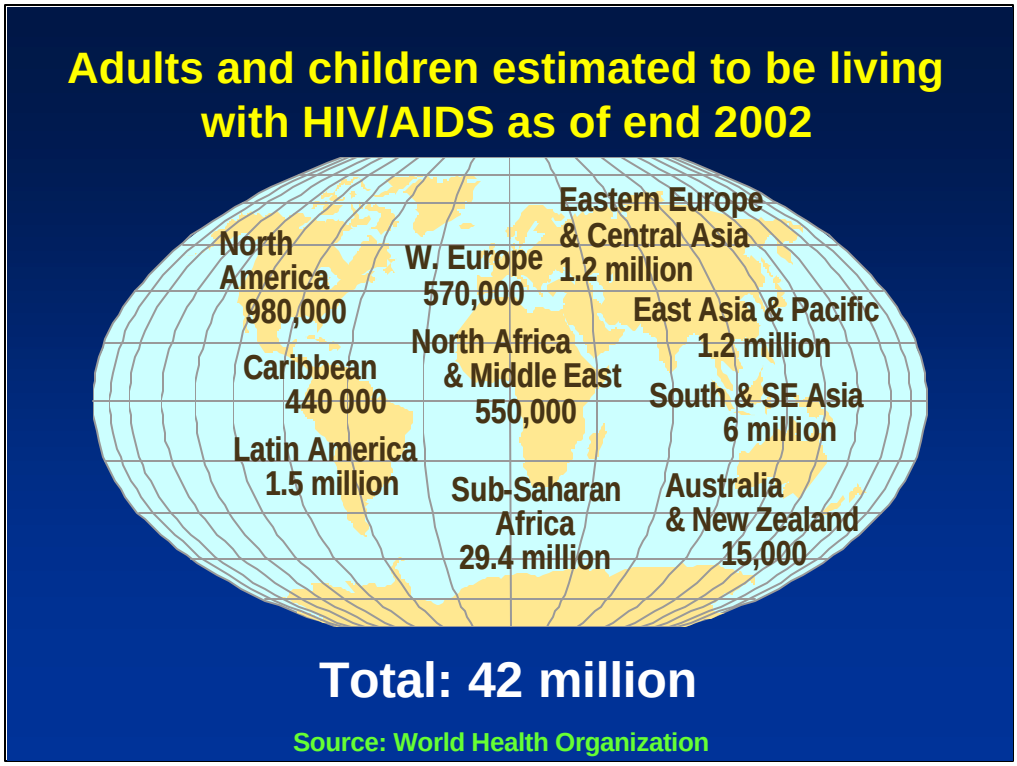
A map of these areas is shown in the next slide.



Here is a map of the 8 Service Planning Areas, or SPAs, in Los Angeles County.

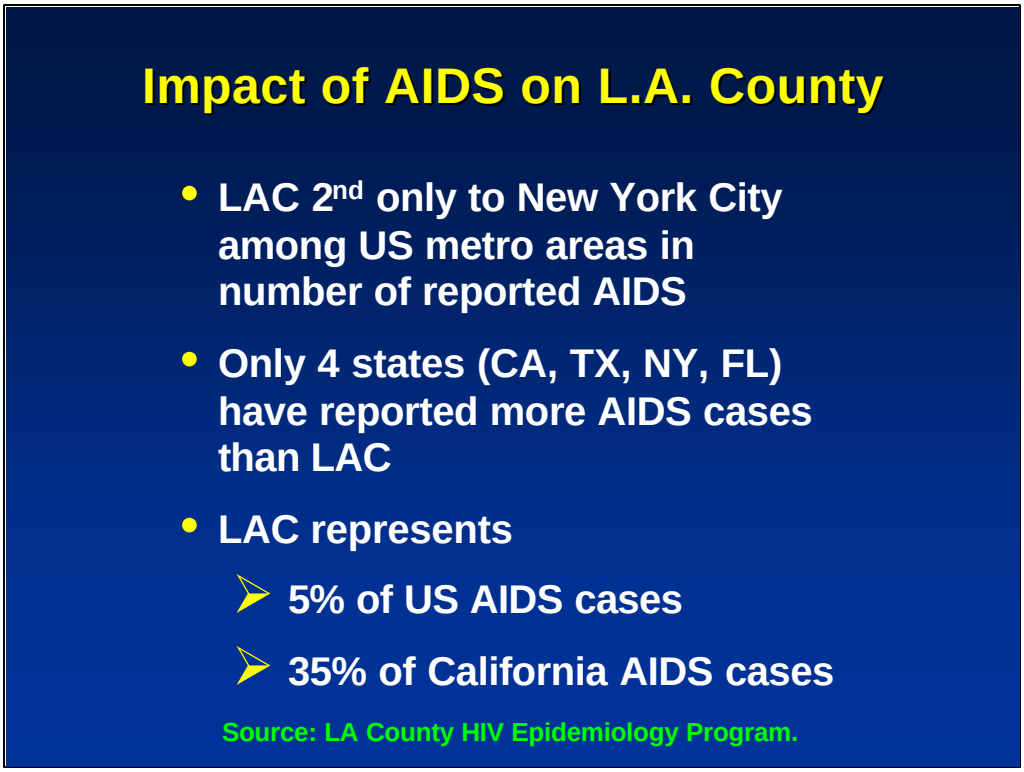
Latinos comprise the majority of residents for the three encircled SPAs: Metro (SPA 4), South (SPA 6), and East (SPA 7).

HIV and AIDS in Los Angeles County



Before we turn to Los Angeles County, let's put things in perspective. The World Health Organization estimates 42 million persons were living with HIV/AIDS by the end of 2002. Of these, the vast majority were living in sub-Saharan Africa and Asia.

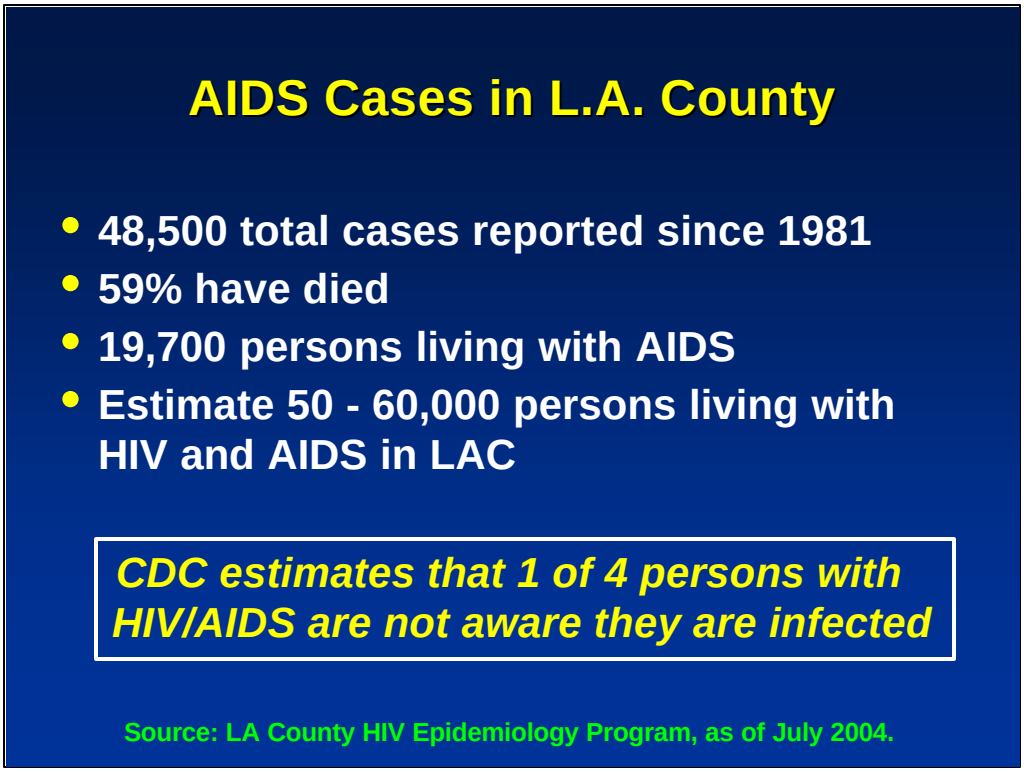
Latin America has an estimated 1.5 million persons living with HIV/AIDS and North America 980,000.



Los Angeles County has more persons reported with AIDS than any other major metropolitan area of the US except New York City.

If LAC were a state, it would rank 5th in the number of AIDS cases.

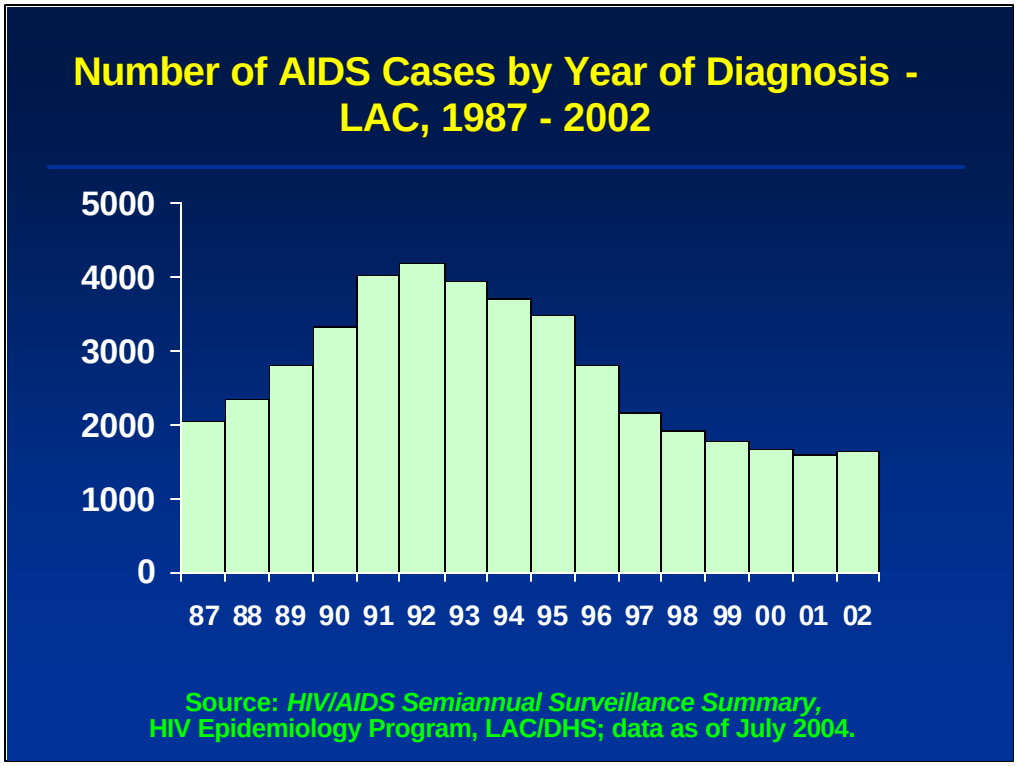
LAC represents 5% of all US cases and 35% of California AIDS cases reported.



Of the 48,500 persons reported with AIDS since the beginning of the epidemic, 59% have died.

Nearly 20,000 persons were living with AIDS in Los Angeles County as of July 2004.

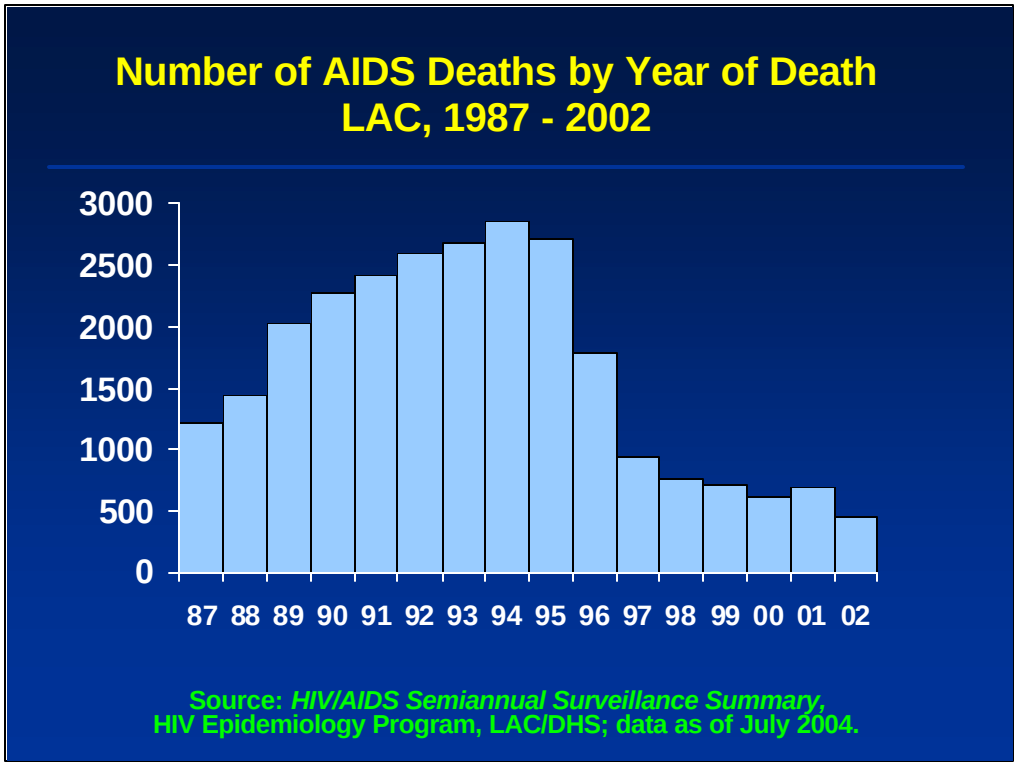
We estimate that 50 – 60,000 persons are living with HIV and AIDS in the county, 1 out of 4 of which are unaware that they are infected.



This slide shows the trend in number of AIDS cases diagnosed each year in Los Angeles County from 1987 through 2002.

AIDS incidence increased steadily from 1987 through 1992. The peak years, 1990 through 1995 were impacted in part by the change in the AIDS case definition in 1993, which for the first time added laboratory criteria as diagnostic for AIDS (CD4 counts below 200 or a percentage of CD4 below 14%).

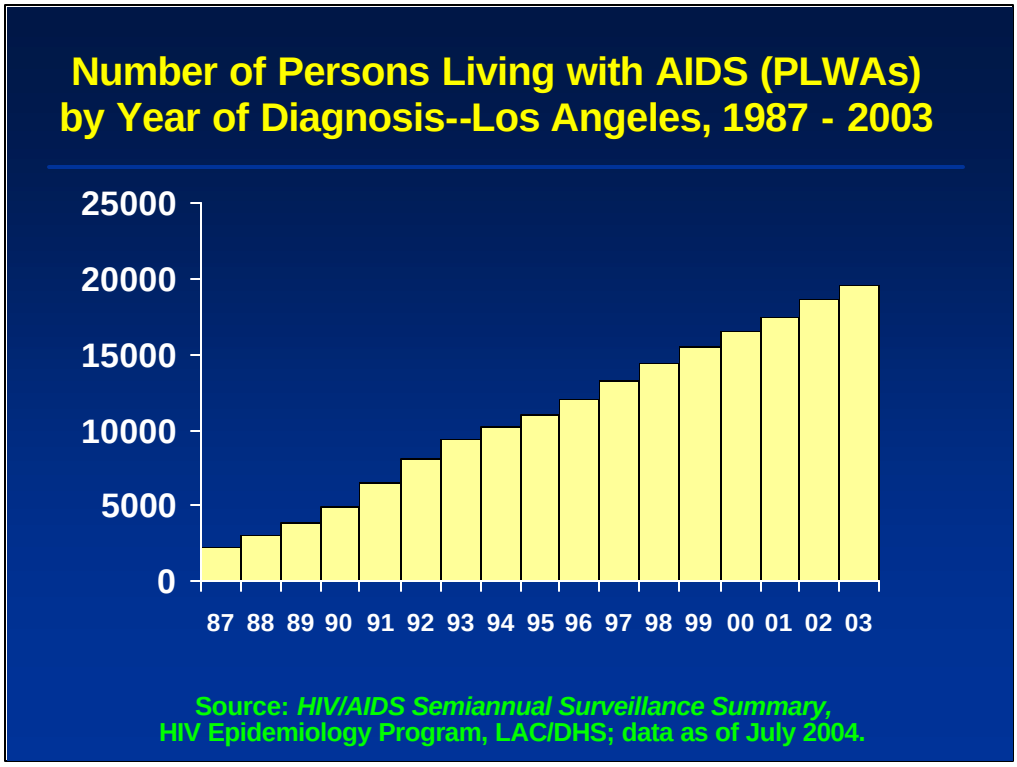
In 1996 with the advent of "highly active anti-retroviral therapy" (HAART), the annual number of newly diagnosed AIDS cases dropped substantially until 1998, after which the decline has leveled off.



This slide shows the trend in number of deaths among AIDS cases by year of death in Los Angeles County between 1987 and 2002.

AIDS deaths had increased steadily from 1987 through 1994, but then decreased dramatically between 1995 and 1998 due, in large part, to HAART.

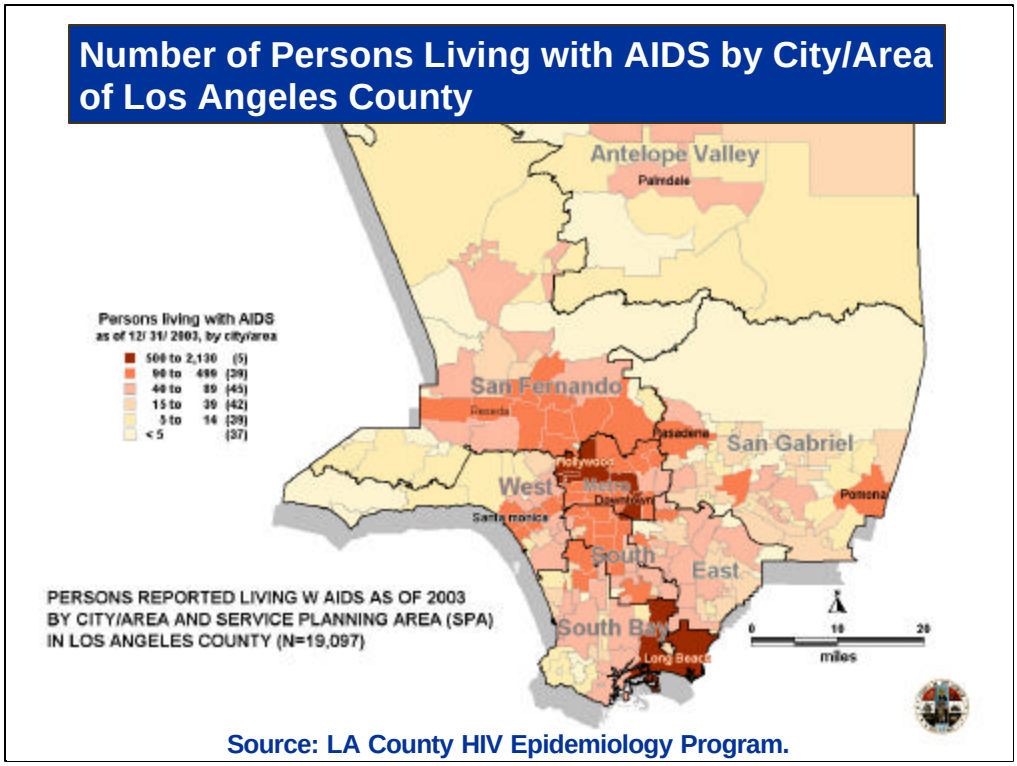
In more recent years, AIDS deaths have reached a plateau, remaining at levels far below those observed in the mid-80's. It is too early to tell whether the slight increase in AIDS deaths in 2001 is indicative of an upward trend or not.



This slide shows the number of persons living with AIDS by year of diagnosis in Los Angeles County from 1987 through 2003.

As of December 2003, over 19,000 persons were living with AIDS in Los Angeles County.

As you can see, the number of persons living with AIDS has increased steadily over time. The reduction in AIDS deaths, shown in the previous slide, has largely impacted the rise.



Source: LA County HIV Epidemiology Program.

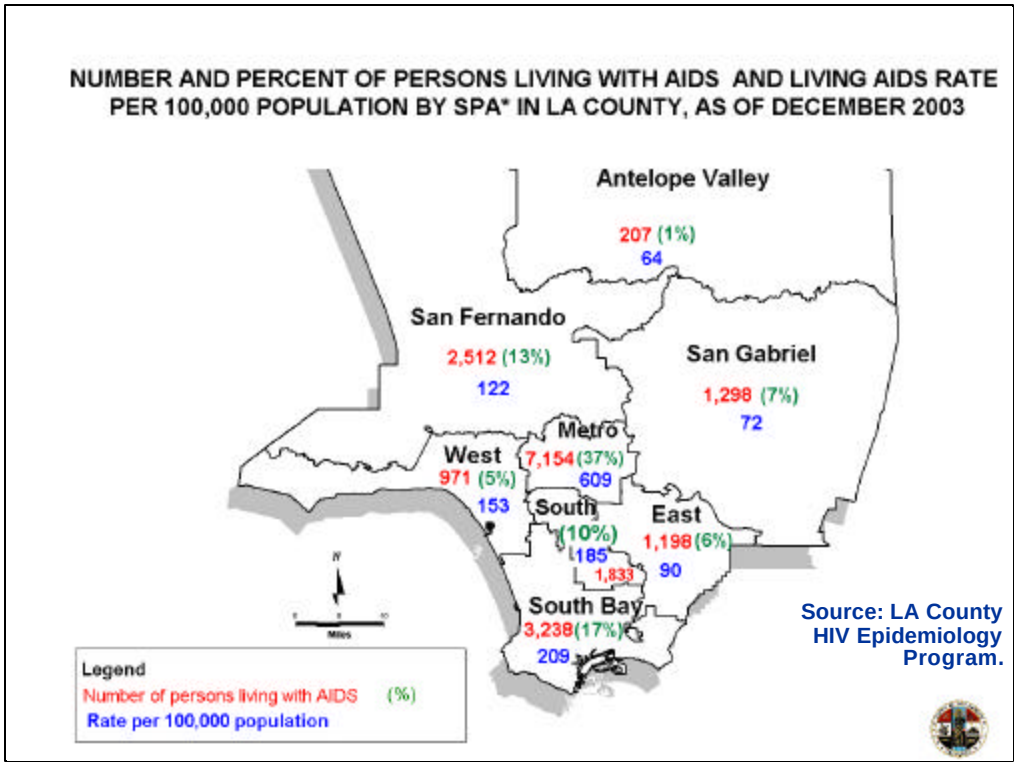
This is a map of Los Angeles County showing the 8 Service Planning Areas and the number of persons living with AIDS in each area or city of the county.

The darker red the area is colored, the more persons there are in that area living with AIDS.

As you can see, there are dark red areas around Hollywood and Downtown in SPA 4 and in Long Beach in SPA 8 (South Bay).

SPA 6 (South) has fewer, but still a lot of cases, as represented mostly in orange.

East (SPA 7) has fewer cases yet.

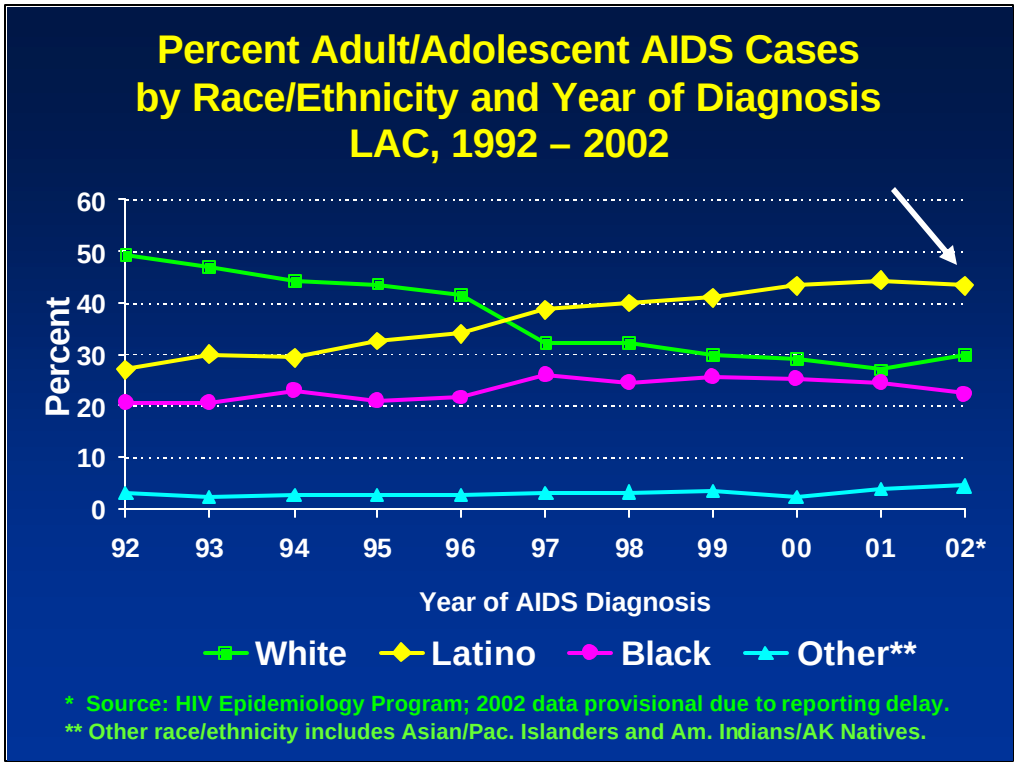


Here is a map of Los Angeles County that has

1. the number of cases (in red),
2. the proportion of county cases (in green), and
3. the rate of cases (in blue)

For persons living with AIDS by Service Planning Area.

As can be seen, Metro, SPA 4, has the largest number of persons living with AIDS (7,154), the highest percentage of county cases (37%) and the highest rate per 100,000 SPA 4 residents (609 per 100,000).

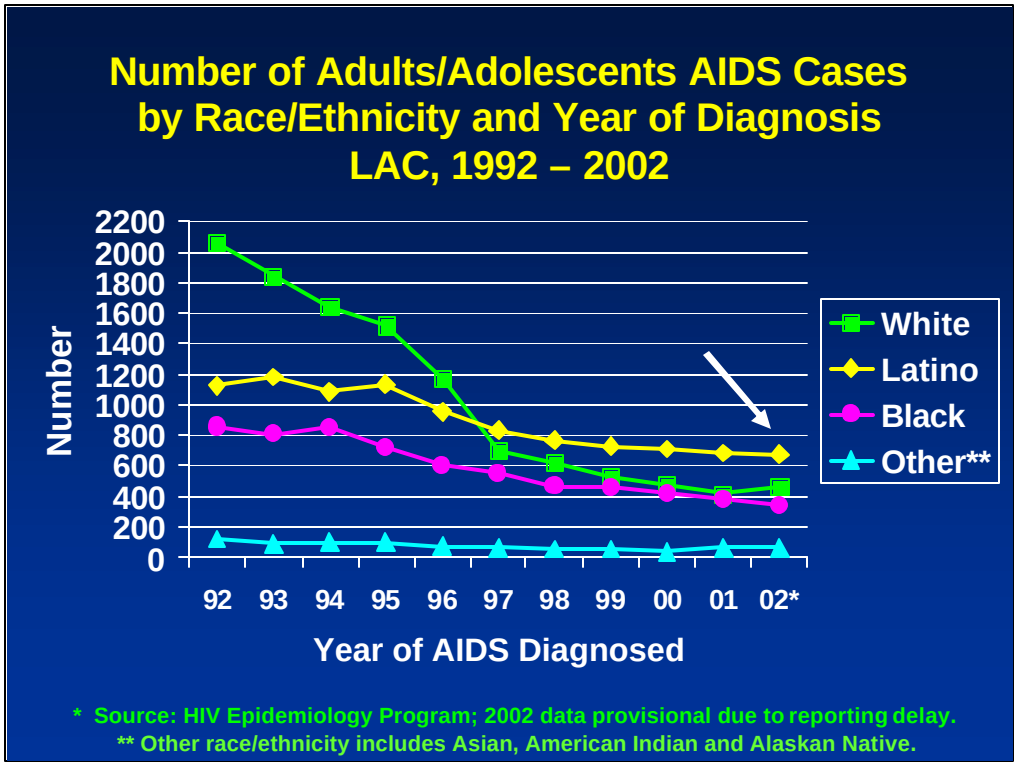


This slide shows the proportion of Adult/Adolescent AIDS cases in Los Angeles County from 1992 through 2002 by race/ethnicity.

In 1992, the largest proportion of AIDS cases diagnosed in that year was among Whites at 49% compared to Latinos at 27%, Blacks at 21%, and Asians and others at 3%.

Over time, there has been a substantial decrease in the proportion of cases among Whites and a substantial increase in the proportion of cases among Latinos, with Latinos accounting for the biggest proportion of cases since 1997.

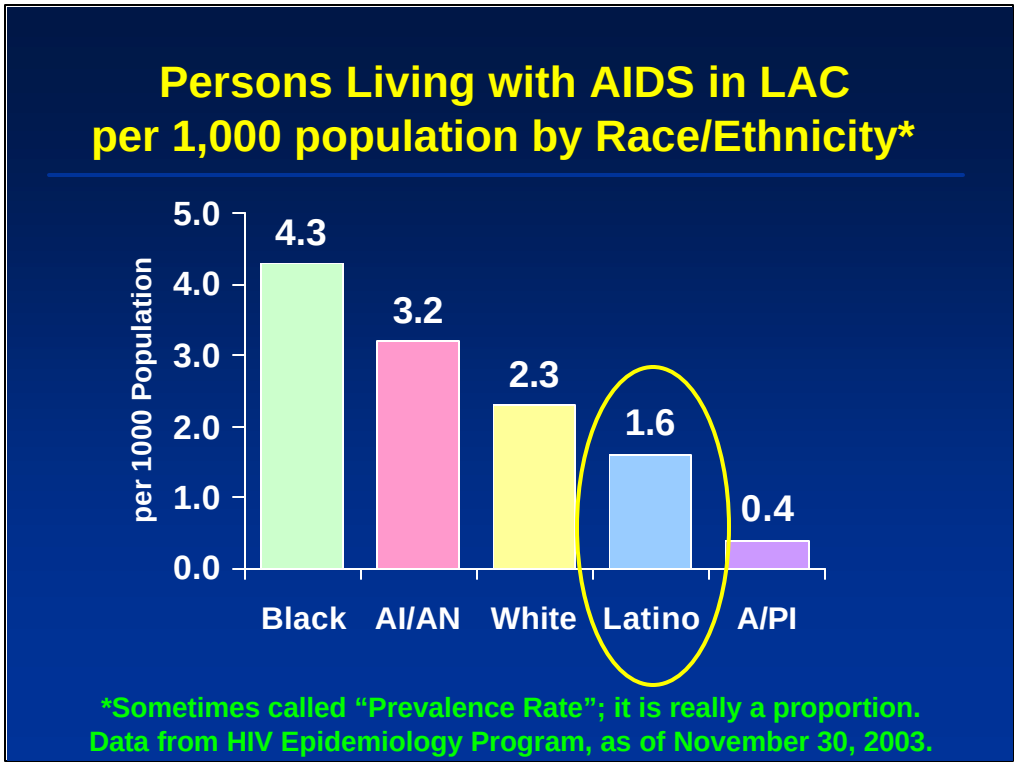
In 2002, Latinos accounted for 43% of county AIDS reports, Whites 30%, Blacks 22%, Asians and others 4%.



This slide shows the annual number of Adult/Adolescent AIDS cases in Los Angeles County by race/ethnicity and year of diagnosis from 1992 through 2002. This slide combines both male and female cases.

Just because Latinos now have the highest percentage of cases in the county does not mean the number of AIDS cases diagnosed among Latinos is on the rise. In fact, AIDS cases among Latinos decreased 40% during the same period (from 1123 to 677). AIDS cases among Whites has decreased 77% from 1992 to 2002 (from 2053 cases to 464 cases) and AIDS cases among Blacks decreased 59% (from 858 to 348).

Although difficult to discern from this graph, AIDS cases among "Others" which includes Asian/Pacific Islanders, and American Indians/Alaskan Natives also decreased 44% (from 121 to 68).



This slide shows the distribution of persons living with AIDS at the end of 2003, expressed as a rate in cases per 1,000 population.

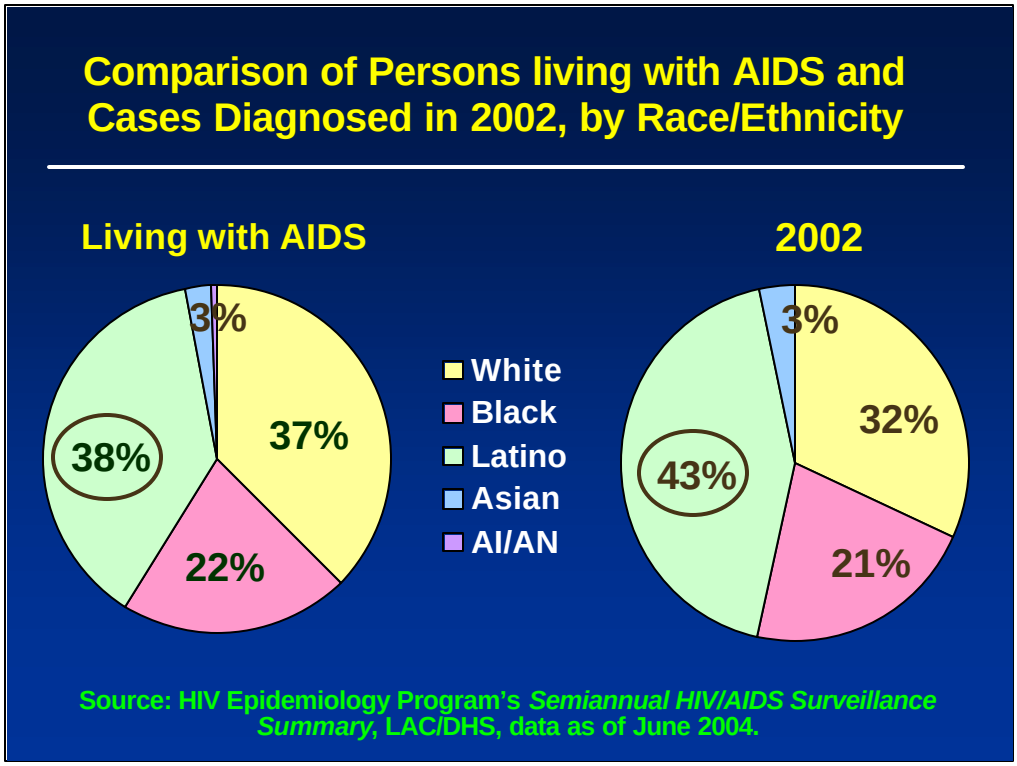
The number or percentage of persons living with a disease is called "prevalence". The statistics shown here are referred to as prevalence "rates".

A rate measures the impact of a disease in a given population because it takes into account the size of each population.

Blacks, who represent only 10 percent of the general population in this county, have been the race/ethnic group that has been most impacted with the highest prevalence rate at 4.3 per 1,000, almost twice the rate of Whites and more than twice that of Latinos.

And American Indians, while comprising a very small percent of the population, have the second highest rate of persons living with AIDS at 3.2 per 1,000.

So while Latinos represent the most AIDS cases in the county, their AIDS prevalence rate is relatively low.

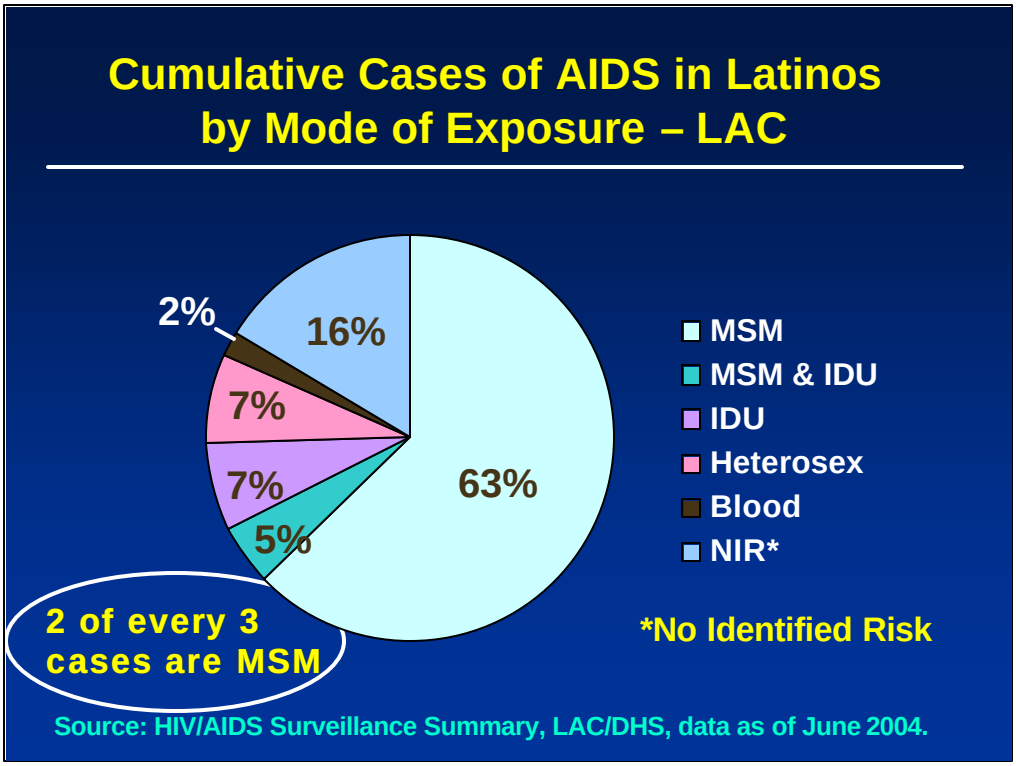


This slide has two pie charts:

The first shows the percentage of county cases each represented by each race/ethnicity of persons living with AIDS (prevalence).

As you can see, 38% of persons living with AIDS in LA County as of June 2004 were Latino.

The second pie chart shows the percentage of county cases diagnosed with AIDS in 2002 each represented by each race/ethnicity. As you can see, 43% of new AIDS diagnoses are among Latinos.



Here is a pie chart of Latino AIDS cases reported since the beginning of the epidemic, by their mode of exposure. "Mode of exposure" is the reported mechanism by which an individual is exposed to and contracts the virus – for example, sexual intercourse, injection drug use, or transfusion.

The mode of exposure was "MSM" for those men who *reported* having had sex with other men - whether or not they *identified* as gay, bisexual or heterosexual. The mode was "IDU" for those who reported injection drug use. The mode was "heterosex" for those who reported having sex with an HIV-infected person, a bisexual man, an injection drug user, a transfusion recipient, or someone else with an identified risk factor for HIV. "Blood" indicates a person whose mode of HIV exposure was through receiving contaminated blood, clotting factors, or organ transplant.

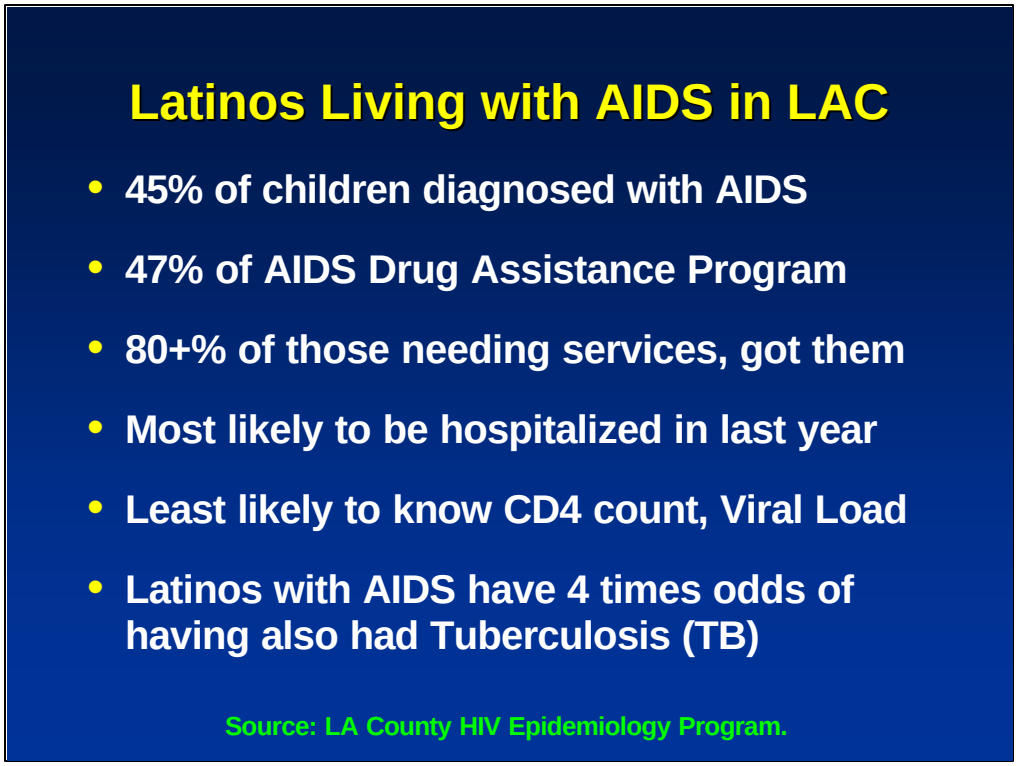
Lastly, "NIR" stands for "no identified risk" and represents those AIDS cases in which no mode of exposure was ever reported or found.

As you can see, 2 of every 3 AIDS case among Latinos in the county were among men who have sex with men (including MSM who also injected drugs). For half of the rest of cases, no risk was reported or identified.

Latino men who have sex with men (MSM) were found to have among the highest infection rates among persons coming in for HIV testing at the county's counseling and testing sites - the equivalent of 3 - 5% of Latino MSM testers becoming infected with HIV each year. This high rate includes "bisexual" Latino men who have sex with men and women, as well as Latino MSM who reported injecting drugs.

In a recent survey of young men, aged 15 – 23 years, 2 out of every 3 Latino youths stated that ethnic identity was very important to them. But 2 of 3 also stated that most people in their ethnic group disapproved of gays.

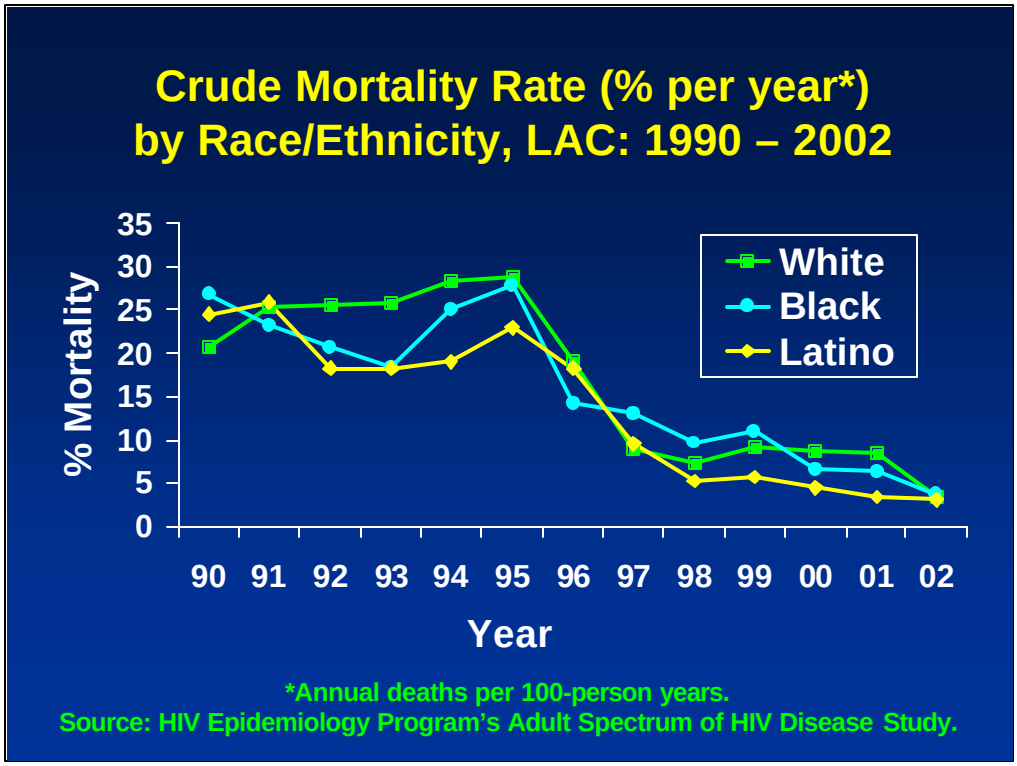
Other studies have found that MSM of color – including Latino MSM – often do not disclose that they have sex with men or identify themselves as gay or bisexual, out of fear of being stigmatized, discriminated against, and/or marginalized in their community. This secrecy and denial make prevention efforts targeting this group especially difficult.



Some other studies conducted by HIV Epidemiology have shown that Latinos comprise the largest proportion of children living with AIDS, and the largest proportion of users of the AIDS Drug Assistance Program, or ADAP.

Compared with other racial/ethnic groups, Latinos are also very likely to get HIV services if they need them and are most likely to have been hospitalized in the last year, but were least likely to know their CD4 count and least likely to know their viral load.

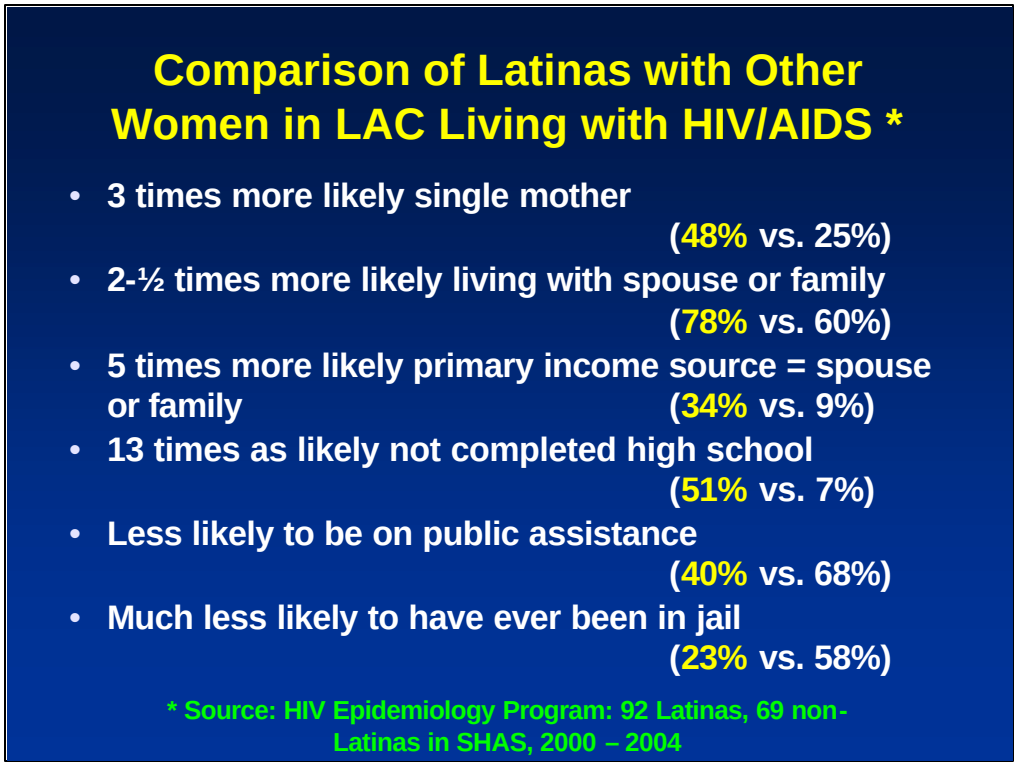
Also, Latinos with AIDS were more likely to have had TB than were other race/ethnicities.



Here is a graph showing the percent of AIDS-related mortality (death) each year – called the "crude mortality rate" - for the three major race/ethnic groups in the county.

The mortality rate for all three groups has declined since 1990, with Latinos actually faring better than the others from 1998 – 2001. By 2002, all groups had a low 5% mortality rate.

The Supplement to HIV/AIDS Surveillance Project, or SHAS, collected in depth information through face-to-face interviews with persons living with AIDS beginning in 1990 and ending in 2004. Data presented in the next few slides are of persons who had an AIDS diagnosis and were interviewed by SHAS staff.



In a comparison of 92 Latina with 69 non-Latina women living with AIDS and interviewed in the SHAS project, we found that Latinas were significantly more likely to be single mothers, living with family or spouse, to have their primary source of income be their family or spouse, and not to have completed high school.

Latina participants with AIDS were less likely than women of other race/ethnicities ever to have been in jail.

Comparison of Latinas with Other Women in LAC Living with HIV/AIDS – 2

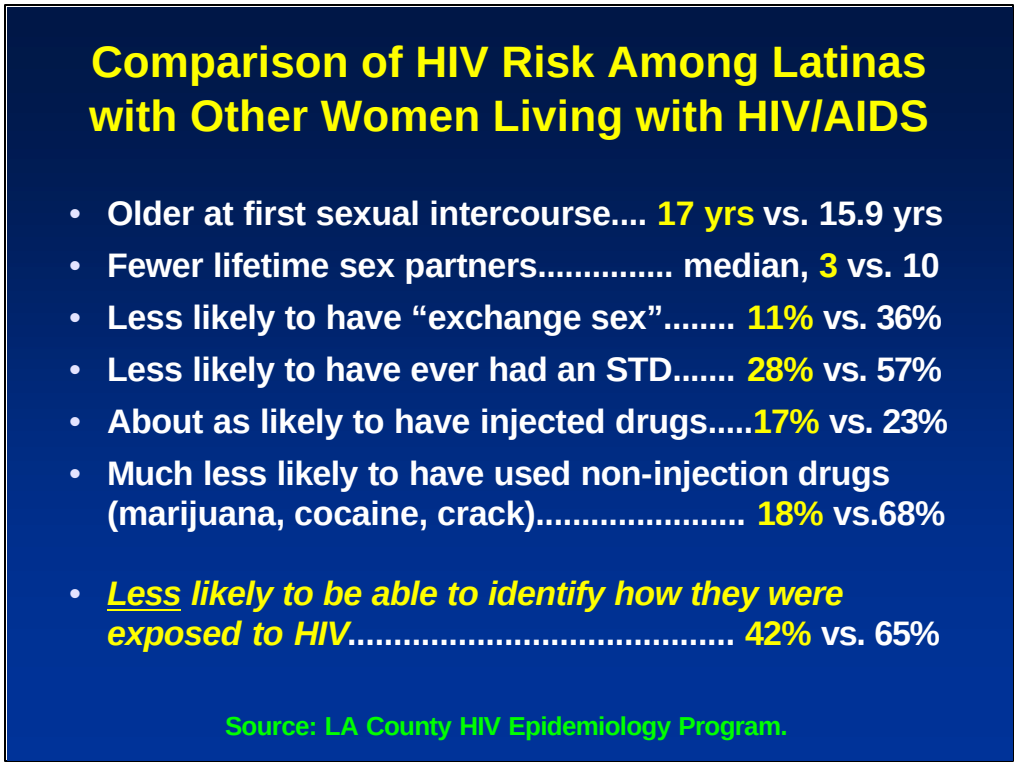
- Latinas more likely to get medications from AIDS Drug Assistance Program (43% vs. 25%) or a public clinic (28% vs. 7%), and less likely to get meds through health care insurance (24% vs. 55%)
- Twice as likely to never had insurance (47% vs. 28%)
- About as likely as non-Latino study participants to:
  - be single 48%
  - make less than $10,000 /year 58%
  - be employed 25%
  - have ever been pregnant 97%
  - used condom as birth control 42%
  - two-thirds used condom at last sex 65%

Source: LA County HIV Epidemiology Program.

Compared with other women living with AIDS, Latinas were also more likely to get their anti-retroviral drugs from the AIDS Drug Assistance Program or a public clinic and were less likely to have ever had health insurance.

Half of Latinas living with AIDS in SHAS were single, more than half made less than $10,000 per year, only 1 in 4 were employed, and nearly all had been pregnant at least once.

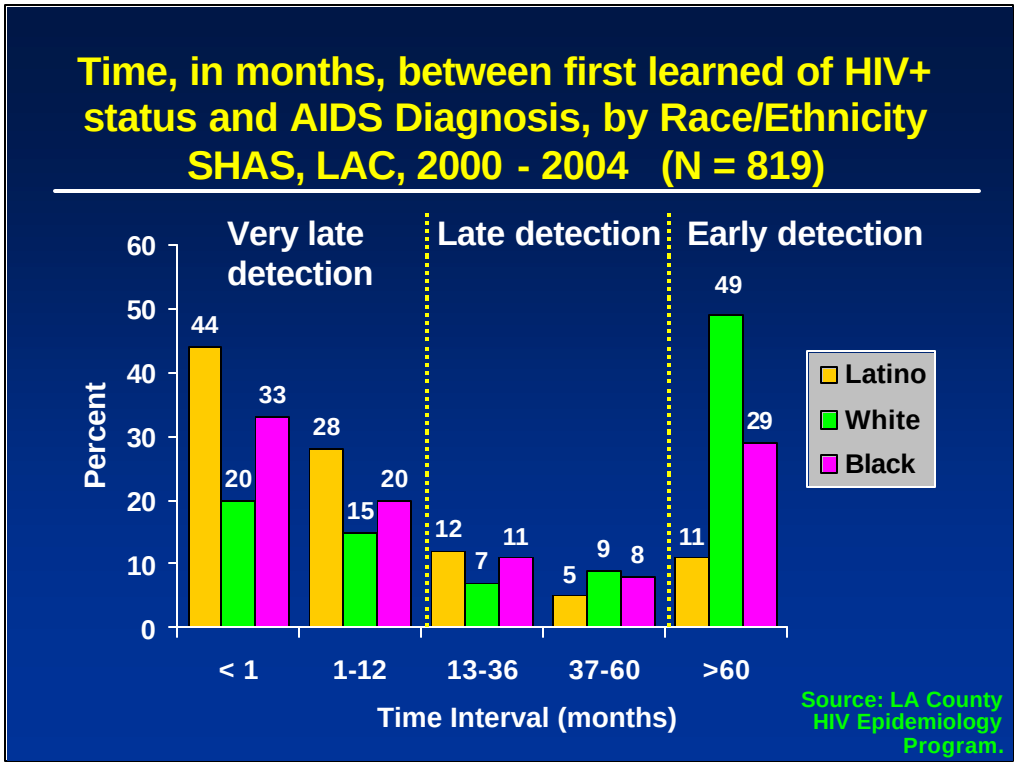
Less than half of Latinas reported having used condoms for birth control, but 2 of 3 report having used a condom at last sexual intercourse.



Latinas were significantly older at the time of their first sexual intercourse, had significantly fewer sexual partners on average, were less likely to have had exchange sex – that is, sex for money, food, shelter, or drugs – and less likely to have had a sexually transmitted disease.

Latinas were about as likely as non-Latinas to have tried injection drugs, but were much less likely to have tried non-injection recreational drugs.

Latinas were also significantly less likely to be able to identify how they were infected with HIV.



SHAS looked at the time interval between when a person first became aware they were HIV-positive and when they were diagnosed with AIDS.

"Early detection" of HIV was defined as finding out one's HIV+ status at least 5 years (60 or more months) prior to coming down with an AIDS diagnosis.

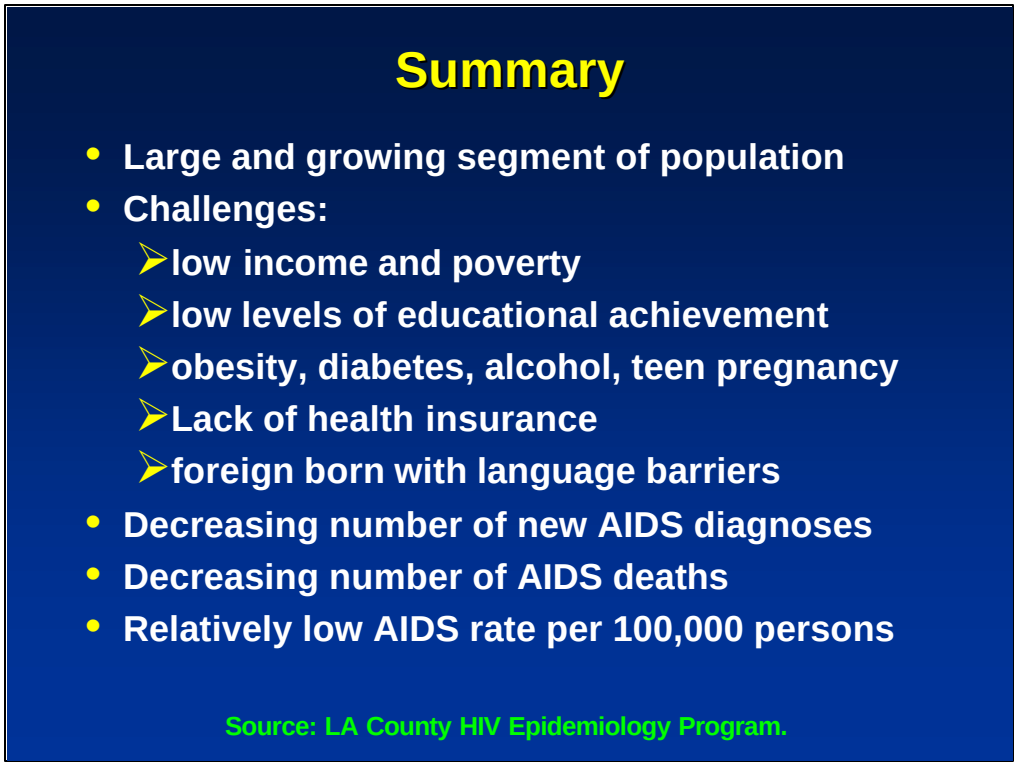
"Very late detection" of HIV was defined as finding out one's HIV+ status only within a year (0-12 months) prior to coming down with an AIDS diagnosis.

"Late detection" was defined as finding out one's HIV+ status between 13 and 60 months prior to coming down with an AIDS diagnosis.

Among 819 persons living with AIDS interviewed for the SHAS project, differences in time to detection varied greatly by race/ethnicity.

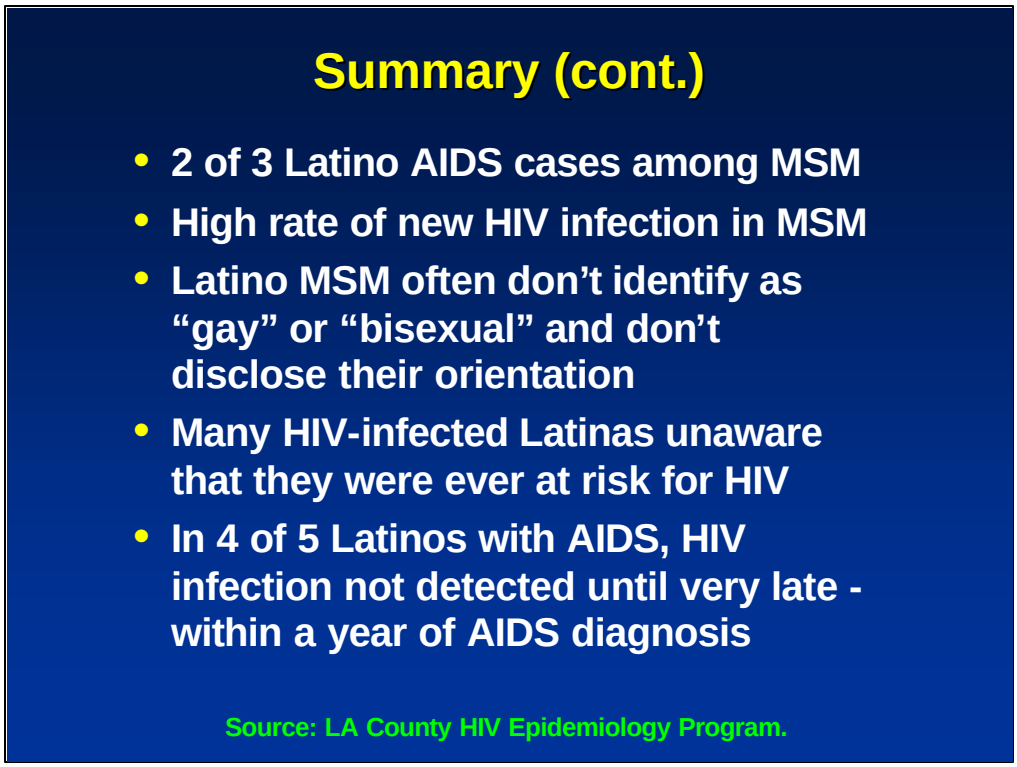
Specifically, Whites living with AIDS were significantly more likely than Blacks and Latinos to have had their HIV infection detected more than 5 years before being diagnosed with AIDS.

Nearly 3 of 4 Latinos (72%) and over half of Blacks (53%) living with AIDS interviewed in SHAS had their HIV infection detected very late in the progression of their illness.



In summary, Latinos are a large and growing segment of Los Angeles County who face many health and other challenges.

The good news is that the numbers of Latinos being newly diagnosed with AIDS has continued to drop, as have their AIDS-related deaths; also compared with most other racial/ethnic groups, Latinos have a low rate of AIDS compared with the size of the Latino population in the county.



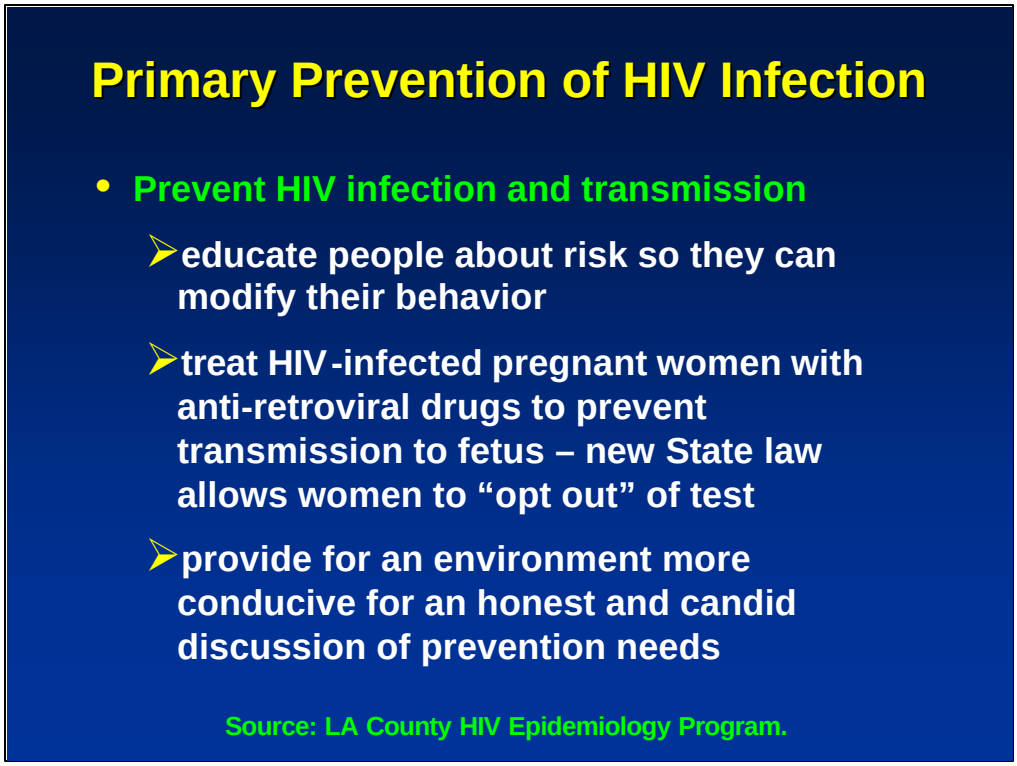
However, 2 out of every 3 Latino AIDS cases are among men who have sex with men.

Also, Latino MSM have one of the highest rates on new HIV infection in the county.

Further, "primary prevention" (see next slide) efforts targeting this group may be hindered by the fact that some Latino men who have sex with men do not identify as either gay or bisexual, and are less likely than White MSM to disclose their orientation to their family, friends, or female sex partners.

Many Latinas infected with HIV are unaware that they were ever at risk for the disease and so do not get tested or find out they are infected until they fall ill and are diagnosed with advanced HIV disease or AIDS.

Finally, 4 out of every 5 Latinos living with AIDS interviewed in SHAS said they did not know they were infected with HIV until less than a year of being diagnosed with AIDS. The very late detection of infection makes "secondary prevention" (see slide after next) and early intervention impossible.



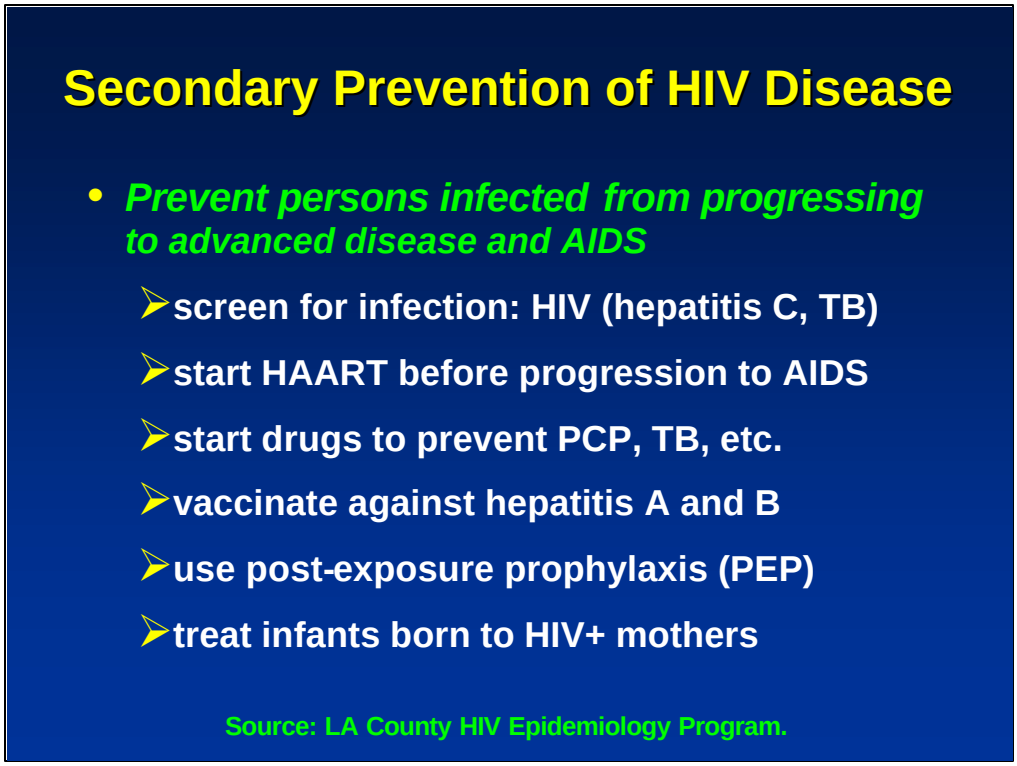
Primary prevention of HIV infection involves preventing the transmission of the virus.

This can only be done when people are educated about the risk factors for transmitting HIV, so they can modify their behavior to avoid these risks.

One good example of primary prevention is preventing transmission of the virus from a pregnant woman infected with HIV to her unborn child by using antiretroviral drugs during pregnancy.

In 2003, a new California law made the testing of pregnant women for HIV routine, meaning a woman should expect to be tested unless she opts out of the testing, which is within her rights to do.

Finally, unless we provide a community environment where an honest and candid discussion of HIV and its risks can take place without fear of blame, discrimination, or condemnation, primary prevention messages will not get to those persons at highest risk for engaging in behaviors that put them at risk for acquiring and transmitting HIV.



Secondary prevention of HIV disease refers to the prevention of disease progression among those persons already infected with HIV. Put another way, secondary prevention seeks to keep HIV-infected persons from getting advanced disease and AIDS. These prevention measures can only be followed if that person is aware they are infected. Therefore, getting tested for HIV is important to screen persons to find out who is HIV-infected so that early interventions can take place.

Besides screening for HIV infection, secondary prevention measures include screening for other disease that may alter the course of HIV disease, such as tuberculosis and hepatitis C.

Contact Information

HIV Epidemiology Program

Phone: (213) 351 – 8196

www.lapublichealth.org/hiv