

AIDS IN INJECTING DRUG USERS SAN DIEGO COUNTY 2013

County of San Diego

**Health and Human Services Agency
Epidemiology & Immunization Services**



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Health and Human Services Agency
Public Health Services Division
Epidemiology & Immunization Services Branch



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SUMMARY

- Injection Drug Users (IDU) comprise 19.1% of cumulative AIDS cases diagnosed in the county and 16.5% of recent (2008-2012) cases.
- 54.4% of IDU AIDS cases are also Men who have Sex with Men (MSM) (MSM+IDU).
- 14.2% of IDU AIDS cases are female.
- The majority, 53.1%, of IDU AIDS cases are white. Black AIDS cases are more likely to be IDU than other race/ethnicities; black IDU cases are more likely to be female.
- IDU cases are statistically significantly older than non-IDU cases. However, this difference is not clinically significant. There are no differences in age between male and female IDU cases.
- A smaller percentage of IDU cases than non-IDU cases has simultaneous HIV and AIDS diagnoses, and less than a year between HIV and AIDS diagnoses.
- San Diego County IDU AIDS cases have smaller proportions of cases surviving more than 12, 24, and 36 months than national estimates from the Centers for Disease Control and Prevention (CDC).
- The majority of both IDU and non-IDU AIDS cases diagnosed in the County resided in the Central region at the time of diagnosis.
- The most frequent facility of diagnosis type in both IDU and non-IDU AIDS cases is the inpatient or outpatient hospital setting (28%).
- MSM+IDU AIDS cases are younger than male IDU and non-IDU cases.
- MSM+IDU AIDS cases have higher percentages of whites and Hispanics, but lower percentages of black, than male IDU cases.

The first AIDS case in an Injecting Drug User, diagnosed in 1981, was in a male who was also a Man who has Sex with Men (MSM). Since then, IDU and MSM who are also IDU (MSM+IDU) have comprised 2,861 (19.1%) of the 14,895 cumulative AIDS cases diagnosed in persons over 12 years of age and reported in the county as of December 31, 2012 (see Table 1). This is a significantly smaller ($p < 0.001$) percentage than the 31.3% estimated in cumulative cases by the Centers for Disease Control and Prevention (CDC) in 2011. The percentage of all IDU AIDS cases in San Diego County has decreased significantly ($p < 0.001$) since the 1993-1997 time period.

Unless otherwise stated, IDU in this report refers to both IDU-only and MSM+IDU cases. Only cases older than 12 years of age (adult/adolescent) cases are included in this report. Data analyzed for this report includes all AIDS cases diagnosed in county residents and reported through December 31, 2012.

GENDER

Almost 85% of cumulative IDU AIDS cases in San Diego county are male (see Table 2); 54.4% of IDU cases diagnosed in the county are also MSM. The percent of IDU AIDS cases that are female has remained relatively stable over time ($p = 0.370$), while the percent of

TABLE 1:
IDU and Non-IDU AIDS Cases by Time Period of Diagnosis, San Diego County

	Time Period of Diagnosis						Cumulative	Total Cases
	1981-1987	1988-1992	1993-1997	1998-2002	2003-2007	2008-2012		
All IDU*	13.9%	15.5%	21.6%	23.6%	19.7%	16.5%	19.1%	2,861
IDU only	3.3%	6.7%	9.8%	12.2%	9.2%	8.2%	8.7%	1,306
MSM+IDU	10.5%	8.8%	11.8%	11.6%	10.5%	8.3%	10.4%	1,555
Non-IDU	86.1%	84.6%	78.4%	76.2%	80.3%	83.5%	80.9%	12,124
Total Cases	866	3,923	4,330	2,303	2,056	1,507	14,985	

*Includes MSM+IDU (those MSM who also inject drugs).

TABLE 2:
Male and Female IDU and Non-IDU AIDS Cases Over 5-Year Time Periods, San Diego County

Time Period of Diagnosis	IDU*		Non-IDU	
	Male	Female	Male	Female
1981-1987	92.5%	7.5%	97.3%	2.7%
1988-1992	87.6%	12.4%	96.4%	3.6%
1993-1997	84.3%	15.7%	94.1%	5.9%
1998-2002	83.9%	16.1%	91.4%	8.6%
2003-2007	87.9%	12.1%	89.3%	10.7%
2008-2012	84.7%	15.3%	91.2%	8.8%
Cumulative	2,455 (85.8%)	406 (14.2%)	11,345 (93.6%)	779 (6.4%)

*Includes IDU-only and MSM+IDU cases.

females in non-IDU AIDS cases increased significantly ($p < 0.001$) over time. When all AIDS cases are considered, females are significantly ($p < 0.001$) more likely to be IDU than males.

RACE/ETHNICITY

The majority (53.1%) of cumulative IDU cases are white (see Table 3), but among cumulative IDU cases, blacks are significantly more likely than other race/ethnicities to be

IDU ($p < 0.001$), and whites significantly less likely than other race/ethnicities to be IDU when compared to non-IDU ($p < 0.001$) (see Figure 1). Among IDU cases, blacks are more likely to be female ($p < 0.001$). Over the 5-year time periods since the 1993-1997 period (see Table 4), there have been significant decreases in the percent of white ($p < 0.001$) and black ($p = 0.027$) IDU cases and increases in Hispanic IDU cases ($p < 0.001$).

TABLE 3:
Cumulative IDU and Non-IDU Cumulative AIDS Cases by Race/Ethnicity, San Diego County

	Race/Ethnicity				Total
	White	Black	Hispanic	Other*	
IDU**	53.1%	20.1%	23.8%	3.1%	2,861
non-IDU	60.3%	10.8%	25.5%	3.2%	12,124
Total	8,836	1,887	3,774	488	14,985

*Includes Asian, Pacific Islander, Native American, and Multi-Race.

**Includes MSM+IDU.

Note: percentages may not total 100 due to rounding.

FIGURE 1:
Cumulative IDU and Non-IDU Cases by Race/Ethnicity, San Diego County

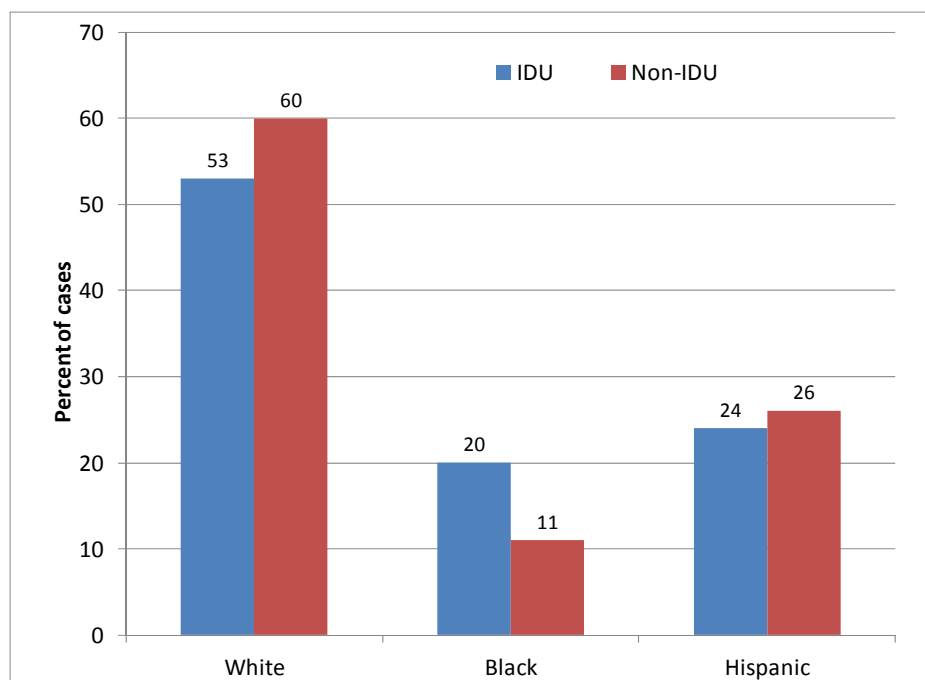


TABLE 4:
Race/Ethnicity in IDU AIDS Cases Over 5-Year Time Periods, San Diego County

Time Period of Diagnosis	Race/Ethnicity				Total
	White	Black	Hispanic	Other*	
1981-1987	71.7%	14.2%	12.5%	1.7%	120
1988-1992	57.1%	22.8%	19.1%	1.0%	606
1993-1997	52.4%	20.7%	23.2%	3.8%	934
1998-2002	49.5%	21.7%	26.3%	2.6%	548
2003-2007	48.6%	17.3%	29.1%	4.9%	405
2008-2012	52.8%	14.9%	28.2%	4.0%	248
Total	1,520	574	680	87	2,861

*Includes Asian, Pacific Islander, and Native American.

Note: Percent may not total 100 due to rounding.

AGE AT DIAGNOSIS AND IN CASES LIVING IN 2012

The mean age at diagnosis of cumulative IDU and non-IDU cases is 38.3 and 38.4 years respectively (see Table 5). The mean age at diagnosis has increased over time, and recent IDU cases are statistically significantly older than non-IDU cases ($p=0.001$). This statistical difference is not clinically significant. There is no difference in age between cumulative male and females IDU cases ($p=0.272$) or non-IDU cases ($p<0.465$).

The mean age of IDU AIDS cases living in 2012 is 50.6, which is statistically significantly greater than the mean age of non-IDUs at 49.8 years ($p=0.002$) (see Table 5). This difference, however, is unlikely to be clinically significant.

White IDU cases are significantly ($p<0.001$) younger than white non-IDU cases (38.3 years vs 39.6 years) at diagnosis. Black IDU cases are significantly older than black non-IDU cases (40.0 years vs. 36.5 years; $p<0.001$); Hispanic IDU cases (37.2 years) do

TABLE 5:
Mean, Median, and Range of Ages at Diagnosis in Cumulative, Recent, and Prevalent IDU and Non-IDU AIDS Cases, San Diego County

	IDU*			Non-IDU		
	At diagnosis			At diagnosis		
	1981- 2012	2008- 2012	Age In 2012**	1981- 2012	2008- 2012	Age In 2012**
Mean age (years)	38.3	42.0	50.6	38.4	40.9	49.8
Median age (years)	38	43	51	37	41	50
Range (years)	17-71	18-68	22-84	13-92	16-88	20-92
Total cases	2,861	248	1,295	12,124	1,259	6,055

*Includes MSM+IDU.

**Among cases alive in 2012.

not differ significantly from non-IDU cases (36.9 years) in age ($p=0.417$).

When race/ethnicity is examined by age group at diagnosis (see Table 6), black IDU cases have a significantly greater percent of total IDU cases in the 30-39 age group ($p<0.001$ vs. whites; $p<0.001$ vs Hispanics), 40-49 year age group ($p<0.001$ vs whites; $p=0.016$ vs. Hispanics), and the 50+ age group ($p<0.001$ vs. whites; $p<0.001$ vs Hispanics). There are no significant differences seen in the percent of IDU cases between white, black, or Hispanic in the 13-19 and 20-29 year age groups.

TIME FROM HIV TO AIDS

A smaller percentage ($p<0.001$) of IDU (35.0%) than non-IDU (42.1%) cumulative AIDS cases have simultaneous diagnoses with HIV and AIDS, meaning those cases had less than one month between receiving the HIV diagnosis and the AIDS diagnosis (see Figure 2). This is due to testing and identifying cases

late in the infection, after the disease has progressed. The time from HIV diagnosis to AIDS diagnosis is highly skewed for all risk groups. A significantly smaller proportion ($p<0.001$) of IDU (49.2%) than non-IDU (56.9%) had less than a year between HIV diagnosis and AIDS diagnosis (“late testers”). When race was controlled for, significant differences remain only among whites. When the time period of diagnosis is controlled for, significant differences in percent of cases with less than a year between HIV and AIDS diagnosis are seen only from the 1998-2002 time period onward. The greatest difference between IDU and non-IDU cases (35.0% vs. 58.4%; $p<0.001$) in percent progressing from HIV to AIDS in less than a year is seen in the most recent time period (2008-2012).

The percent of IDU with simultaneous diagnoses of HIV and AIDS (less than one month between HIV and AIDS diagnoses) varies by time period. IDU cases have a smaller percentage with simultaneous diagnoses.

TABLE 6:

Age Group at Diagnosis in Cumulative IDU and Non-IDU AIDS Cases by Race/Ethnicity, San Diego County

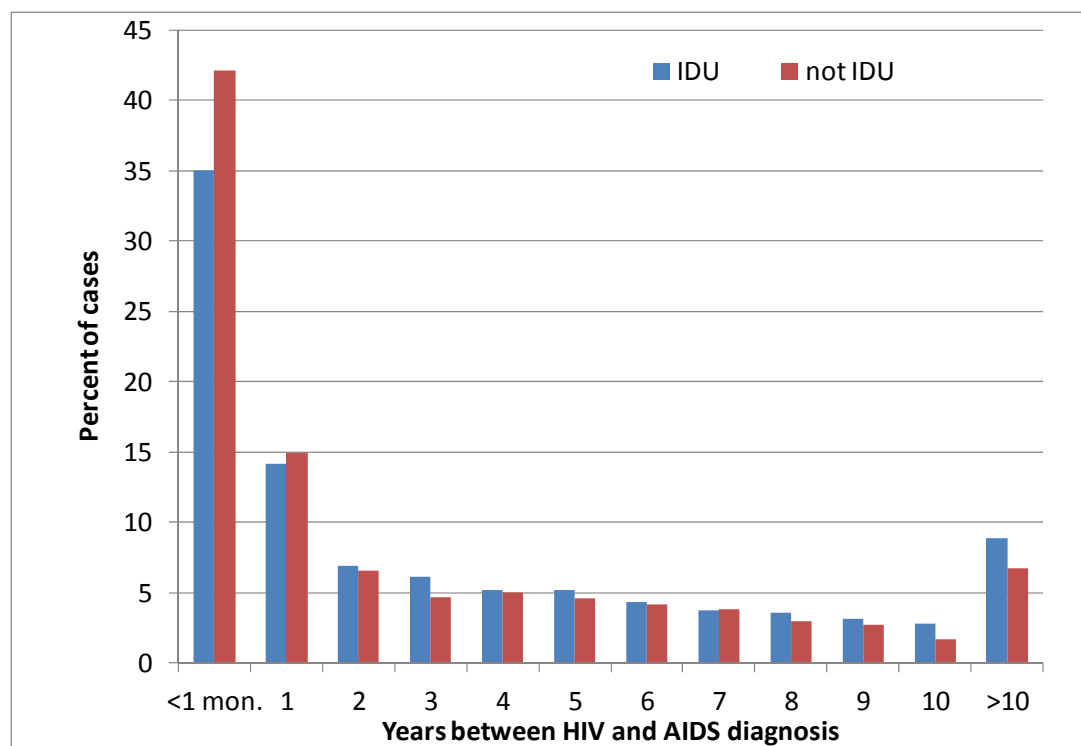
Age Group (years)	Race/Ethnicity							
	White		Black		Hispanic		All Cases*	
	IDU	Non-IDU	IDU	Non-IDU	IDU	Non-IDU	IDU	Non-IDU
<20	0.0%	0.2%	0.2%	1.1%	0.7%	1.0%	0.2%	0.6%
20-29	15.1%	13.0%	9.1%	21.9%	20.3%	22.7%	15.2%	16.7%
30-39	44.3%	42.4%	42.9%	45.1%	42.6%	43.0%	43.3%	42.9%
40-49	30.5%	30.0%	35.0%	22.2%	27.8%	22.9%	31.0%	27.2%
50+	10.1%	14.4%	12.9%	9.7%	8.5%	10.4%	10.3%	12.7%
Total	1,520	7,316	574	1,313	680	3,094	2,861	12,124

*Includes Asian, Pacific Islanders, and Native Americans.

Note: percentages may not total 100 due to rounding.

FIGURE 2:

Time Between HIV Diagnosis and AIDS Diagnosis Among Cumulative IDU and Non-IDU AIDS Cases, San Diego County



Statistically significant differences are seen in all but the 1993-1997 time period. The greatest difference ($p < 0.001$) between IDU (22.6%) and non-IDU (32.1%) cases is seen in recent years. When race/ethnicity is controlled for, these differences are seen only in whites ($p < 0.001$).

It is possible that IDU brings people to medical care earlier in the course of disease so that they are diagnosed with HIV earlier, extending the time from HIV to AIDS. Also, a number of drug treatment programs request HIV testing at the time of entry, and this may increase the likelihood of early diagnosis in IDU.

SURVIVAL

The proportion of AIDS cases diagnosed in San Diego County from 2003 to 2007 and

surviving greater than 12, 24, and 36 months is compared to Centers for Disease Control and Prevention (CDC) estimates in Table 7. San Diego County has significantly lower proportions of IDU cases surviving than the CDC estimates at greater than 12 ($p = 0.037$), 24 ($p = 0.025$), and 36 months ($p = 0.003$). The only other statistically significant difference between county and CDC data is seen only in IDU cases surviving more than 24 months ($p = 0.036$). There are no statistical differences between county cases who are IDU only and those who are MSM+IDU

COUNTRY OF ORIGIN

The majority of both IDU (85.6%) and non-IDU (80.1%) cases were born in the United States (U.S.) (see Table 8). IDU cases were sig-

TABLE 7:

Proportion of IDU Male AIDS Cases Diagnosed 2003-2007 Surviving More than 12, 24, and 36 Months, San Diego County (SDC) and National (CDC) Comparison

	Survival (months)					
	>12		>24		>36	
	SDC	CDC	SDC	CDC	SDC	CDC
All IDU§	0.91*	0.87	0.88*	0.83	0.85**	0.79
IDU only	0.89	0.86	0.87*	0.81	0.81	0.77
MSM+IDU	0.91	0.92	0.87	0.88	0.85	0.85

§Includes IDU only and MSM+IDU.

*Significant at $p < 0.050$. **Significant at $p < 0.010$.

TABLE 8:

Geographic Origin of Cumulative IDU and non-IDU AIDS Cases, San Diego County

	IDU	Non-IDU
US	85.6%	80.1%
US Dependency	1.2%	0.3%
Mexico	9.6%	14.3%
Other*	3.7%	5.3%
Total	2,861	12,124

*Includes 62 cases whose origin is unknown.

nificantly less likely ($p < 0.001$) to be born outside of the U.S. than non-IDU cases. IDU cases make up only about 19% of AIDS cases in San Diego County, but comprise about 49% of the 72 cases born in a U.S. dependency. Most IDU and non-IDU cases born outside of the U.S. are from Mexico (66.3% and 71.8% respectively) or the Philippines (3.1% and 4.4% respectively). The IDU and non-IDU cases are similar in proportion to cases born in Asia, Africa, Europe, North and South America, and the Caribbean.

RESIDENCE AT DIAGNOSIS

The majority of all AIDS cases were living in the HHS Central region at the time of their AIDS diagnosis (see Table 9). Over time there have been shifts in the proportion of

IDU cases in the regions. The percent of IDU cases in the Central region has declined significantly ($p < 0.001$) while it has increased significantly ($p < 0.001$) in the South region since the 1993-1997 time period (see Table 10). This is similar to changes in proportion over regions seen in all AIDS cases in the county. No significant changes in percent of IDU cases are seen in other regions over time.

FACILITY OF DIAGNOSIS

The largest percent of IDU and non-IDU AIDS cases were diagnosed in a hospital facility. IDU cases were significantly more likely to be diagnosed in a hospital ($p < 0.001$), adult HIV clinic ($p = 0.007$), or correctional facility ($p < 0.001$) than non-IDU cases. IDU cases were significantly less likely to be diagnosed at a

TABLE 9:

IDU and Non-IDU Cumulative AIDS Cases by HHS Region of Residence at Diagnosis, San Diego County

	HHS Region						Total Cases
	Central	East	South	North Coastal	North Inland	North Central	
IDU	58%	8%	12%	8%	5%	9%	2861*
Non-IDU	56%	7%	11%	8%	5%	14%	12124**
Total cases	8,449	1087	1,671	1142	689	1,913	14,985

*Includes 7 cases with unknown region.

**Includes 27 cases with unknown region.

Note: percentages may not total 100 due to rounding.

TABLE 10:

Time Period	HHS Region						Total Cases
	Central	East	South	North Coastal	North Inland	North Central	
1981-1987	66%	7%	6%	8%	2%	12%	120
1988-1992	62%	8%	9%	6%	5%	10%	373
1993-1997	58%	8%	10%	9%	6%	9%	944
1998-2002	61%	7%	12%	8%	5%	8%	664
2003-2007	49%	11%	19%	10%	3%	8%	466
2008-2012	49%	8%	12%	8%	5%	8%	287
Cumulative	58%	8%	12%	8%	5%	9%	100%
Total cases	1,650	237	344	238	131	254	2861*

*Includes 7 cases with unknown region.

Note: Percents may not total 100 due to rounding and missing region.

private medical office than non-IDU cases ($p < 0.001$) (see Table 11).

MSM AND IDU

Of the 2,861 male and female IDU AIDS cases reported in San Diego County, more than half, or 1,555 cases (54.4%), are also MSM (MSM+IDU) (see Table 11). Of the male IDU cases (2455), MSM+IDU comprise 63.3%. The percent of IDU-only ($p = 0.001$) and MSM+IDU ($p = 0.001$) cases has decreased significantly since 1998-2002 (see Table 12).

When compared to male IDU-only AIDS cases, the MSM+IDU group has a significantly larger percentage of whites (40.0% vs. 62.0%; $p < 0.001$). The percent of Hispanics (20.1% vs. 31.2%; $p < 0.001$) and of blacks (14.7% vs. 25.9%; $p < 0.001$) is smaller in MSM+IDU cases than male IDU-only cases (see Table 13).

Cumulative MSM+IDU cases (mean age 37.3 years) are younger ($p < 0.001$) than male IDU-only cases (mean age 40.0 years). MSM+IDU AIDS cases are significantly more likely to be in the 20-29 years ($p < 0.001$) or 30-

TABLE 11:

Type of Facility of Diagnosis in Cumulative IDU and Non-IDU AIDS Cases, San Diego County

	IDU Cases	Non-IDU Cases	All Cases
Private doctor/HMO	13.1%	23.6%	21.6%
Medical Examiner	0.3%	0.2%	0.3%
Correctional facility	4.2%	0.6%	1.3%
Hospital, inpatient	34.1%	26.5%	28.0%
Adult HIV clinic	15.7%	13.8%	14.1%
Other outpatient clinic	15.3%	13.0%	13.5%
Other*	0.1%	0.6%	0.3%
Unknown	17.2%	21.7%	20.9%
Total cases**	2,861	12,124	14,985

*Includes Emergency Department, Pediatric HIV Clinic, TB Clinic.

**Cases for which facility type information is available.

TABLE 12:

Percent of Male IDU-only and MSM+IDU AIDS Cases over 5-Year Time Periods, San Diego County

	Percent of all Male Cases	
	IDU only	MSM+IDU
1981-1987	2.4%	10.9%
1988-1992	5.0%	9.3%
1993-1997	7.0%	12.8%
1998-2002	9.3%	13.0%
2003-2007	7.7%	11.8%
2007-2012	6.3%	9.2%
Total cases	900 (6.5%)	1555 (11.3%)

39 years ($p=0.001$) age groups than male IDU-only cases. They are significantly less likely to be in the 40-49 years ($p<0.001$) and 50+ years ($p=0.001$) age groups (see Figure 3 and Table 13).

There is a significantly ($p<0.001$) larger percent of male IDU-only cases (43.7%) than MSM+IDU cases (31.1%) with less than one month between the time from reported HIV diagnosis to AIDS diagnosis (see Table 13). When race/ethnicity is controlled for, these differences are maintained.

There are differences between MSM+IDU and male IDU-only in type of facility of diag-

nosis. Male IDU-only cases are significantly more likely to be diagnosed in the hospital setting ($p<0.001$) or a correctional facility ($p<0.001$) than MSM+IDU cases, but less likely to be diagnosed by a private medical provider or in an HMO setting ($p=0.003$) (see Table 13).

The MSM+IDU cases (mean age 37.3 years) are, statistically, if not clinically, significantly younger than MSM-only cases (mean age 38.2 years) ($p<0.001$). The MSM+IDU cases are more likely to be in the 50+ years age group than MSM cases (8.9% vs. 11.4%; $p=0.003$); no other significant differences were

TABLE 13

Race/Ethnicity, Age Groups, Time Between Diagnoses, and Facility Type at Diagnosis for Cumulative Male Adolescent/Adult IDU-only, MSM+IDU, and MSM only AIDS Cases, San Diego County

		Male IDU-only*	MSM+IDU	MSM only
Race/ Ethnicity	White	40.0%	62.0%	63.1%
	Black	25.9%	14.7%	9.6%
	Hispanic	31.2%	20.1%	24.3%
	Other**	2.4%	3.2%	3.1%
Age (years)	mean	40.0	37.3	38.2
	<20	0.2%	0.2%	0.2%
	20-29	10.8%	18.4%	16.5%
	30-39	40.4%	45.5%	44.3%
	40-49	35.3%	27.0%	27.6%
	50+	13.2%	8.9%	11.4%
Time from HIV to AIDS Diagnosis	<1 month	43.7%	31.1%	41.2%
	<12 months	60.0%	43.9%	55.1%
Facility Type	Hospital	39.1%	31.0%	25.8%
	Private doctor/HMO	10.3%	15.2%	24.2%
	Adult HIV Clinic	13.3%	16.3%	13.7%
	Correctional Facility	6.7%	3.6%	0.5%
	Medical Examiner	0.3%	0.3%	0.3%
	Other#	14.3%	15.0%	12.8%
	Unknown	16.0%	18.6%	22.7%
Total Cases in Group		900	1,555	10,837

*Male cases with only IDU as mode of transmission.

**Includes Asian, Pacific Islander, and Native American.

#Includes emergency room and unspecified types of clinics.

Note: Percentages may not total 100 due to rounding.

seen in age groups (see Table 13).

The MSM+IDU cases have a significantly greater percentage of blacks ($p<0.001$), but a smaller proportion of Hispanics ($p=0.005$) than MSM-only cases. There is no significant difference between MSM+IDU and MSM-only in the proportion of (see Table 13).

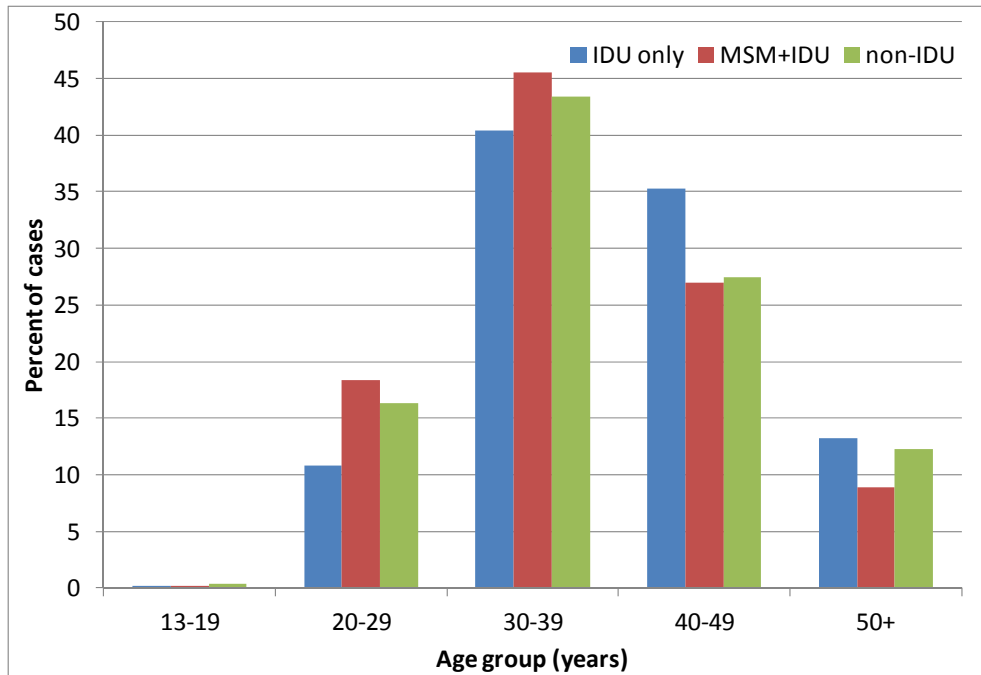
Cases in MSM+IDU have a significantly greater percent diagnosed in the hospital setting ($p<0.001$), HIV clinic ($p=0.006$), and cor-

rectional facility ($p<0.001$) than MSM-only cases. MSM-only cases were significantly more likely to be diagnosed by a private medical provider or in an HMO system than MSM+IDU cases ($p<0.001$). No differences were seen in other diagnostic settings (see Table 13).

The MSM-only cases have a significantly greater proportion of cases with less than one month from HIV diagnosis to AIDS diagnosis

FIGURE 3:

Age groups of Male IDU, MSM+IDU, and Non-IDU AIDS Cases, San Diego County



than MSM+IDU ($p < 0.001$) or with less than 12 months between diagnoses ($p < 0.001$) (see Table 13). This is consistent with findings in IDU and non-IDU cases. This difference is seen when controlling for race. It is possible that IDU brings people to medical care earlier in the course of disease so that they are diagnosed with HIV earlier, extending the time from HIV to AIDS, and are under care extending their survival.

LIMITATIONS

The data presented in this report are dependent on accurate reporting from healthcare providers, laboratories, and patients. Patients, for many reasons, may not provide accurate current or historical information to their healthcare providers, who are responsible for reporting. Healthcare providers may not report complete information because it is not

available to them, they wish to protect their patients' privacy, or other for reasons. Each of these situations, and others, results in data that may not be complete or accurate and these inaccuracies may impact analysis.

The data reported for each AIDS case is entered into the enhanced HIV/AIDS Reporting System (eHARS) data base. The eHARS database is provided by the CDC to the California Department of Public Health (CDPH). The variables in eHARS are defined by the CDC. Some of these variables are limited in the information they can provide. For example, while country of origin is collected, the age at which the case arrived in the United States (U.S.) is not collected. This makes interpretation of the importance of country of origin difficult because there may be differences between the case who arrives in the U.S. at two years of age, is raised in the U.S. to the

age of 30 before being infected, and the case who is raised in Africa or Latin America and arrives in the U.S. two years before being infected at age 30. Both would be identified as having a non-U.S. origin, but with very different cultural experiences. There are also cases identified in the county who were infected in their country of origin and this information is not presented.

Caution should be exercised in the analysis of the most recent time period (2008-2012) because additional cases are likely to be reported over time; retrospective case finding will continue. Case reports are also updated as new information becomes available. When, for example, more information on risks is obtained, the database is updated and this may impact proportions and rates used in this and future analyses.

Some of the variables under study do not have sufficient numbers of occurrences to make statistical inferences. When small numbers are presented, caution should be exercised in the interpretation of data presented.

Whenever possible, case information is updated as to vital status. However, it is likely that some cases that have died have not yet been reported to the Epidemiology Program. Some cases may have died outside of San Diego County or California. Circumstances of death may also impact accuracy of vital status; cases with no indication of an HIV or AIDS diagnosis on the death certificate are less likely to have the death reported to the Epidemiology Program. This may result in inaccurate assumptions and survival calculations.

Updates are also made related to risk

group as new information on cases becomes available. For this reason, a number of cases each year are reclassified from IDU to MSM+IDU. This may result in changes of proportions and significance in analyses.

The county has a higher proportion of Hispanics and a lower proportion of blacks than do many states, and the United States as a whole. These racial/ethnic demographic differences make comparisons of San Diego County to the nation as a whole, and to other states, difficult, and must be taken into account when discussing the impact of the AIDS epidemic on the county.

Comparisons are made in this report to CDC national estimates for rates and percentages of AIDS cases in terms of demographic and risk variables. It should be remembered that these are estimates based on data submitted under many different state and local surveillance systems, while the county data is based on individual cases reported. This can make these comparisons difficult to interpret.

All databases have limitations, but taking these into account can facilitate their usefulness and contribution to community planning and prevention.

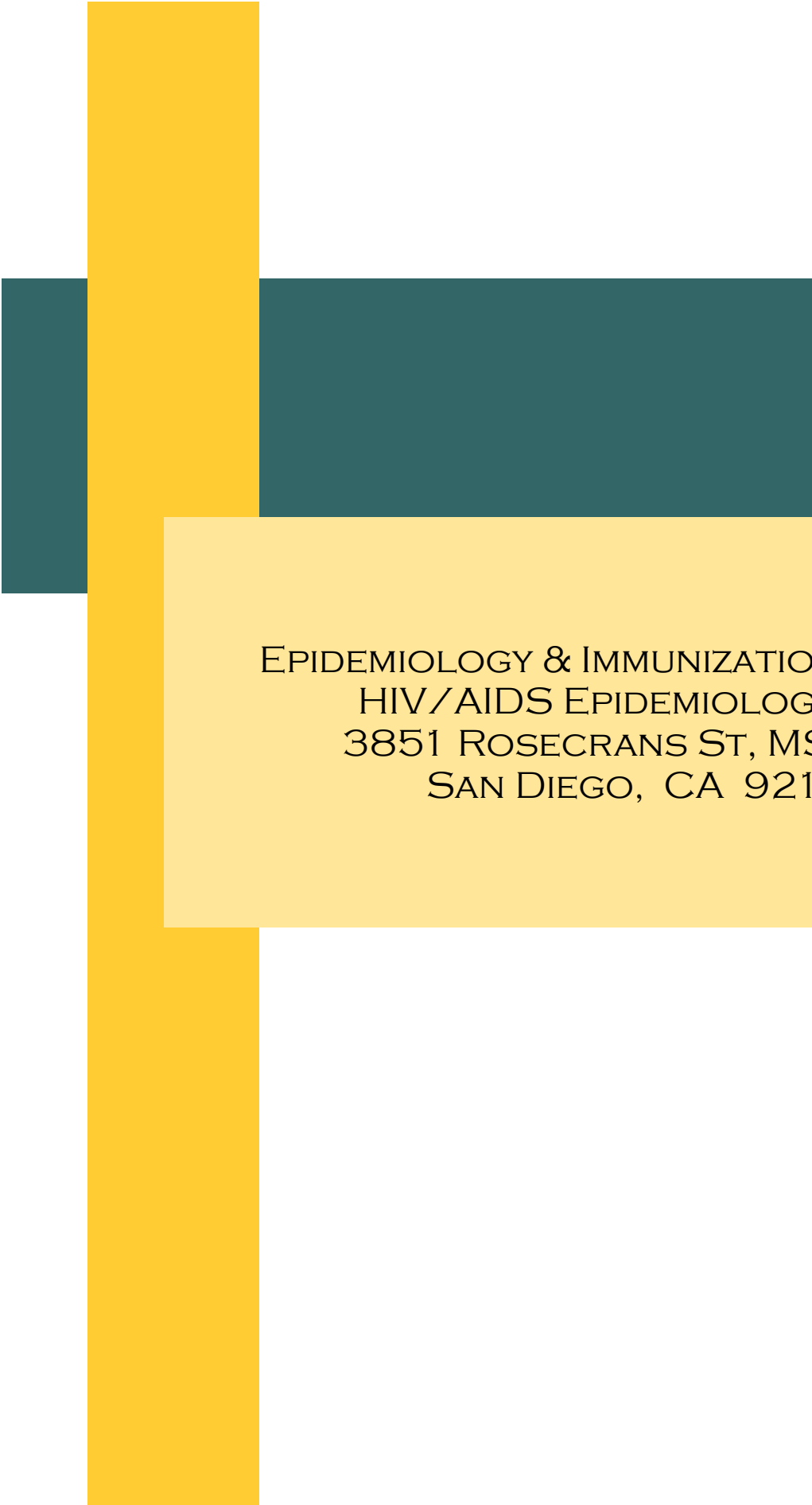
DATA SOURCES:

County of San Diego, HIV/AIDS Epidemiology Unit database and Annual Report.

SANDAG population estimates.

HIV/AIDS Surveillance Report, 2011 (Vol. 23), Centers for Disease Control and Prevention.

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