

HIV/AIDS and Hepatitis C Virus (HCV) Co-Infection - Florida



Bureau of HIV/AIDS Hepatitis Program & Surveillance Section

Data from 1981 through December 2008

Data sources: HIV/AIDS Reporting System (HARS) & MERLIN



HIV/HCV

Co-Infection - Florida

- This presentation contains data acquired from matching HIV/AIDS cases who were alive through 2008 and were reported in the HIV/AIDS database (eHARS) **WITH** the acute and chronic HCV data (confirmed, probable and suspect cases) reported between 2003 – 2008 in the MERLIN database. **An additional 2,500 living HIV/AIDS cases were updated with HCV this year as a result of this year's match.**
- All matched cases along with those HIV/AIDS cases noting a history of HCV in eHARS were considered to be co-infected with HIV and HCV and were analyzed further. County data exclude Department of Correction (DOC) cases.

HIV/HCV

Co-Infection – Florida (cont)

- Infection with more than one pathogen is called co-infection. When modes of transmission for pathogens are the same or significantly overlap, such as occurs with HIV and hepatitis, infection with more than one pathogen is likely.
- Potentially severe concurrent illnesses to HIV infection, like viral hepatitis, may increase mid- to long-range morbidity and mortality. Chronic hepatitis, especially that due to HCV is common in the HIV-infected population. Infection by hepatitis viruses in HIV-infected patients may impact health status, decrease quality of life, and increase health care costs.

HIV/HCV

Co-Infection – Florida (cont)

- HCV is *more* serious in HIV-infected persons. It leads to liver damage more quickly. Co-infection with HCV may also affect the treatment of HIV infection. Therefore, it is important for HIV-infected persons to know whether they are also infected with HCV and, if they aren't, to take steps to prevent infection.

HIV/HCV

Co-Infection – Florida (cont)

- Injection drug use is one of the main ways people become infected with HIV as well as with HCV. In fact 50%-90% of HIV-infected injection drug users are also co-infected with HCV.
- Persons who received blood products for either hemophilia or transfusion prior to 1987 commonly have HCV infection.
- Heterosexual sex or perinatal exposure can also pass on HCV infection, however these risks are much lower for acquiring HCV than they are for acquiring HIV.

HIV/HCV

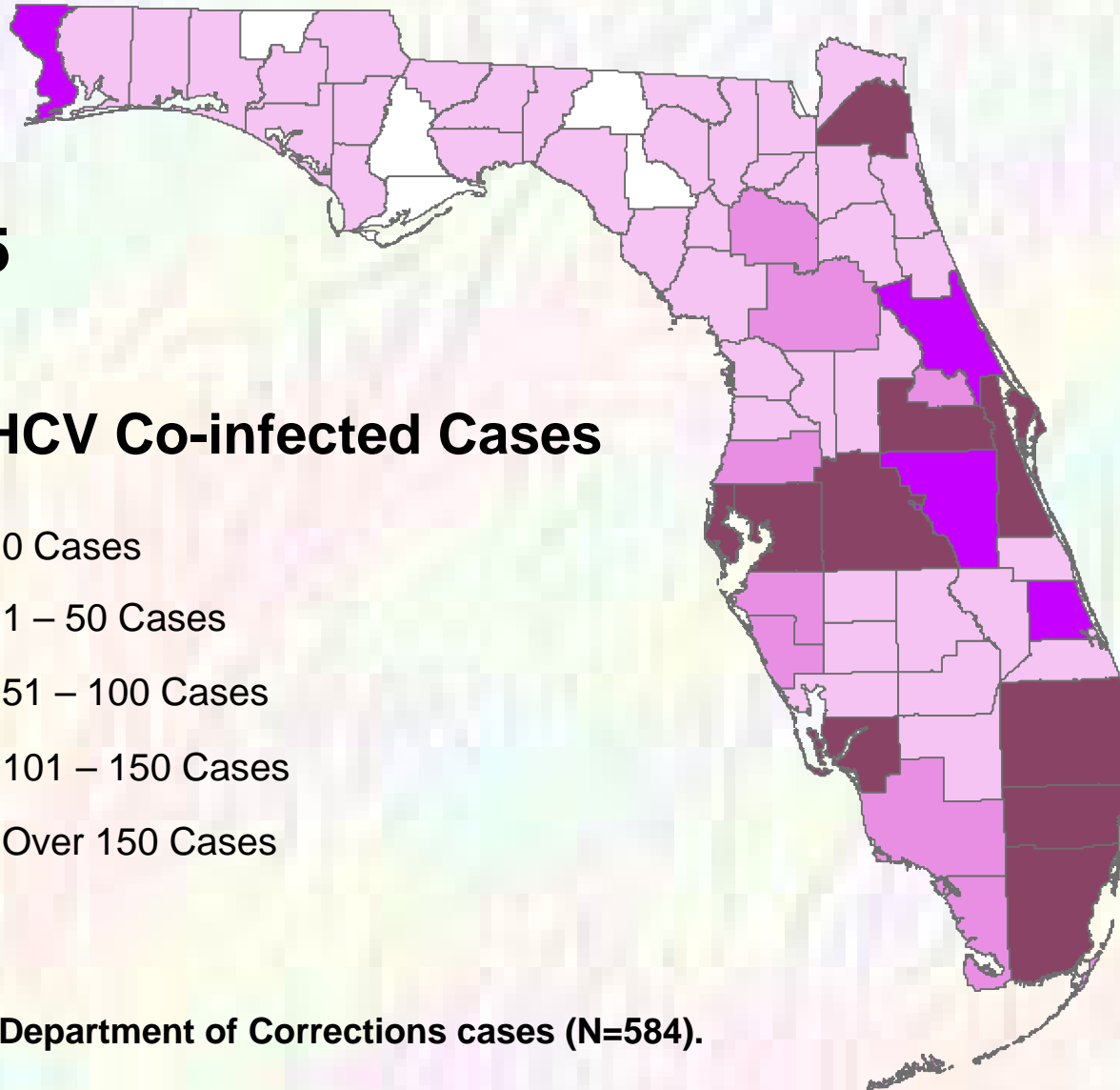
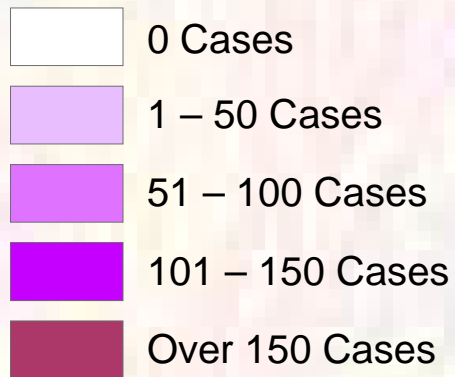
Co-Infection – Florida (cont)

- Limitations of the data:
 - Documentation of Hepatitis C is **NOT** complete as many chronic infected cases may not yet have been reported in MERLIN (the reporting system for HCV).
 - Social Security Numbers are minimally reported in MERLIN, making it impossible to validate many cases that might otherwise be true matches between MERLIN and the HIV/AIDS reporting system.
- Therefore, keep in mind that these data represent a *minimal estimate* of HIV/HCV co-infection.

HIV/HCV Co-infected Cases Living through 2008, Florida

N=7,365

HIV/HCV Co-infected Cases



County totals exclude Department of Corrections cases (N=584).

HIV/HCV Co-infected Cases by County Living through 2008, Florida, N=7,365

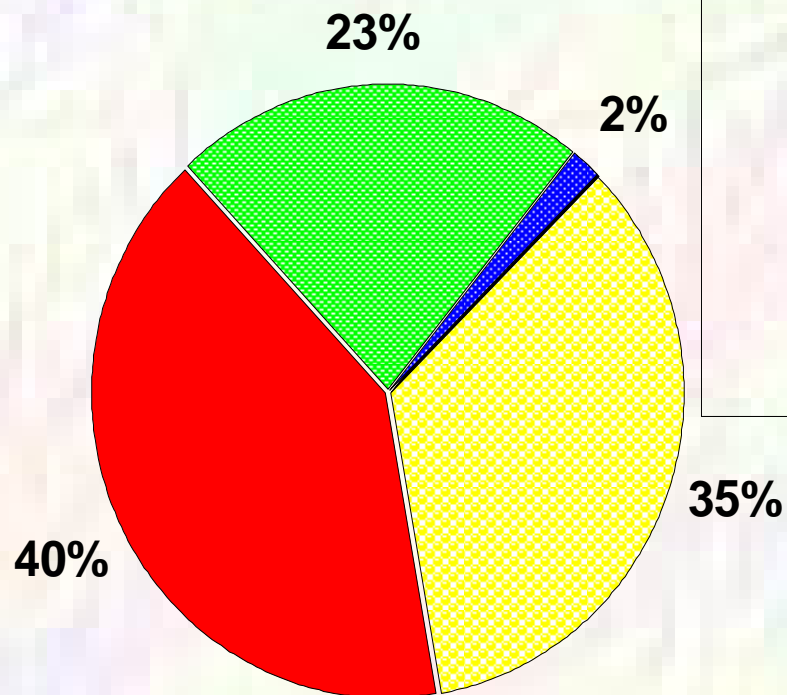
ALACHUA CO.	94	GULF CO.	2	ORANGE CO.	527
BAKER CO.	4	HAMILTON CO.	2	OSCEOLA CO.	111
BAY CO.	41	HARDEE CO.	7	PALM BEACH CO.	409
BRADFORD CO.	6	HENDRY CO.	10	PASCO CO.	91
BREVARD CO.	159	HERNANDO CO.	21	PINELLAS CO.	374
BROWARD CO.	1256	HIGHLANDS CO.	17	POLK CO.	181
CALHOUN CO.	3	HILLSBOROUGH CO.	459	PUTNAM CO.	26
CHARLOTTE CO.	17	INDIAN RIVER CO.	29	SANTA ROSA CO.	13
CITRUS CO.	20	JACKSON CO.	9	SARASOTA CO.	79
CLAY CO.	16	JEFFERSON CO.	1	SEMINOLE CO.	84
COLLIER CO.	56	LAKE CO.	45	ST JOHNS CO.	26
COLUMBIA CO.	13	LEE CO.	153	ST LUCIE CO.	105
DADE CO.	1754	LEON CO.	35	SUMTER CO.	7
DE SOTO CO.	8	LEVY CO.	6	SUWANNEE CO.	4
DIXIE CO.	3	MANATEE CO.	78	TAYLOR CO.	1
DUVAL CO.	480	MARION CO.	92	UNION CO.	2
ESCAMBIA CO.	143	MARTIN CO.	22	VOLUSIA CO.	123
FLAGLER CO.	10	MONROE CO.	68	WAKULLA CO.	1
GADSDEN CO.	10	NASSAU CO.	5	WALTON CO.	4
GILCHRIST CO.	1	OKALOOSA CO.	33	WASHINGTON CO.	1
GLADES CO.	2	OKEECHOBEE CO.	6		

County totals exclude Department of Corrections cases (N=584).

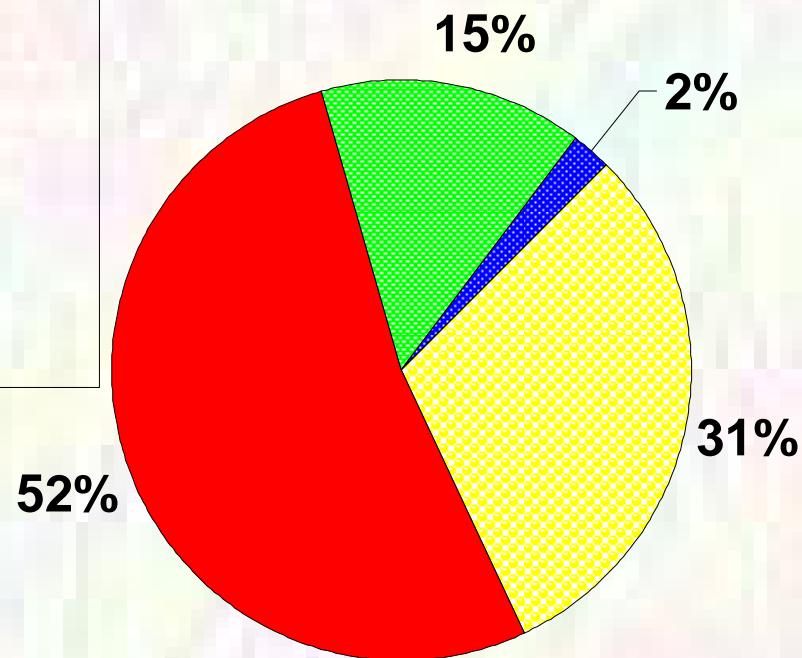


Living Adult HIV/HCV Co-infected Cases By Sex and Race/Ethnicity, Florida Through 12/31/08

Males
N = (5,569)



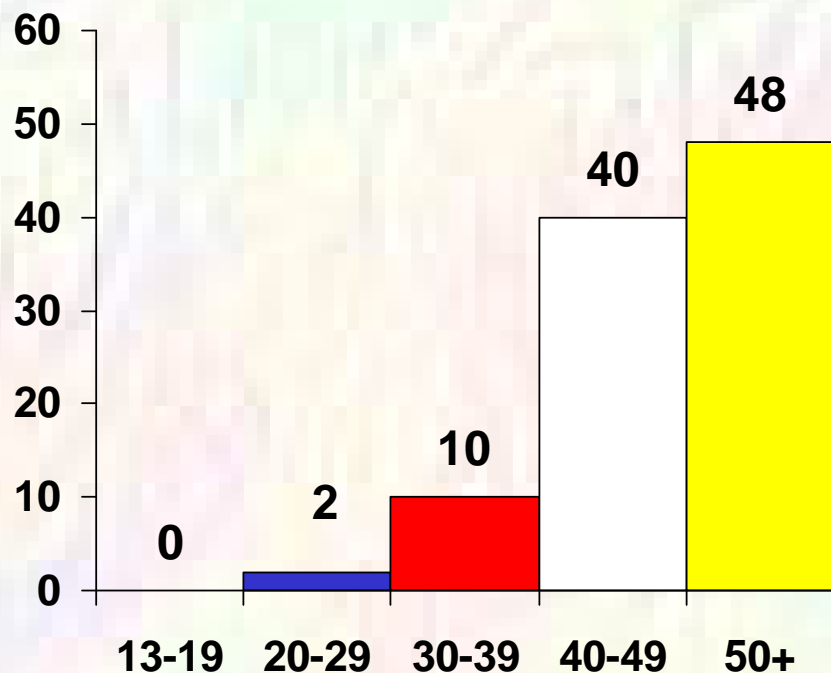
Females
N = (2,376)



Living Adult HIV/HCV Co-infected Cases By Sex and Current Age Group, Florida Through 12/31/08

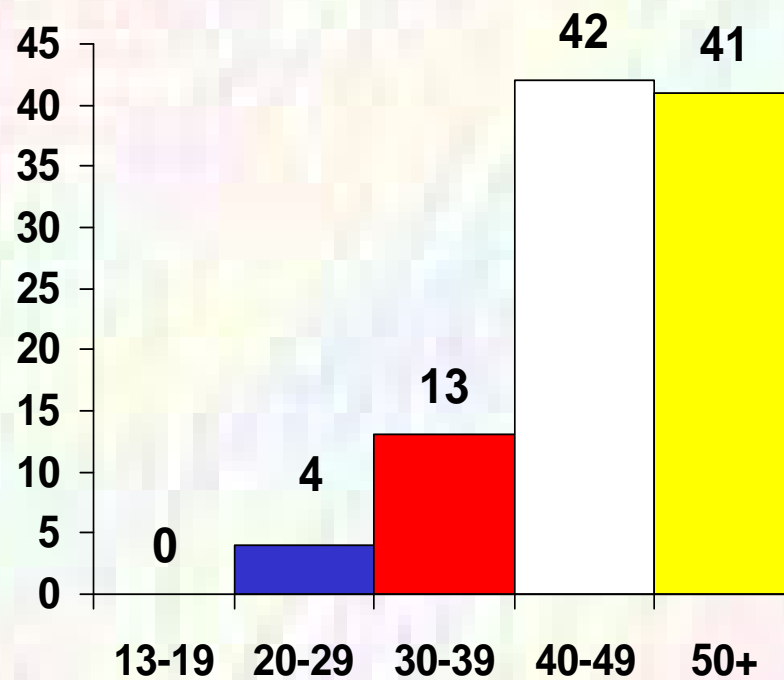
Males (N=5,569)

Percent



Females (N=2,376)

Percent



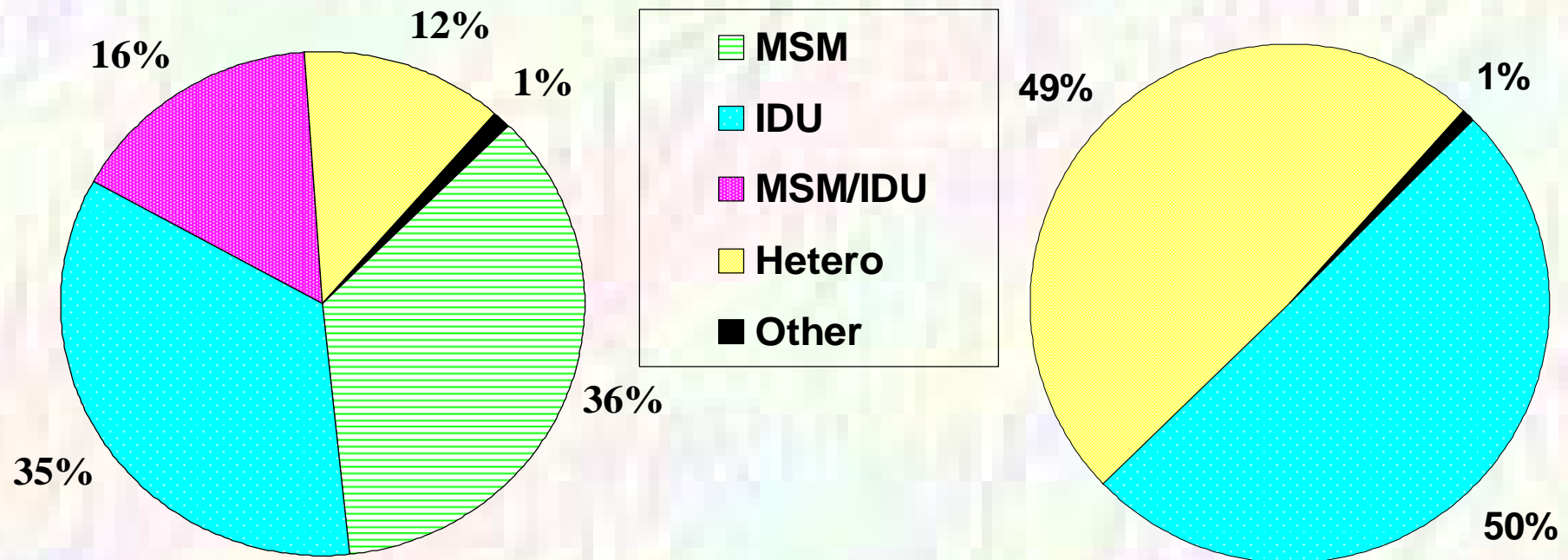
Comment: In this snapshot of living HIV/HCV co-infected cases through 2008, among males 87% are currently 40 years of age or older. Among females 83% are currently 40 years of age or older.

HIV/HCV co-infection is increasingly recognized worldwide. Rates are particularly high -- up to 90% -- among **injection drug users (IDUs)**, since both viruses are readily transmitted via shared needles and other injection equipment.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Florida* Through 12/31/08

Males (N=5,569)

Females (N=2,376)



Comment: Of the 90,483 living HIV/AIDS cases in Florida, 9% are known to be co-infected with HIV/HCV.

51% of males and 50% of females have a documented IDU-related risk.

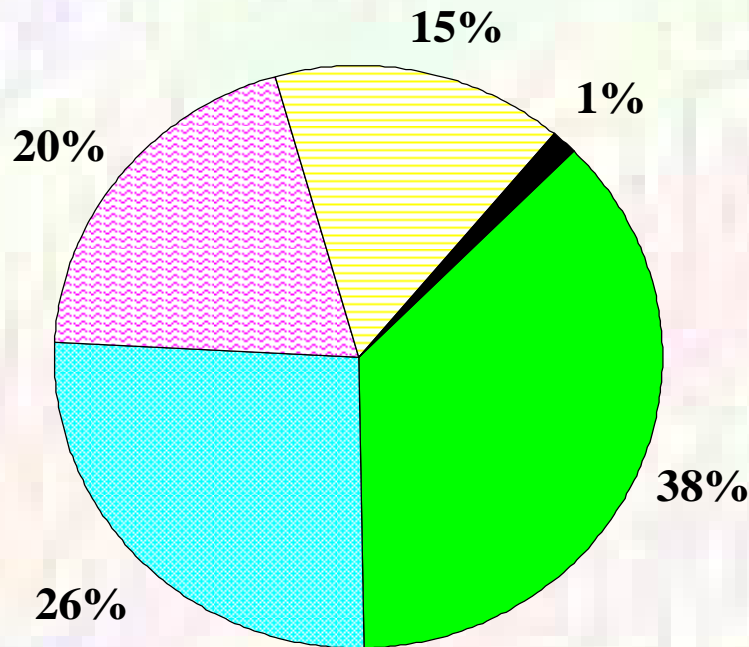
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

***Data includes Dept of Corrections cases.**

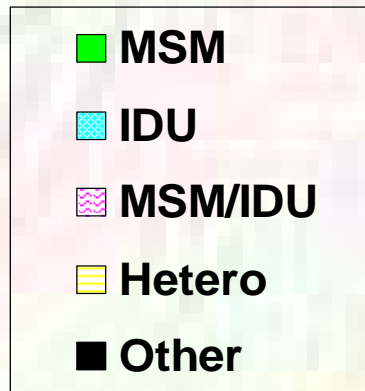
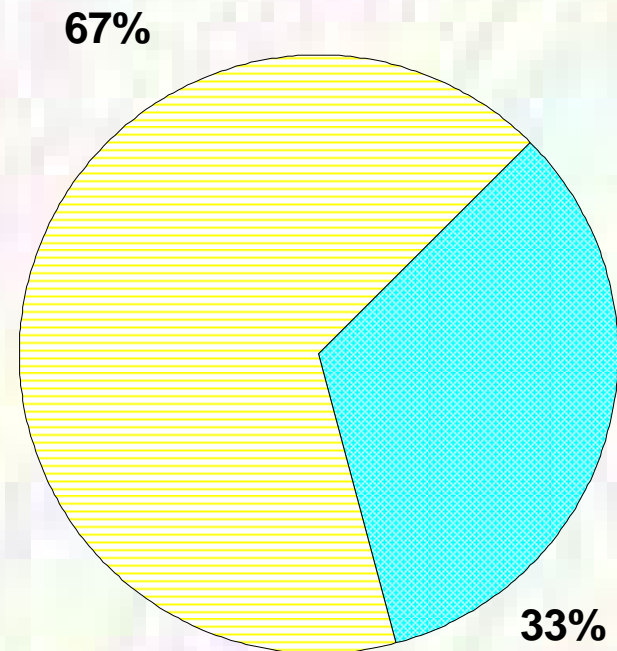


Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 1 Through 12/31/08

Males (N=142)



Females (N=51)

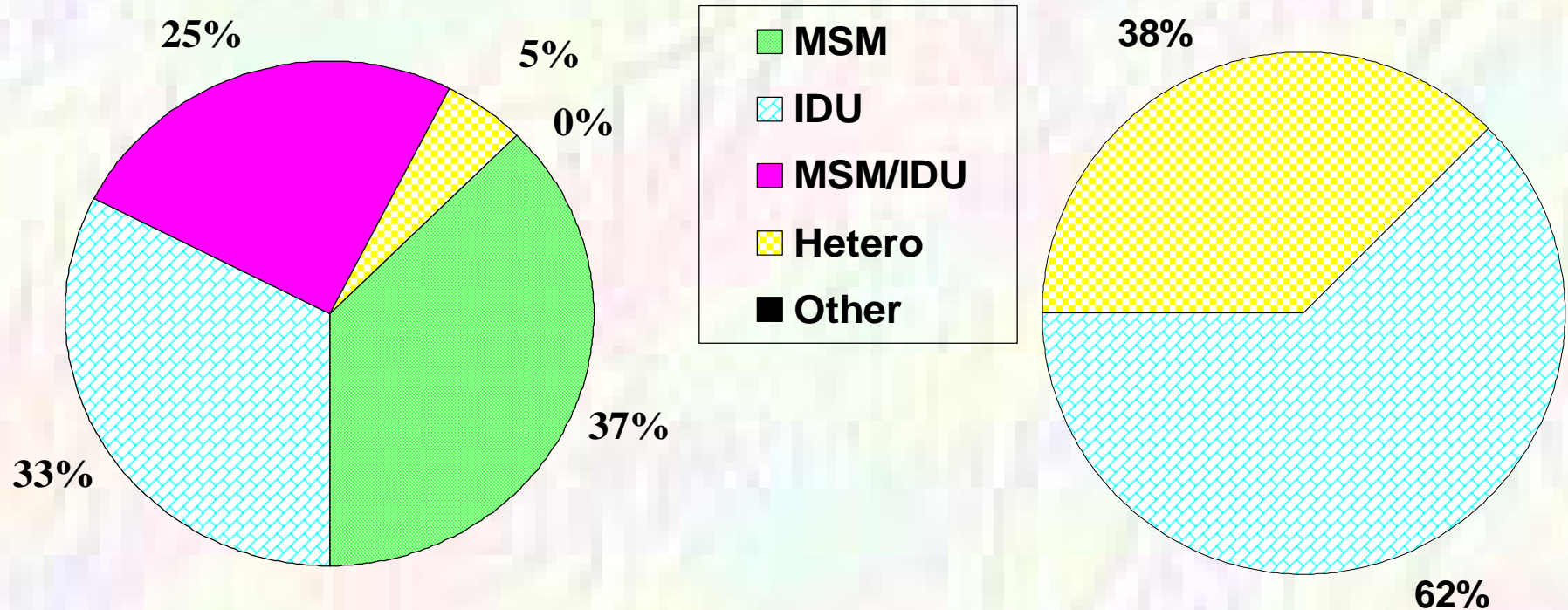


Comment: Of the 1,468 living HIV/AIDS cases in Area 1, 13% are known to be co-infected with HIV/HCV.
 46% of males and 33% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 2a Through 12/31/08

Males (N=40)

Females (N=16)

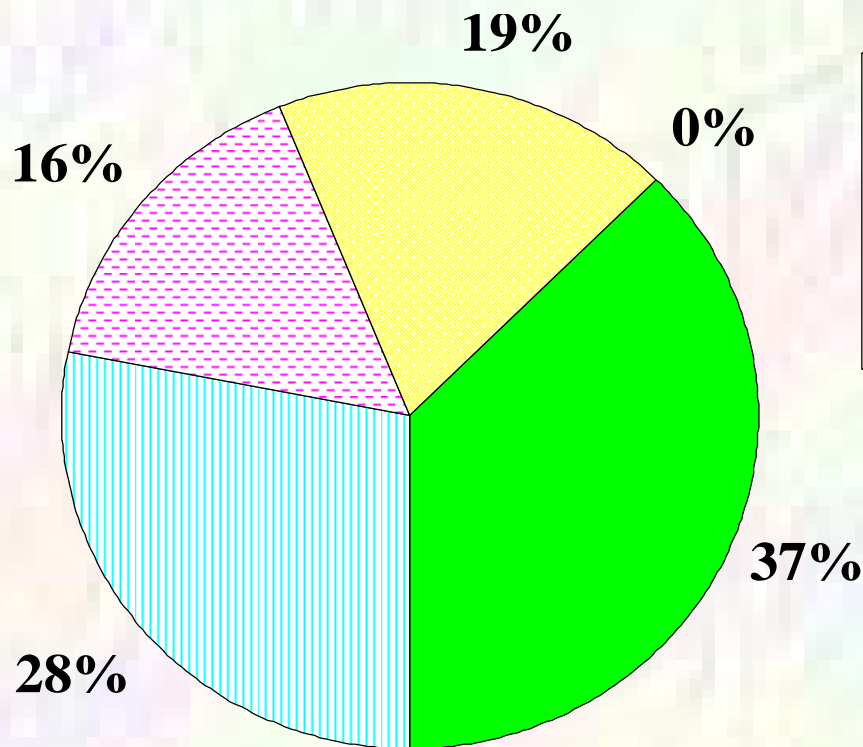


Comment: Of the 482 living HIV/AIDS cases in Area 2a, 12% are co-infected with HIV/HCV.
58% of males and 62% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

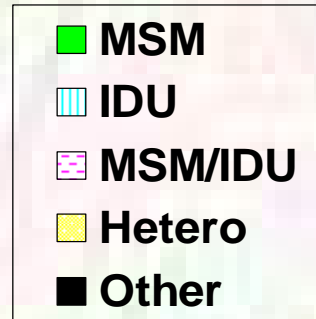
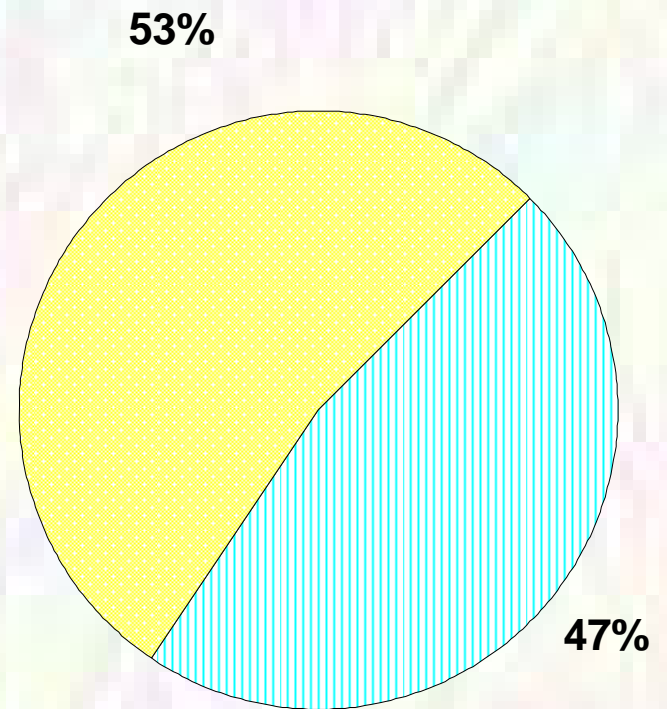


Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 2b Through 12/31/08

Males (N=31)



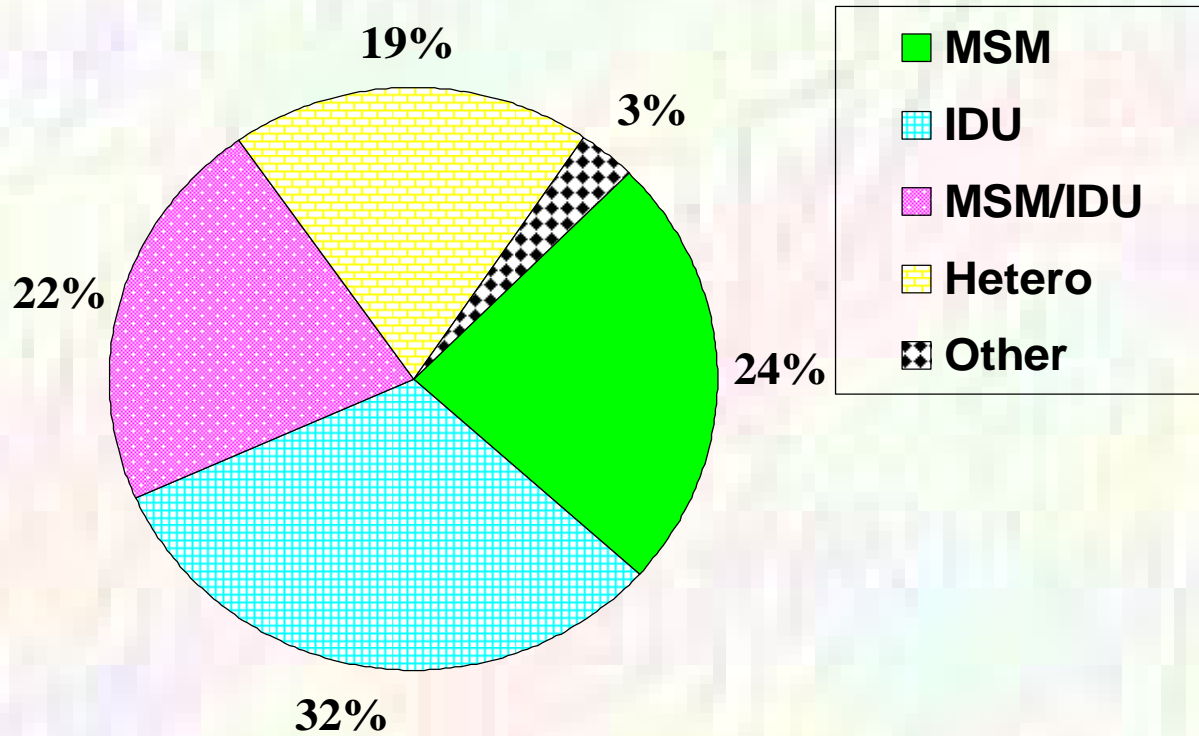
Females (N=17)



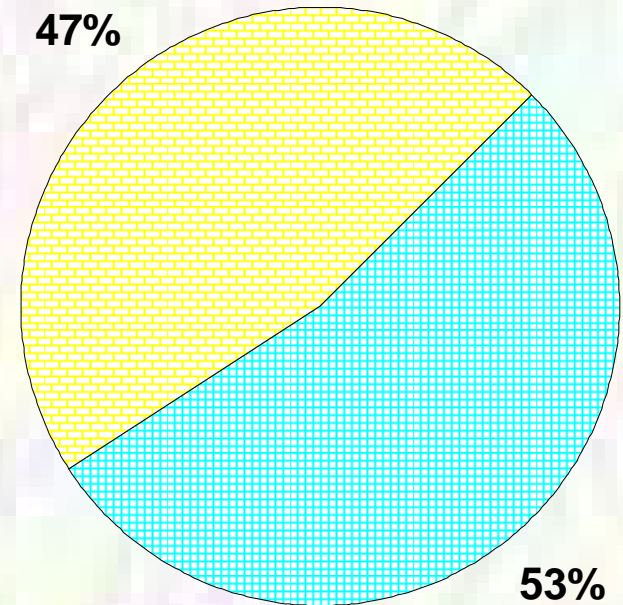
Comment: Of the 1,208 living HIV/AIDS cases in Area 2b, 4% are co-infected with HIV/HCV.
44% of males and 47% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 3 Through 12/31/08

Males (N=95)



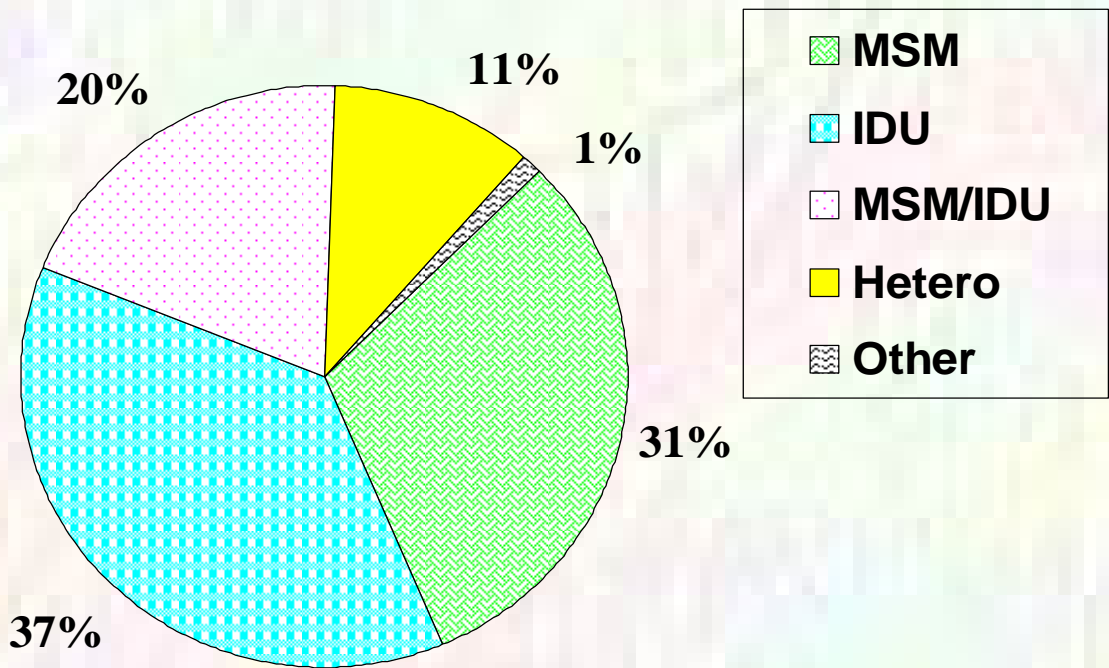
Females (N=62)



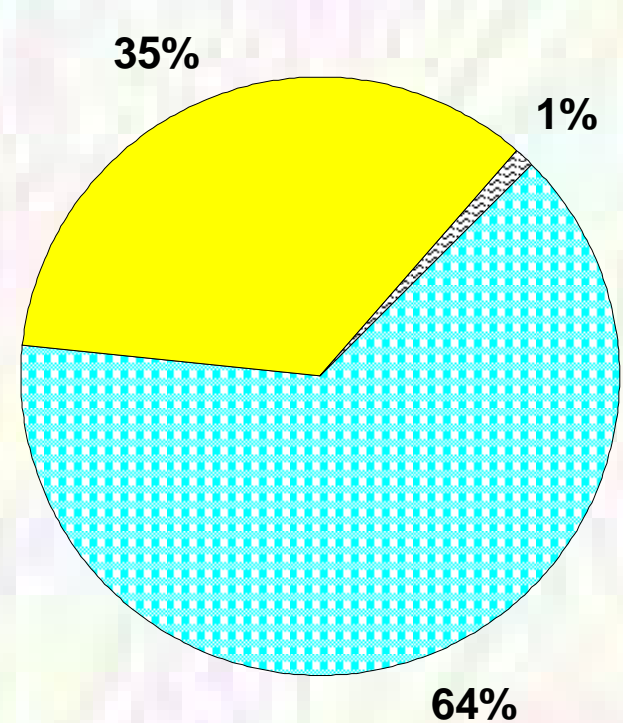
Comment: Of the 1,371 living HIV/AIDS cases in Area 3, 11% are co-infected with HIV/HCV.
54% of males and 53% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 4 Through 12/31/08

Males (N=352)



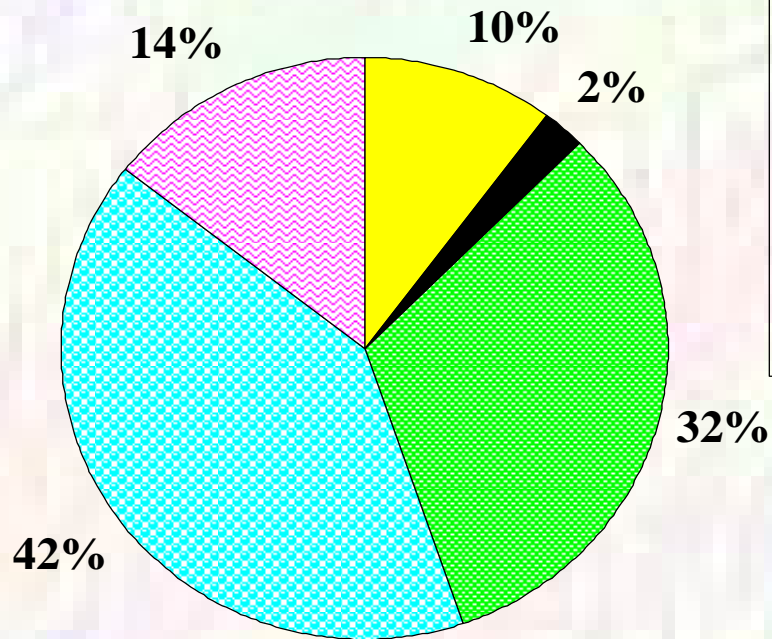
Females (N=179)



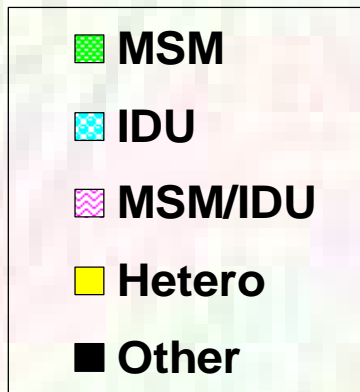
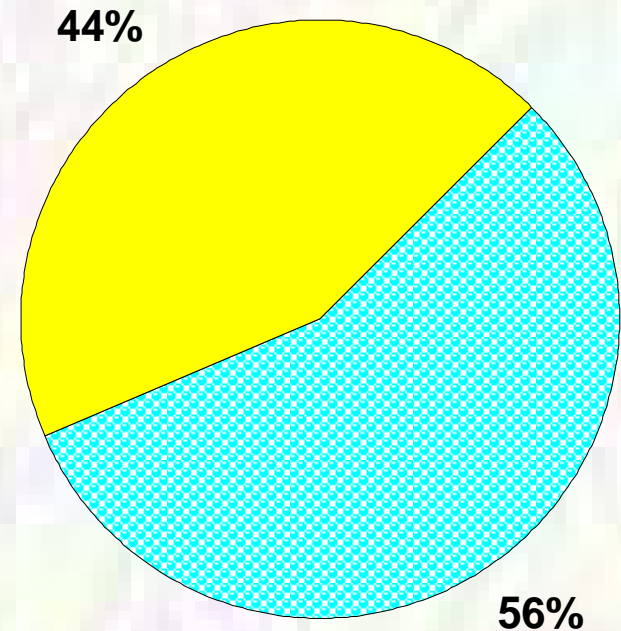
Comment: Of the 5,309 living HIV/AIDS cases in Area 4, 10% are co-infected with HIV/HCV.
57% of males and 64% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 5 Through 12/31/08

Males (N=401)



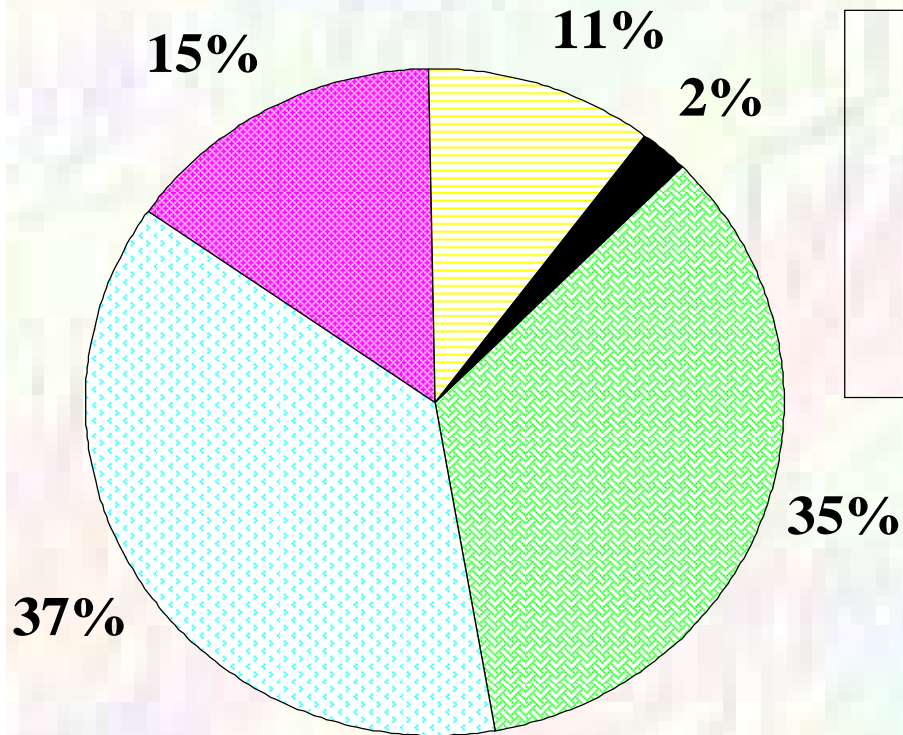
Females (N=157)



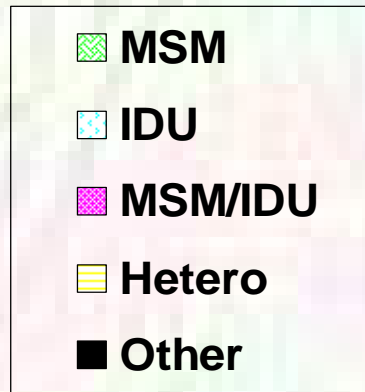
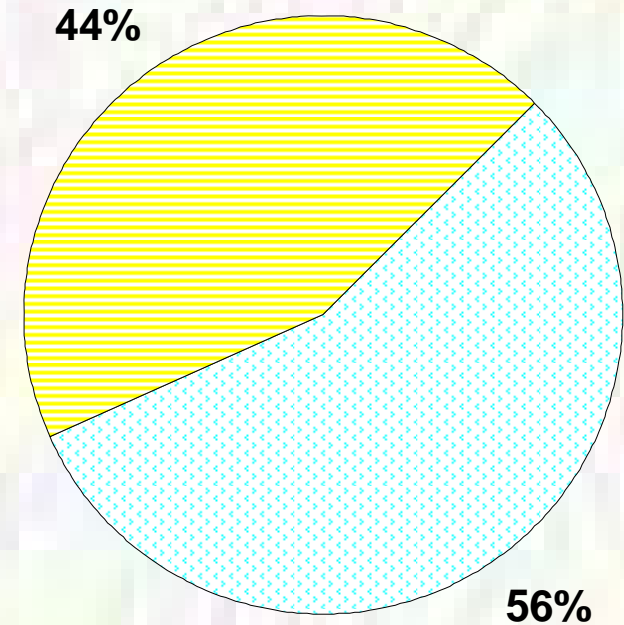
Comment: Of the 3,987 living HIV/AIDS cases in Area 5, 14% are co-infected with HIV/HCV.
56% of males and 56% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 6 Through 12/31/08

Males (N=312)



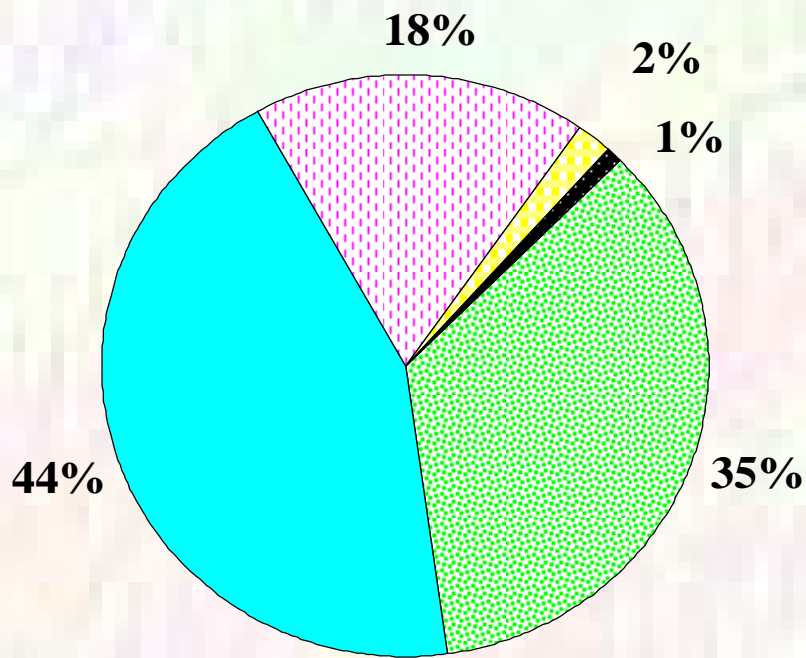
Females (N=127)



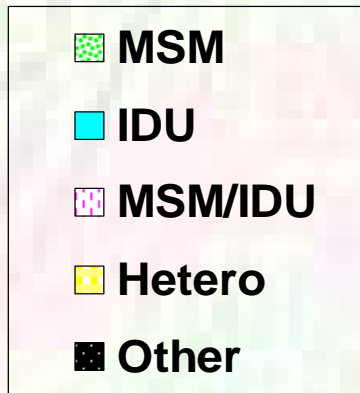
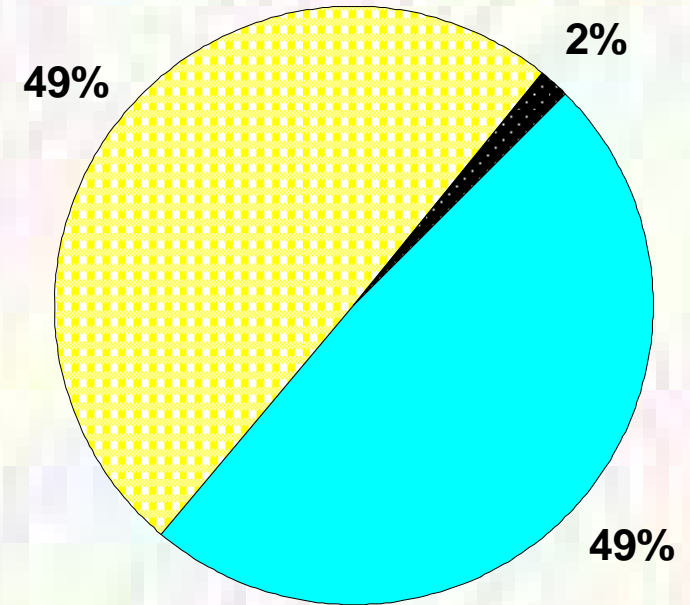
Comment: Of the 6,424 living HIV/AIDS cases in Area 6, 7% are co-infected with HIV/HCV.
52% of males and 56% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 7 Through 12/31/08

Males (N=498)



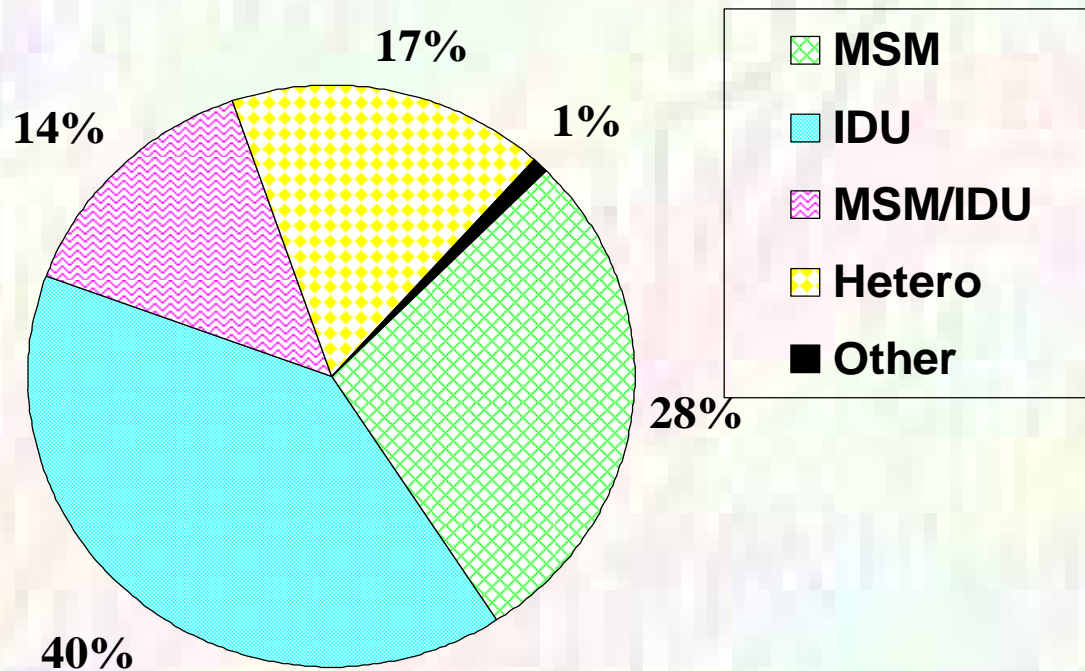
Females (N=189)



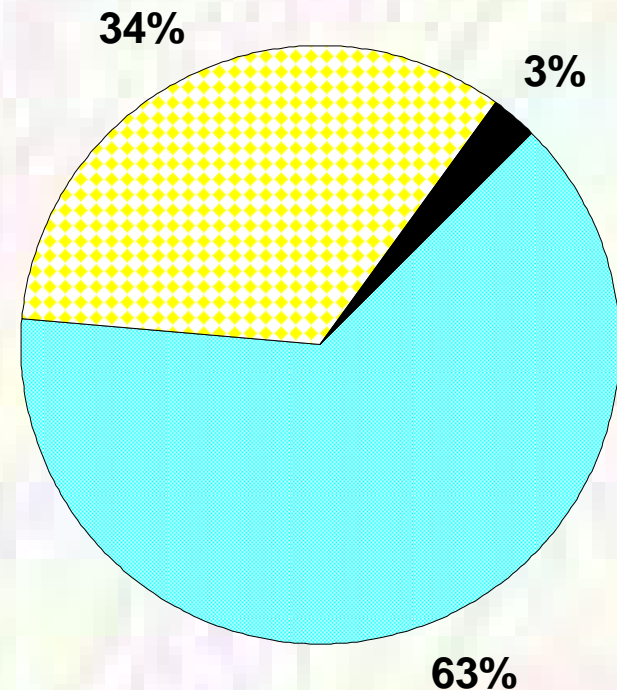
Comment: Of the 9,038 living HIV/AIDS cases in Area 7, 8% are co-infected with HIV/HCV.
62% of males and 49% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 8 Through 12/31/08

Males (N=209)

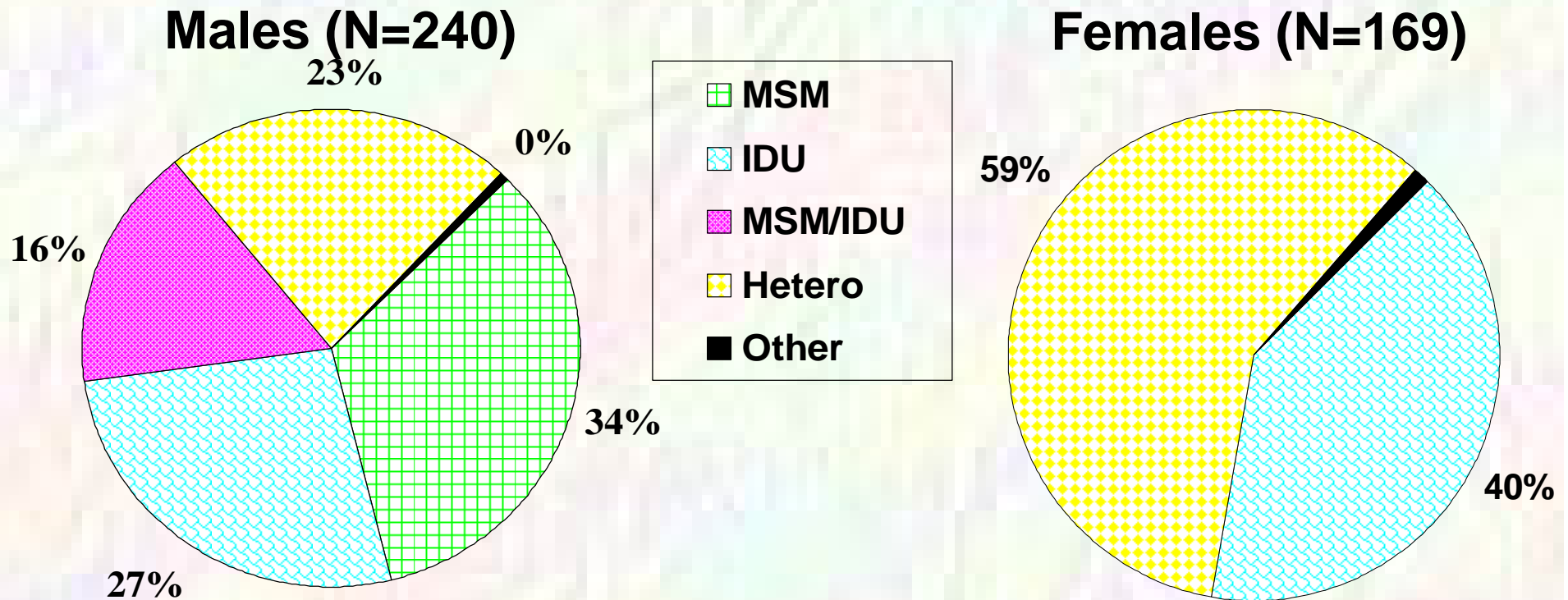


Females (N=116)



Comment: Of the 3,515 living HIV/AIDS cases in Area 8, 9% are co-infected with HIV/HCV.
54% of males and 63% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

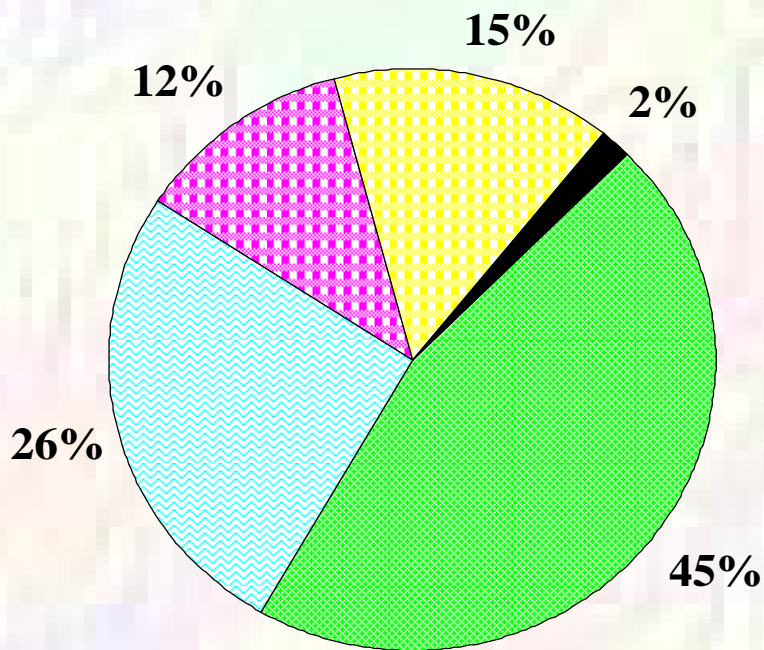
Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure Area 9, Palm Beach County Through 12/31/08



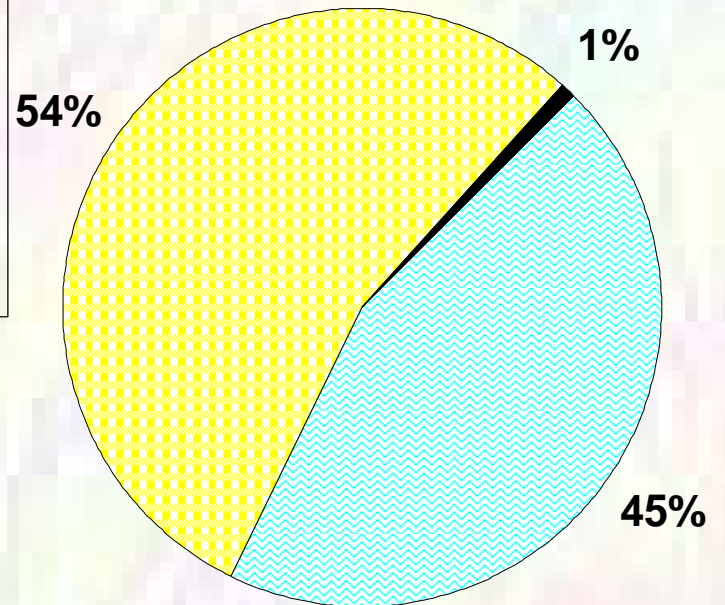
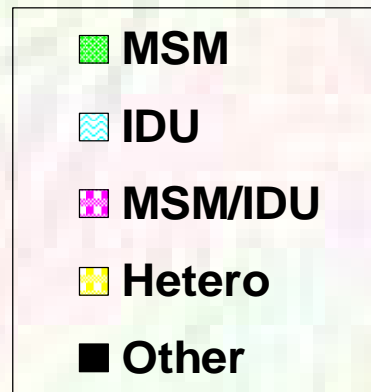
Comment: Of the 7,426 living HIV/AIDS cases in Area 9, 5% are co-infected with HIV/HCV.
43% of males and 40% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure Area 10, Broward County Through 12/31/08

Males (N=917)



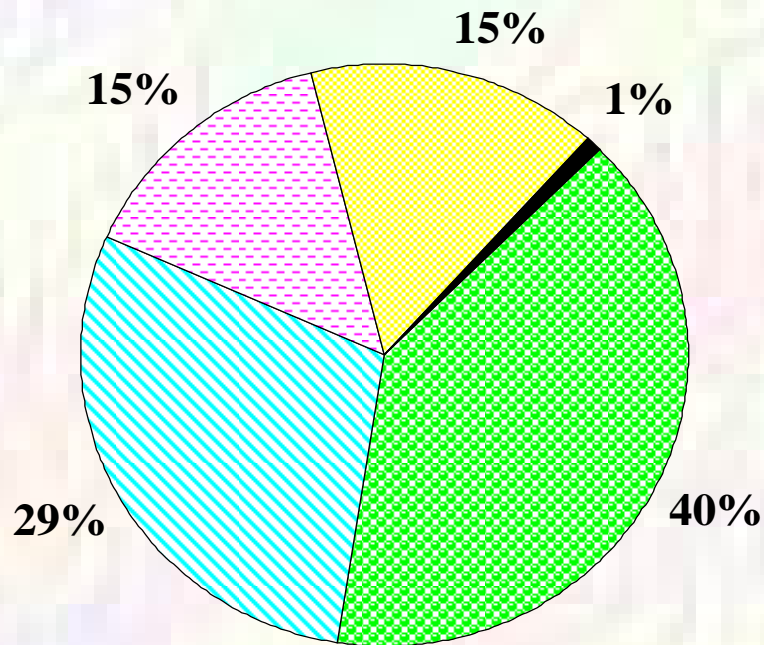
Females (N=339)



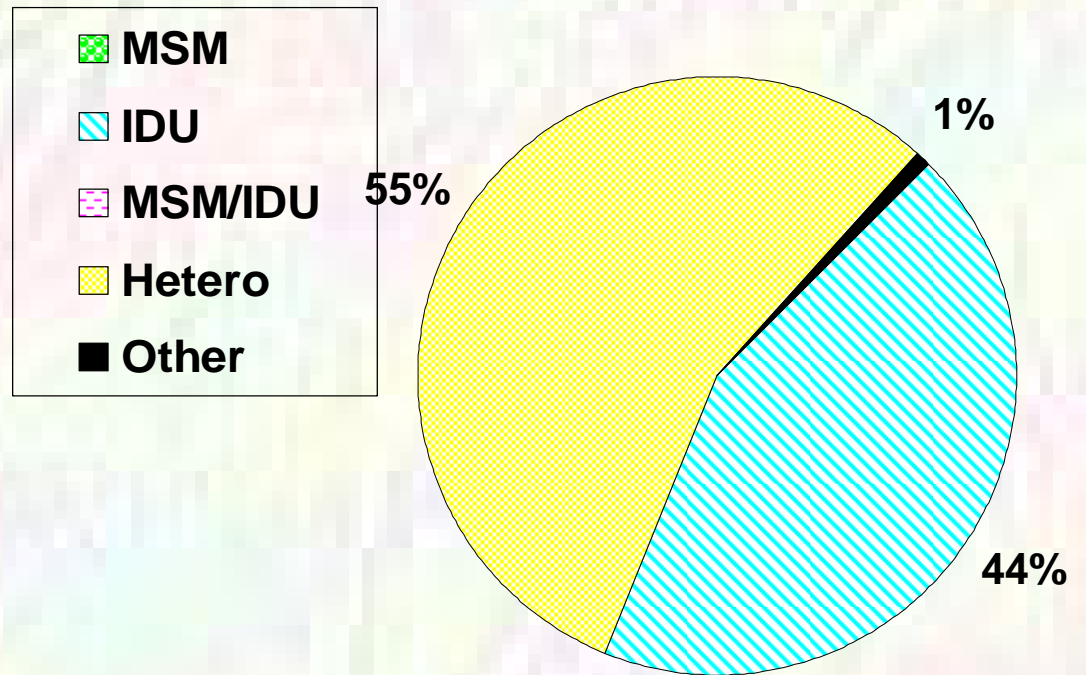
Comment: Of the 15,090 living HIV/AIDS cases in Area 10, 8% are co-infected with HIV/HCV.
38% of males and 45% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure Area 11a, Miami-Dade County Through 12/31/08

Males (N=1,211)



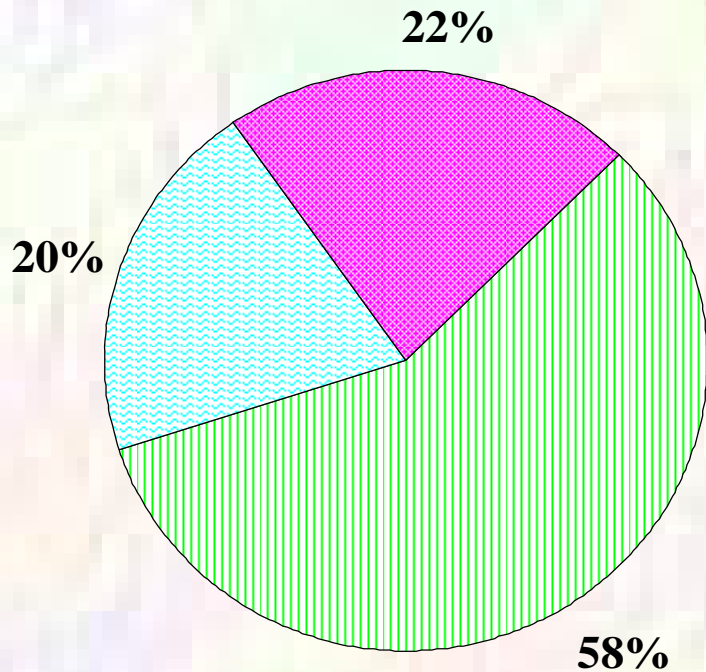
Females (N=541)



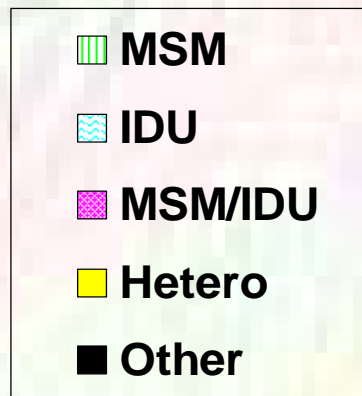
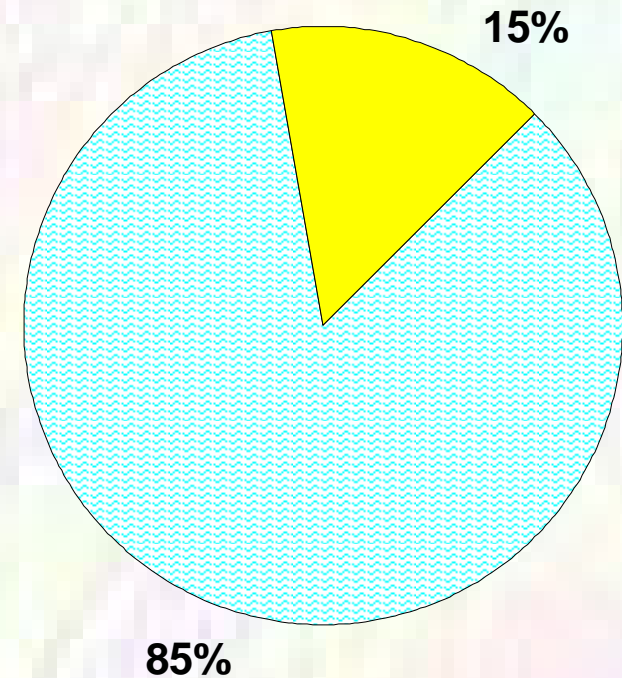
Comment: Of the 23,595 living HIV/AIDS cases in Area 11a, 7% are co-infected with HIV/HCV.
44% of males and 44% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure Area 11b, Monroe County Through 12/31/08

Males (N=55)



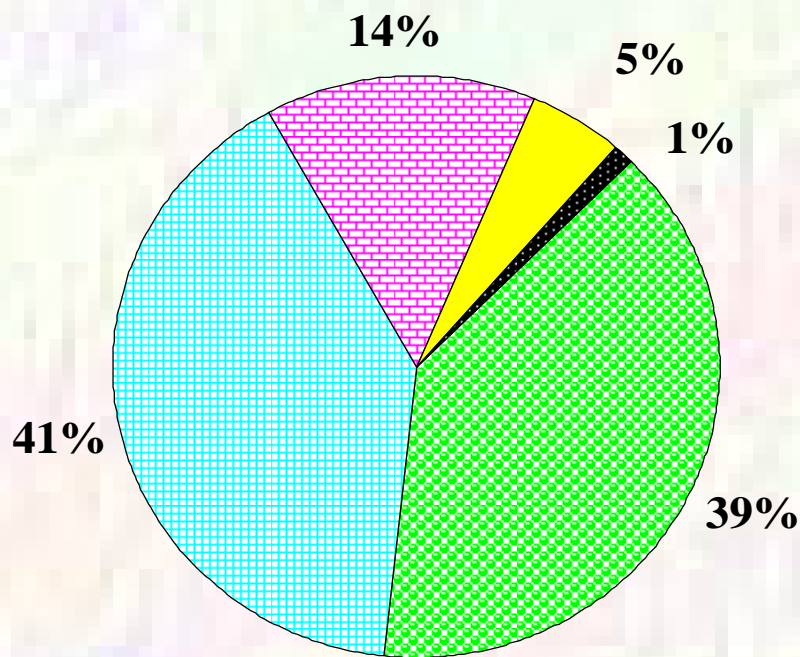
Females (N=13)



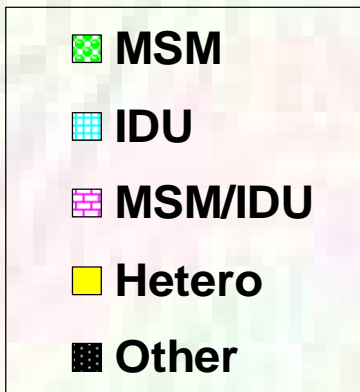
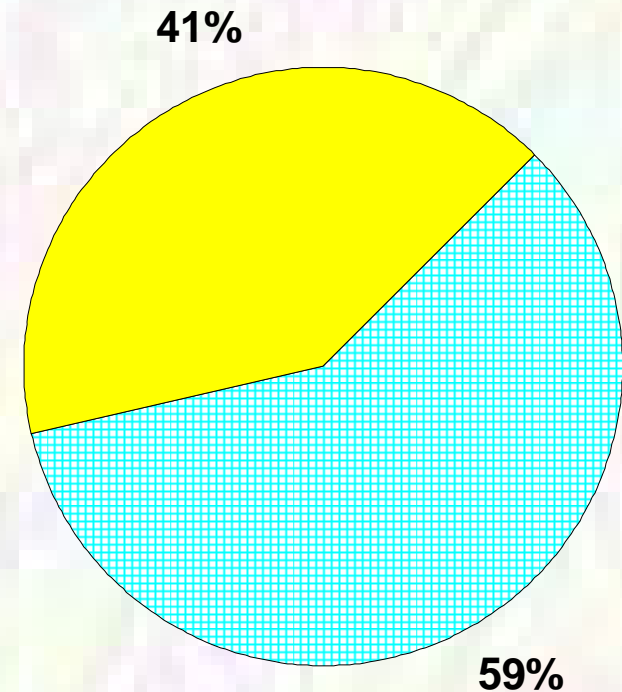
Comment: Of the 680 living HIV/AIDS cases in Area 11b, 10% are co-infected with HIV/HCV.
42% of males and 85% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 12 Through 12/31/08

Males (N=97)



Females (N=34)

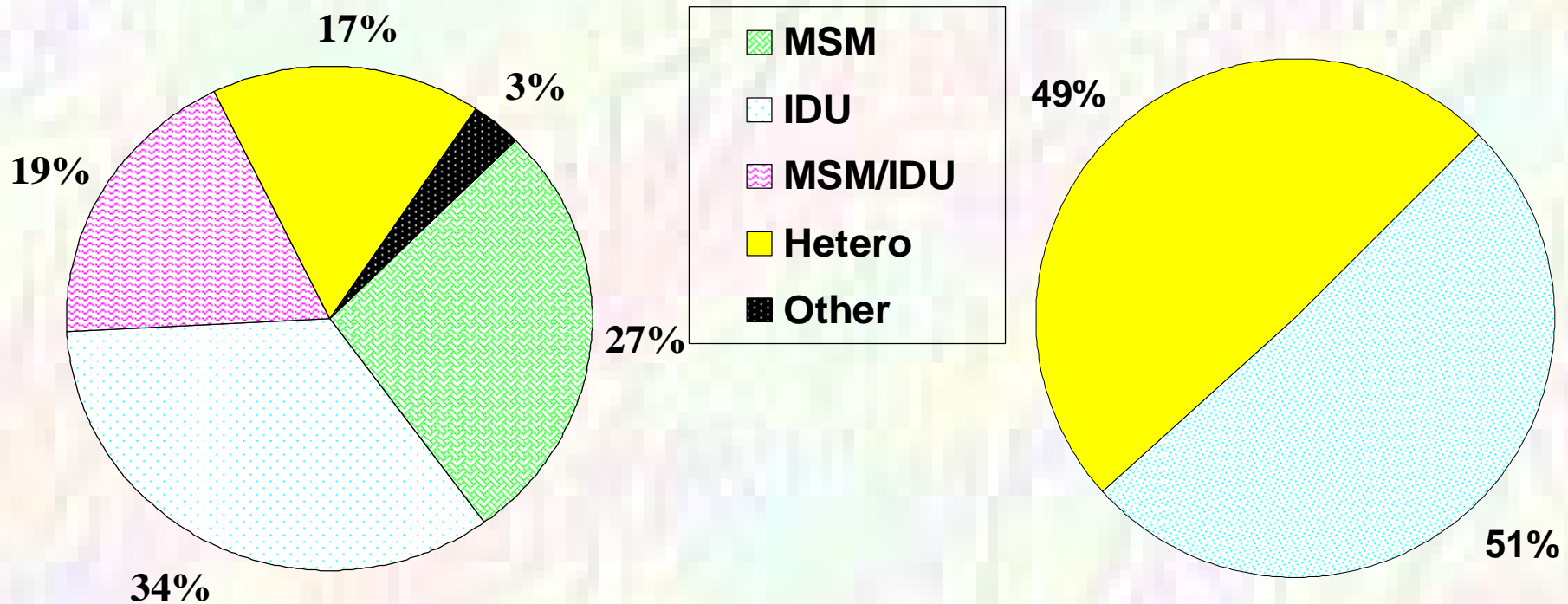


Comment: Of the 1,344 living HIV/AIDS cases in Area 12, 10% are co-infected with HIV/HCV.
55% of males and 59% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 13 Through 12/31/08

Males (N=101)

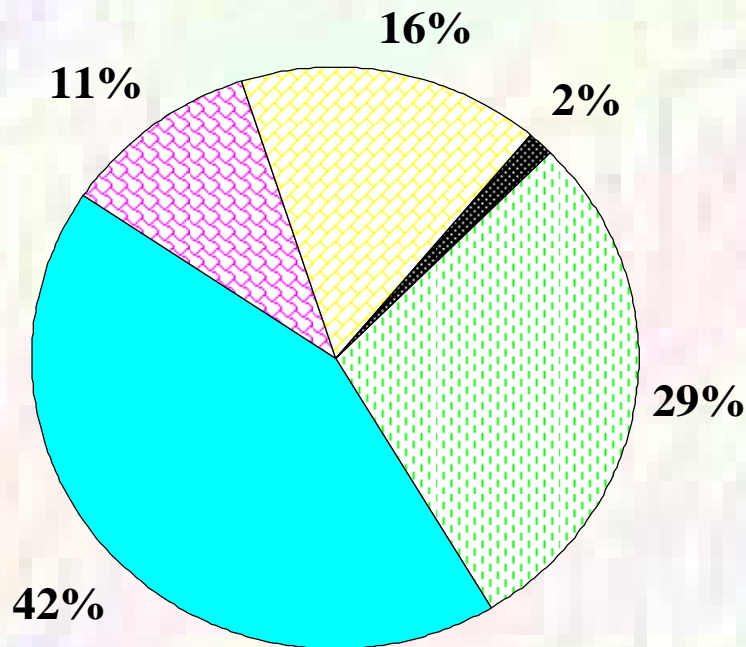
Females (N=63)



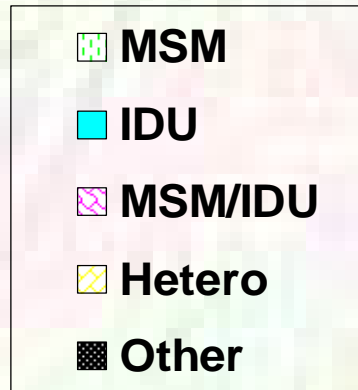
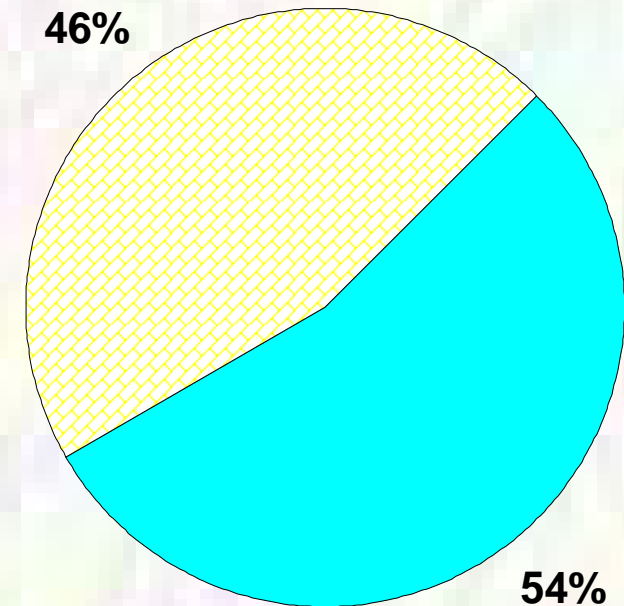
Comment: Of the 1,243 living HIV/AIDS cases in Area 13, 13% are co-infected with HIV/HCV. 53% of males and 51% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 14 Through 12/31/08

Males (N=133)



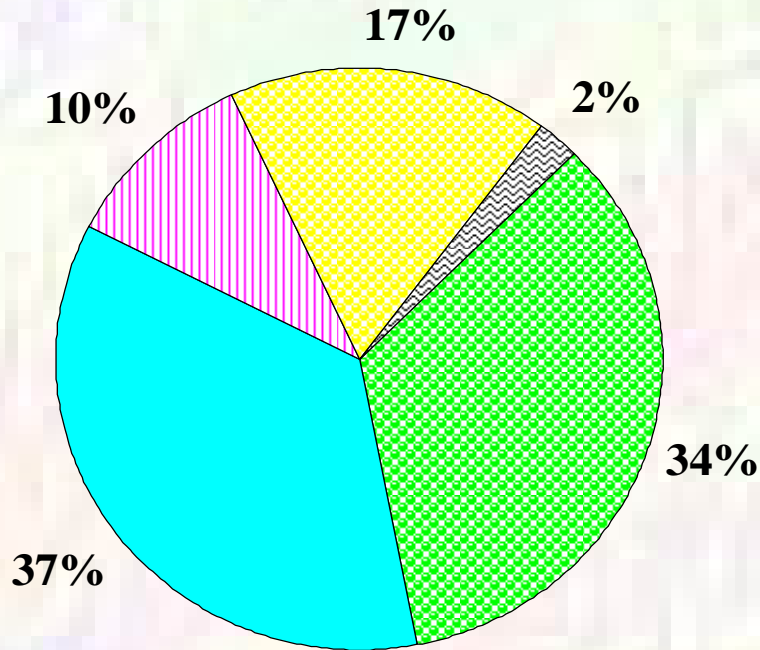
Females (N=72)



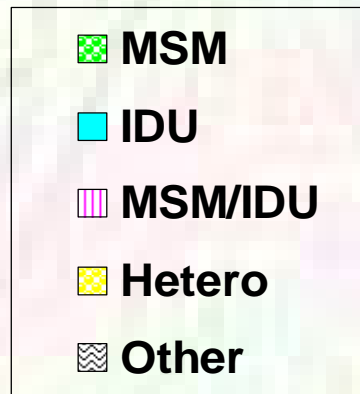
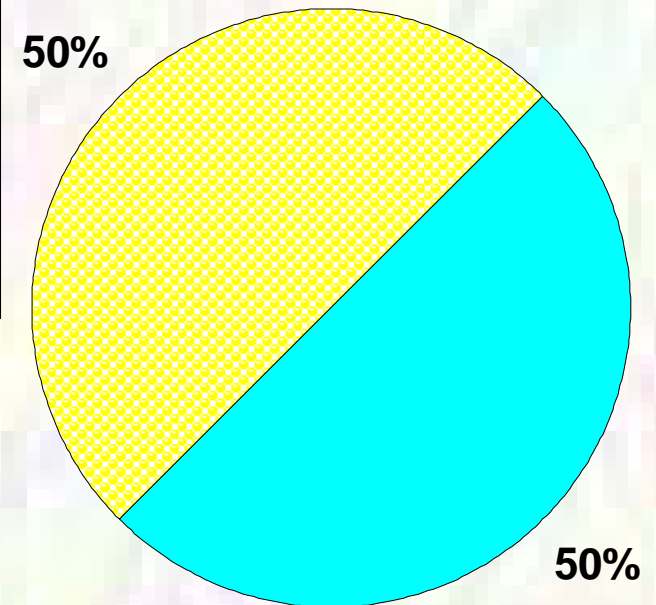
Comment: Of the 1,736 living HIV/AIDS cases in Area 14, 12% are co-infected with HIV/HCV.
53% of males and 54% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

Living Adult HIV/HCV Co-infected Cases By Sex and Mode of Exposure, Area 15 Through 12/31/08

Males (N=88)




Females (N=74)



Comment: Of the 2,030 living HIV/AIDS cases in Area 15, 8% are co-infected with HIV/HCV.
47% of males and 50% of females have a documented IDU-related risk.
Note, The mode of exposure is as documented in HARS with NIRS redistributed.

After acute HCV infection, progression to chronic hepatitis C is increased from 70%-85% in HIV negative people to more than 90% in HIV positive individuals, particularly those with advanced immunosuppression. Studies have also shown that co-infected people have higher HCV RNA levels, again correlated with degree of immune suppression.

Liver disease is a leading cause of death in HIV-infected individuals in countries with high rates of HIV-HCV coinfection, even in individuals with CD4 counts > 200 cells/mm³.



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Dena Hall (850) 245-4444 X 2589

Internet <http://www.floridaaids.org> or <http://www.flahepatitis.org>

Intranet <http://dohiws.doh.state.fl.us>