

# HIV and STD Surveillance Data in South Carolina

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# HIV/AIDS and STD Data Collection in South Carolina

- The state of South Carolina requires medical providers to report all cases of HIV, AIDS, syphilis, gonorrhea, and chlamydia to the agency.
- All CD4 and HIV Viral Load tests are also reportable by law, regardless of test results.
- The program conducts active surveillance for HIV and AIDS cases, and passive surveillance for all other STDs.
- Information is available going back to the mid 1980s.

# How do we obtain our data?

Physicians, hospitals, and laboratories report cases in several different ways.

- Electronic Laboratory Reporting (ELR) – 75% of test records are sent via ELR.
- Hand-written disease reporting cards.
- Via provider entry into the integrated surveillance system (SCION).
- Via active case surveillance done by four surveillance coordinators located throughout the state.

# Surveillance Registries(1)

## Enhanced HIV/AIDS Reporting System (eHARS)

A CDC-designed relational database of HIV/AIDS cases. Contains the following information:

- Demographics
- Patient identifiers
- Test information (may be hundreds of tests per case)
- Maternal information (if perinatal exposure)
- Other information – risk data, some treatment data, opportunistic infections

# Surveillance Registries (2)

## STD\*MIS

A CDC-designed relational database of syphilis, gonorrhea, and chlamydia. Contains the following information:

- Demographics and patient identifiers
- Behavior information (sexual, substance use, etc.)
- Clinical information – tests, treatments.
- Interview data (collected by Disease Intervention Specialists through the state)
- Case contacts or suspects

# Other data sets we use to improve completeness and accuracy of our surveillance data.

- DHEC Clinic Encounter Files – Treatment and counseling information, patient address
- Social security death master files and National Death Index files – To ascertain vital status
- Vital Records Birth and Death files – to ascertain vital status and to identify HIV exposed infants
- Surveillance files for other diseases – Routine linkage to ascertain coinfection with tuberculosis and viral hepatitis

# Special Initiatives

- HIV Incidence Surveillance (HIS) Project – Uses testing to identify recency of infection for newly diagnosed cases. Data is used to produce incidence estimates. (Ends in 2018)
- Molecular HIV Surveillance – Uses HIV genotyping data to identify clusters of HIV cases that may be connected.
- Perinatal HIV Exposure Reporting (PHER) – Collects extensive data on HIV infected infants and their mothers. Helps to identify service gaps and missed prevention opportunities.

# Limitations of Data

- Undiagnosed cases. Testing initiatives do increase case counts.
- Provisional nature of data. As new information on cases is received, it is reflected in the registry. Any reports produced are a “snapshot.”
- Difficulty of using and interpreting testing data (especially HIV Viral Load data and syphilis data)
- Movement of patients to another state. This makes it difficult to keep the registry current.
- Unavailable data. Some STDs are primarily reportable by labs, which rarely have race information.
- Self-reported data. May be subject to recall bias.



# How STS data is used

- Epidemiologic Profile
- Surveillance Report
- HIV/AIDS Prevention
- General Requests

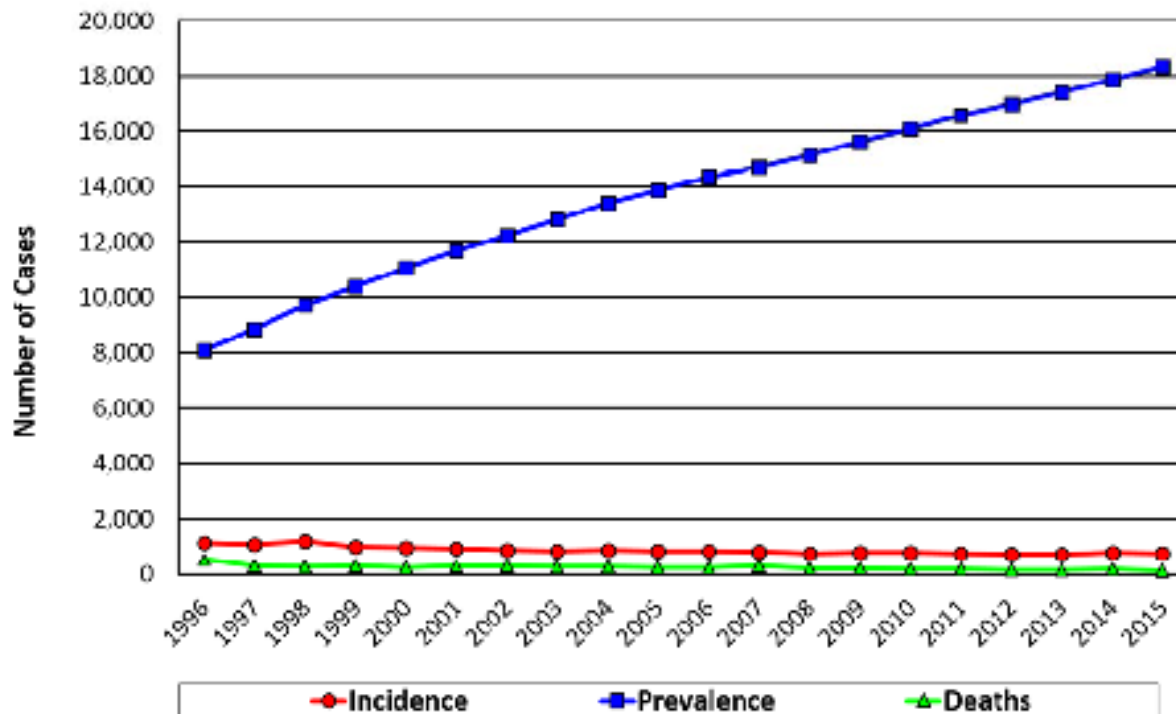
# HIV/AIDS Epidemiologic Profile

- Describes the HIV/AIDS epidemic in various populations in South Carolina
- Identifies characteristics of:
  - the general population (sociodemographic characteristics)
  - HIV-infected populations (impact of HIV/AIDS)
  - non-infected persons (who is at risk)
- Serves as a source of quantitative data from which HIV prevention and care needs can be identified
- Used by HIV Prevention Council for planning

Epidemiologic Profile

Figure 1.01 shows total incidence (the number of new cases within a specified time period), deaths, and prevalence of HIV/AIDS cases in South Carolina since 1996.

**Figure 1.01: South Carolina HIV/AIDS incidence, prevalence, and deaths**



Note: number of cases diagnosed in S.C. only; excludes out of state cases returning to S.C.

### Chlamydia

Over the past decade, reported cases of chlamydia have been steadily increasing (Figure 3.18); some of this increase may be attributed to initiating routine screening for all young women attending family planning and STD clinics in health departments statewide. In 2015, there were 27,711 cases of chlamydia diagnosed in South Carolina. Among those cases with a reported race, 50 percent were African-American women and 22 percent were white women. African-American men comprised 22 percent of chlamydia cases, and white men accounted for seven percent. Thirty-five percent of chlamydia cases have 'Unknown' race; this is attributed to the fact that these conditions are primarily reported by labs, which frequently do not collect a race.

Figure 3.18: South Carolina count of reported Chlamydia cases by year of diagnosis, 2006-2015

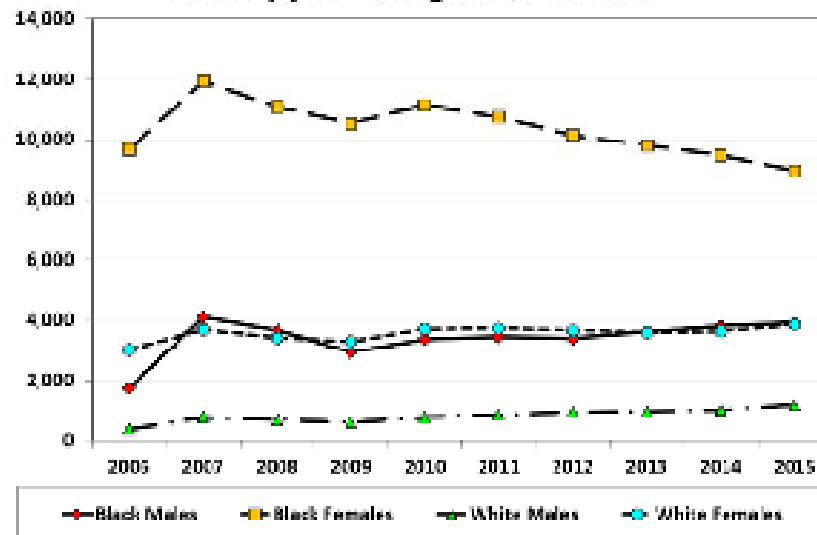
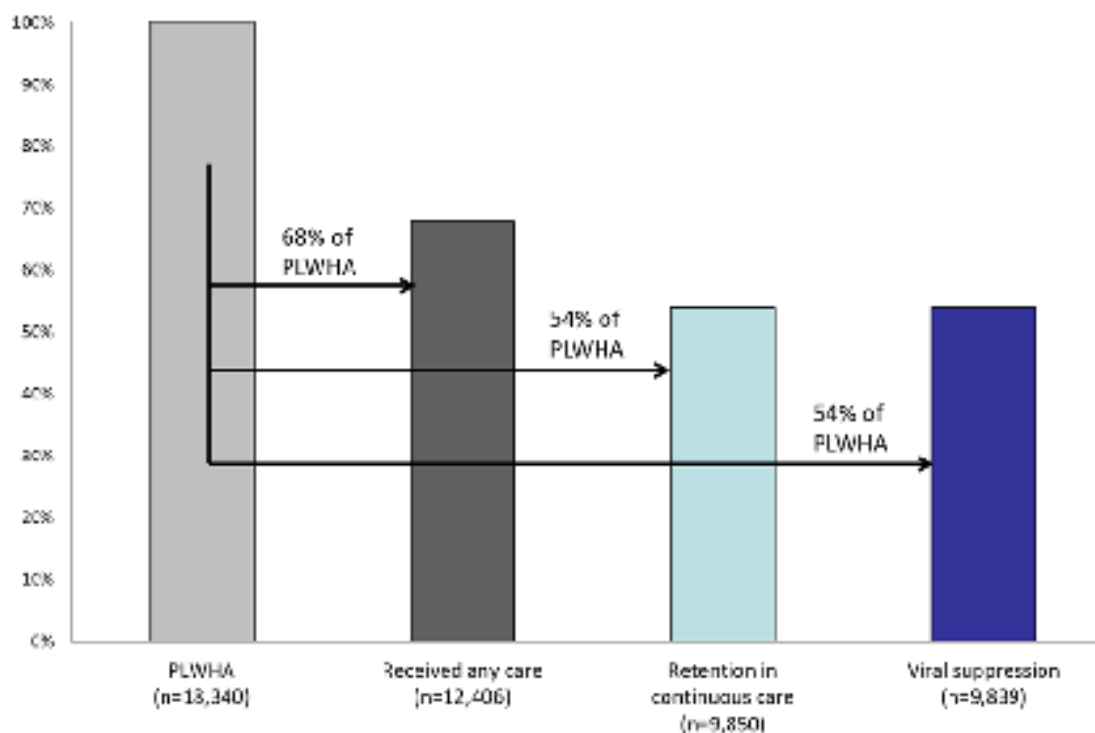


Figure 5.01 shows the number and percentage of PLWHA engaged in each step of the HIV continuum of care. Of the 18,340 PLWHA, Sixty-eight percent of PLWHA had at least one CD4 or viral load test during 2015; 54 percent of PLWHA had two or more CD4 or viral load tests at least 3 months apart during 2015; and 54 percent of PLWHA had a Viral Load  $\leq 200$  copies/mL at most recent test during 2015.

**Figure 5.01 Number and percentage of persons engaged in each step of the HIV continuum of care, 2015**



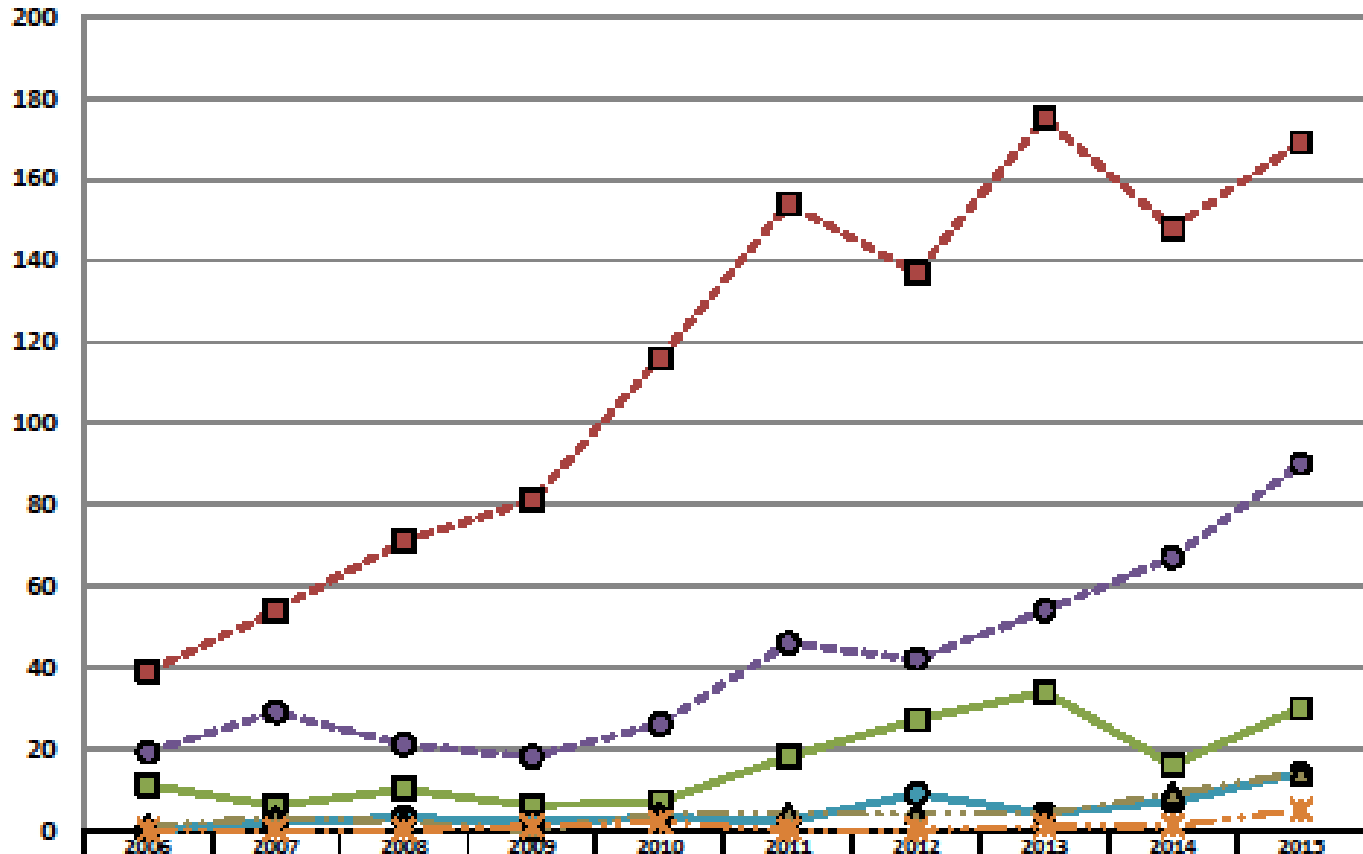
# STD/HIV/AIDS Surveillance Report

- Describes the characteristics of people newly diagnosed with HIV and people living with diagnosed HIV
- Provides data in table format
- Used by CBO's

**Table 7**  
**South Carolina HIV/AIDS Cases\* by Age Group, Exposure Category\*\*, and Sex,**  
**Incidence Cases Diagnosed January - December 2014 and January - December 2015**  
**Prevalence\*\* Totals through December 31, 2015**

	Males				Females				Totals**				Prevalence Total	
	Jan. 1 - Dec. 31, 2014		Jan. 1 - Dec. 31, 2015		Jan. 1 - Dec. 31, 2014		Jan. 1 - Dec. 31, 2015		Jan. 1 - Dec. 31, 2014		Jan. 1 - Dec. 31, 2015			
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
<i>Adult/adolescent exposure category</i>														
Men Who Have Sex With Men	441	70.1	379	63.9	.	0.0	.	0.0	441	57.1	379	51.3	7,655	42.1
Injecting Drug Use	10	1.6	16	2.7	3	2.1	5	3.4	13	1.7	21	2.8	1,428	7.8
Men Who Have Sex With Men & Inject Drugs	9	1.4	2	0.3	.	0.0	.	0.0	9	1.2	2	0.3	593	3.3
Hemophilia/Coagulation Disorder	.	.	.	.	.	.	.	.	.	.	.	.	19	0.1
Heterosexual Contact subtotal	32	5.1	20	3.4	59	41.3	60	41.1	91	11.8	80	10.8	4,674	25.7
<i>Sx w/ injecting drug user</i>	1	.	.	.	4	.	5	.	5	.	5	.	532	.
<i>Sx w/ bisexual male</i>	.	.	.	.	10	.	4	.	10	.	4	.	195	.
<i>Sx w/ person with hemophilia</i>	.	.	.	.	.	.	.	.	.	.	.	.	12	.
<i>Sx w/ transfusion recipient w/HIV</i>	2	.	.	.	1	.	2	.	3	.	2	.	37	.
<i>Sx w/HIV+ person, risk not specified</i>	29	.	20	.	44	.	49	.	73	.	69	.	3,898	.
Receipt of blood transfusion/components	.	.	.	.	.	.	.	.	.	.	.	.	10	0.1
Adult Undetermined	137	21.8	176	29.7	81	56.6	81	55.5	218	28.2	257	34.8	3,819	21.0
<b>Adult/adolescent subtotal</b>	<b>629</b>	<b>100.0</b>	<b>593</b>	<b>100.0</b>	<b>143</b>	<b>100.0</b>	<b>146</b>	<b>100.0</b>	<b>772</b>	<b>100.0</b>	<b>739</b>	<b>100.0</b>	<b>18,198</b>	<b>100.0</b>
<i>Pediatric (&lt;13 years old) exposure category</i>														
Hemophilia/coagulation disorder	.	.	.	.	.	.	.	.	.	.	.	.	1	0.5
Mother with/at risk for HIV infection:	2	66.7	3	100.0	3	100.0	.	.	5	83.3	3	100.0	189	85.1
Injecting drug use	.	.	.	.	.	.	.	.	.	.	.	.	6	.
<i>Sx w/ HIV+ person, risk not specified</i>	.	.	.	.	.	.	.	.	.	.	.	.	1	.
Has HIV infection, risk not specified	2	.	3	.	3	.	.	.	5	.	3	.	180	.
Child Undetermined	1	33.3	.	0.0	.	0.0	.	.	1	16.7	.	0.0	30	13.5
Confirmed Other	.	.	.	.	.	.	.	.	.	.	.	.	2	0.9
<b>Pediatric subtotal</b>	<b>3</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>.</b>	<b>.</b>	<b>6</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>222</b>	<b>100.0</b>
<b>Total</b>	<b>632</b>	<b>100.0</b>	<b>596</b>	<b>100.0</b>	<b>146</b>	<b>100.0</b>	<b>146</b>	<b>100.0</b>	<b>778</b>	<b>100.0</b>	<b>742</b>	<b>100.0</b>	<b>18,420</b>	<b>100.0</b>

### South Carolina Infectious Syphilis Cases by Year of Diagnosis by Race and Sex



Black Male	39	54	71	81	116	154	137	175	148	169
Black Female	11	6	10	6	7	18	27	34	16	30
White Male	19	29	21	18	26	46	42	54	67	90
White Female	0	2	3	2	3	2	9	4	7	14
Hispanic M/F	1	3	2	0	4	4	4	4	9	14
Other M/F	0	0	0	1	2	0	0	1	1	3



# HIV/AIDS Prevention

- DIS reports
- Prevention Grants/Progress Reports
- Fact Sheets
- Data-to-Care

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# Special Initiatives

## Treatment as Prevention

### Data to Care Initiatives

HIV treatment not only improves the health of the patient. It also decreases the risks of spreading the infection to others. States are creating initiatives to use surveillance data to drive prevention efforts by getting patients into care.

- HIV surveillance programs collect all CD4 and Viral Load data. This is used as a proxy for in-care status.
- Prevention staff may work with providers to bring patients back into care if they have been identified by surveillance data as being out of care.

# How to access STS data

- Visit DHEC's web page:
  - Data reports:  
[www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/HIVandSTDs/DataandReports](http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/HIVandSTDs/DataandReports)
  - Epi Profile:  
[http://www.scdhec.gov/Health/FHPF/DiseaseResourcesforHealthcareProviders/HIV\\_AIDS\\_STD\\_Resources/StatePlansPlanningResources/](http://www.scdhec.gov/Health/FHPF/DiseaseResourcesforHealthcareProviders/HIV_AIDS_STD_Resources/StatePlansPlanningResources/)
- Contact:
  - Terri Stephens ([stephetg@dhec.sc.gov](mailto:stephetg@dhec.sc.gov)) or
  - Kirk A Shull ([shullka@dhec.sc.gov](mailto:shullka@dhec.sc.gov))
- Complete Data Request form
- Access to data may require IRB approval