

An Interactive HIV Atlas from CDC's DHAP (Division of HIV/AIDS Prevention)

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Atlas Project

- Goal: apply GIS to develop an atlas that can be used by various audiences to:
 - illustrate spatial and temporal variation in HIV patterns;
 - identify gaps in health care access and delivery; and,
 - understand geographic variation in services.

What is an atlas?

- ❑ An atlas is a *specific and sophisticated mapping tool that displays spatial relationships, patterns, and trends.*
- ❑ It can be argued that maps are the most powerful method for the display of statistical information (the utility of maps over tables appears to increase as the quantity of data increases).

Data for atlas, Phase I

- ❑ National Maps of States: The application will have the ability to display cross-tabulations for both HIV and AIDS, for the 50 states and DC.
- ❑ The following variables will be displayed at the state level: New diagnoses, Prevalence, and Deaths (by year, sex, race/ethnicity, age, transmission category).

Data, Phase II

- ❑ In Phase II, we will produce state maps of counties using the HIV surveillance data.
- ❑ Phase II will also see the integration of other data sets; this will take place at both the national and state scales. This will include other DHAP data (e.g., testing, prevention, counseling) and socioeconomic data (e.g., poverty, unemployment, education).



Data, Phase III

- In Phase III, we will display other NCHHSTP data at the national level (i.e., by state) - gonorrhea, chlamydia, syphilis, hepatitis A/B/C, TB.



Atlas utility

- The atlas will assist with strategic planning, including:
 - the construction of an epi profile
 - overlaying services with the geography of the epidemic;
 - CBO funding (which organizations serve which areas); and,
 - advocating for and locating new services.



HIV Interactive Atlas and Data Reporting Tool

An interactive tool for exploration of HIV data patterns and trends.

[Hide Query](#)

1 Disease/Condition

Disease:

Transmission Category:

2 Demographics and Time Span

Race/Ethnicities:

Year:

Gender:

Age Group:

3 Execute

[Advanced Query](#)

Tools

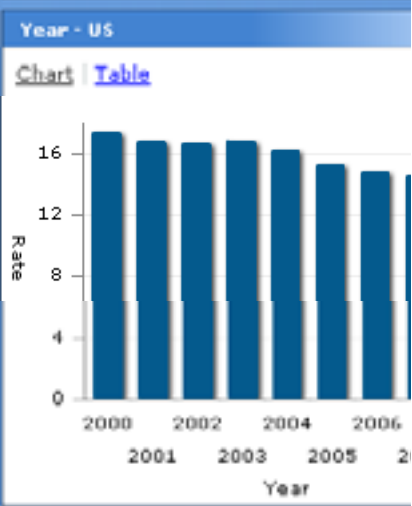
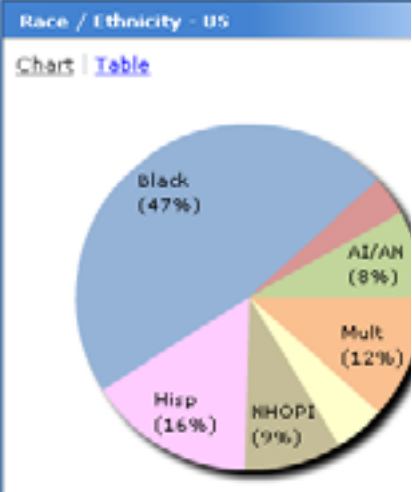
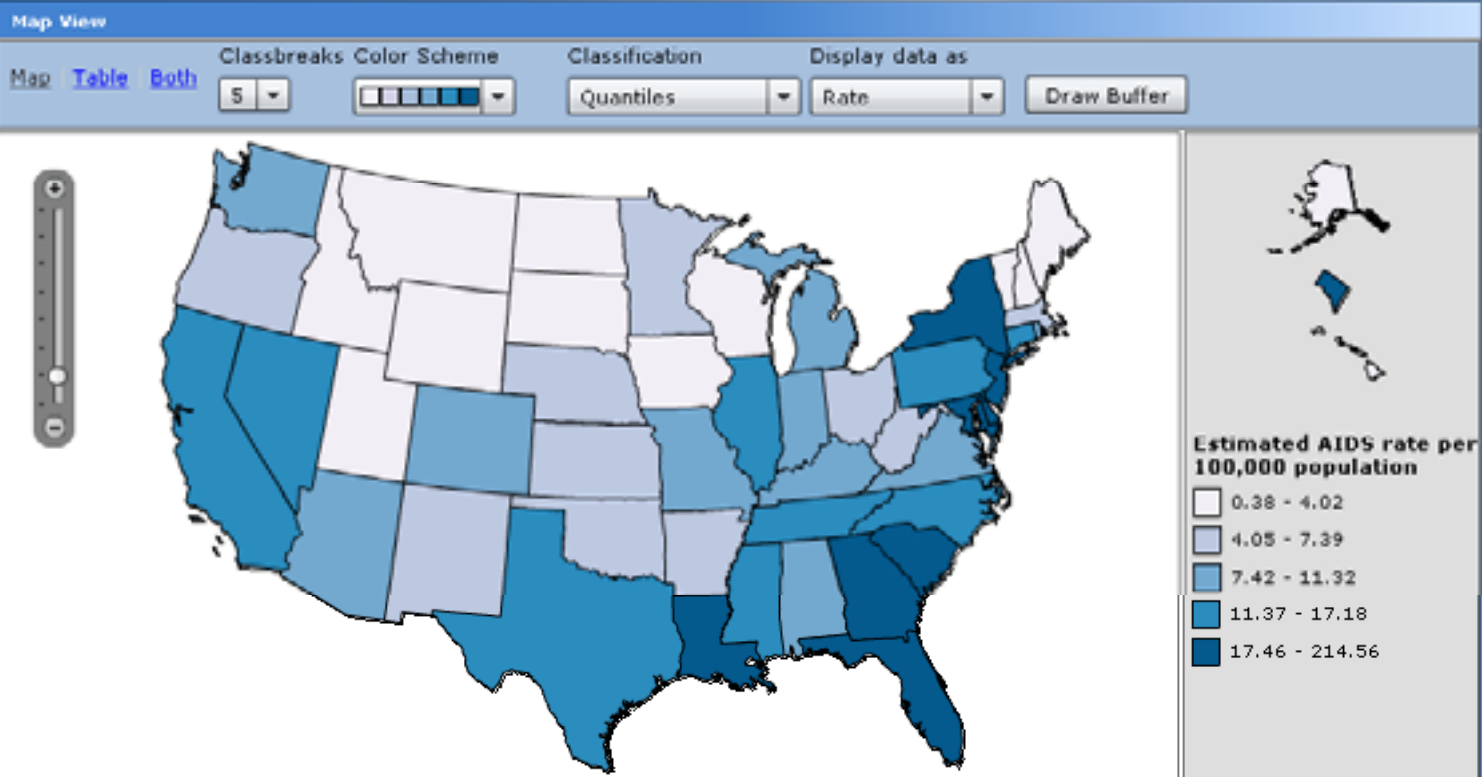
[Email](#)

[Export to Excel](#)

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Query History: AIDS | All states | All Races | Both Genders | All Years

[About these data and footnotes](#)



Center Data Visualization Project

- ❑ NCHHSTP also began a new project that aims to provide unified access to HIV, viral hepatitis, STD, and TB data to meet the analytical and data dissemination needs of the National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention.
- ❑ A Center-wide “Data Harmonization Workgroup” is developing a common format for aggregated surveillance data. The primary strength of harmonizing data across disease conditions is to allow the ability to dynamically query NCHHSTP data and generate maps, charts, tables, and other graphics.

Data Harmonization – Data Elements

- ❑ **Year of diagnosis:** will be displayed by single year of diagnosis
- ❑ **Years of data to be displayed:**
 - HIV: 2006-2009 (diagnoses, prevalence, deaths);
 - AIDS: 2000-2009 (diagnoses , prevalence, deaths)
 - Hepatitis: 1995-2009 (incidence only; and number of reported cases)
 - STD: 1996-2009 (can go back to 1982; incidence only)
 - TB: 1993-2009 (incidence only)

notes: STD data are Chlamydia, gonorrhea, and syphilis

Hep data are Hep A, B, & C

Data Harmonization – Data Elements

□ Areas to be included:

- HIV: 50 states & DC, American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands
- Hep: 50 states & DC
- STD: 50 states, DC, Puerto Rico and the U.S. Virgin Islands
- TB: 50 states, DC, Puerto Rico

Note: none of the territories have race/ethnicity denominator data

Data Harmonization – Data Elements

- ❑ **Sex: all Divisions use the same (male, female, unknown)**

Data Harmonization – Data Elements

□ Age:

- 13+ ?
- 15+ ?

- 5 year categories ?
- 10 year categories ?

Data Harmonization – Data Elements

□ Race:

- The Office of Management and Budget (OMB) in 2003 mandated the collection of multi-race data
- Divisions implemented this mandate on different schedules

Data Harmonization – Data Elements

□ Denominator data:

- NCHS Bridged Race or Census?
 - Are all age groupings available?
 - Are all years available?
- Vintage?
- Source ? --> Center – wide census data storage

Data Harmonization – Data Elements

□ Small Cell Rules:

- Numerator ?
- Denominator ?
- Combination ?

In Sum: “Lowest Common Denominator”

- For all data elements: both subset selection and data display will default to the “lowest common denominator.”

Example: If mapping HIV & TB data, only the overlapping years, 2006-2009, will be available. When mapping only TB data, all years for which there are TB data will be available.

Example: When mapping HIV and TB data, use 10 year age groupings. When mapping only TB data, use 5 year age groupings.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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