

The DASIS Report

July 29, 2005

Analyzing TEDS Using the New Graphing Features of the Online Data Analysis System (DAS)

In Brief

- Over 80 studies, including the 1992-2002 TEDS, are publicly available from the Substance Abuse and Mental Health Data Archive (SAMHDA) at <http://www.icpsr.umich.edu/SAMHDA>
- Program administrators, researchers, and others with Internet access may run their own online analyses without using specialized software
- Contact the archive staff for assistance at samhda-support@icpsr.umich.edu or toll-free at (888) 741-7242

A combined file for the 1992-2002 Treatment Episode Data Set (TEDS) is available from the Substance Abuse and Mental Health Data Archive (SAMHDA)¹ using the archive's online data analysis system (DAS).² This file contains over 18.6 million records³ and is useful for conducting geographic comparisons and analyzing changes over time.⁴

The combined 1992-2002 TEDS file will be used to demonstrate the new graphics capability of the DAS, which was added in March 2005. When generating frequencies or crosstabulations, chart options are now available to produce bar, stacked bar, pie, and line charts.

The procedures described in this report only work with MS Internet Explorer, version 5 or higher. To explore the new charting functionality:

Figure 1. Run Frequency or Crosstabulation (with charts) Input Screen

SDA Frequencies/Crosstabulation Program
Selected Study: Treatment Episode Data Set, 1992-2002 (Concatenated)
 Help: [General](#) / [Recoding Variables](#)

REQUIRED Variable names to specify
Row:

OPTIONAL Variable names to specify
Column:
Control:
Selection Filter(s): Example: age(18-50)
Weight:

TABLE OPTIONS	CHART OPTIONS
Percentaging: <input checked="" type="checkbox"/> Column <input type="checkbox"/> Row <input type="checkbox"/> Total with <input type="text" value="1"/> decimal(s) <input type="checkbox"/> Statistics with <input type="text" value="2"/> decimal(s) <input type="checkbox"/> Question text <input type="checkbox"/> Suppress table <input checked="" type="checkbox"/> Color coding <input type="checkbox"/> Show Z-statistic	Type of chart: <input type="text" value="Pie Chart(s)"/> Bar chart options: Orientation: <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal Visual Effects: <input checked="" type="radio"/> 2-D <input type="radio"/> 3-D Show Percents: <input checked="" type="checkbox"/> Yes Palette: <input checked="" type="radio"/> Color <input type="radio"/> Grayscale Size - width: <input type="text" value="600"/> height: <input type="text" value="400"/>

- Access the SAMHDA homepage at <http://www.icpsr.umich.edu/SAMHDA>.
- Click on “Analyze Data Online”
- Select “Treatment Episode Data Set.”
- Choose “Online Analysis.”
- Select the “TEDS 1992-2002 concatenated file.”⁵

For this exercise, click on the button “Run frequency or cross-tabulation (with charts)” and then click on “Start.”

Example 1: Admissions Involving Heroin by Year and Census Region

The three variables listed below will be used to examine trends in heroin admissions in the four Census regions of the country. All variables and codes are specified in the online TEDS codebooks.

- Heroin Flag⁶ (variable name *herflag*), which denotes whether heroin was mentioned as a drug of abuse at admission
- Year of Admission (variable name *year*)⁷
- Census Region (variable name *region*)⁸

To begin investigating the relationships between these variables, create a frequency table and pie chart reflecting the regional distribution of admissions for all years (1992-2002) combined.

- On the input screen, enter *region* as the row variable.
- In the “Chart Options” section, select Pie Chart(s) from the “Type of chart” drop-down menu and check “yes” for “Show Percents.”
- Click the “Run the Table” button at the bottom of the screen to generate results.

The input screen is shown in Figure 1.

The resulting pie chart is displayed in Figure 2. For all years combined, the percentage of cases in each region is highest in the Northeast (31 percent), and almost equally distributed in the South, West, and Midwest (24, 23, and 22 percent, respectively).⁹

To examine the relationship between region and admissions involving heroin, return to the input screen by clicking on the Back button. This time we will generate a crosstabulation and stacked bar chart.

- Enter *herflag* (i.e., the Heroin Flag) as the row variable and *region* as the column variable.
- In the “Chart Options” section, make sure the default (Stacked Bar Chart) is shown in the “Type of chart” drop-down menu. (“Show Percents” should still have a check for “yes.”)
- Click the “Run the Table” button at the bottom of the screen to generate results.

The resulting stacked bar chart is displayed in Figure 3. For all years combined, the percentage of admissions involving heroin was highest in the Northeast region (27 percent). In the West, 21 percent of admissions involved heroin, followed by the South (9 percent), and the Midwest (6 percent).

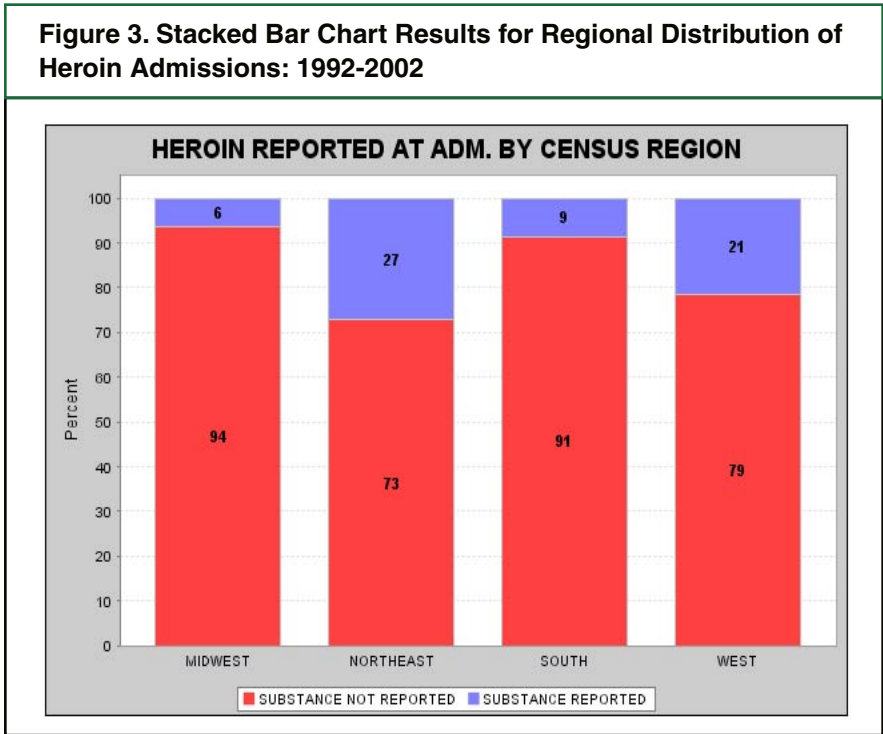
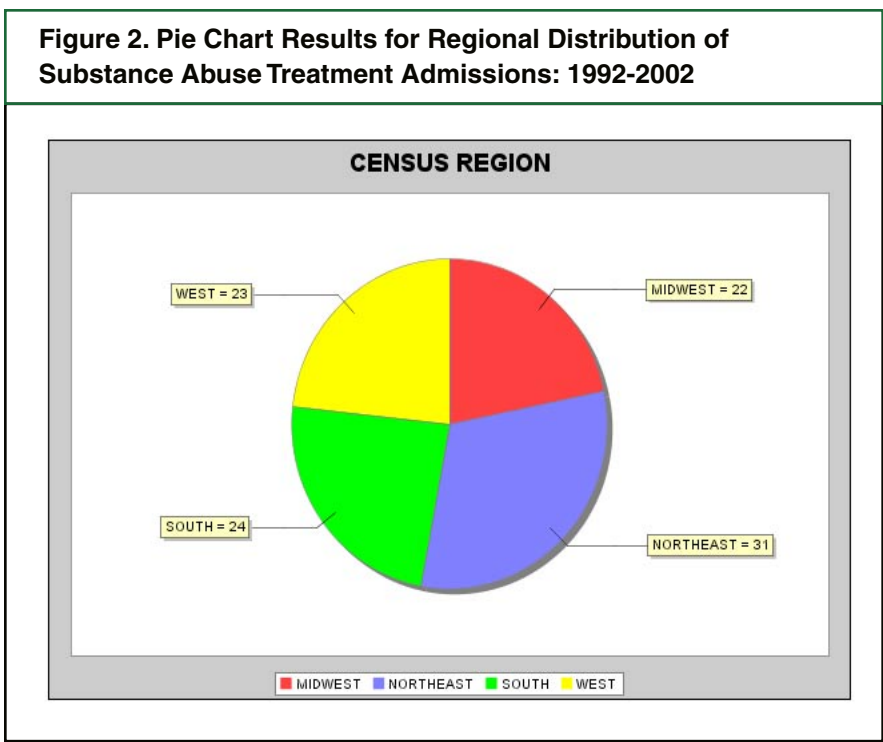
Finally, to examine trends in admissions involving heroin for each Census region, we will return to the input screen once more to generate crosstabulations and line charts.

- Use *herflg* as the row variable, *year* as the column variable, and *region* as the control variable.¹⁰
- Select Line Chart from the “Type of chart” drop-down menu.
- Click the “Run the Table” button at the bottom of the screen to generate results.

Figure 4 displays the line charts produced for each region. These results show that in the West, heroin admissions were highest between 1994 and 1996 (26, 25, and 25 percent), followed by a decline between 1997 and 2002 (from 23 to 15 percent). However, the other three regions show the opposite trend; the Midwest and South show modest increases over the 11-year span, with admissions involving heroin rising a total of 3 percent in these regions between 1992 and 2002. The Midwest increased from 5 percent in 1992 to 8 percent in 2002. Heroin-related admissions in the South rose from 7 percent to 10 percent during the same time period. The most dramatic increase occurred in the Northeast, with admissions involving heroin rising from 20 percent in 1992 to 33 percent in 2002.

Example 2: Using DAS Graphics with Other Applications

DAS graphics can be copied into another application by right-clicking directly on the DAS chart image, selecting “Copy,” and using the appropriate paste function in the target application.¹¹ For example, to paste the graphic into a Microsoft® PowerPoint® 2002 presentation:



- In PowerPoint, choose “Paste Special” from the “Edit” menu.
- Click “OK” to paste the graphic within the slide.
- Select “Device Independent Bitmap.”

Figure 4. Line Chart Results of Yearly Heroin Admissions, by Census Region: 1992-2002

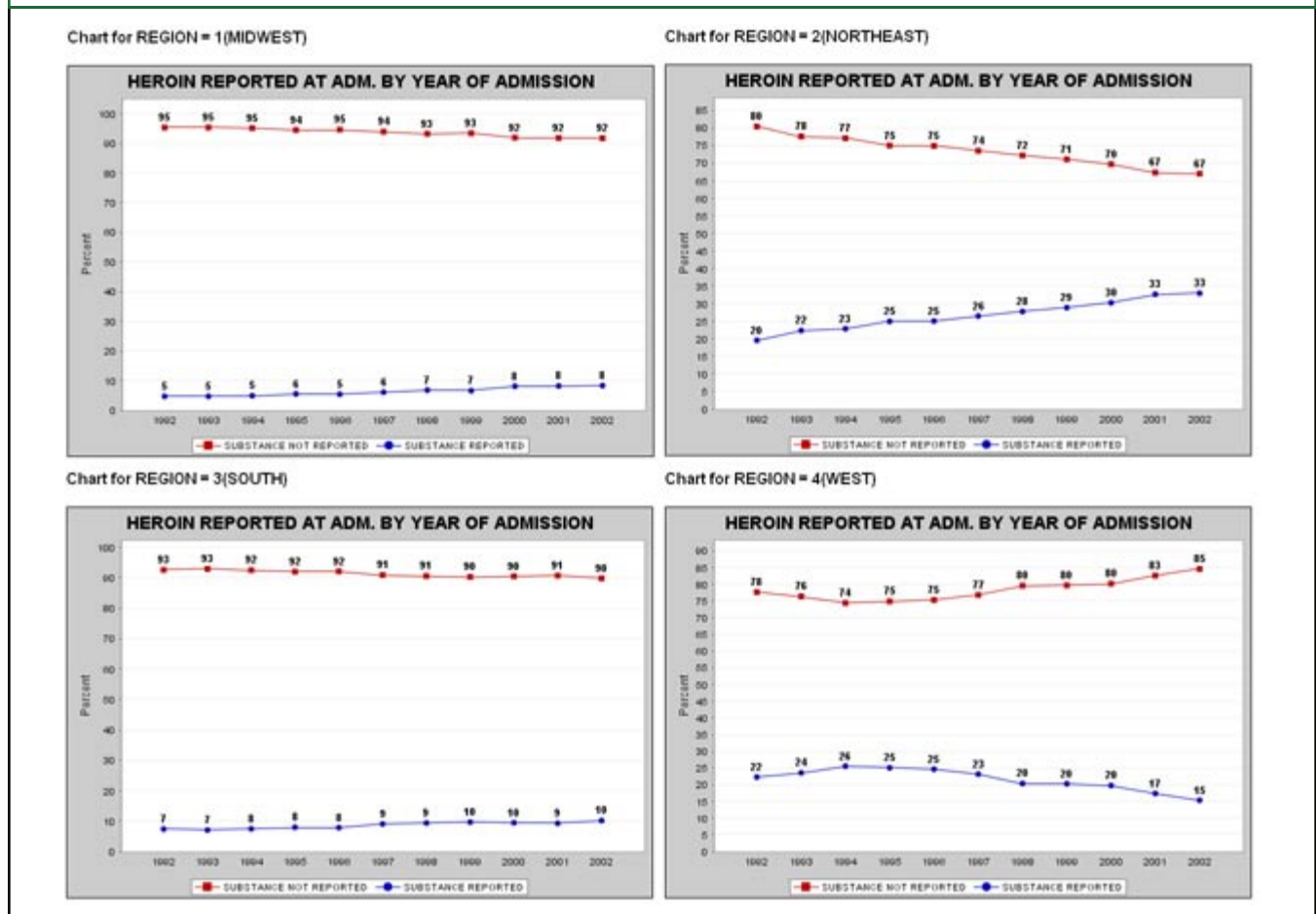


Figure 5 shows the completed screen for the “Paste Special” options.

There is a convenient way to proportionally adjust the size of the graphic in PowerPoint:

- Double-click on the graphic to open the Format Picture dialog box.

- Click on the “Size” tab.
- Under the “Scale” options, alter the percentage in either the “Height” or “Width” category—the unselected percentage will adjust accordingly.
- Click “OK” to complete the scale adjustment.

The image can be reset to its original size at any time by pressing the “Reset” button in the “Original size” section. Figure 6 shows the completed screen for an image reduced to 80 percent of its original size.

End Notes

¹ The archive is supported by the Office of Applied Studies, SAMHSA, and is based at the Inter-university Consortium for Political and Social Research at the University of Michigan.

² The DAS is based on Survey Documentation and Analysis (SDA) software developed at the Computer-assisted Survey Methods (CSM) Program at the University of California at Berkeley.

³ The concatenated file is revised annually based on new and updated data. This report is based on the data available as of May 2004.

⁴ Using the DAS, this file may also be used to subset and download records for a given State or metropolitan area.

⁵ See previous short reports for further instruction on using the DAS at <http://www.icpsr.umich.edu/SAMHDA/das.html>.

⁶ *Heroin Flag* (herflg) records if heroin was reported as the primary, secondary, or tertiary substance of abuse at the time of admission. [Note: The *primary substance of abuse* is the main substance reported at the time of admission, and *secondary/tertiary substances* are other substances of abuse also reported at the time of admission.]

⁷ *Year of Admission* (year) is the year of the client’s admission to substance abuse treatment.

Figure 5. Selection of Paste Special Options in PowerPoint

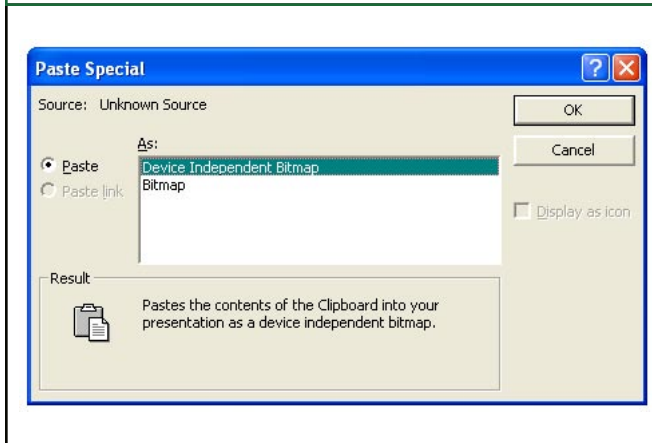
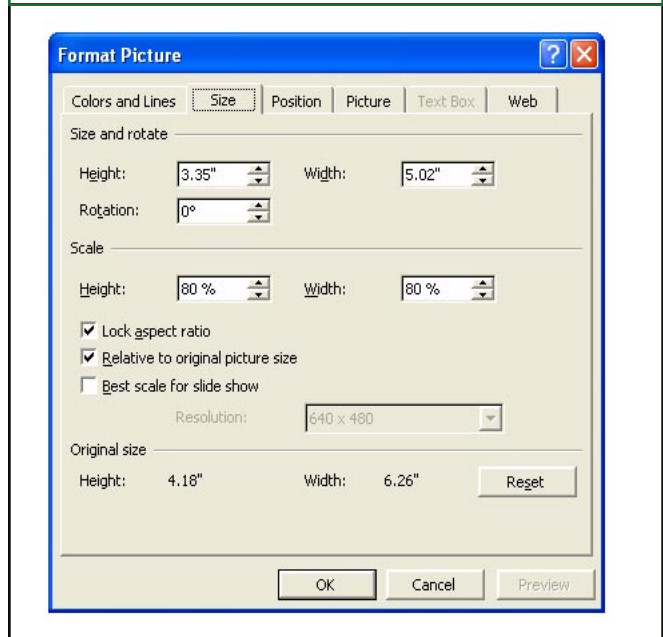


Figure 6. Adjustments to Picture Scale in PowerPoint



The Drug and Alcohol Services Information System (DASIS) is an integrated data system maintained by the Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA). One component of DASIS is the Treatment Episode Data Set (TEDS). TEDS is a compilation of data on the demographic characteristics and substance abuse problems of those admitted for substance abuse treatment. The information comes primarily from facilities that receive some public funding. Information on treatment admissions is routinely collected by State administrative systems and then submitted to SAMHSA in a standard format. TEDS records represent admissions rather than individuals, as a person may be admitted to treatment more than once. State admission data are reported to TEDS by the Single State Agencies (SSAs) for substance abuse treatment. There are significant differences among State data collection systems. Sources of State variation include completeness of reporting, facilities reporting TEDS data, clients included, and treatment resources available. See the annual TEDS reports for details. Approximately 1.9 million records are included in TEDS each year.

The DASIS Report is prepared by the Office of Applied Studies, SAMHSA; Synectics for Management Decisions, Inc., Arlington, Virginia; and by RTI International in Research Triangle Park, North Carolina (RTI International is a trade name of Research Triangle Institute).

Access the latest TEDS reports at: <http://www.oas.samhsa.gov/dasis.htm>
 Access the latest TEDS public use files at: <http://www.oas.samhsa.gov/SAMHDA.htm>
 Other substance abuse reports are available at: <http://www.oas.samhsa.gov>



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
 Substance Abuse and Mental Health Services Administration
 Office of Applied Studies
www.samhsa.gov

End Notes (continued)

⁸ *Census Region* (region) is based on divisions used by the U.S. Bureau of Census, 1970 Census of Population. The four regions are comprised of the following states and territories: The *Northeast* region of the United States is composed of nine States: CT, ME, MA, NJ, NY, NH, PA, RI, and VT. The *Midwest* region of the United States is composed of 12 States: IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI. The *West* region of the United States is composed of 13 States: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, and WY. The *South* region of the United

States is composed of 17 States: AL, AR, DC, DE, GA, FL, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, and WV.

⁹ For further details, including results to additional decimal places, or counts of cases, consult the frequency or crosstabulation table accompanying the chart output. Row totals and color-coded indication of the strength of statistical results are additionally available in the crosstabulation output.

¹⁰ Results are provided for each value of the control variable, and for all valid cases.

¹¹ To save the graphic as a file that can be inserted into another application, right-click directly on the DAS graphic and select "Save Picture As" to specify file type, location, and name.