Creating Race/Ethnicity Charts with County Data
**Prepared for the California Disproportionality Project**

Center for Social Services Research
University of California at Berkeley

This document provides instructions for creating annual race/ethnicity stacked bar charts. Please note that these instructions use Q1_08 data for the year 2007.

- There are six stacked bars in this chart:
    - Child Population
    - Allegations
    - Substantiations
    - Entries
    - In Care
    - Exits
- Each bar will be used to present the racial/ethnic composition of children having contact at that particular point in your county in a given year. Since these charts reflect annual population data, all points of contact should be set to January-December.
- All data can be downloaded from the CWS/CMS Dynamic Reports website: (http://cssr.berkeley.edu/ucb_childwelfare/)

Step 1: Getting Started
- Download the presentation template ("Stacked Bar Charts") from the CSSR website: http://cssr.berkeley.edu/cwscmsreports/ppts/training/Stacked_Bar_Chart_Template.ppt
- When prompted, choose "Save" (rather than immediately opening) and download the template to a folder on your computer
- When downloading is complete, choose "Open" to begin working on your presentation
- You'll note that the presentation will open in a view called "Slide Sorter". You should see 2 slides. One slide (1a) shows a finished stack bar slide for California. The other is a template to be used for entering your county's data.
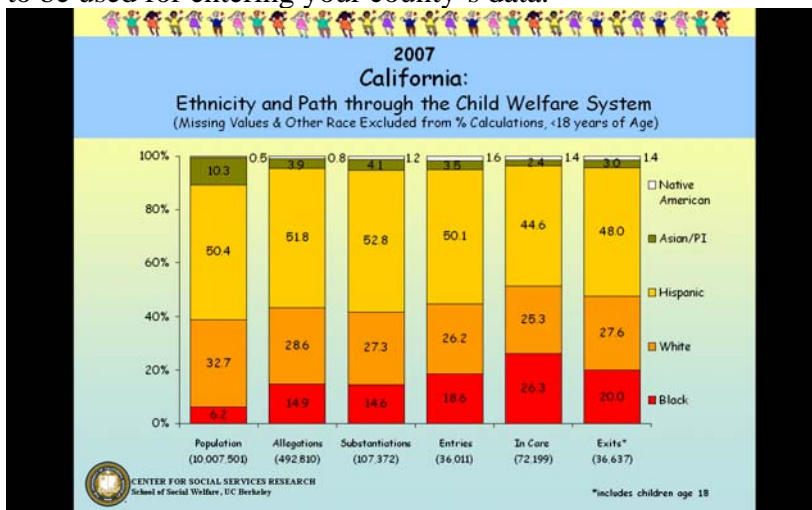
Slide 1a is the California view of race/ethnicity across child welfare points of contact. It was last updated with Q1_08 data for the year 2007.
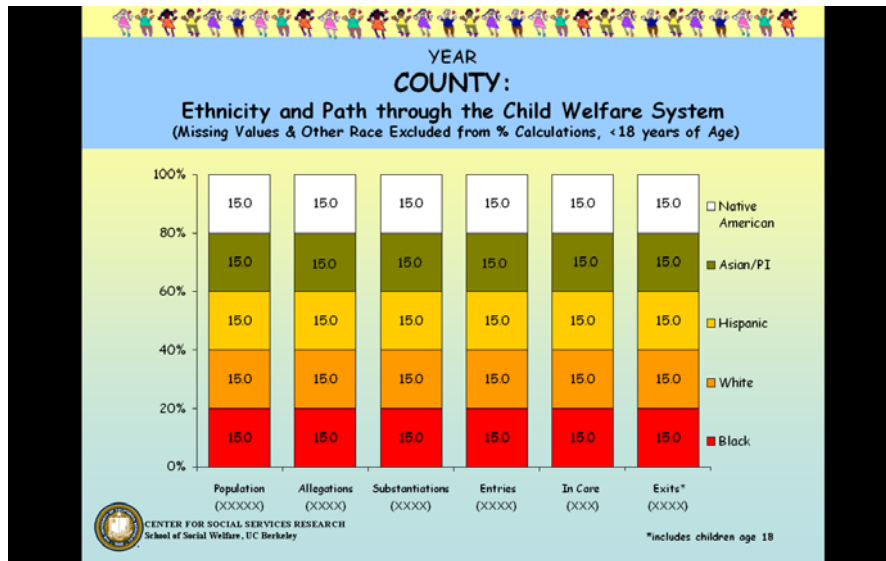
Slide 1b has been set-up so that it is ready to be populated with county data…

- Go to "View" in the powerpoint menu header and click on "Normal". This will allow you to view one slide at a time, but you should also be able to see all the other slides in a column on the left-hand side of the screen. Note that at any point you can return to "View" and either look at the "Slide Show" in progress or organize your slides through "Slide Sorter".
- Next, click on "Save As" under "File" and give your presentation a new name. This way, you can always return to the untouched template if you need to start over.

Step 2: Downloading the Population, Referral, Substantiation, and Entry Data
- From the Dynamic Report System home page, click on "Referral and Substantiation Rates": http://cssr.berkeley.edu/ucb_childwelfare/RefRates.aspx

- Screen 1:
  - Select "SINGLE Time Period" from the "Drill Down Reports…"
  - Click "Next"
- Screen 2:
  - Choose the "Time Period" that corresponds to the desired year (it will automatically default to the most recent period of data available). At the time these instructions were written, 2007 was the most recent year available.
  - Use the "County" pull-down menu to choose your county
  - Set the "Row Dimension" to "Ethnic Group"
  - Click "Finish"
- Screen 3:
  - Click "View in Excel" (found at the top of the screen)
  - Click "Save" and navigate to a folder where you can keep these data (you may also want to rename this file to something more descriptive than "CSSRdata.xls")
  - Once downloading has completed, click "Open"
  - You should now see an excel spreadsheet that shows the data you will need to create the first four bars of the chart

Microsoft Excel - Pop_Ref_Sub_Ent_data.xls

Center for Social Services Research

University of California at Berkeley

California Child Population (0-17) and Children with Child Maltreatment Referrals, Substantiations, and Entries

Incidence per 1,000 Children

Agency Type=Child Welfare

Jan 1, 2007 to Dec 31, 2007

California

Ethnic Group	Total Child Population	Children with Referrals	Incidence per 1,000 Children	Children with Substantiations	Incidence per 1,000 Children	% of Referrals	Entries	Incidence per 1,000 Children	% of Substantiations
Black	597,216	67,462	113	15,160	25.4	22.5	6,658	11.1	43.9
White	3,146,601	129,281	41.1	28,231	9	21.8	9,411	3	33.3
Hispanic	4,849,726	234,549	48.4	54,723	11.3	23.3	17,959	3.7	32.8
Asian/P.I.	988,078	17,615	17.8	4,288	4.3	24.3	1,249	1.3	29.1
Nat Amer	47,139	3,734	79.2	1,197	25.4	32.1	580	12.3	48.5
Missing	378,741	40,169	106.1	3,773	10	9.4	154	0.4	4.1
Total	10,007,501	492,810	49.2	107,372	10.7	21.8	36,011	3.6	33.5

Based on an unduplicated count of entries during time period.

Data Source: CWS/CMS 2008 Quarter 1 Extract.

Population Data Source: California Department of Finance annual population projections (Based on the 2000 U.S. Census).

Program version: 1.16 Database version: 5B6AD243

Pop_Ref_Sub_Ent_data

Ready

Step 3: Manipulating the <u>Population, Referral, Substantiation, and Entry</u> Data

- Compute valid population percentages (i.e., exclude missing race/ethnicity):
    1. Create a new row (below the "Total" row) labeled "Total-missing" (this should be typed in cell A26)
    2. Create a formula that subtracts "Missing" values from the "Total" (type in "**=B25-B24**" in cell B26)
    3. Copy the contents of cell B26 to cells C26, E26, and H26 (the formula will automatically update to also subtract missing values from "Children with Referrals", "Children with Substantiations" and "Entries")

| Microsoft Excel - Pop_Ref_Sub_Ent_data.xls | | | | | | | | | | | |

(spreadsheet screenshot)

Cell reference: CORREL =B25-B24

	A	B	C	D	E	F	G	H	I	J	K
3	University of California at Berkeley										
5	California Child Population (0-17) and Children with Child Maltreatment Referrals, Substantiations, and Entries										
7	Incidence per 1,000 Children										
9	Agency Type=Child Welfare										
11	Jan 1, 2007 to Dec 31, 2007										
15	California										
17				Incidence per		Incidence per			Incidence per		
18	Ethnic Group	Total Child Population	Children with Referrals	1,000 Children	Children with Substantiations	1,000 Children	% of Referrals	Entries	1,000 Children	% of Substantiations	
19	Black	597,216	67,462	113	15,160	25.4	22.5	6,658	11.1	43.9	
20	White	3,146,601	129,281	41.1	28,231	9	21.8	9,411	3	33.3	
21	Hispanic	4,849,726	234,549	48.4	54,723	11.3	23.3	17,959	3.7	32.8	
22	Asian/P.I.	988,078	17,615	17.8	4,288	4.3	24.3	1,249	1.3	29.1	
23	Nat Amer	47,139	3,734	79.2	1,197	25.4	32.1	580	12.3	48.5	
24	Missing	378,741	40,169	106.1	3,773	10	9.4	154	0.4	4.1	
25	Total	10,007,501	492,810	49.2	107,372	10.7	21.8	36,011	3.6	33.5	
26	Total-missing	=B25-B24	452,641		103,599			35,857			

Sheet tab: Pop_Ref_Sub_Ent_data

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4. Highlight and delete rows 27-33 (right click and choose "delete")
5. Label cell A29 (which should now be blank) "Black", A30 "White", A31 "Hispanic", A32 "Asian/PI", and A33 "Native American"
6. Title cell B28 "POPULATION"
7. In cell B29 type in the formula "**=(B19/B$26)*100**". This should divide the Black population counts by the Total-missing population counts.
8. Copy the contents of this cell into cells B30 through B33. This will compute valid population percentages for the other races.

- Computing valid referral percentages (i.e., exclude missing race/ethnicity):
    1. Title cell C28 "REFERRALS"
    2. In cell C29 type in the formula "**=(C19/C$26)*100**". This should divide the Black referral counts by the Total-missing referral counts.
    3. Copy the contents of this cell into cells C30 through C33.

- Computing valid substantiation percentages (i.e., exclude missing race/ethnicity):
    1. Title cell D28 "SUBSTANTIATIONS"

2. In cell D29 type in the formula "**=(E19/E\$26)*100**". This should divide the Black substantiation counts by the Total-missing substantiation counts. *(PLEASE NOTE that these data are being pulled into the D column of your new table from the E column of the data table. Make sure to use the correct formula.)*
3. Copy the contents of this cell into cells D30 through D33.

- Computing valid entry percentages (i.e., exclude missing race/ethnicity):
    1. Title cell E28 "ENTRIES"
    2. In cell E29 type in the formula "**=(H19/H\$26)*100**". This should divide the Black entry counts by the Total-missing entry counts. *(Again, please note that these data are coming from column H.)*
    3. Copy the contents of this cell into cells H30 through H33.

- If your percent calculations are correct, the sum of the percentages by race should equal 100%. Check this by typing the formula "**=sum(B29:B33)**" into cell B34 and then copying it to C34, D34, and E34. You should see "100" displayed in each of these cells.
  (See table below for sample California calculations using Q1_08 data for 2007.)

- SAVE YOUR DATA!

University of California at Berkeley

California Child Population (0-17) and Children with Child Maltreatment Referrals, Substantiations, and Entries

Incidence per 1,000 Children

Agency Type=Child Welfare

Jan 1, 2007 to Dec 31, 2007

California

Ethnic Group	Total Child Population	Children with Referrals	Incidence per 1,000 Children	Children with Substantiations	Incidence per 1,000 Children	% of Referrals	Entries	Incidence per 1,000 Children	% of Substantiations
Black	597,216	67,462	113	15,160	25.4	22.5	6,658	11.1	43.9
White	3,146,601	129,281	41.1	28,231	9	21.8	9,411	3	33.3
Hispanic	4,849,726	234,549	48.4	54,723	11.3	23.3	17,959	3.7	32.8
Asian/P.I.	988,078	17,615	17.8	4,288	4.3	24.3	1,249	1.3	29.1
Nat Amer	47,139	3,734	79.2	1,197	25.4	32.1	580	12.3	48.5
Missing	378,741	40,169	106.1	3,773	10	9.4	154	0.4	4.1
Total	10,007,501	492,810	49.2	107,372	10.7	21.8	36,011	3.6	33.5
Total-missing	9,628,760	452,641		103,599			35,857		

	POPULATION	REFERRALS	SUBSTANTIATIONS	ENTRIES
Black	6.202418588	14.90408514	14.63334588	18.56820147
White	32.67919234	28.56148692	27.25026303	26.2459213
Hispanic	50.36708777	51.81788658	52.82193844	50.0850601
Asian/PI	10.26173671	3.891605047	4.139036091	3.48328081
Native American	0.489564596	0.824936318	1.155416558	1.617536325
	100	100	100	100

Step 4: Downloading the <u>In Care</u> Data

- From the home page, click on "In Care Rates":
  http://cssr.berkeley.edu/ucb_childwelfare/InCareRates.aspx

- <u>Screen 1:</u>
  - Select "SINGLE Time Period" from the "Drill Down Reports…"
  - Click "Next"
- <u>Screen 2:</u>
  - Choose the "Time Period" that corresponds to the mid-point (i.e., July 1) of desired year. For example, if you are creating a chart for 2007 use "July 1, 2007". *Please note that this report will automatically default to the most recent period of data available and you may need to manually adjust to another point in time.*
  - Use the "County" pull-down menu to choose your county
  - Set the "Row Dimension" to "Ethnic Group"
  - Click "Finish"
- <u>Screen 3:</u>
  - Click "View in Excel" (found at the top of the screen)
  - Click "Save" and navigate to a folder where you can keep these data (you may also want to rename this file to something more descriptive than "CSSRdata.xls")
  - Once downloading has completed, click "Open"
  - You should now see an excel spreadsheet that shows the data you will need to create the fifth bar of your chart

Microsoft Excel - In Care_data.xls

	A	B	C	D	E
3	University of California at Berkeley				
4					
5	Child Population (0-17), Caseload, and Prevalence Rates				
6					
7	Agency Type=Child Welfare				
8					
9	1-Jul-07				
10					
11					
12					
13	California				
14					
15				Prevalence per	
16	Ethnic Group	Total Child Population	In Care	1,000 Children	
17	Black	597,216	18,949	31.7	
18	White	3,146,601	18,269	5.8	
19	Hispanic	4,849,726	32,225	6.6	
20	Asian/P.I.	988,078	1,709	1.7	
21	Nat Amer	47,139	1,025	21.7	
22	Missing	378,741	22	0.1	
23	Total	10,007,501	72,199	7.2	
24					
25	Data Source: CWS/CMS 2008 1 Extract.				
26					
27	Population Data Source: California Department of Finance annual population projections (Based on the 2000 U.S. Census).				
28					
29	Program version: 1.16 Database version: 8C8FD1AA				
30					
31					
32					

Step 5: Manipulating the <u>In Care</u> Data

- Compute valid in care percentages (i.e., exclude missing race/ethnicity):
    1. Create a new row (below the "Total" row) labeled "Total-missing" (this should be typed in cell A24)
    2. Create a formula that subtracts "Missing" values from the "Total" In Care population (type in "**=C23-C22"** in cell C24)
    3. Highlight and delete rows 25-29 (right click and choose "delete")
    4. Label cell A27 (which should now be blank) "Black", A28 "White", A29 "Hispanic", A30 "Asian/PI", and A31 "Native American"
    5. Title cell B26 "IN CARE"
    6. In cell B27 type in the formula "**=(C17/C$24)*100**". This should divide the Black in care counts by the Total-missing in care counts.
    7. Copy the contents of this cell into cells B28 through B31.

- If your percent calculations are correct, the sum of the percentages by race should equal 100%. Check this by typing the formula "**=sum(B27:B31)**" into cell B32. You should see "100" displayed in this cell.

- SAVE YOUR DATA! (See table below for sample California data created using Q1_08 data for 2007.)

University of California at Berkeley

Child Population (0-17), Caseload, and Prevalence Rates

Agency Type=Child Welfare

1-Jul-07

California

Ethnic Group	Total Child Population	In Care	Prevalence per 1,000 Children
Black	597,216	18,949	31.7
White	3,146,601	18,269	5.8
Hispanic	4,849,726	32,225	6.6
Asian/P.I.	988,078	1,709	1.7
Nat Amer	47,139	1,025	21.7
Missing	378,741	22	0.1
Total	10,007,501	72,199	7.2
Total-missing		72,177	

	IN CARE
Black	26.25351566
White	25.31138728
Hispanic	44.64718678
Asian/PI	2.367790293
Native America	1.420119983
	100

Step 6: Downloading the Exit Data

- From the home page, click on "Exits":
  http://cssr.berkeley.edu/ucb_childwelfare/Exits.aspx

- Screen 1:
  - Select "Child Welfare" for "Agency Type"
  - Select "SINGLE Time Period"
  - Click "Next"
- Screen 2:
  - Change the "Time Period" to conform to "Jan-Dec" of the year you are examining. (*Please note that these reports will default to the most recent time period available, which may not correspond to the other data in your charts. If you are creating charts for the year 2007, you should set the time period to "Jan-Dec 2007".*)
  - Use the "County" pull-down menu to choose your county
  - Select "All" for "Days in Care"
  - Select "Last Exit" for "Episode Count"
  - Select "Count" for "Table Output in"
  - Set the "Column Dimension" to "Ethnic Group"
  - Click "Next" (*not "Finish" as the age range needs to be restricted...*)
- Screen 3:
  - In the "Age" filter, check the boxes for ages 0-18 (leave unchecked 19 and 20)
  - Click "Finish"

- Screen 4:
  - Click "View in Excel" (found at the top of the screen)
  - Select "Save" and navigate to a folder where you can keep these data (you may also want to rename this file to something more descriptive than "CSSRdata.xls")
  - Once downloading has completed, click "Open"
  - You should now seen an excel spreadsheet that shows the data you will need to create the sixth (and final) bar of the chart

Step 7: Manipulating the Exit Data

- Highlight and delete rows 31-33 (right click and choose "delete")

- Create a transposed table for yourself below the current table
  1. Label cell A32 (which should now be blank) "Black", A33 "White", A34 "Hispanic", A35 "Asian/PI", A36 "Native American", A37 "Missing", and A38 "Total"
  2. Highlight row 29. Right click and choose "Copy"
  3. Place your cursor in cell B31. Right click and choose "Paste Special". A box of choices should appear. Leave everything as it is, except check the box for "Transpose" (toward the bottom). Click "OK".
  4. Widen column B so that the numbers are all visible.

- Compute valid exit percentages (i.e., exclude missing race/ethnicity):
  1. Label cell A39 "Total-missing"
  2. Create a formula that subtracts "Missing" values from the "Total" (in cell B39 type in "=B38-B37")
  3. Title cell C31 "Exits"

4. In cell C32 type in the formula "**=(B32/B$39)*100**". This should divide the Black exit count by the Total-missing exit count.
5. Copy this formula into cells B33 through B36.

- If your percent calculations are correct, the sum of the percentages by race should equal 100%. Check this by typing the formula "**=sum(B32:B36)**" into cell B39. You should see "100" displayed in this cell. (See table below for sample California data which is from the Q1_08 data extract for 2007.)

- SAVE YOUR DATA!

Center for Social Services Research

University of California at Berkeley

Exits From Foster Care

Agency Type=Child Welfare

Jan 1, 2007 to Dec 31, 2007

Selected Subset: Episode Count: Last Exit

Selected Subset: Number of Days in Care: 8 days or more, 7 days or less
Selected Subset: Age: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18

California

	Ethnic Group						Total
	Black	**White**	**Hispanic**	**Asian/P.I.**	**Nat Amer**	**Missing**	
	n	n	n	n	n	n	n
Count							
Reunified	3,582	5,749	11,080	737	307	108	21,563
Adopted	1,493	2,294	3,767	175	67	2	7,798
Kin-GAP	408	135	430	21	6	.	1,000
Other Guardianship	329	386	519	39	33	3	1,309
Emancipated	1,177	1,180	1,230	105	50	1	3,743
Other	320	337	509	14	35	9	1,224
Total	7,309	10,081	17,535	1,091	498	123	36,637

	Total	Exits
Black	7,309	20.02
White	10,081	27.61
Hispanic	17,535	48.02
Asian/PI	1,091	2.99
Native	498	1.36
Missing	123	
Total	36,637	
total-missing	36,514	100.00

Step 8: Organizing Your Data into a Single Table

1. Return to the first Excel spreadsheet where the population, referral, substantiation, and entry data for your county were downloaded and saved.

   - Insert a new worksheet by using the "Insert" pull-down menu in the Excel header
   - Choose "Worksheet". You should see a new sheet appear named "Sheet 1".
   - Highlight the table of computed percents from the original worksheet (see below). Ignore the row that shows "100" as that was just a check made to be certain percentages were computed correctly. Right click and choose "Copy".

   - Move to "Sheet 1" (the new sheet that was just created in this workbook).
   - Place your cursor in cell A1. Right click and choose "Paste Special". A gray box should appear (see below). Choose the button for "Values and number formats" and check the box for "Transpose". Click "OK". This will paste the data (but not the formulas) from your original sheet while also transposing columns and rows so that the table matches that in the powerpoint chart.

- Next, return to your "In Care" workbook and copy those cells that contain your computed percentages (see below). (*Ignore the 100 and also ignore column A with the race/ethnicity labels as those have already been pasted into the transposed table.*)


- Return to "Sheet 1".
- Place your cursor in cell A6 and right click. Choose "Paste Special". Choose the same options as before "Values and number formats" and "Transpose". This will paste your In Care data in as a row.
- Finally, return to your "Exits" data spreadsheet. Highlight your percent calculations (*ignoring your 100% check and the race/ethnicity labels*). Right click and choose "Copy".

- Return to "Sheet 1".
- Place your cursor in cell A7 and right click. Choose "Paste Special". Choose the same options as before "Values and number formats" and "Transpose". This will paste your Exit data in as a row.
- Now, you should have a table that includes 6 rows of contact data by five columns of race/ethnicity (California Q1_08 data for the year 2007 are shown below).

	Black	White	Hispanic	Asian/PI	Native American
POPULATION	6.202419	32.679192	50.367088	10.261737	0.489565
REFERRALS	14.904085	28.561487	51.817887	3.891605	0.824936
SUBSTANTIATIONS	14.633346	27.250263	52.821938	4.139036	1.155417
ENTRIES	18.568201	26.245921	50.085060	3.483281	1.617536
IN CARE	26.253516	25.311387	44.647187	2.367790	1.420120
EXITS	20.016980	27.608588	48.022676	2.987895	1.363860

Step 9: Pasting the Data from Excel to Powerpoint

- Return to the earlier downloaded Powerpoint template. Now that all of the data have been 1) downloaded, 2) adjusted to compute valid percents, and 3) organized into a single table, these data need to be pasted into the chart template.
    - Double click on the county slide template (1b) in between the bars. You should see a "Data Sheet" open up. *(Note: if you don't see a data sheet appear, try right clicking on the chart and choose "Data Sheet".)*
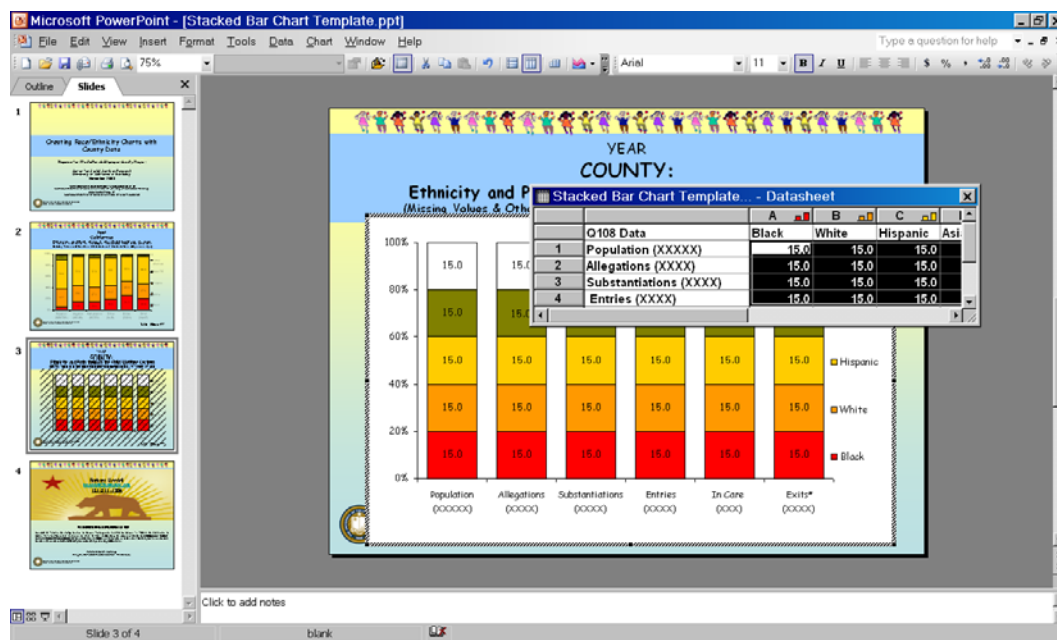
- You should see rows labeling points of contact with the child welfare system and columns labeled by race/ethnicity. "Place holder" data have been entered (15.0 in all cells) which will be pasted over with your county data.

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- From Excel Sheet 1, highlight the contents of your data table (see below). *(Ignore column A, your points of contact labels, and ignore row 1, your race/ethnicity labels as those are already in the powerpoint template.)*
- Right click and choose "Copy".

- Paste your data from Excel into the Data Sheet in powerpoint by placing your cursor in cell A1, right clicking, and choosing "Paste". You should see the powerpoint table populated with your data.
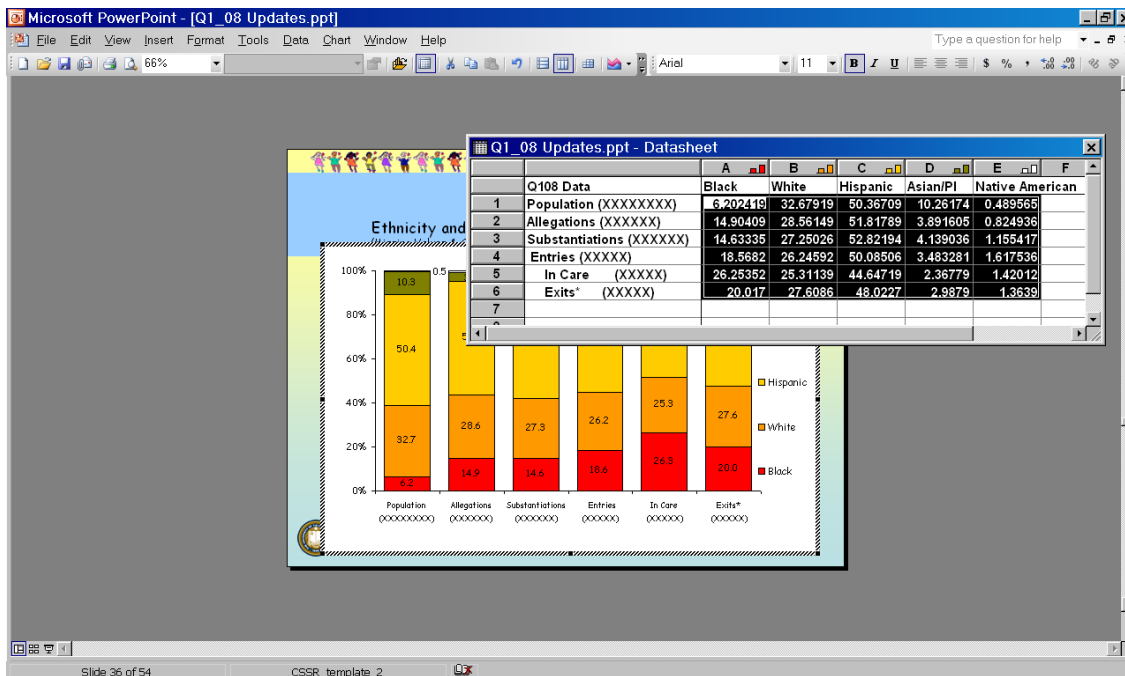
- Next, you will need to return to your downloaded data and manually enter the underlying population, allegation, substantiation, referral, in care, and exit counts into powerpoint in the spaces currently marked with X's. That is, look to the "Total" row and enter the count of the total child population, total number of allegations, total number of substantiations, etc. (see table below where the X's have been replaced with the counts for California).

(*Please note that the spacing may seem off…but this is to center the counts under the labels for each bar. If the spacing does not work because your county numbers are smaller, you may want to play around with the spacing to center your labels. Also please note that you should enter the totals that include the missing values even though the percentages exclude missings.*)
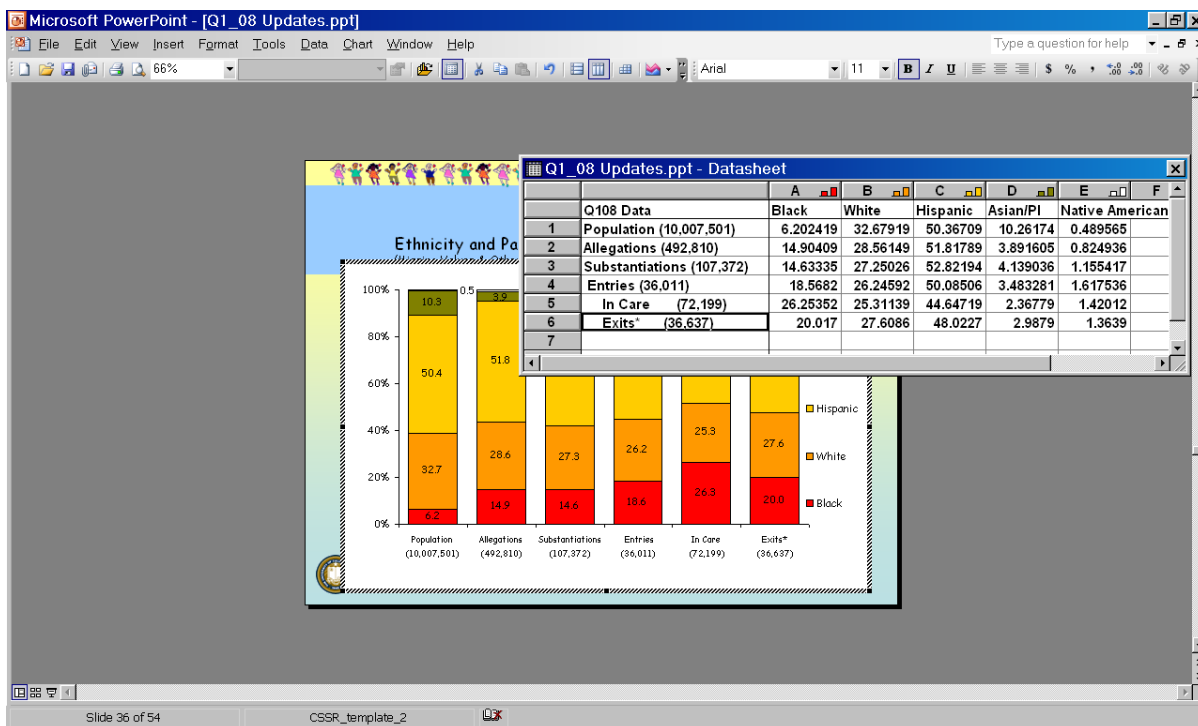
Step 10: Final Formatting
- Close the powerpoint data sheet.
- Use your cursor to "drop and drag" any of the data labels that may need to be moved for easier reading (this is sometimes the case with Native American or Asian/PI data where the percentages are very small).
- Enter your county name in the slide's title bar as well as the year.
- Save your data.
- The end!!