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Understanding & Interpreting Your Needs Assessment Data

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Objectives of this presentation

- Locating your data on the FHOP website
- How to use your Community Health Status Report (CHSR) Overview
- How to use your Community Health Status Report (CHSR) – Details
- Understanding what is included in California County MCAH Data Spreadsheets and what additional information can they provide
    - Rates over time, overall and by race/ethnicity if there are sufficient numbers
    - Trends by race/ethnicity

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Locating your Data

Easy ways to access your data

From the Title V Needs Assessment Page click on link for County Data https://fhop.ucsf.edu/california-county-mcah-data

Direct link to the County Data page: https://fhop.ucsf.edu/california-county-data-spreadsheets-0

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Using data for your needs assessment

- Approach to using data will vary depending on size of your local health jurisdictions (LHJs), available resources, and capacity
- We have developed simplified data overview products that point out areas where your LHJ is doing better or worse than the state
- We have also developed additional data products that allow for more in-depth analysis
- LHJs are not expected to do in-depth data analysis for all indicators. How far you go is up to you and will depend on your available resources and capacity
- For small LHJs, it is okay to just focus on using the Community Health Status Reports.

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Part 1

Using your Community Health Status Report (CHSR) Overview and your Community Health Status Report Details

What is the Community Health Status Report Overview?

- Summary report of all the indicators for the LHJ's 2018-2019 Title V Needs Assessment
- Provides local and state data for the latest available time period, including confidence intervals
- For some indicators, comparison of the latest local rates vs. state rate, with symbol telling you how they compare

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OPEN CHSR OVERVIEW and walk through the indicators

Important to note

- Time Periods vary – explain ranges
- Width of confidence intervals
- How much other information is available – Comparison to State

Local compared to State Column

- For many indicators in the overview, there will be a symbol in the Local Compared to State column

Community Health Status Report Overview

	Domain and Indicator	Period	Local			State			Local compared to State
			Rate	95% Conf. Int Lower	95% Conf. Int Upper	Rate	95% Conf. Int Lower	95% Conf. Int Upper	
	1. Maternal/ Women's Health Indicators								
1 A	Medi-Cal insured deliveries per 100 live births	2013-2015	55.5	54.4	56.6	44.3	44.3	44.4	⇧
1 B	Uninsured pre-pregnancy per 100 females delivering a live birth	2013-2015	15.7	12.7	18.8	21.6	20.5	22.7	⇩

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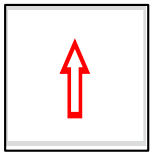
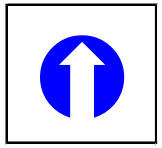
Understanding Symbols in Local Compared to State Column

- Uses 2 dimensions – Color AND Direction
- Color of arrows (Red, Blue or Black)

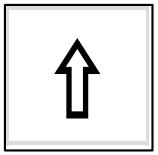


Red Arrows = BAD, statistically worse than the state

Blue Arrows = GOOD, statistically better than the state

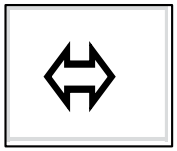


Black Arrows = Statistically different from state, but indicator not easily classified as better or worse

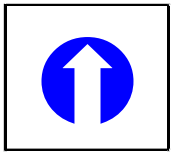
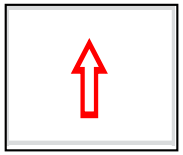
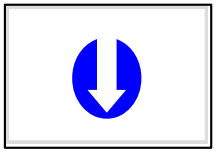
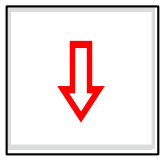


Understanding Symbols in Local Compared to State Column

- Direction of arrows (Up, Down, Sideways)



  - » Sideway Arrow = no significant difference between local and state
  - » Up and Down arrows indicate significant differences with the state, the color tells you if you are doing better than the state (BLUE) or worse than the state (RED)

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What if there is No Symbol in the Local Compared to State Column?

- For some of the indicators in the CHSR Overview, FHOP is not able to calculate whether or not your LOCAL is different from the STATE due to the nature of the data and other logistical constraints (sample size, availability of the data, resources required to access and analyze the data)
- When available, confidence intervals are included in the CHSR overview and can be used to assess if differences are statistically significant

Using Confidence Intervals (CIs) with Survey Data

- A confidence interval is the range of values within which the "true" value is likely to fall
- Ninety-five percent is the most commonly used CI
- A 95% CI indicates that there is a 95% chance that the "true" value of the estimate (rate) is included in the interval between the Upper CI and the Lower CI
- Where possible, risk estimates should be accompanied by a CI

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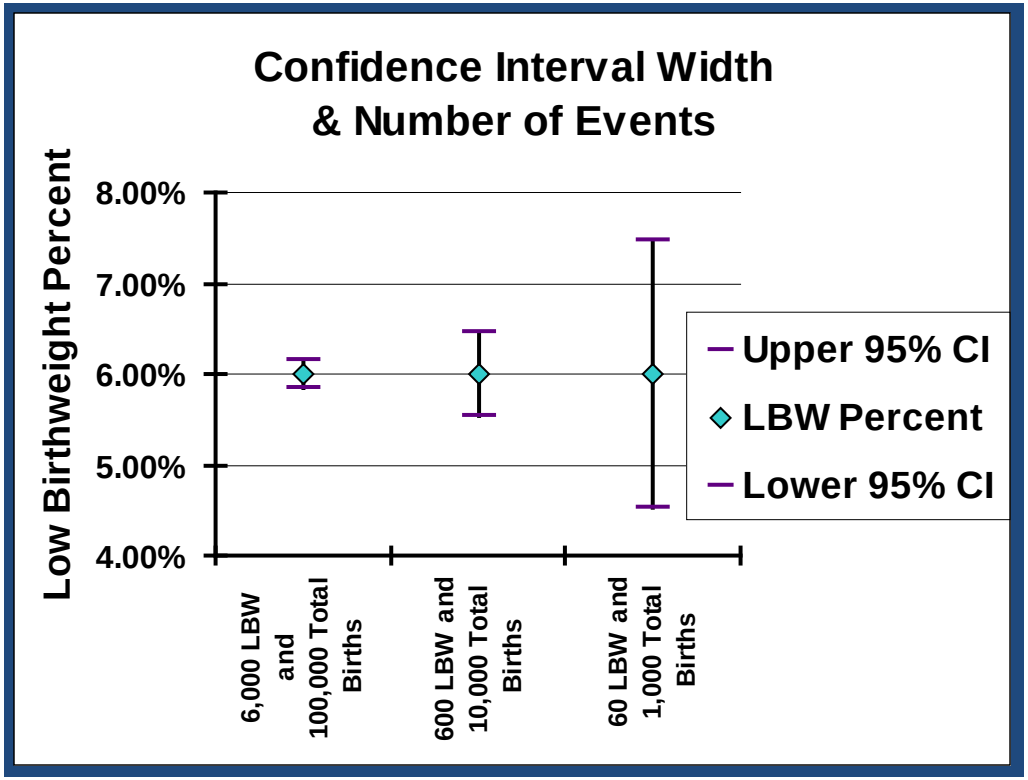
Effects of Sample Size on the Confidence Interval

- The smaller the sample, the larger the confidence interval and the harder it is to establish that observed differences are statistically significant
- The larger the sample, the smaller the confidence interval and the easier it is to detect statistically significant differences

95% Confidence Interval



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Using CI to Assess Statistical Difference for Survey Data

- When comparing 2 rates (i.e. local vs. state), crude but simple way to assess if rates are probably statistically different or not
- If CI (range between the Upper CI – Lower CI) of RATE 1 overlaps with the CI of RATE 2 ➔ this implies no significant difference
- If CI (range between the Upper CI – Lower CI) of RATE 1 does NOT overlap with the CI of RATE 2 ➔ significantly different

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When CI's do overlap = No significant difference

Period	Local			State		
		95% Conf. Int			95% Conf. Int	
	Rate	Lower	Upper	Rate	Lower	Upper
Had a doctor visit in the last year per 100 females age 18 and over	**86.5**	**(82.8 - 90.1)**		**85.9**	**(85.1 - 86.7)**	

Notice the overlap in the intervals = not significantly different

When CI's don't overlap = A significant difference

Period	Local			State		
		95% Conf. Int			95% Conf. Int	
	Rate	Lower	Upper	Rate	Lower	Upper
Binge drinking in the year month per 100 females age 18 and older	**28.4**	**(25.2 - 31.6)**		**23.6**	**(22.7 - 24.6)**	

Notice that there is NO overlap in the intervals = significantly different

Limitations of Rate Comparisons

- The numbers may be too small to ever get a stable rate with which to compare differences using CIs
- A rate difference may be significant but the actual increase in risk may be minimal
- A rate difference may be significant but it could be that it is only because of a small group in relation to the total number of cases, thus in terms of actual local impact, it may be minimal

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Practice

Is there a statistically significant difference in Exclusive in-hospital breastfeeding rates?

- Compare local rate with state

Period	Local			State		
		95% Conf. Int			95% Conf. Int	
	Rate	Lower	Upper	Rate	Lower	Upper
2015	89.9	(82.4 - 94.4)		62.6	(62.5 - 62.8)	

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What is the Community Health Status Report - Details

- Provides additional data on a select group of indicators
- Includes rates from 2004-2006 to 2013-2015 for both the Local and the State
- Compares Local rates in 2004-2006 to those in 2013-2015 to see if they are statistically different
- Compares Local rates in 2013-2015 to State rates to see of they are statistically different
- Compares Local rates in 2013-2015 to Healthy People 2020 Objectives (where applicable)

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OPEN CHSR Details and walk through indicators and the 3 types of comparisons (Local end vs. Local start, Local end vs. State end, Local end vs. HP2020)

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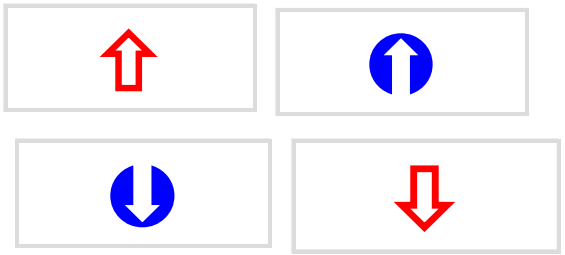
Understanding the Local Trend Column

- This column tells you if your LHJ has:
  1. A trend of Increasing rates
  2. A trend of Decreasing rates
  3. A non-linear trend
  4. No trend
  5. Insufficient Data



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Practice

- Review example in CHSR – Details
  - Is Local doing better or worse than period start?
  - Is Local doing better or worse than State at period end?
  - Is Local meeting HP2020 Objective?
  - Is there a significant Local trend, and what is it?

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When should you look deeper?

Consider looking in more depth at a specific indicator when you:

- Are doing worse than the state
- Are doing worse than you were in the past
- Know or suspect that there is a race/ethnic disparity

NOTE: We recognize that your ability to do this will depend on your resources so it is not required but recommended when possible

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Part 2

Using your MCAH Spreadsheets, (aka your Databooks) to learn more about an indicator and to identify disparities

Indicators with Spreadsheets

1. Maternal/ Women's Health Indicators	
1 A	MediCal insured deliveries per 100 live births
1 C	Prenatal care in the first trimester per 100 live births
1 F	Substance use diagnoses per 1,000 hospitalizations of pregnant females age 15-44
1 H	Gestational diabetes per 100 females age 15 to 44 delivering a live or still-born infant in-hospital
1 I	Births conceived within 18 months of a previous live birth per 100 females age 15 to 44 delivering a live birth
1 J	Cesarean delivery per 100 low risk women giving birth for the first time

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Indicators with Spreadsheets

	1. Maternal/ Women's Health Indicators
1 O	Uninsured per 100 female population age 18 to 64
1 P	Mood disorder hospitalizations per 100,000 female population age 15 to 44
1 Q	Assault hospitalizations per 100,000 female population age 15 to 44
1 R	Domestic violence calls per 100,000 population

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Indicators with Spreadsheets

2. Infant health	
2 A	Births less than 37 weeks gestation per 100 live births
2 B	Births weighing less than 2,500 grams per 100 live births
2 C	Births weighing less than 1,500 grams per 100 live births
2 G	Deaths at age less than 1 year per 1,000 live births

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Indicators with Spreadsheets

3. Child and Adolescent Health	
3 A	Uninsured per 100 population age 0 to 18
3 J	Substance use hospitalizations per 100,000 population age 15 to 24
3 K	Mental health hospitalizations per 100,000 population age 15 to 24
3 L	Births per 1,000 female population age 15 to 19
3 M	Births conceived within 18 months of a previous pregnancy per 100 females age less than 20 delivering a live birth

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Indicators with Spreadsheets

3. Child and Adolescent Health	
3 P	Motor vehicle injury hospitalizations per 100,000 population age 0 to 14
3 Q	Deaths per 100,000 population age 1 to 4 years
3 R	Deaths per 100,000 population age 5 to 14 years
3 S	Deaths per 100,000 population age 15 to 19 years
3 T	Deaths per 100,000 population age 20 to 24 years

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Indicators with Spreadsheets

	5. Social Determinants of Health
5 A	Poverty (0-200% FPL) per 100 female population age 18 to 64
5 B	Poverty (0-200% FPL) per 100 population age 0 to 18
5 D	Unemployment per 100 people in employment market
5 H	Children in foster care per 1,000 population age 0 to 17

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What is in your spreadsheets?

- LHJ and State Data Tabs
- Definition Tab
- Rate Tabs
- Graph Tabs

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Spreadsheet – Data Tabs

- Data Tabs are a 2-tab set of 12 years of local and state data
- Includes numerators with the appropriate denominators to calculate rates
- Data are the source for calculating rates and graph tabs for each indicator.

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Spreadsheet – Definition Tab

- Only included for a few indicators where needed to provide more specific information on how they are calculated
  - For indicators using a population subset (e.g., births to mothers age 15 to 44, singleton births) where total reported will be less than the total for the source data (e.g., all births vs. singleton births)
  - For indicators requiring adding cases from multiple data sources, e.g., births and fetal deaths

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Spreadsheet – Rate Tab

Set to print on 3 pages:

- Page 1
  - Indicator and its risk factors
  - Rate table for total cases
  - Data sources
  - Recommendations for additional analyses
- Page 2
  - Rate tables for White Non-Hispanic and Hispanic All-Race
- Page 3
  - Rate tables for Non-Hispanic African-American and Asian populations

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What can trend analysis tell us?

- Allows us to look at rates over a time period of 2004-2015 and see if there are significant upward or downward trends on key indicators (as opposed to the inaccurate eyeballing approach)
- Useful for identifying and monitoring trends in disparities among racial/ethnic groups
- Allows for comparisons with the statewide trends on key indicators for different racial/ethnic groups
- Useful for identifying whether a problem is affecting people across groups or disproportionately impacting subgroups
- Allows local health jurisdictions to track their progress toward reaching Healthy People 2020 Goals

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Exercise

Are these rates for teen births (15-19, out of 1,000 live births) significantly different?

- Hispanic rate = 89.9 (Lower C.L . 85.7– Upper C.L. 94.2)
- African American rate = 80.0 (Lower C.L. 69.4 – Upper C.L 92.0)
  A. YES
  B. NO
  C. Not Sure

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Questions?

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