

Finding, Understanding and Disseminating Data and Statistics

A Knowledge to Practice Program



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Learning Objectives

By the end of this tutorial, you will:

- Be able to identify strategies to critically determine what type of data you need
- Have the skills to navigate and understand how to access two main sources of health statistics information

Overview

Throughout this tutorial, you will cover the following topics:

- Standard questions to help determine the type of data you need for your project or research
- Introduction to two sources of health statistics information
- Case study practice with data sources

Why are data and statistics useful to health professionals?

The ability to **find**, **use** and **disseminate** health data and statistics allows a health professional to:



Determine
Needs

Promote
Behavior
Change

Providing
Convincing
Arguments

More specifically, data allows you to:

Determine specific needs of various groups at the community, state and national levels

Promote behavior change through evidence-based practices

Provide convincing arguments when grant-writing

Asking yourself some standard questions can help determine the type of data you need for your project or research.

1. Who are you interested in?

2. What health indicator?

3. Where are you looking?

4. When: season or time period?

5. Why do you want this data?

6. How will you get the data?

Let's go through each question.

1. **Who** are you interested in?

Consider factors like:

- Gender
- Age
- Race
- Socioeconomic Status (SES)

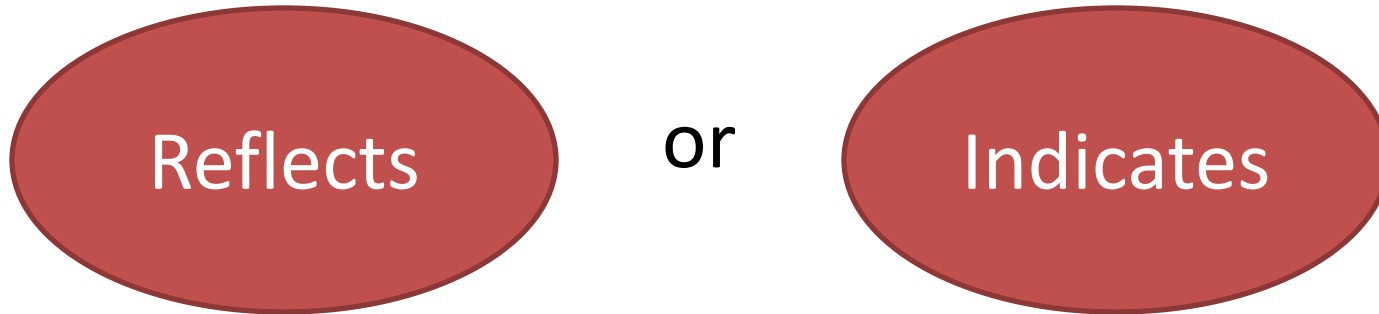
Be specific!

For example, if you are interested in breastfeeding, are you looking for information on:

- African American women who become mothers after age 35?
- Teenage mothers in poverty?
- Women of child bearing age in poverty who do not have a high school diploma?

2. What health indicator are you interested in?

A health indicator is a *measure* that



the state of health of persons in a defined population.

**The more information the better
when you are in the “finding” phase
of data research.**

For example:

What
specifically
about
breastfeeding
could we look
at:

- Initiation?
- Breastfeeding immediately after delivery?
- Breastfeeding after 4 months?
- Breastfeeding after 6 months?

3. Where are you looking?

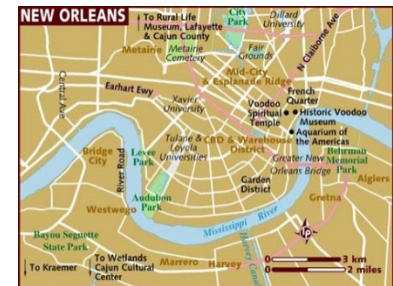
National



State



Local





It may be helpful to use national statistics to support your state and local statistics.

4. **When:** season or time period?

This
year?

This
month?

This
decade?

Are you interested in conducting a comparison of different time periods?

This is useful to see how health indicators might be improving or getting worse over time.

5. Why do you want this data?

- To write a grant
- To use the information for clinical work
- To increase public education
- To submit to financial backers
- To show a need for a program

6. How will you find and understand the data?

Journals

Websites

Web sources

Social media

When you pick a data source, ask yourself similar questions about the source.

1. **Who** is the data looking at?

2. **What** is the data looking at?

3. **When** was the data collected?

4. **Where** was the data collected?

5. **Why** was the data collected?

6. **How** was the data collected?




The Center for Disease Control (CDC) is your best bet for finding up-to-date data and statistics on many health indicators, including breastfeeding.



Their website contains summarized information.

You can search for specific data and statistics through surveillance databases.

But how can you include data in your health promotion programs?



Let's look at the National WIC Breastfeeding Promotion Plan: Loving Support Campaign:

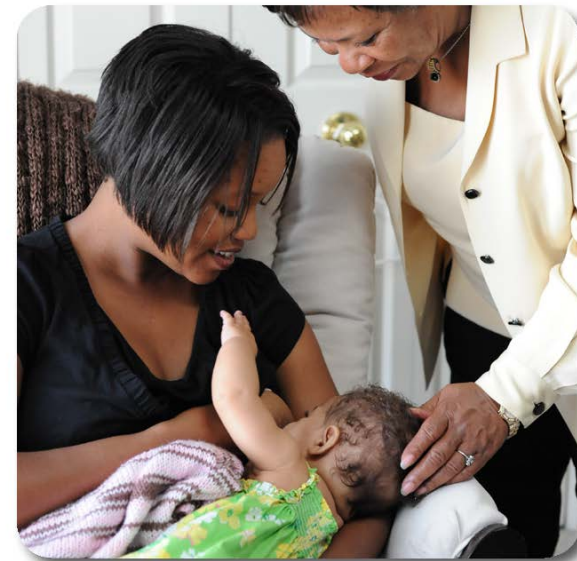
The objectives are to:

- Increase the number of breastfeeding women.
- Increase the average duration of breastfeeding among WIC program participants.
- Increase the number of referrals to WIC for breastfeeding support and technical assistance.
- Increase acceptance/support for breastfeeding among public.



Louisiana was not included in the pilot states for the program. Pretend that you work in Louisiana and believe that Louisiana should be included in the program when it is expanded. What should you do?

Use *The Breastfeeding Report Card* and the *Pregnancy Risk Assessment Monitoring System (PRAMS)* to support your argument that Louisiana should be included in the program.



Breastfeeding  **Report Card**
United States / 2013

National Center for Chronic Disease Prevention and Health Promotion
Division of Nutrition, Physical Activity, and Obesity



The Breastfeeding Report Card:

Provides state-by-state data on breastfeeding initiation and duration

- Ever breastfed - breastfeeding at 6 months - breastfeeding at 12 months
- Exclusively breastfeeding
- Outcomes directly track *Healthy People 2020* Breastfeeding objectives

Provides state-by-state information on breastfeeding support systems

- Birth Facility Support
- Professional Support
- Mother to Mother Support
- Legislation
- Infrastructure

**Here is some data from *the 2013
Breastfeeding Report Card.***

From the Outcome Indicators:

	U.S. National	Louisiana
Ever breastfed	76.5	60.6
Breastfeeding at 6 months	49.0	31.3
Breastfeeding at 12 months	27.0	14.9
Exclusive breastfeeding at 3 months	37.7	30.6
Exclusive breastfeeding at 6 months	16.4	10.7

From the Process Indicators:

	U.S. National	Louisiana
Percent of hospitals and birth centers where $\geq 90\%$ of infants are skin-to-skin	54.4	49.0
Percent of hospitals and birth centers where $\geq 90\%$ of infants are rooming-in	37.0	19.6
Percent of live births occurring at facilities designated as Baby Friendly (BFHI)	7.25	0
Percent of breastfed infants receiving formula before 2 days of age	24.2	13.0
Number of La Leche League Leaders per 1,000 live births	0.92	0.55
Number of IBCLC's per 1,000 live births	3.35	2.29
State child care regulation supports lactation	7	No

**What important information can we
get from this data?**

From the outcome indicators:

Summary

Statement:

Louisiana has lower rates in all breastfeeding categories when compared to the national rates.

Which indicator is most important for your purpose?

The exclusive breastfeeding rate at 6 months in Louisiana is 10.7%, which is lower than the national average of 16.4%.

From the process indicators:

**Summary
Statement:**

Louisiana has lower percentages in all support system availability than the national average with the exception of percent of infants under 2 days that receive formula.

**Which
indicator is
most
important
for your
purpose?**

You could use any of these indicators to make the argument that more support is needed to promote breastfeeding in Louisiana.

You could support your argument with further statistics from both the Outcome Indicator and Process Indicator reports. Now let's move on to looking at PRAMS data.

Pregnancy Risk Assessment Monitoring System (PRAMS)

Collects population-based data on maternal attitudes and practices before, during, and after pregnancy.

Researchers can request access to the data formally but there are quick ways that users can access the data as well. Surveillance Reports are available for certain years online.

We will use the Prevalence and Trends Database called CPONDER to find data.



CPONDER V2.0

Users can design their own analysis by choosing from available variables:

- Contains data from years 2000-2010.
- Information is available on over 50 health topics.

You can find information from:

- A single state and year.
- A single state and all available years.
- All available states and a single year.

**Here are some tips on navigating
PRAMS.**



1. From the PRAMS website click on “Prevalence and Trend data- CPONDER system” on the right hand side of the screen.

2. Choose “Prevalence and Trend data- CPONDER system” on the right hand side of the screen.

3. In the pull down menu, choose:

- State (or all states)
- Year
- Topic of interest

Questions related to the topic will appear if available.

In this example, let's look at the most recent data for Louisiana concerning breastfeeding:

CPONDER V2.0 - CDC's PRAMS On-line Data for Epidemiologic Research

Select one entry from each of three boxes below — a state, a year, and a topic. Click on the arrow of each box to make a selection. Once a selection is made, click on the Go button. You will be taken to another page where you will be able to narrow your selection.

Please choose from the following pull-down menus to search for PRAMS data.

State:

Year:



Topic:

Go

For example, let's look at "Indicator of whether the mother was still breastfeeding 8 weeks after delivery."



Year		No	Yes
2004	%	67.9	32.1
	CI	65.3 - 70.4	29.6 - 34.7
	n	1013	506

If you are given the data above, how might you answer the following questions:

- A. In 2004 in Louisiana, what percentage of women surveyed were breastfeeding 8 weeks after delivery?
- 32.1% of women were breastfeeding 8 week after delivery
- B. How many women were surveyed in Louisiana in 2004 (n)?
- 1519 women were surveyed ($1013 + 506 = 1519$)

Now let's look at how to use breakout categories.

In this example, let's again look at "Indicator of whether the mother was still breastfeeding 8 weeks after delivery."

Breakout categories appear in a drop down menu

- Let's choose to break out whether the mother was in WIC during her pregnancy
- The following results are based on the response being "yes"



Year		Non-WIC	WIC
2004	%	45.4	22.1
	CI	41.3 - 49.6	19.1 - 25.3
	n	308	194

If you are given the data above, how might you answer the following questions:

A. In Louisiana in 2004, what percentage of the surveyed women, who were breastfeeding 8 weeks after delivery, were utilizing WIC?

- 22.1% of the women who were breastfeeding 8 weeks after delivery were utilizing WIC

B. How many women were surveyed in this example (n)?

- 502 women were surveyed in this example ($308 + 194 = 502$)

**So now let's apply some conclusions
to the case study.**

Remember...

Our
original
purpose
was:

To look at breastfeeding rates among women in Louisiana on WIC to support the inclusion of Louisiana in the “Loving Support Campaign.”

What did we find out?

- Louisiana has lower breastfeeding rates in all categories than the national average
- Louisiana has worse support systems than the national average
- There is a lower percentage of women breastfeeding 8 weeks post delivery who are in WIC than those not in WIC

All of these statistics address the objectives of the campaign and could be used in writing a grant to promote Louisiana's inclusion in this campaign.

Some final tips...

For a complete picture, look at as many data sources as possible.

- Start with CDC data but you can also use state-level office of public health data and other sources.
- Just make sure your source is credible!

Also, always remember to cite data.

- Give credit where credit is due!

Conclusion

- Using data and statistics is important in any public health program
- You need to have a clear idea about what kind of data you are looking for and how it will be used
- The CDC is a great source for data and statistics

References

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