

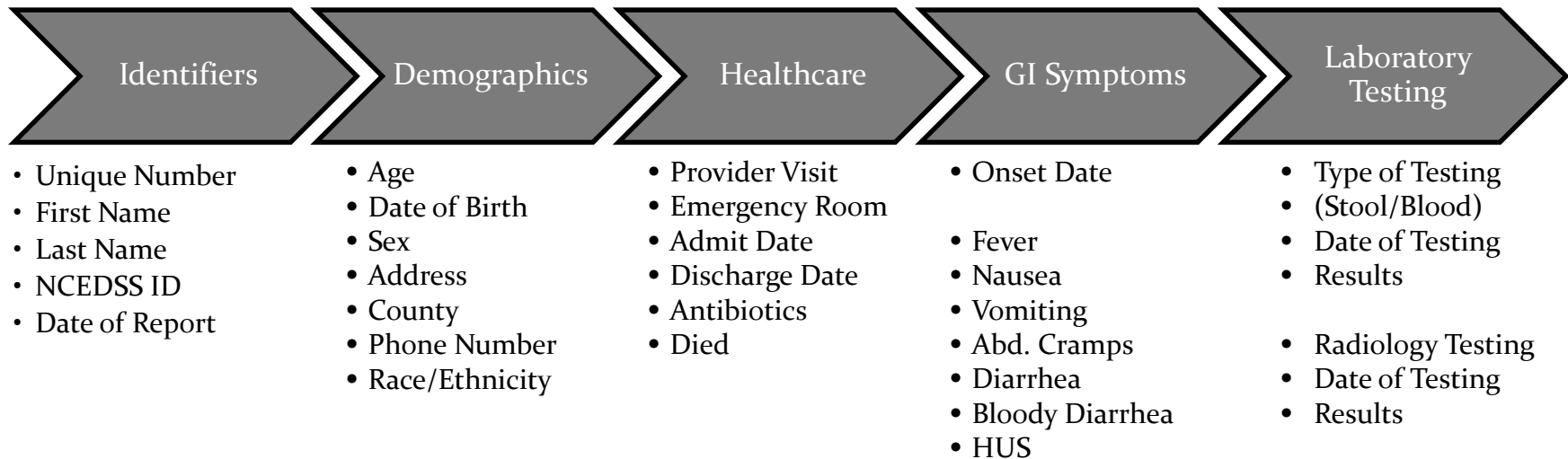
Outbreak Investigation: Managing Data

Supplement to 2012 Conference Presentation:

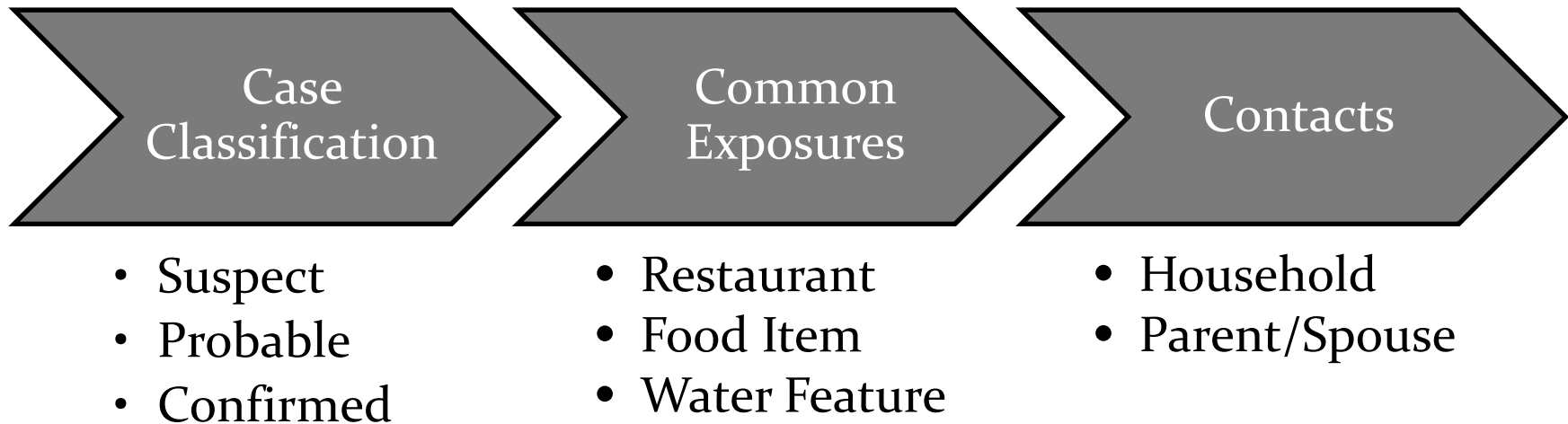
**Excel How-To
With Screenshots**

Nicole Lee, MPH
Stephanie Griese, MD MPH

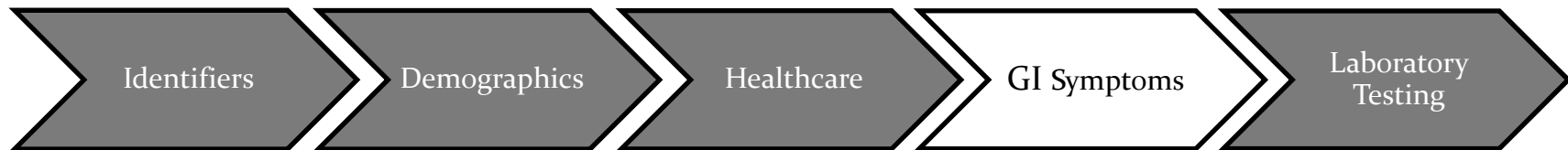
Line List Recap: Basic Pieces



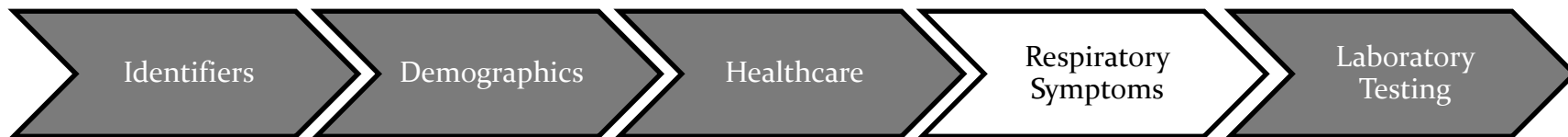
Line List Recap: Optional Pieces



Line List Recap: Switching Pieces to Fit Your Outbreak

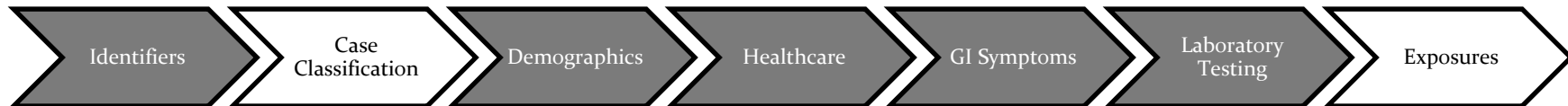


- Onset Date
- Fever
- Nausea
- Vomiting
- Abd. Cramps
- Diarrhea
- Bloody Diarrhea
- HUS



- Onset Date
- Fever
- Headache
- Malaise
- Cough
- Difficulty Breathing
- Rhinorrhea
- Post-tussive emesis
- N/V/D

Line List Recap: Adding Pieces



Line List Recap: Recycling



How-To: Adding Pieces

- If you need to add a new column in the middle of your line list...

1. Right click on the letter of the column where you want your new column.

2. Select insert.

CEDESS	Date of Report	Age	Sex	Address	City
.01E+08	6/30/2012				
.01E+08	7/1/2012				
.01E+08	7/4/2012				
1E+08	7/4/2012	24	Female	7982 Bayo	Raleigh
.01E+08	7/5/2012				
1E+08	7/5/2012				
1E+08	7/6/2012				
1E+08	7/6/2012				
1E+08	7/7/2012				
1E+08	7/7/2012				
1E+08	7/7/2012				
1E+08	7/8/2012				

1. Right click on the letter of the column where you want your new column.
2. Select insert.

3. Now you have a new column!

3. Now you have a new column!

CEDESS	Date of Report	Age	Sex	Address	City
.01E+08	6/30/2012	15	Female	10 Beach f	Raleigh
.01E+08	7/1/2012	53	Female	42A Bikini	Raleigh
.01E+08	7/4/2012	69		1930 Appl	Raleigh
1E+08	7/4/2012	24	Female	7982 Bayo	Raleigh
.01E+08	7/5/2012	35	Female	123 Happy	Raleigh
1E+08	7/5/2012	30	Female	221-B Bak	Raleigh
1E+08	7/6/2012		Female	1313 Mock	Raleigh
1E+08	7/6/2012			185 East 8	Raleigh
1E+08	7/7/2012	42		112 1/2 Bea	Raleigh
1E+08	7/7/2012		Female	4 Privit Dr	Raleigh
1E+08	7/8/2012		Female	740 Evergr	Raleigh

How-To: Managing the Line List

- Data entry
 - Single user
 - Multiple users
 - Copying & pasting line list headers
 - Combining multiple line lists
- Deleting data
- Data gaps
- Answering questions with data

Data Entry

Single vs. Multiple Users

Single Users

- One person adds information to the line list
- Easy but not always realistic when your time is limited

Multiple Users

- Multiple people add information to the line list
- Very helpful when your time is limited

Data Entry: Multiple Users

How To Copy/Paste Line List Headers

1. Each person adding information to the line list should have their own copy saved on their computer.
 - a. Make sure each copy of the line list has the same title in every column (also known as “headers”). The easy way to do this is to copy the headers from one spreadsheet to the next. (**See Figures 1 - 3**)
 - b. Having the name of the person adding information to the line list in the title of the document helps.

Data Entry: Multiple Users

How-To: Copying/Pasting Headers (Fig 1)

CDConference_Basic Elementsb.xlsx - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Styles

Calibri 11 A A \$ % , .00 .00

Wrap Text Merge & Center

General Conditional Formatting as Table Styles

A1 Identifiers

Identifiers						Demographics					
Unique #	First Name	Last Name	NCEDSS	Date of Re	Age	Address	City	State	Zip	County	Phone Nu
1	Sunny	Day	1.01E+08	#####	1	10 Beach F	Raleigh	NC	27617	Wake	919-111-1
2	Polka	Dott	1.01E+08	7/1/2012	5	42A Bikini	Raleigh	NC	27617	Wake	919-222-4
3	PC	Macintosh	1.01E+08	7/4/2012	7	1930					6

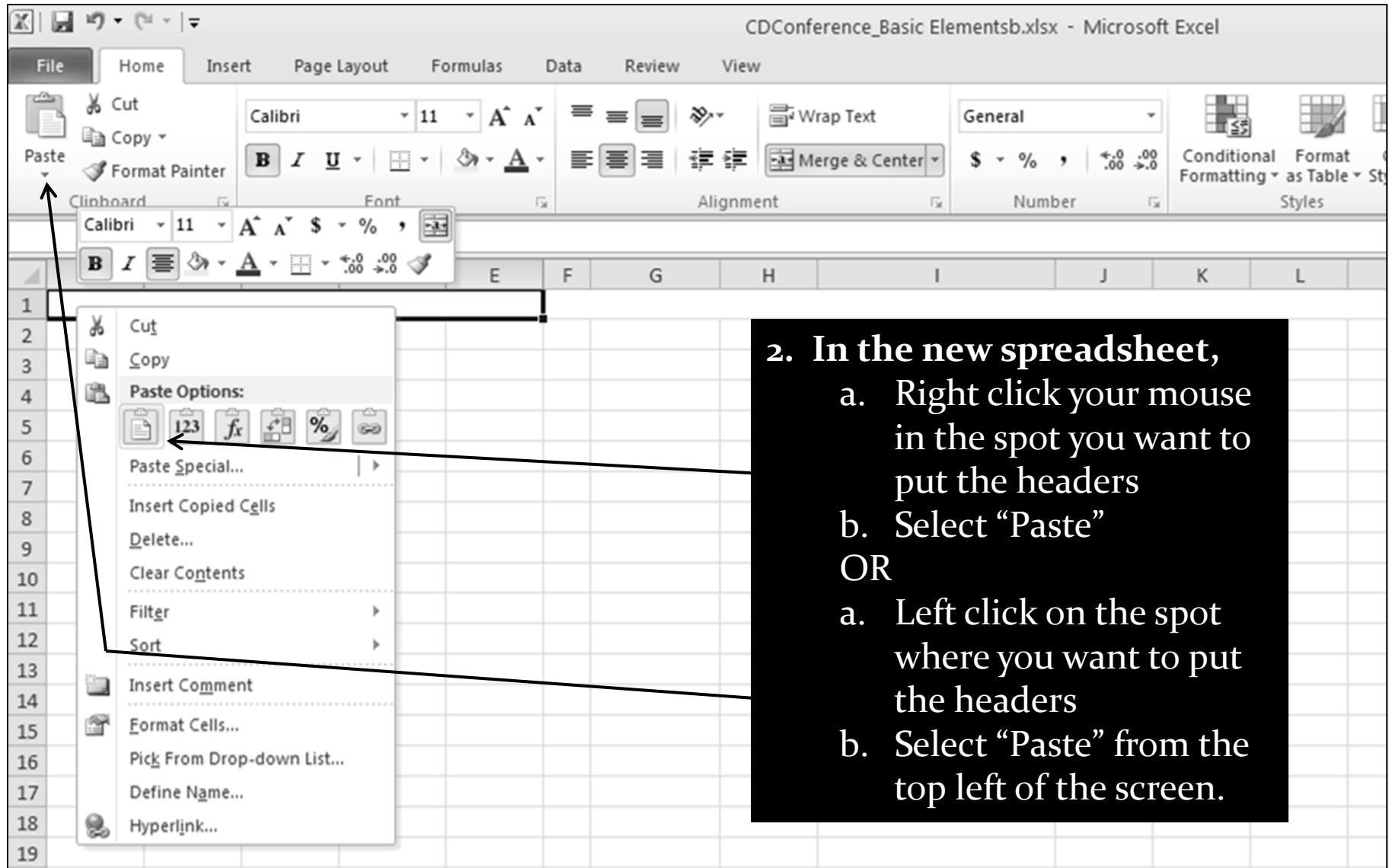
1. Highlight rows 1 and 2
a. Right click your mouse in the highlighted area
b. Select "Copy"

OR

a. Select "Copy" from the top left of the screen.

Data Entry: Multiple Users

How-To: Copying/Pasting Headers (Fig 2)



Data Entry: Multiple Users

How-To: Copying/Pasting Headers (Fig 3)

	Identifiers				Demographics							Healthcare								
1	Unique #	First Name	Last Name	NCEdSS	Date of Rec Age	Date of Birth	Sex	Address	City	State	Zip	County	Phone Nu	Provider	ED	Admit Date	Discharge Date	Died	Or	
2	1	Sunny	Day	1.01E+08	#####	16	8/1/1996	Female	10 Beach	F Raleigh	NC	27617	Wake	919-111-1	Yes	No			No	##
3	2	Polka	Dott	1.01E+08	7/1/2012	54	#####	Female	42A Bikini	Raleigh	NC	27617	Wake	919-333-4	No	Yes	#####	#####	No	##
4	3	PC	Macintosh	1.01E+08	7/4/2012	70	#####	Male	1930 Appl	Raleigh	NC	27617	Wake	919-333-4	No	Yes	#####	#####	No	##

3. Now you have two spreadsheets/linelists with the same headers.

- Don't forget to save these two files in a way that is easiest for you to keep up with.

	Identifiers				Demographics							Healthcare						
1	Unique #	First Name	Last Name	NCEdSS	Date of Rec Age	Date of Birth	Sex	Address	City	State	Zip	County	Phone Nu	Provider	ED	Admit Date	Discharge Date	Died
2																		
3																		
4																		
5																		
6																		
7																		
8																		

Data Entry: Multiple Users

Combining Multiple Line Lists

2. After multiple users have finished entering cases on their line lists they will need to be combined into one spreadsheet.

Data Entry: Multiple Users

How-To: Combining Multiple Line Lists

The screenshot shows an Excel spreadsheet with the following data:

Identifiers					Demographics								
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County	Phone N
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	Raleigh	NC	27614	Wake	919-444
8	Left	Eye	100123456	7/6/2012	35	3/6/1977	Female	18					
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	11					
10	Barbara	Streisand	10012			5/4/1929	Female	4					
11	MC	Hammer	10012				Male	16					
12	Jenny	Jenay	10012				Female	74					

The context menu is open over rows 3-8, with the 'Copy' option highlighted. The 'Copy' option in the top-left ribbon is also circled.

1. Highlight the rows you want to copy

- Right click your mouse in the highlighted area
- Select "Copy"

OR

- Select "Copy" from the top left of the screen.

Data Entry: Multiple Users

How-To: Combining Multiple Line Lists

The screenshot shows an Excel spreadsheet with the following data:

Identifiers					Demographics								
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County	Phone Num
1	Sunny	Day	100777777	6/30/2012	15	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake	919-111-1
2	Polka	Dott	100999999	7/1/2012	53	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wake	919-333-4
3	PC	Macintosh	100888888	7/4/2012	69	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wake	919-987-6
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988							
			0555555	7/5/2012	35	2/4/1977							
			0444444	7/5/2012	30	1/1/1982							

The context menu is open over cell A9, with the 'Paste' option circled. The 'Paste' option is highlighted in the context menu.

2. In the spreadsheet you want to add all copied rows...

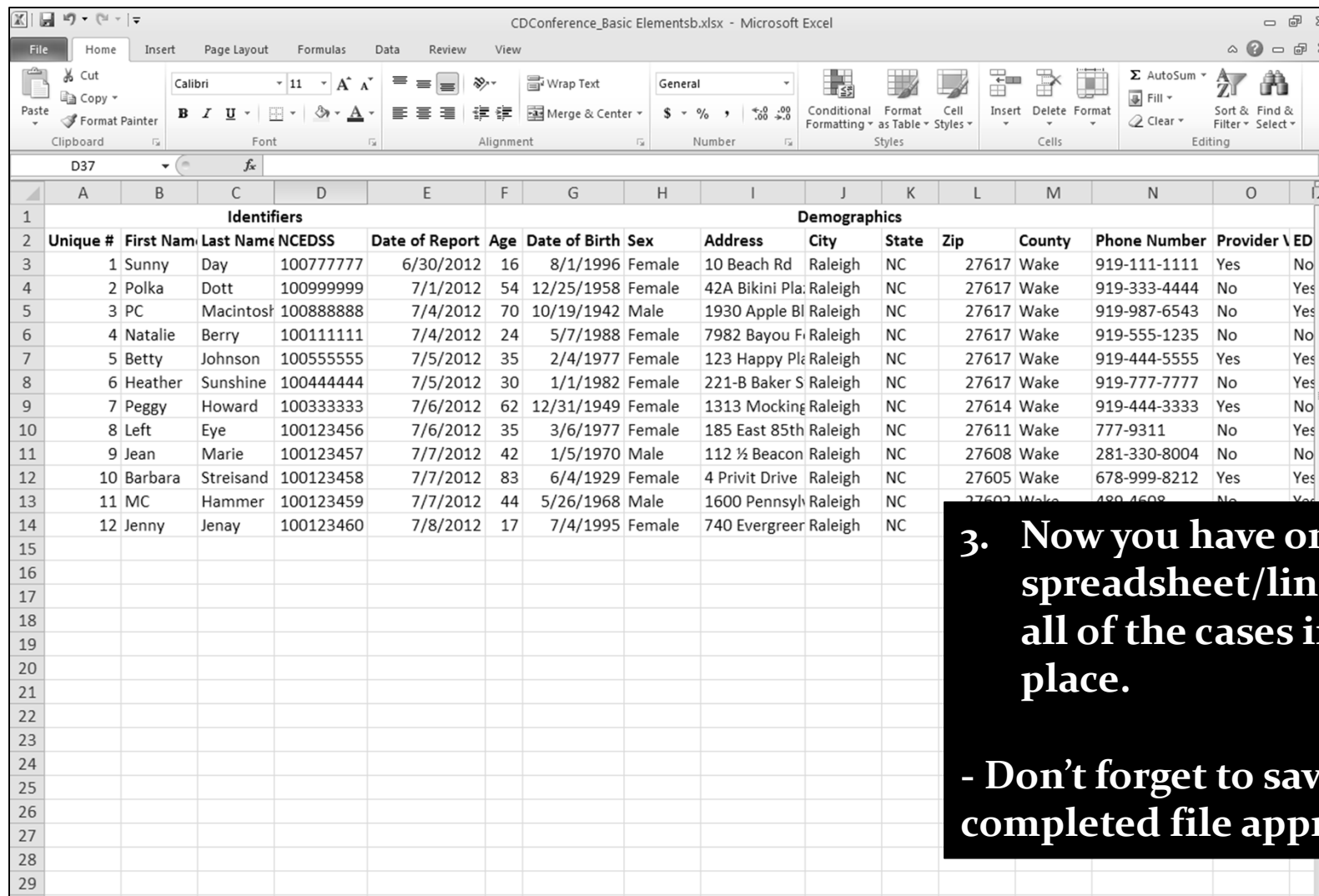
1. Right click your mouse in the spot you want to put the copied rows
2. Select "Paste"

OR

1. Left click on the spot where you want to put the copied rows
2. Select "Paste" from the top left of the screen.

Data Entry: Multiple Users

How-To: Combining Multiple Line Lists



CDConference_Basic Elementsb.xlsx - Microsoft Excel

	Identifiers				Demographics											
	Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County	Phone Number	Provider	ED
1																
2	1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake	919-111-1111	Yes	No
3	2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Pla	Raleigh	NC	27617	Wake	919-333-4444	No	Yes
4	3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Bl	Raleigh	NC	27617	Wake	919-987-6543	No	Yes
5	4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fr	Raleigh	NC	27617	Wake	919-555-1235	No	No
6	5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Pl	Raleigh	NC	27617	Wake	919-444-5555	Yes	Yes
7	6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker S	Raleigh	NC	27617	Wake	919-777-7777	No	Yes
8	7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mocking	Raleigh	NC	27614	Wake	919-444-3333	Yes	No
9	8	Left	Eye	100123456	7/6/2012	35	3/6/1977	Female	185 East 85th	Raleigh	NC	27611	Wake	777-9311	No	Yes
10	9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 1/2 Beacon	Raleigh	NC	27608	Wake	281-330-8004	No	No
11	10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive	Raleigh	NC	27605	Wake	678-999-8212	Yes	Yes
12	11	MC	Hammer	100123459	7/7/2012	44	5/26/1968	Male	1600 Pennsylv	Raleigh	NC	27602	Wake	480-4608	No	Yes
13	12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreer	Raleigh	NC					
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																

3. Now you have one spreadsheet/line list with all of the cases in one place.

- Don't forget to save your completed file appropriately.

Deleting Data

- If you find out a case needs to be removed from your line list, do not delete it.
- Create a tab titled “Excluded”.
- Move cases that no longer meet your case definition to the “Excluded” tab.

Deleting Data

How-To: Creating a Tab for Excluded Cases

The screenshot shows an Excel spreadsheet with the following data:

Identifiers					Demographics							
Unique #	First Name	Last Name	NCEdSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County
1	Sunny	Day	1.01E+08	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake
2	Polka	Dott	1.01E+08	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wake
3	PC	Macintosh	1.01E+08	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wake
4	Natalie	Berry	1E+08	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	Raleigh	NC	27617	Wake
5	Betty	Johnson	1.01E+08	7/5/2012	35	2/4/1977	Female	123 Happy Place	Raleigh	NC	27617	Wake
6	Heather	Sunshine	1E+08	7/5/2012	30	1/1/1982	Female	221-B Baker Street	Raleigh	NC	27617	Wake
7	Peggy	Howard	1E+08	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	Raleigh	NC	27614	Wake
8	MC	Hammer	1E+08	7/6/2012	35	3/6/1977	Male	185 East 85th Street	Raleigh	NC	27611	Wake
9	Jean	Marie	1E+08	7/7/2012	42	1/5/1970	Male	112 1/2 Beacon Street	Raleigh	NC	27608	Wake
10	Barbara	Streisand	1E+08	7/7/2012	83	6/4/1929	Female	4 Privit Drive	Raleigh	NC	27605	Wake
11	Left	Eye	1E+08	7/7/2012	44	5/26/1968	Female	1600 Pennsylvania Ave	Raleigh	NC	27602	Wake
12	Jenny	Jenay	1E+08	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	Raleigh	NC	27599	Wake

The context menu is open over the bottom tab 'Sheet3', with 'Insert...' selected. A black callout box contains the following instructions:

1. Right click on the bottom tab of your line list
2. Select "Insert"

Deleting Data

How-To: Creating a Tab for Excluded Cases

The screenshot shows Microsoft Excel with a data table. The table has two main sections: 'Identifiers' and 'Demographics'. The 'Identifiers' section includes columns for Unique #, First Name, Last Name, NCEDSS, and Date of Report. The 'Demographics' section includes columns for Age, Date of Birth, Sex, Address, City, State, Zip, and County. An 'Insert' dialog box is open, showing the 'Worksheet' option selected. A black callout box with white text says '3. Select "Worksheet" and click OK.'

Identifiers					Demographics							
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County
1	Sunny	Day	1.01E+08	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake
2	Polka	Dott	1.01E+08	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wake
3	PC	Macintosh	1.01E+08	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wake
4	Natalie	Berry	1E+08	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	Raleigh	NC	27617	Wake
5	Betty	Johnson	1.01E+08	7/5/2012	35	2/4/1977	Female	123 Happy Place	Raleigh	NC	27617	Wake
6	Heather	Sunshine	1E+08	7/5/2012	30	1/1/1982	Female	221-B Baker Street	Raleigh	NC	27617	Wake
7	Peggy	Howard	1E+08	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	Raleigh	NC	27614	Wake
8	MC	Hammer	1E+08	7/6/2012	35	3/6/1977	Male	185 East 85th Street	Raleigh	NC	27611	Wake
9	Jean	Marie	1E+08	7/7/2012	42	1/5/1970	Male	112 1/2 Beacon Street	Raleigh	NC	27608	Wake
10	Barbara	Streisand	1E+08	7/7/2012	83	6/4/1929	Female	4 Privit Drive	Raleigh	NC	27605	Wake
11	Left	Eye	1E+08	7/7/2012	44	5/26/1968	Female	1600 Pennsylvania Ave	Raleigh	NC	27602	Wake
12	Jenny	Jenay	1E+08	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	Raleigh	NC	27599	Wake

3. Select "Worksheet" and click OK.

Deleting Data

How-To: Creating a Tab for Excluded Cases

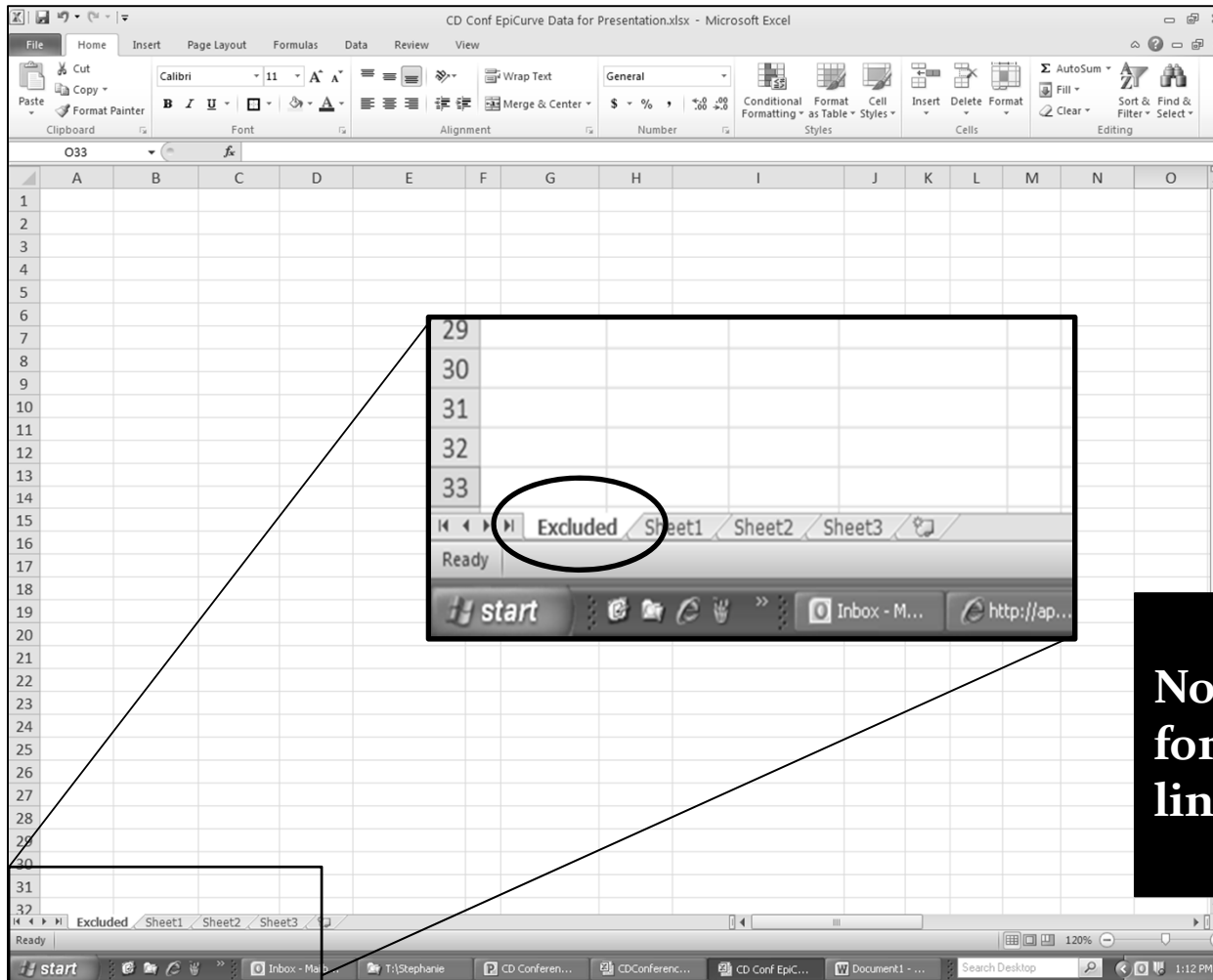
The screenshot shows the Microsoft Excel interface with a new sheet being added. A context menu is open over the sheet tab, with the 'Rename' option selected. The sheet tab is labeled 'Sheet3'. The ribbon shows the 'Home' tab with various options like 'Cut', 'Copy', 'Paste', 'Format Painter', 'Font', 'Alignment', 'Number', 'Styles', 'Cells', and 'Editing'. The spreadsheet area is mostly empty, with a few cells visible in the first few rows.

4. Right click on the new tab at the bottom of the spreadsheet.

5. Select "Rename" and type the word "Excluded".

Deleting Data

How-To: Creating a Tab for Excluded Cases



Now you've created a new tab for cases excluded from your line list!

Deleting Data

How-To: Creating a Tab for Excluded Cases

The screenshot shows an Excel spreadsheet with two main sections: 'Identifiers' and 'Demographics'. The data is as follows:

Identifiers					Demographics							
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County
1	Sunny	Day	1.01E+08	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake
2	Polka	Dott	1.01E+08	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wake
3	PC	Macintosh	1.01E+08	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wake
4	Natalie	Berry	1E+08	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	Raleigh	NC	27617	Wake
5	Betty	Johnson	1.01E+08	7/5/2012	35	2/4/1977	Female	123 Happy Pl	Raleigh	NC	27617	Wake
6	Heather	Sunshine	1E+08	7/5/2012	30	1/1/1982	Female	221-B Baker St	Raleigh	NC	27617	Wake
7	Peggy	Howard	1E+08	7/6/2012	62	12/31/1949	Female	1313 Mocking	Raleigh	NC	27617	Wake
8	MC	Hammer	1E+08	7/6/2012	35	3/6/1977	Male	185 East 85th	Raleigh	NC	27617	Wake
9	Jean	Marie	1E+08	7/7/2012	4	5/26/1968	Female	1600 Pennsylv	Raleigh	NC	27617	Wake
10	Barbara	Streisand	1E+08	7/7/2012	8	5/26/1968	Female	740 Evergreen	Raleigh	NC	27617	Wake
11	Left	Eye	1E+08	7/7/2012	4	5/26/1968	Female	1600 Pennsylv	Raleigh	NC	27617	Wake
12	Jenny	Jenay	1E+08	7/8/2012	1	5/26/1968	Female	740 Evergreen	Raleigh	NC	27617	Wake

The context menu is open over row 13, with the 'Cut' option highlighted. An arrow labeled '7.' points to the 'Cut' option.

6. Copy the headers from your line list and paste them into the “Excluded” tab.

7. Highlight the row for the case you want to move to the “excluded” tab and select “Cut”.

Deleting Data

How-To: Creating a Tab for Excluded Cases

9.

The screenshot shows the Microsoft Excel interface. The ribbon is set to 'Home'. The 'Clipboard' group contains the 'Paste' button, which is highlighted by an arrow and the number '9.'. The spreadsheet has two main sections: 'Identifiers' and 'Demographics'. The 'Identifiers' section has columns for Unique #, First Name, Last Name, NCEDSS, and Date of Report. The 'Demographics' section has columns for Age, Date of Birth, Sex, Address, City, State, Zip, County, and Phone Number. The data for the first row is: Unique # 11, First Name Left, Last Name Eye, NCEDSS 1E+08, Date of Report 7/7/2012, Age 44, Date of Birth 5/26/1968, Sex Female, Address 1600 Pennsylvania Ave, City Raleigh, State NC, Zip 27602, County Wake, Phone Number 489-460.

Identifiers					Demographics								
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County	Phone N
11	Left	Eye	1E+08	7/7/2012	44	5/26/1968	Female	1600 Pennsylvania Ave	Raleigh	NC	27602	Wake	489-460

8. Click on the “Excluded” tab and then click on the spot where you want to insert the case .

9. Select “Paste” at the top left of the screen.

Deleting Data

How-To: Creating a Tab for Excluded Cases

The screenshot shows an Excel spreadsheet with the following data:

Identifiers					Demographics							
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	Cour
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wak
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wak
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wak
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	Raleigh	NC	27617	Wak
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	Raleigh	NC	27617	Wak
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	Raleigh	NC	27617	Wak
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	Raleigh	NC	27614	Wak
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	Raleigh	NC	27611	Wak
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 1/2 Beacon Street	Raleigh	NC	27608	Wak
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive	Raleigh	NC	27605	Wak
11	Left	Eye	100123459	7/7/2012	44	5/26/1968	Female	1600 Pennsylvania Ave	Raleigh	NC	27602	Wak
12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	Raleigh	NC	27599	Wak

A callout box with a black background and white text points to the 'Excluded' tab in the worksheet navigation bar at the bottom of the Excel window. The text in the callout box reads: "Now the excluded case has been moved from the line list to the 'Excluded' tab."

Deleting Data

How-To: Creating a Tab for Excluded Cases

The screenshot shows an Excel spreadsheet with the following data:

Identifiers							Demographics						
Unique #	First Name	Last Name	NCEdSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County	
1	Sunny	Day	1.01E+08	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake	
2	Polka	Dott	1.01E+08	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wake	
3	PC	Macintosh	1.01E+08	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wake	
4	Natalie	Berry	1E+08	7/4/2012	24	5/7/1988	Female	7982 Bay					
5	Betty	Johnson	1.01E+08	7/5/2012	35	2/4/1977	Female	123 Happ					
6	Heather	Sunshine	1E+08	7/5/2012	30	1/1/1982	Female	221-B Bak					
7	Peggy	Howard	1E+08	7/6/2012	62	12/31/1949	Female	1313 Mod					
8	MC	Hammer	1E+08	7/6/2012	35	3/6/1977	Male	185 East					
9			1E+08	7/7/2012	42	1/5/1970	Male	112 1/2 Bea					
10			1E+08	7/7/2012	83	6/4/1929	Female	4 Privit D					
11													
12													
13													
14		Jenay	1E+08	7/8/2012	17	7/4/1995	Female	740 Everg					

The context menu is open over row 13, with the following options: Cut, Copy, Paste Options, Paste Special..., Insert, Delete, Clear Contents, Format Cells..., Row Height..., Hide, Unhide. The 'Delete' option is highlighted. An arrow points from the 'Delete' option to row 13, and another arrow points from row 13 to the text box.

10. To remove the empty row on the line list, highlight the empty row.

11. Right click the highlighted row and select "Delete"

Deleting Data

How-To: Creating a Tab for Excluded Cases

Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Styles Cells Editing

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Identifiers					Demographics							
2	Unique #	First Nam	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	City	State	Zip	County
3	1	Sunny	Day	1.01E+08	6/30/2012	16	8/1/1996	Female	10 Beach Rd	Raleigh	NC	27617	Wake
4	2	Polka	Dott	1.01E+08	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	Raleigh	NC	27617	Wake
5	3	PC	Macintosh	1.01E+08	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	Raleigh	NC	27617	Wake
6	4	Natalie	Berry	1E+08	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	Raleigh	NC	27617	Wake
7	5	Betty	Johnson	1.01E+08	7/5/2012	35	2/4/1977	Female	123 Happy Place	Raleigh	NC	27617	Wake
8	6	Heather	Sunshine	1E+08	7/5/2012	30	1/1/1982	Female	221-B Baker Street	Raleigh	NC	27617	Wake
9	7	Peggy	Howard	1E+08	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	Raleigh	NC	27614	Wake
10	8	MC	Hammer	1E+08	7/6/2012	35	3/6/1977	Male	185 East 85th Street	Raleigh	NC	27611	Wake
11	9	Jean	Marie	1E+08	7/7/2012	42	1/5/1970	Male	112 ½ Beacon Street	Raleigh	NC	27608	Wake
12	10	Barbara	Streisand	1E+08	7/7/2012	83	6/4/1929	Female	4 Privit Drive	Raleigh	NC	27605	Wake
13	12	Jenny	Jenay	1E+08	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	Raleigh	NC	27599	Wake
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													

Ready

start T:\Stepha... CDConfer... Ayo Lineli... Christie Li... CD Confe... Document... Book1 Search Desktop 5:57 PM

Now you have a clean line list.

If you haven't done so already, you should probably rename "Sheet1" – call it "Linelist" or something similar.

Answering Questions with Data Using Excel as a Calculator

- A line list is not only a great tool where you have everything in one place, but it can also give you answers to important questions during an outbreak.
- Excel can calculate totals from your line list and produce an epi curve.
 - If you start a calculation and want to start over just press the ESC key (top left on the keyboard)

Answering Questions with Data Using Excel as a Calculator

- **Calculating age - minimums, maximums & medians**
 - **=MIN** this function will tell you the lowest number
 - **=MAX** this function will tell you the highest number
 - **=MEDIAN** this function will give you the median number (which is the middle number when you list a series of numbers in order)

Answering Questions with Data

How-To: Using Excel as a Calculator

- **Age - calculating minimum**

MAX										
=min(F3:F13)										
	A	B	C	D	E	F	G	H	I	
1	Identifiers									Den
2	Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
3	1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
4	2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
5	3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
6	4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
7	5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
8	6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
9	7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird La	
10	8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	
11	9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½ Beacon Street	
12	10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929			
13	12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995			
14										
15										
16	Age	Min	=min(F3:F13)							
17		Max	MIN(number1, [number2], ...)							
18		Median								
19										
20	Gender	Male								
21		Female								
22										
23										

1. Select the cell where you want you answer to be calculated
2. Type =min(
3. Highlight the cells where your ages are listed
4. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Age - calculating minimum

Identifiers									
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 1/2 Beacon Street	
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive	
12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	
16	Age	Min	16						
17		Max							
18		Median							
20	Gender	Male							
21		Female							

Now you have the minimum age calculated by Excel.

Answering Questions with Data

How-To: Using Excel as a Calculator

- **Age - calculating maximum**

Identifiers									
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Ma		
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Ma		
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Fer		
12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Fer		

Age	Min	16
	Max	=max(F3:F13)
	Median	MAX(number1, [number2], ...)

1. Select the cell where you want you answer to be calculated
2. Type =max(
3. Highlight the cells where your ages are listed
4. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Age - calculating maximum

Identifiers									
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½ Beacon Street	
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive	
11	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	
12									
13									
14									
15									
16	Age	Min			16				
17		Max			83				
18		Median							
19									
20	Gender	Male							
21		Female							
22									

Now you have the maximum age calculated by Excel.

Answering Questions with Data

How-To: Using Excel as a Calculator

- Age – calculating median

Identifiers						Demog			
Unique #	First Nam	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970			
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929			
12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995			

16	Age	Min	16
17		Max	83
18		Median	=median(F3:F13)
19			MEDIAN(number1, [number2], ...)
20	Gender	Male	
21		Female	

1. Select the cell where you want you answer to be calculated
2. Type =median(
3. Highlight the cells where your ages are listed
4. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Age – calculating median

Identifiers									
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½ Beacon Street	
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive	
12	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	
16	Age	Min	16						
17		Max	83						
18		Median	35						
20	Gender	Male							
21		Female							

Now you have the median age calculated by Excel.

Answering Questions with Data Using Excel as a Calculator

- **Calculating totals within your line list data -- case classifications, identifiers, healthcare, symptoms ...**
 - **=SUM** this function will add up numbers for you
 - **=COUNTIF** this function will tell you the total number of times a particular word is seen
 - **=COUNT** this function will tell you the total number of times any number is seen in a group of cells

Answering Questions with Data

How-To: Using Excel as a Calculator

- If you choose to use *zeros and ones* in your line list then you can use the **=SUM** function to add up numbers for you
- If you choose to use *Yes and No* in your line list then you can use the **=COUNTIF** function to tell you the total number of times a particular word is seen
 - Zero means No
 - One means Yes

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=SUM** to calculate # of suspect cases

Laboratory Testing		Case Classification			Common Exposures		
Date Collected	Results	Suspect	Probable	Confirmed	Yucky Oys	Oysters	Salad
6/21/2012	Salmonella	0	0	1	Yes	No	Yes
6/25/2012	Salmonella	0	0	1	Yes		
6/27/2012	Salmonella	0	0	1	Yes		
		1	0	0	Yes		
6/25/2012	inconclusive	0	1	0	Yes		
		0	1	0	No		
6/23/2012	Salmonella	0	0	1	y		
6/27/2012	Salmonella	0	0	1	Yes		
		1	0	0	Yes		
6/25/2012	inconclusive	0	1	0	Yes		
6/23/2012	Salmonella	0	0	1	y		
	Total Cases:	=sum(AD3:AD13)					

1. Select the cell where you want your answer to be calculated
2. Type =sum(
3. Highlight the cells where your criteria is listed
4. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=SUM** to calculate # of suspect cases

Laboratory Testing		Case Classification			Common Exposures			
Sample ID	Date Collected	Results	Suspect	Probable	Confirmed	Yucky Oys	Oysters	Salad
	6/21/2012	Salmonella	0	0	1	Yes	No	Yes
	6/25/2012	Salmonella	0	0	1	Yes	Yes	Yes
	6/27/2012	Salmonella	0	0	1	Yes	Yes	No
			1	0	0	Yes	No	Yes
	6/25/2012	inconclusive	0	1	0	Yes	Yes	No
			0	1	0	No		
	6/23/2012	Salmonella	0	0	1	y	Yes	No
	6/27/2012	Salmonella	0	0	1	Yes	Yes	No
			1	0	0	Yes	No	Yes
	6/25/2012	inconclusive	0	1	0	Yes	Yes	
	6/23/2012	Salmonella	0	0	1	y	Yes	
Total Cases:			2					

Now you have the total number of suspect cases calculated by Excel.

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=SUM** to total additional classifications

Laboratory Testing		Case Classification			
re	Date Collected	Results	Suspect	Probable	Confirmed
	6/21/2012	Salmonella	0	0	1
	6/25/2012	Salmonella	0	0	1
	6/27/2012	Salmonella	0	0	1
			1	0	0
	6/25/2012	inconclusive	0	1	0
			0	1	0
	6/23/2012	Salmonella	0	0	1
	6/27/2012	Salmonella	0	0	1
			1	0	0
	6/25/2012	inconclusive	0	1	0
	6/23/2012	Salmonella	0	0	1
			1	0	0
		Total Cases:	2	3	6

Here we show the formulas used for the rest of the case classification data.

=sum(AE3:AE13)

=sum(AF3:AF13)

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=COUNTIF**(*data range*, “*criteria you’re searching for*”) to calculate # of male cases

Identifiers									
Unique #	First Name	Last Name	NCEdSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Bea	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bi	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 A	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 B	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Ha	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 M	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 Ea	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½	
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privi	
11	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Ev	

Age	Min	16
	Max	83
	Median	35
Gender	Male	=countif(H3:H13,"Male")
	Female	

1. Select the cell where you want you answer to be calculated
2. Type =countif(
3. Highlight the cells where your criteria is listed
4. Type ,
5. Type "Male"
6. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=COUNTIF**(*data range*, “*criteria you’re searching for*”) to calculate # of male cases

Identifiers										Demog
Unique #	First Nam	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address		
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd		
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza		
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd		
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain		
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place		
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street		
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane		
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street		
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½ Beacon Street		
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive		
11	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace		
12										
13										
14										
15										
16	Age	Min			16					
17		Max			83					
18		Median			35					
19										
20	Gender	Male			3					
21		Female								
22										

Now you have the total number of males calculated by Excel.

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=COUNTIF**(*data range*, “*criteria you’re searching for*”) to calculate # of female cases

Identifiers									
Unique #	First Name	Last Name	NCEdSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Bea	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A B	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930,	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 H	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 E	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½	
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Priv	
11	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 E	

Age	Min	16
	Max	83
	Median	35

Gender	Male	
	Female	=countif(H3:H13, "Female")

1. Select the cell where you want you answer to be calculated
2. Type =countif(
3. Highlight the cells where your criteria is listed
4. Type ,
5. Type "Female"
6. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=COUNTIF**(*data range*, “*criteria you’re searching for*”) to calculate # of female cases

Identifiers									
Unique #	First Name	Last Name	NCEDSS	Date of Report	Age	Date of Birth	Sex	Address	
1	Sunny	Day	100777777	6/30/2012	16	8/1/1996	Female	10 Beach Rd	
2	Polka	Dott	100999999	7/1/2012	54	12/25/1958	Female	42A Bikini Plaza	
3	PC	Macintosh	100888888	7/4/2012	70	10/19/1942	Male	1930 Apple Blvd	
4	Natalie	Berry	100111111	7/4/2012	24	5/7/1988	Female	7982 Bayou Fountain	
5	Betty	Johnson	100555555	7/5/2012	35	2/4/1977	Female	123 Happy Place	
6	Heather	Sunshine	100444444	7/5/2012	30	1/1/1982	Female	221-B Baker Street	
7	Peggy	Howard	100333333	7/6/2012	62	12/31/1949	Female	1313 Mockingbird Lane	
8	MC	Hammer	100123456	7/6/2012	35	3/6/1977	Male	185 East 85th Street	
9	Jean	Marie	100123457	7/7/2012	42	1/5/1970	Male	112 ½ Beacon Street	
10	Barbara	Streisand	100123458	7/7/2012	83	6/4/1929	Female	4 Privit Drive	
11	Jenny	Jenay	100123460	7/8/2012	17	7/4/1995	Female	740 Evergreen Terrace	
12									
13									
14									
15									
16	Age	Min	16						
17		Max	83						
18		Median	35						
19									
20	Gender	Male	3						
21		Female	8						
22									

Now you have the total number of females calculated by Excel.

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=COUNTIF**(*data range*, “*criteria you’re searching for*”) to calculate # of cases who visited a private provider

	O	P	Q	R	S	T	U	V
1	Healthcare							
2	Provider Visit	ED	Admit Date	Discharge Date	Died	Onset Date	Fever	Nausea
3	Yes	No			No	6/20/2012	No	Yes
4	No	Yes	6/25/2012	6/26/2012	No	6/24/2012	Yes	Yes
5	No	Yes	6/27/2012		No	6/26/2012	Yes	Yes
6	No	No			No	6/23/2012	No	Yes
7	Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes
8	No	Yes			No	6/24/2012	No	No
9	Yes	No			Yes	6/28/2012	Yes	Yes
10	No	Yes	6/27/2012		No	6/26/2012	Yes	Yes
11	No	No			No	6/23/2012	No	Yes
12	Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes
13	Yes	No			Yes	6/28/2012	Yes	Yes
14								
15								
16	Clinical	Private Provider Visit	=countif(O3:O13, "Yes")					
17		ED Visit	COUNTIF(range, criteria)					
18		Hospitalized						
19								
20		Nausea						
21		Vomiting						
22		Diarrhea						
23								

1. Select the cell where you want your answer to be calculated
2. Type =countif(
3. Highlight the cells where your criteria is listed
4. Type ,
5. Type “Yes”
6. Press enter

Answering Questions with Data

How-To: Using Excel as a Calculator

- Use **=COUNTIF**(*data range*, “*criteria you’re searching for*”) to calculate # of cases who visited a private provider

Healthcare									
Provider Visit	ED	Admit Date	Discharge Date	Died	Onset Date	Fever	Nausea	Vomiting	GI Sympto
Yes	No			No	6/20/2012	No	Yes	Yes	
No	Yes	6/25/2012	6/26/2012	No	6/24/2012	Yes	Yes	Yes	
No	Yes	6/27/2012		No	6/26/2012	Yes	Yes	Yes	
No	No			No	6/23/2012	No	Yes	Yes	
Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes	Yes	
No	Yes			No	6/24/2012	No	No	Yes	
Yes	No			Yes	6/28/2012	Yes	Yes	Yes	
No	Yes	6/27/2012		No	6/26/2012	Yes	Yes	Yes	
No	No			No	6/23/2012	No	Yes	Yes	
Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes	Yes	
Yes	No			Yes	6/28/2012	Yes	Yes	Yes	
Clinical	Private Provider Visit			5					
	ED Visit								
	Hospitalized								
	Nausea								
	Vomiting								
	Diarrhea								

Now you have the total number of cases who visited their private provider.

Answering Questions with Data

How-To: Using Excel as a Calculator

- Using **=COUNTIF**(*data range*, "*criteria you're searching for*") to calculate # of cases who visited a private provider

	O	P	Q	R	S	T	U	V	W	X	Y
1	Healthcare				GI Symptoms						
2	Provider Visit	ED	Admit Date	Discharge Date	Died	Onset Date	Fever	Nausea	Vomiting	Abd Cramps	Diarrhea
3	Yes	No			No	6/20/2012	No	Yes	Yes	No	Yes
4	No	Yes	6/25/2012	6/26/2012	No	6/24/2012	Yes	Yes	Yes	Yes	Yes
5	No	Yes	6/27/2012		No	6/26/2012	Yes	Yes	Yes	Yes	Yes
6	No	No			No	6/23/2012	No	Yes	Yes	No	Yes
7	Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes	Yes	No	Yes
8	No	Yes			No	6/24/2012	No	No	Yes	Yes	Yes
9	Yes	No			Yes	6/28/2012	Yes	Yes	Yes	Yes	Yes
10	No	Yes	6/27/2012		No	6/26/2012	Yes	Yes	Yes	Yes	Yes
11	No	No			No	6/23/2012	No	Yes	Yes	No	Yes
12	Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes	Yes	No	Yes
13	Yes	No			Yes	6/28/2012	Yes	Yes	Yes	Yes	Yes
14											
15											
16	Clinical	Private Provider Visit			5	=countif(O3:O13, "Yes")					
17		ED Visit			6	=countif(P3:P13, "Yes")					
18		Hospitalized			5	=count(Q3:Q13)					
19		Discharged			3	=count(R3:R13)					
20											
21		Nausea			10	=countif(V3:V13, "Yes")					
22		Vomiting			11	=countif(W3:W13, "Yes")					
23		Diarrhea			11	=countif(Y3:Y13, "Yes")					
24											
25											

Here we show the formulas used for the rest of the clinical data.

Answering Questions with Data

How-To: Using Excel as a Calculator

- **=COUNT** (*data range*)

	O	P	Q	R	S	T	U	V	W	X	Y
1	Healthcare				GI Symptoms						
2	Provider Visit	ED	Admit Date	Discharge Date	Died	Onset Date	Fever	Nausea	Vomiting	Abd Cramps	Diarrhea
3	Yes	No			No	6/20/2012	No	Yes	Yes	No	Yes
4	No	Yes	6/25/2012	6/26/2012	No	6/24/2012	Yes	Yes	Yes	Yes	Yes
5	No	Yes	6/27/2012		No	6/26/2012	Yes	Yes	Yes	Yes	Yes
6	No	No			No	6/23/2012	No	Yes	Y		
7	Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes	Y		
8	No	Yes			No	6/24/2012	No	No	Y		
9	Yes	No			Yes	6/28/2012	Yes	Yes	Y		
10	No	Yes	6/27/2012		No	6/26/2012	Yes	Yes	Y		
11	No	No			No	6/23/2012	No	Yes	Y		
12	Yes	Yes	6/25/2012	6/27/2012	No	6/22/2012	No	Yes	Y		
13	Yes	No			Yes	6/28/2012	Yes	Yes	Y		
14											
15											
16	Clinical	Private Provider Visit			5	← =countif(O3:O13, "Yes")					
17		ED Visit			6	← =countif(P3:P13, "Yes")					
18		Hospitalized			5	← =count(Q3:Q13) ←					
19		Discharged			3	← =count(R3:R13) ←					
20											
21		Nausea			10	← =countif(V3:V13, "Yes")					
22		Vomiting			11	← =countif(W3:W13, "Yes")					
23		Diarrhea			11	← =countif(Y3:Y13, "Yes")					
24											
25											

=count was used to see how many cases had an admit date and how many had a discharge date.

The difference between these two numbers tells you the number of people still hospitalized.

Answering Questions with Data

How-To: Make an Epi Curve

- Be sure to start by listing your onset dates in order.
 - 1. Copy the onset dates in the line list and paste it into a new spreadsheet. 2. Sort the onset dates (earliest to latest) 3. List the total number of people who became ill on each onset date. List each date only once.

1. Copy onset dates & paste in new spreadsheet

te	Died	Onset Date	Fever	Nausea	Vomiting	Abc
	No	6/20/201			S	No
12	No	6/24/201			S	Yes
	No	6/26/201			S	Yes
	No	6/23/201			S	No
12	No	6/22/201			S	No
	No	6/24/201			S	Yes
	Yes	6/28/201			S	Yes
	No	6/26/201			S	Yes
	No	6/23/201			S	No
12	No	6/22/201			S	No
	Yes	6/28/201			S	Yes

2. Sort onset dates

	A	B	C	D	E	F	G	H
1	Onset Date							
2	6/20/2012							
3	6/24/2012							
4	6/26/2012							
5	6/23/2012							
6	6/22/2012							
7	6/24/2012							
8	6/28/2012							
9	6/26/2012							
10	6/23/2012							
11	6/22/2012							
12	6/28/2012							
13								
14								
15								

3. List the number ill during each date.

	A	B	C	D
1	Onset Date	Ill People		
2	6/20/2012	1		
3	6/22/2012	2		
4	6/23/2012	2		
5	6/24/2012	2		
6	6/26/2012	2		
7	6/28/2012	2		
8				
9				
10				
11				

Answering Questions with Data

How-To: Make an Epi Curve

- Required information to make an epi curve...
 - The total number of ill people during each onset date
- CDC has a great tool for creating and modifying epi curves. An internet search for “creating an epi curve in excel 2010” will list the link below.
 - http://www.cdc.gov/nceh/vsp/cruiselines/epi_tools/Steps%20to%20Creating%20an%20Epidemic%20Curve%20in%20MS%20Excel%202007.pdf

Other Excel Quirks

- If the information in a cell looks weird, you could try...

- Expanding the cell



	P	Q	R	S
		Healthcare		
LED		Admit D.	Discharge Date	Died
No				No
Yes		#####	6/26/2012	No
Yes		#####		No
No				No
Yes		#####	6/27/2012	No
Yes				No
No				Yes
Yes		#####		No
No				No
Yes		#####	6/27/2012	No
No				Yes

- If a date shows up as a 5 digit number, right click on that number, then click “Format cells” and select “Date” under the “Numbers” tab.

Who do I call for help?

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We are here to help!