



# TIPS FOR USING EXCEL

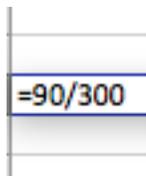
May 2016

## 1. Response Rate and Percentages

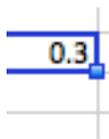
The data includes responses from 30 health care workers. Look at the excel file – the data goes through to row 31. Since the top row is a header, you subtract that row to get a count for the number of responses.

If you want to determine the percentage response, you divide the number of health workers this workflow was sent to by the number of those who responded. You can use a calculator or excel.

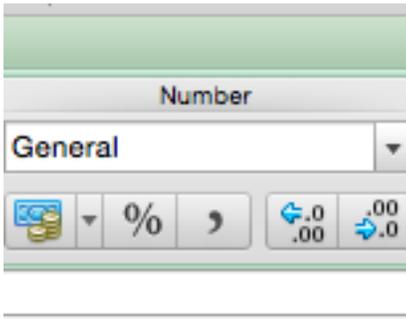
If you are using excel, you would want to use the = sign before the formula. Say for example you have sent a workflow to 300 people and 90 responded. The formula would look like this:



The response would be:



You can use the % button in excel to turn the .3 to 30%.



## 2. Filtering Data

Setting filters to data helps us to target our analysis. Filters mean you can select to only see the responses by say the nurses or just the responses by a certain facility. Setting filters is easy. Highlight the lines you want to filter and click the filter button.



After you enable the filter function, you'll see small arrows under the data headings. They will allow you to select certain answer choices. You can use the check boxes to select which responses you want to see.



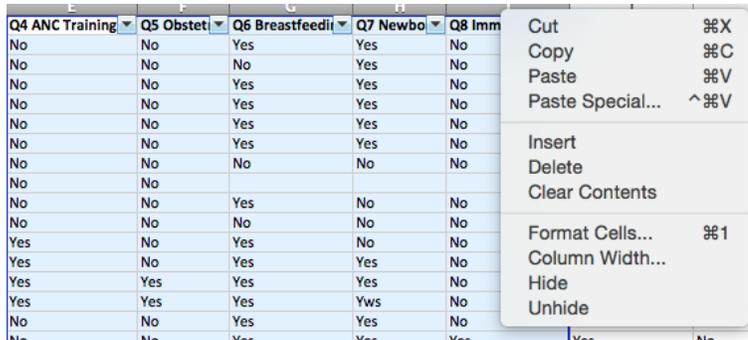
You can enable more than one filter at once. For example if you want to see just the nurse responses in the Lion Facility, you can set these filters using the drop downs from columns B and C in our case study data set.

Using the filter function allows you to see comparisons between groups much easier. You may want to use filters to get an idea of what the story is before delving into a lot of details analysis.

One important tip about filters is to ensure you have cleared our filters after each analyses or before saving your data. This will help to make sure you do not do other analyses on your filtered data.

### 3. Hiding columns

You may not want to see all of the data at once. Say for example you want to do a detailed analysis of just one question. The best way to do this is to hide the data you don't need. To hide data, highlight the columns you want hidden. Right click and select "hide".



The best suggestion is to copy and paste the data you want to analyze into a new tab. Some excel functions will still count hidden data so to be sure your analysis is correct, put only the data you want to use into a new tab. Don't forget to "unhide" your data in your Master Data Tab. You can highlight the columns that are hidden and select "Unhide" by right clicking.

### 4 – Using Excel Counts

Let's assume your filters are set and you have selected data from one question to analyze. Say for example, you want to analyze **all** of the responses to the question stock outs of female condoms. You can hide responses to the other questions so you are only seeing that column.

Your data may be formatted in a new tab to look like the image on the right.

If you want to know total how many health workers responded yes or no, you can manually count them since this data set is not large. But the best solution would be to set up a formula in excel to count this for you.

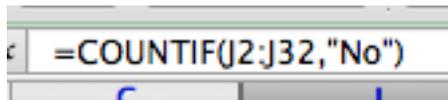
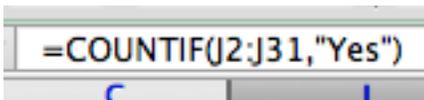
	A	B	C	J
	Facility Type	Facility Name	Cadre	Do you experience stockouts of female condoms? Please answer Yes or No.
1				
2	Level 1 Health Facility	Giraffe Clinic	Midwife	NO
3	Level 1 Health Facility	Giraffe Clinic	Clinical Officer	NO
4	Level 1 Health Facility	Giraffe Clinic	Nurse	
5	Level 1 Health Facility	Giraffe Clinic	Nurse	
6	Level 1 Health Facility	Giraffe Clinic	Nurse	NO
7	Level 1 Health Facility	Giraffe Clinic	Nurse	NO
8	Level 1 Health Facility	Hippo Clinic	Nurse	NO
9	Level 1 Health Facility	Hippo Clinic	Nurse	NO
10	Level 1 Health Facility	Hippo Clinic	Clinical Officer	NO
11	Level 2 Health Facility	Lion Clinic	Midwife	NO
12	Level 2 Health Facility	Lion Clinic	Nurse	NO
13	Level 2 Health Facility	Lion Clinic	Clinical Officer	
14	Level 2 Health Facility	Lion Clinic	Midwife	NO
15	Level 2 Health Facility	Lion Clinic	Midwife	NO
16	Level 2 Health Facility	Lion Clinic	Nurse	NO
17	Level 1 Health Facility	Monkey Clinic	Nurse	NO
18	Level 1 Health Facility	Monkey Clinic	Nurse	NO
19	Level 1 Health Facility	Monkey Clinic	Clinical Officer	NO
20	Level 1 Health Facility	Monkey Clinic	Clinical Officer	NO
21	Level 2 Health Facility	Turtle Clinic	Nurse	
22	Level 2 Health Facility	Turtle Clinic	Clinical Officer	
23	Level 2 Health Facility	Turtle Clinic	Clinical Officer	
24	Level 2 Health Facility	Turtle Clinic	Midwife	
25	Level 2 Health Facility	Turtle Clinic	Nurse	
26	Level 2 Health Facility	Turtle Clinic	Nurse	
27	Level 1 Health Facility	Zebra Clinic	Clinical Officer	YES
28	Level 1 Health Facility	Zebra Clinic	Clinical Officer	YES
29	Level 1 Health Facility	Zebra Clinic	Clinical Officer	YES
30	Level 1 Health Facility	Zebra Clinic	Nurse	YES
31	Level 1 Health Facility	Zebra Clinic	Nurse	YES
32				

You can create a formula to count the number of “yes” answers and the number of “no answers” without having to manually count them.

This is called, “COUNTIF”.



To complete this count in our example, you type in =COUNTIF then highlight the range of the data, type a comma, and put the response you want to count in “. Don’t forget the colon in the range for the cells. You should do this for both “YES” and “NO”.



If you do this correctly in our example, you will have 5 Yes responses and 16 No Responses. This tells you that 5 of the health workers in this data said indicated they do have stockouts of female condoms.

Note that if you add 5 and 16, you only get 21 responses. Why not 30? Because some of the responses are blank meaning the health worker did not finish the whole flow.

So if you want to calculate a percentage of the health workers that said yes from those who responded, use the advice above to calculate this percentage.

The formula =5/21 or 24%.

From looking at the data you can see that all of these responses are from the Zebra district. To use this information and make this data actionable, efforts should be made to reach out to the facility supply chain manager and find out more about why there are stockouts. It might be there is no demand. Or they may be waiting on a shipment. You can use this information to take action.

## 5 - Making graphs

We are able to make graphs using some of these counts but it's a good idea to create a table of information.

It's helpful to make your table first that you want to fill in. You only want two data points for these simple graphs in excel. Given our current example, we may wish to illustrate the Yes/No responses by facility. Our table might be something like this:

	Yes	No
Giraffe	0	4
Hippo	0	3
Lion	0	5
Monkey	0	4
Zebra	5	0

**Note:** we took the Turtle clinic out of the data set since there no responses.

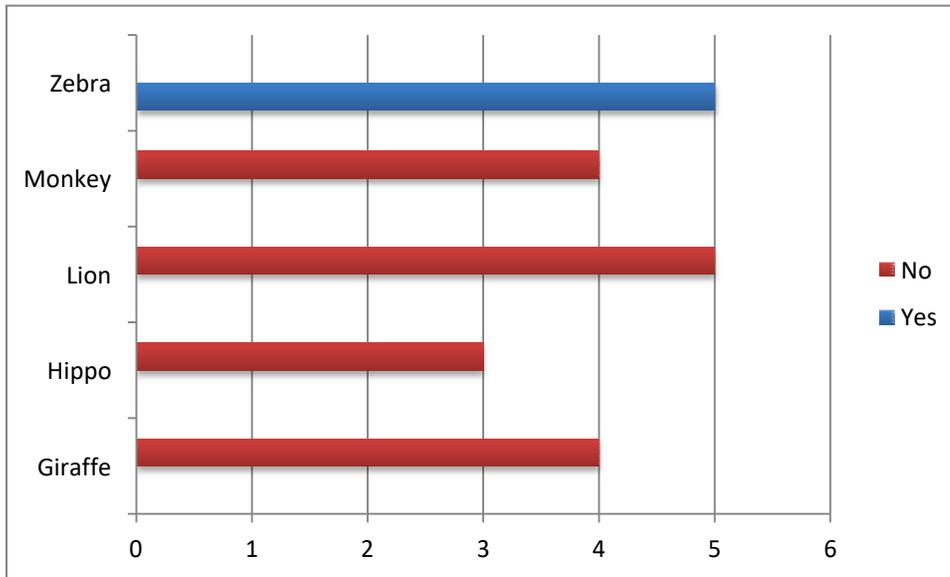
It might take some time to get the counts for a table with a large data set. As we've said in the course, data analysis takes time!

Now let's make a graph. For this example, a bar graph is the best.

To make a bar graph, highlight your data table clicking on the excel "charts" tab. You'll want to select "bar".



Here is what our bar graph should look like.



This shows not only the number of Yes responses at the Zebra facility but also the number of No responses at the other facilities. As we said in our data visualization presentation, graphs like these are good ways to illustrate data analysis.

You can do a lot with the graphic functions such as changing the colors, adding in titles and more. Play around in excel to see how to make charts and graphs more compelling.



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