How to make graphs on Google Sheets

October 8, 2020

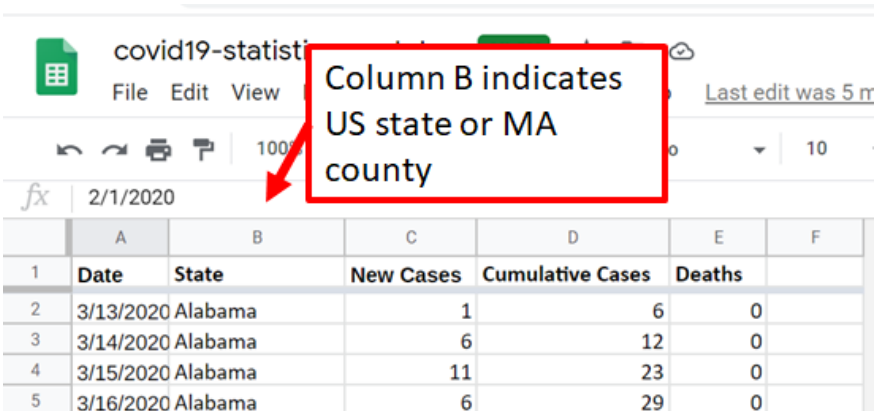
Download Excel files from the Life Sciences Outreach Program website at:
https://lifesciencesoutreach.fas.harvard.edu/lecture-1-100820

There are six files:

covid19-statistics_MAcounties.xlsx	Massachusetts counties[1]
covid19-statistics_USstates.xlsx	US states and territories[1]
covid19-statistics_USA.xlsx	US as a whole[1]
covid19-statistics_China.xlsx	China[2]
covid19-statistics_Italy.xlsx	Italy[2]
covid19-statistics_Southkorea.xlsx	South Korea[2]

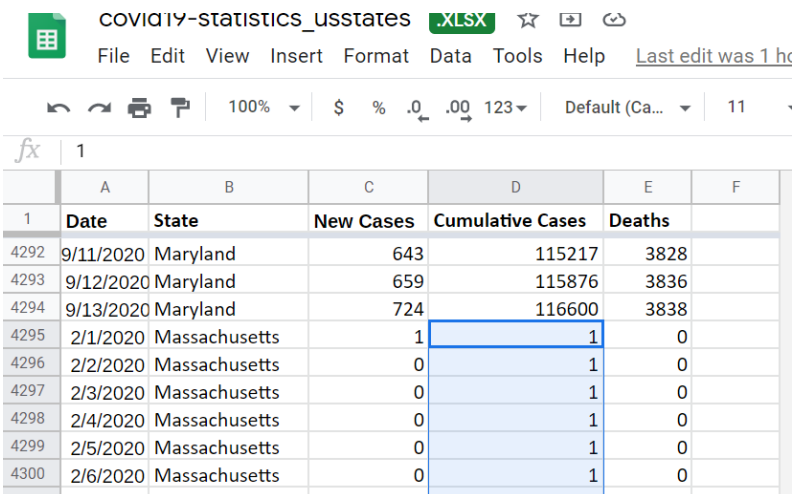
These contain the daily cases, cumulative cases, and cumulative deaths for the geographic region(s) indicated in the file title.

1. After downloading the file from the LSO website, open it in Google Sheets. Instructions for how to do that can be found here.
2. In the case of the MAcounties and USstates files, there are multiple geographic regions within one file. You will be able to tell the region of the data you are looking at from the label in column B.



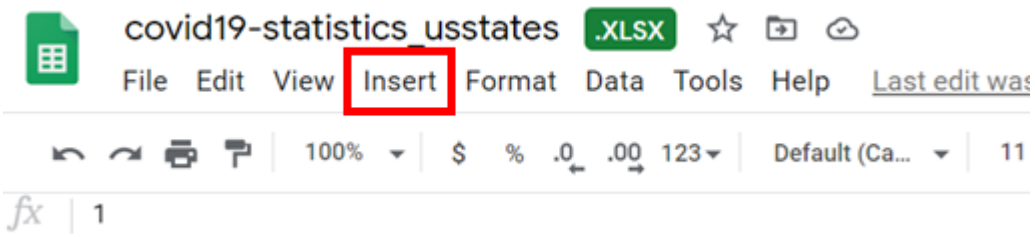
[1] downloaded from https://github.com/nytimes/covid-19-data
[2] downloaded form ECDC https://www.ecdc.europa.eu/en/publications-data/download-todays-data-geographic-distribution-covid-19-cases-worldwide

3. Find the geographic region you are looking for. For this tutorial, we will use the “covid19-statistics_USstates.xlsx” file and graph cumulative cases in Massachusetts.
4. Highlight the “Cumulative cases” in column D for all of the rows labeled “Massachusetts” in column B.

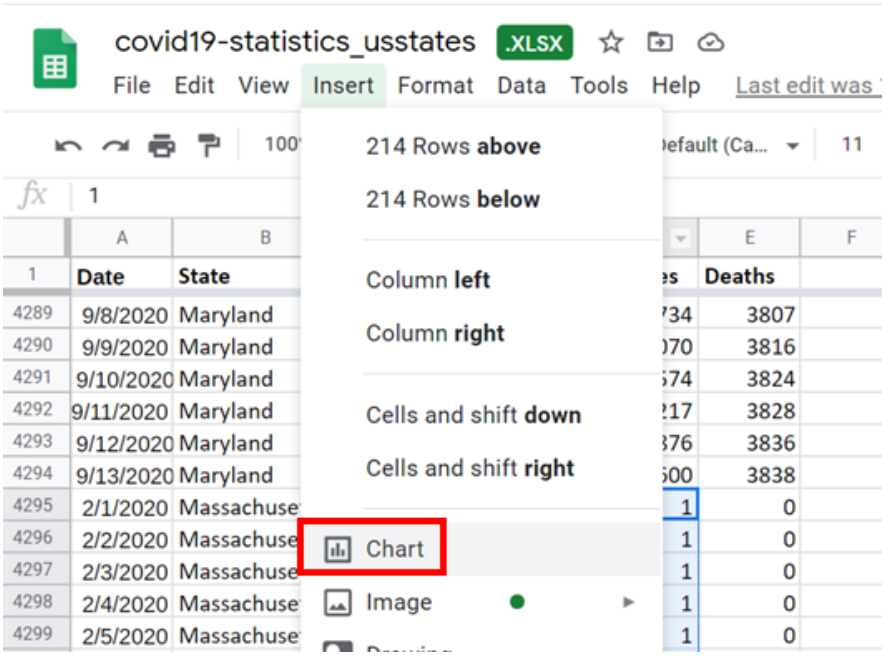


	A	B	C	D	E	F
1	Date	State	New Cases	Cumulative Cases	Deaths	
4292	9/11/2020	Maryland	643	115217	3828	
4293	9/12/2020	Maryland	659	115876	3836	
4294	9/13/2020	Maryland	724	116600	3838	
4295	2/1/2020	Massachusetts	1	1	0	
4296	2/2/2020	Massachusetts	0	1	0	
4297	2/3/2020	Massachusetts	0	1	0	
4298	2/4/2020	Massachusetts	0	1	0	
4299	2/5/2020	Massachusetts	0	1	0	
4300	2/6/2020	Massachusetts	0	1	0	

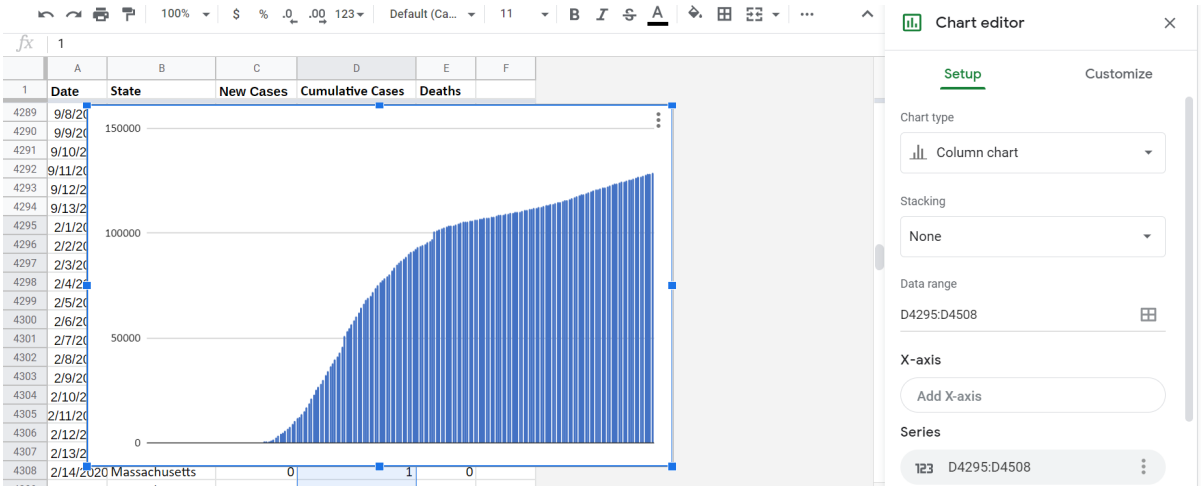
5. From the top menu bar, select “Insert”



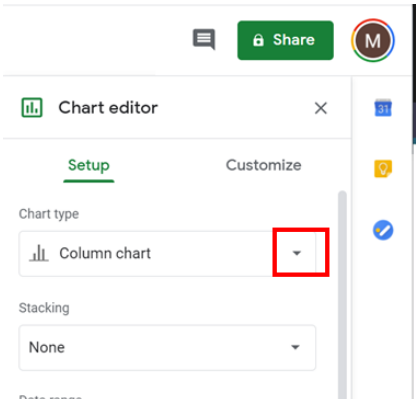
6. And select “Chart”



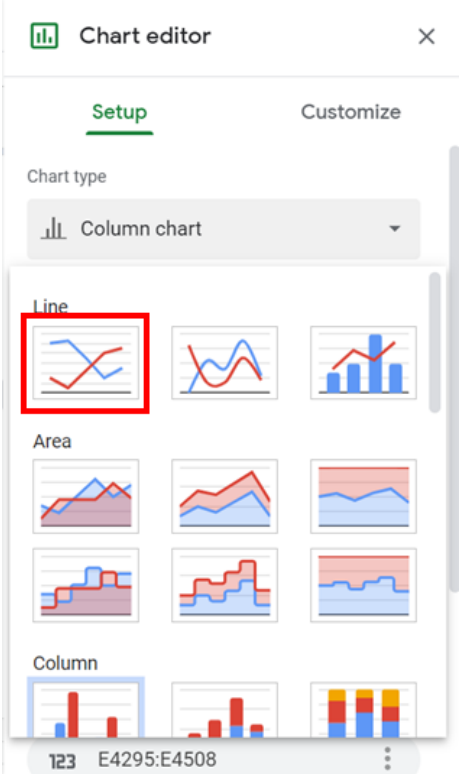
7. This will autogenerate a graph that will likely be shown in columns



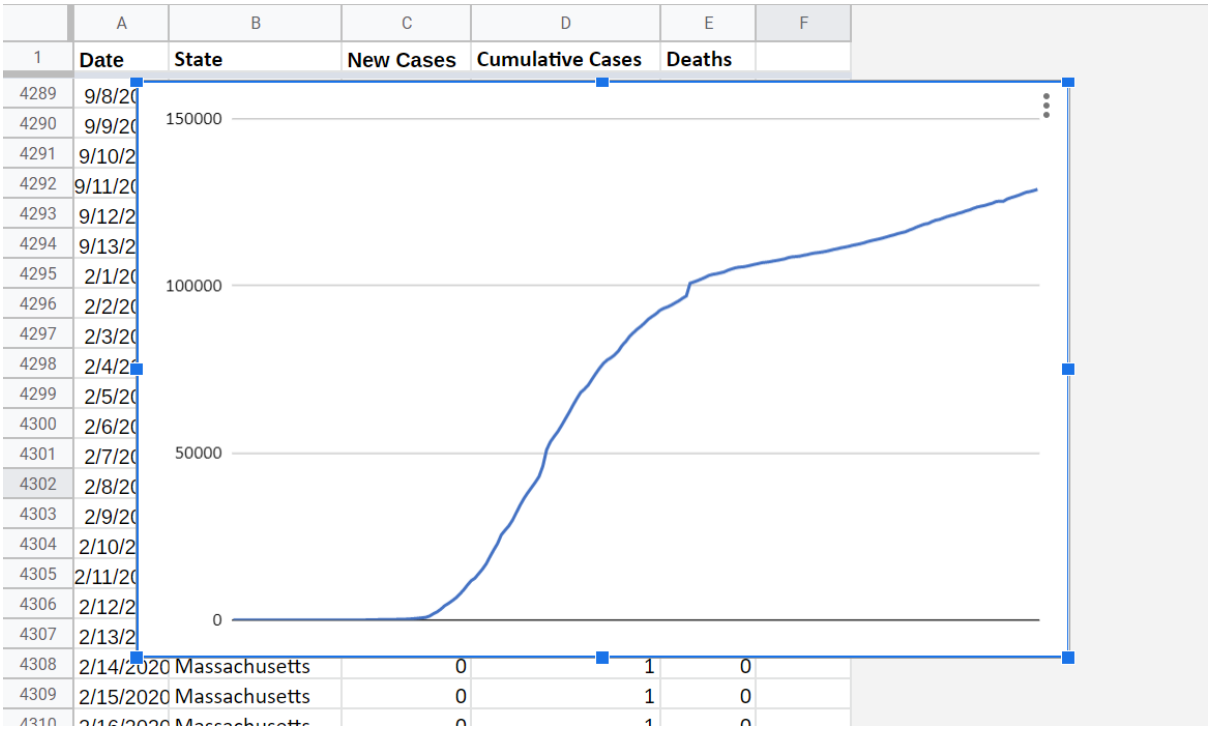
8. On the “Chart editor” on the right. Go to the “Chart type” section and select the downward facing arrow to trigger the drop down menu



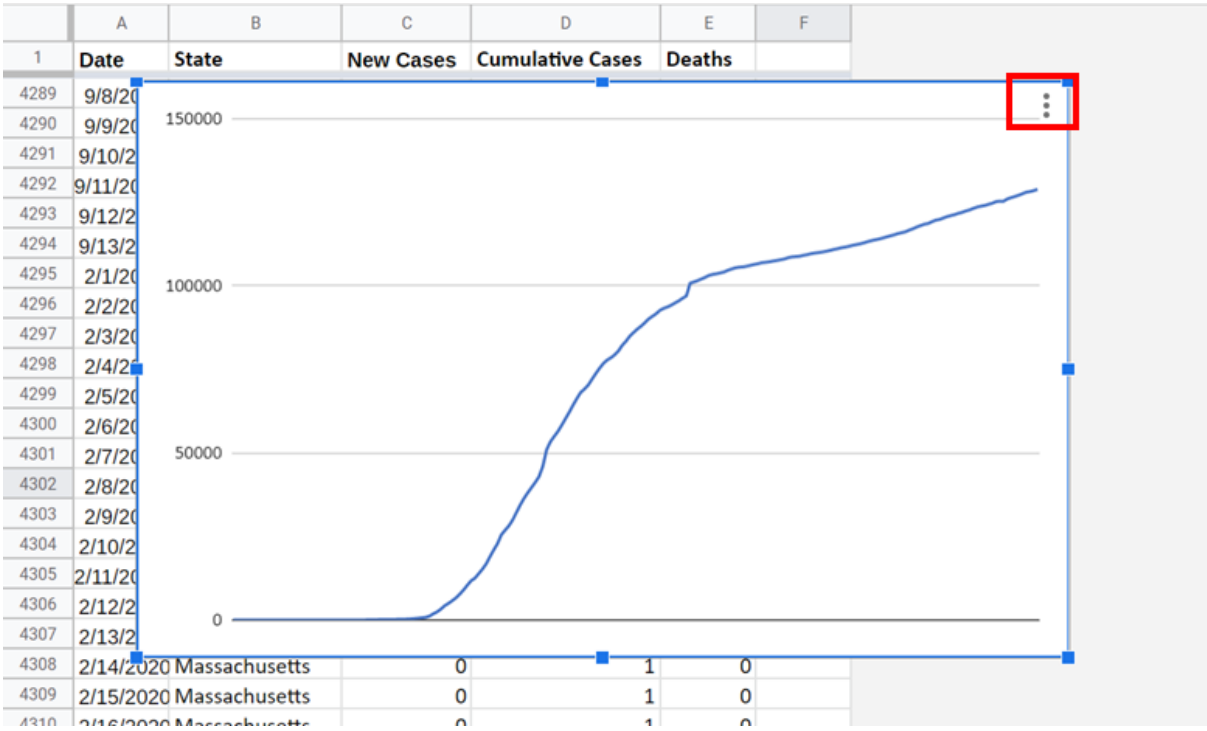
9. Select the first line graph option



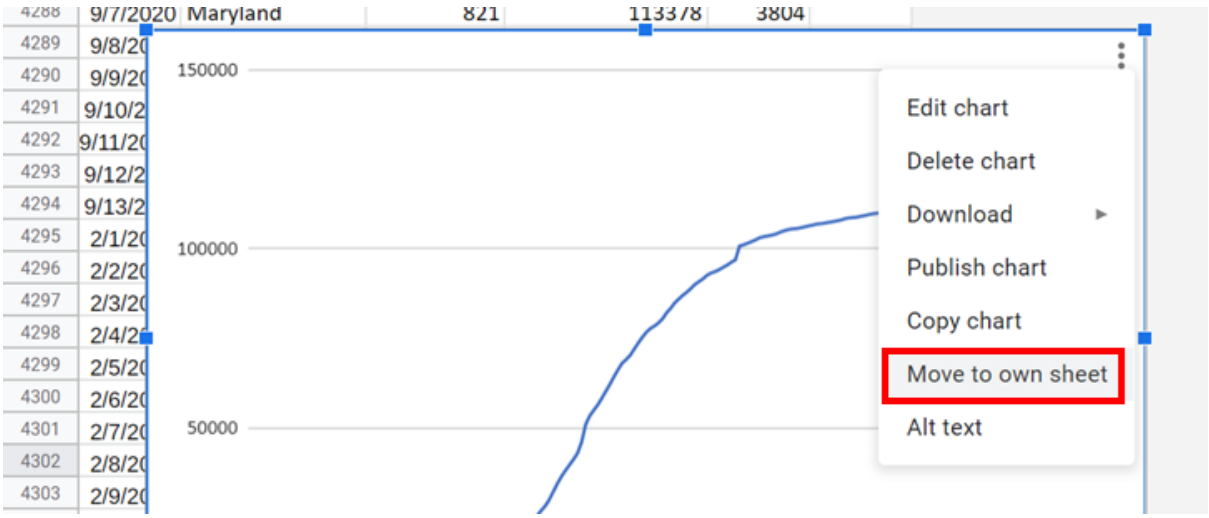
10. The graph should now be a line graph without proper labels



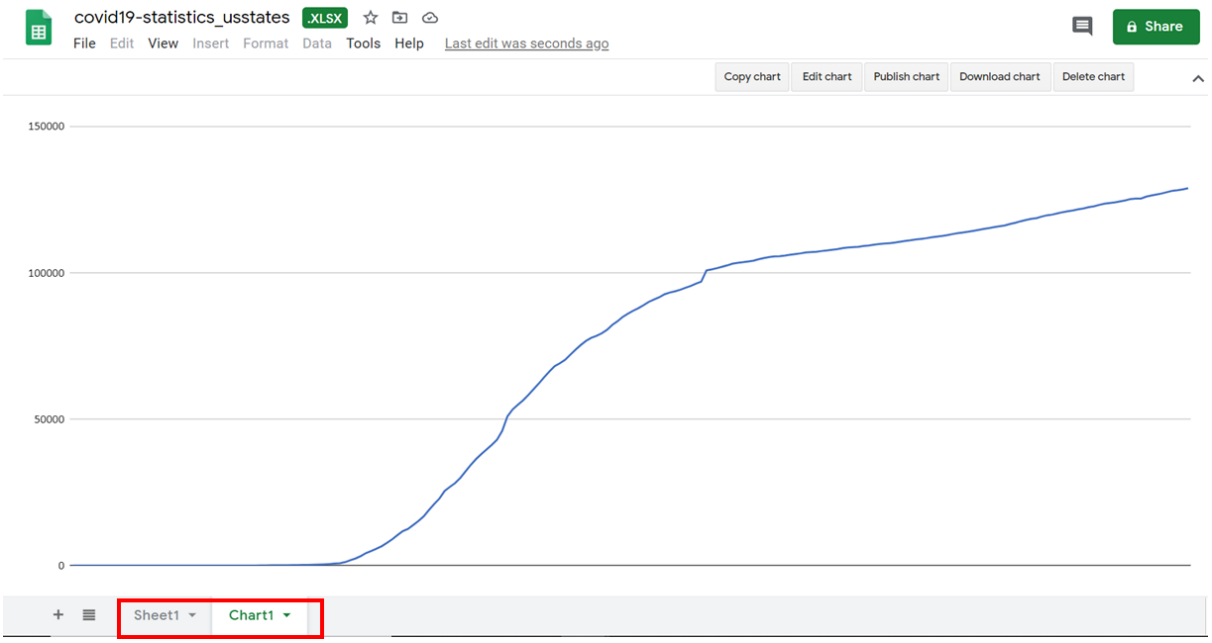
11. To make the graph easier to work with, we will move it to its own sheet. Do this by clicking on the three dots on the top right corner of the graph. If you don't see the three dots, it may be necessary to first click on the graph so that they appear.



12. Select “Move to own sheet”

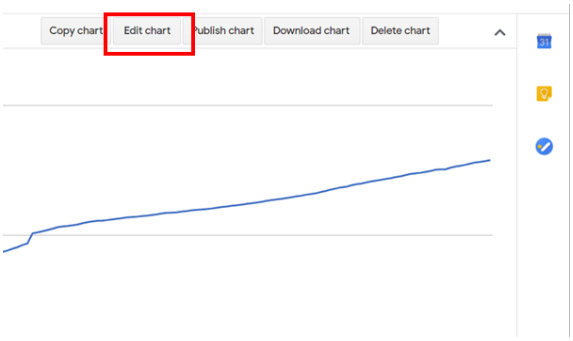


13. This will move the graph to its own sheet. You can toggle between the original datasheet and this graph by clicking on the tabs at the bottom of the browser. You can rename the sheet by double clicking on the tab and typing in the new name.

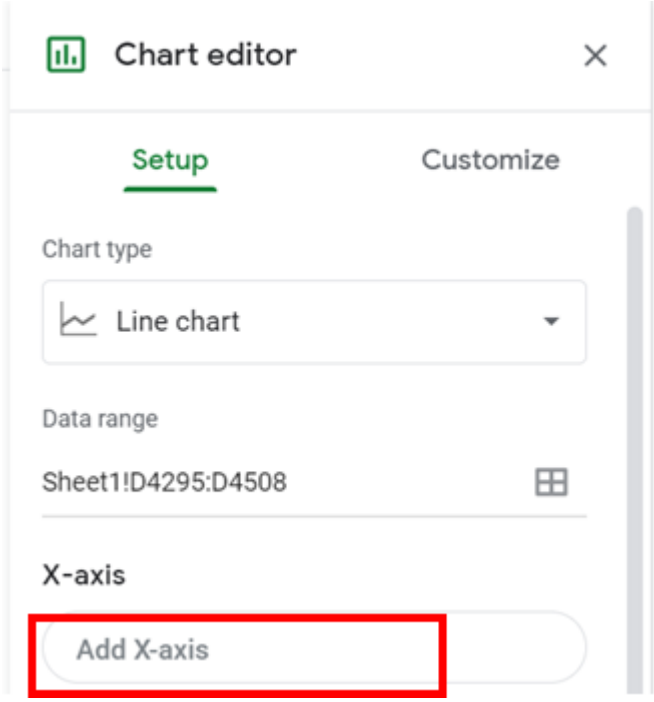


After renaming:

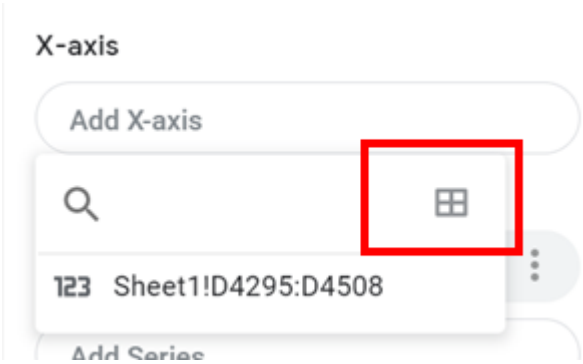
14. To edit the graph, select “Edit chart” at the top right



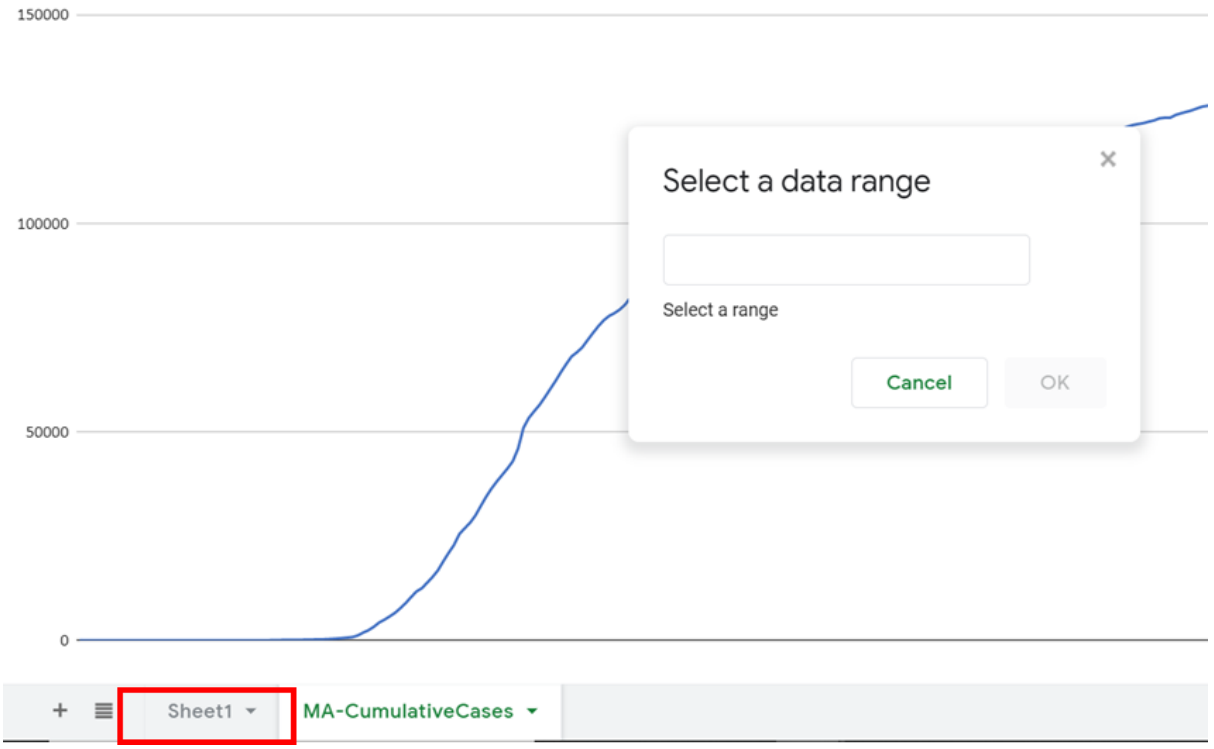
15. This will open up the Chart editor again. Click “Add X-axis.”



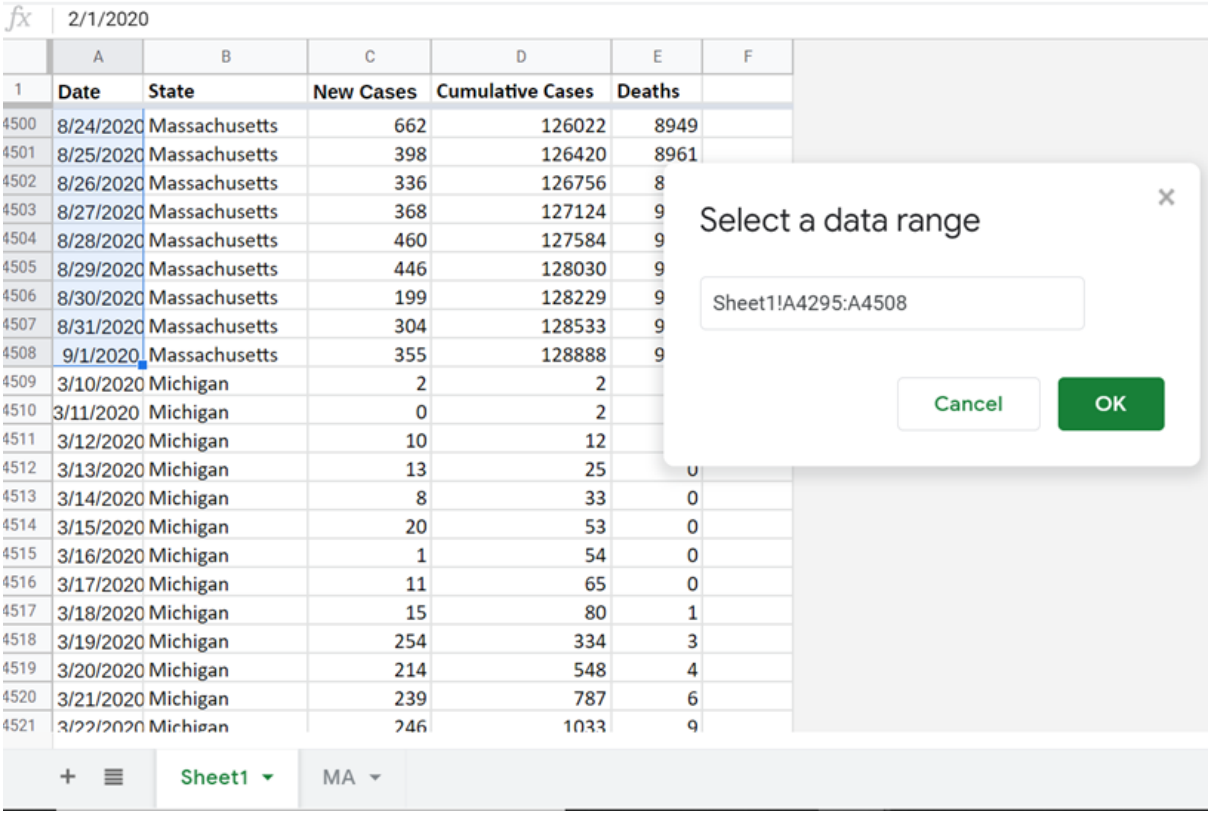
16. This will trigger a drop down menu where you should select the spreadsheet icon..



17. A window will pop up asking you to “Select a data range.” Click on “Sheet 1” at the bottom of the window so you will go back to the original spreadsheet.

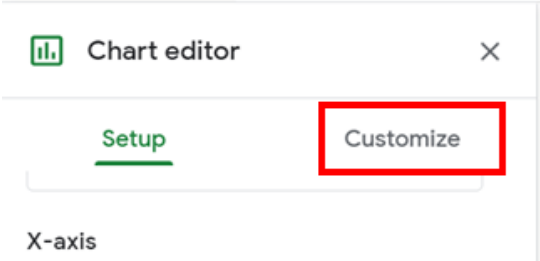


18. Once you’re in the original spreadsheet, click and drag to select all of the dates associated with the cumulative cases numbers you previously selected. Then click “OK”

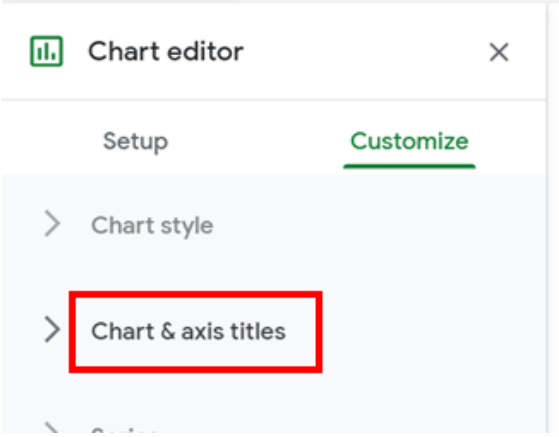


	Date	State	New Cases	Cumulative Cases	Deaths
4500	8/24/2020	Massachusetts	662	126022	8949
4501	8/25/2020	Massachusetts	398	126420	8961
4502	8/26/2020	Massachusetts	336	126756	8
4503	8/27/2020	Massachusetts	368	127124	9
4504	8/28/2020	Massachusetts	460	127584	9
4505	8/29/2020	Massachusetts	446	128030	9
4506	8/30/2020	Massachusetts	199	128229	9
4507	8/31/2020	Massachusetts	304	128533	9
4508	9/1/2020	Massachusetts	355	128888	9
4509	3/10/2020	Michigan	2	2	
4510	3/11/2020	Michigan	0	2	
4511	3/12/2020	Michigan	10	12	
4512	3/13/2020	Michigan	13	25	0
4513	3/14/2020	Michigan	8	33	0
4514	3/15/2020	Michigan	20	53	0
4515	3/16/2020	Michigan	1	54	0
4516	3/17/2020	Michigan	11	65	0
4517	3/18/2020	Michigan	15	80	1
4518	3/19/2020	Michigan	254	334	3
4519	3/20/2020	Michigan	214	548	4
4520	3/21/2020	Michigan	239	787	6
4521	3/22/2020	Michigan	246	1033	9

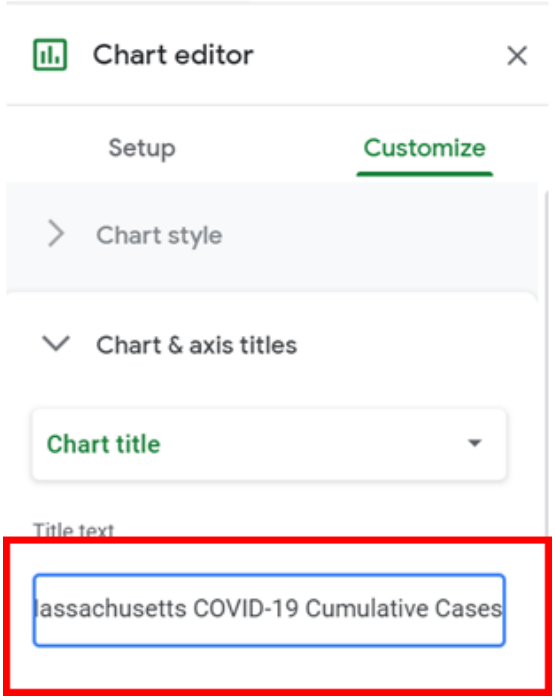
19. To change the graph title, go back to the Chart editor and select “Customize”



Click “Chart & axis titles”



Then type in your desired title text



20. The final graph will look like so: