

Hello all, and welcome back to *This is Berthoud*. I am Amie, your local librarian, and this is the podcast where I get to talk about all the things that you are talking about so that together we all have something new to think about.

We're going to talk about Covid-19 again today, mostly because that's what all of us are talking about just about all of the time right now. But we're going to take a closer look at the data that's been collected about Covid-19 and how that perfectly accurate data gets used to manipulate our thinking.

Let's start with a simple Colorado Covid-19 statistic. I've just hopped onto the governor's website and clicked on the little yellow banner across the top of the homepage that takes me to the Covid-19 information hub, and it's telling me, just so that you know, that the information on this page was last updated on July 15 at 4:02 p.m. It also says that the data shown reflects the number of cases and such through July 14, but the deaths due to Covid-19 in the state hasn't been updated since the 11th. So as I'm speaking this, Governor Polis's office is reporting 38,155 total Covid-19 cases in the state, and 1,744 deaths among those cases. We already get to see a little bit of what we're working through right at the top of this webpage, because immediately under the 1,744 deaths among cases is another number, which is 1,601 deaths due to Covid-19. That means approximately 150 people in this state had Covid-19 when they died, but Covid-19 isn't what killed them-- maybe traumatic injuries from a car accident, or fighting bone cancer, or something else like that. For today, we're going to use the lower number, 1,601, as our death count due to Covid-19 in the state when we're calculating our statistics, and kudos to the governor's office for separating those figures for us.

So I'm a bit of a data nerd-- I think that's a necessary requirement for being a librarian-- but I can admit the shortfalls of data. You see, any piece of data is only interesting and relevant and able to support a message when that data is compared to something else. So let's pretend for a minute, close your eyes, put on your make-believe hat, whatever you need to do, but let's pretend that you've been on a six-month retreat of solitude in the mountains and you're just now coming back into Berthoud. Maybe you've been living on jerky and wild berries for long enough and you decide you really want a burger, so you stop in at A&W. As you're getting out of your car, a friend spots you and walks over and says, "We have 38,155 cases of Covid-19 in the state of Colorado as of today." What would you make of this news? Anything? Without context, a number is just a number, no matter how accurate it is. I think that if this were me, my response would be a slightly sarcastic, "Okay, and..." after which I'd just have to wait for my friend to fill in the blank.

Now here's the key piece: whichever data points my friend chooses to add to the first one determines the message that my friend is trying to send me.

My friend could tell me that we've already had more hospitalizations due to Covid-19 than we had hospitalizations for influenza during 2018. My friend could tell me that despite having several thousand more residents, Larimer County has less than one third of the number of cases reported by Weld County. My friend could tell me that the United States has the highest number of cases in the world, and my friend could also tell me that many countries are underreporting their numbers. My friend could tell me that there's no vaccine and no herd immunity to Covid-19, so everyone is susceptible to the disease. My friend could tell me that the rate of Covid-19 infection in the state is just over half of one percent of the population, and the death rate in the state is .0003 percent of the population. My friend could say that the current unemployment rate in this state is 8.96 percent, about three times as high as it was

during the 2009 to 2010 recession and ten times higher than it was during 2019. My friend could also tell me that Berthoud has only had 33 confirmed cases in 5 months, or my friend could point out that a full 15 percent of our 33 cases were confirmed just within the past week.

What's the point here? All of these data points are valid and accurate, but my friend could drastically change what I would think about the spread of Covid-19 just by changing which bits of information I get. With the huge amount of data that is being collected about this virus right now, anyone could choose a point of view and back it up with valid data. (The one exception to this-- no one can look at the data and say that Covid-19 isn't a real virus.) But within the range of "Covid-19 isn't as big deal as the economy and we should let everyone get back to business" all the way to "we should shut everything down until there's a vaccine for this one," there is data available to justify every point of view.

Now I know some of you are mad at me again. Here's your local librarian, who is supposed to be helping you make sense of information, and she's muddying the waters again. What's a savvy, well-informed person supposed to do? Well, I'll tell you. Here are my three pieces of advice.

Number one: figure out the viewpoint of your source of data. Whether you're getting your information from a government institution, a news agency, or the person behind you in line at Hays, everyone has a specific point of view and they want to convince you that they are right. Now, I know I've had conversations with some of you and you've let me know that you think that government or news sources shouldn't have a bias, that they should be entirely neutral. Whether you're right about that or not doesn't matter much for today because that's not how things are. In reality, any source of data will have a bias, and it's important to know what that bias is going in. Figure out what data your source chose not to include, and that will tell you as much about their opinion as what they did choose to include.

Now, if figuring out the bias of your source of information is all that you do, you're already ahead of the game. But number two, the next step you can take, once you have identified the message of your data source, is to see if you can find other data that counters that message. Ask yourself what data might cause you to doubt a certain point of view, then go look for that. Or consider if a different way of viewing the same data might change the perspective a little. For example, is it different to consider the total number of Covid-19 cases as a percentage of the population instead of just as a straightforward number? Or is it different to consider the total number of Covid-19 cases in comparison to other infectious diseases instead of as a straightforward number? I can't decide that for you, so think it through. It's particularly important for you to work through this if your inclination is to believe everything that your information source tells you, including the underlying message. Challenge your own beliefs, and you'll find yourself able to weave together a more balanced point of view. If you're not sure why that matters, go back and listen to the episode that we did on fake news, where we discuss implicit bias and confirmation bias and the ways they can get us in trouble, and you'll see what I mean. Let's all practice our critical thinking skills.

And third, use this pandemic as a chance to exercise your own empathy. One of the distinct advantages of living in a smaller community like Berthoud is our ability to genuinely know and take care of our neighbors. If you think that wearing a mask inside a public building is a bunch of hooey, remember that there's plenty of data to justify the wearing of masks and show some kindness to your neighbors who are afraid by putting your mask on your face. If you think that there's no need for certain businesses to be operating at all because there's the potential of the

virus spreading there, remember that some of your neighbors are depending on those business operations for their livelihoods and do what you can to support them. Based on the data that is available right now, we may all be a little right and we may all be a little wrong, so give your community members some grace. Bashing someone over the head with your favorite set of figures is not likely to convince people to change their minds, so be kind. It's up to you to make sure that your own viewpoint is as balanced and informed as possible, but it's not up to you to change anyone else's. Congratulations, you're off the hook there.

So there you have it, three pieces of advice for understanding Covid-19 data. Thank you all for listening. Remember that you'll always get advice about processing information in these episodes, but you'll need to find a different expert to get advice about anything medical or legal or financial or the like. If you're wondering where I found the statistics that I shared today, you can find the links in the transcript of this episode, or you can email me at podcast.bclld@gmail.com and I'll send those links to you. All of the statistics I shared with you today were gathered on July 16 of 2020. As always, I'm grateful to be able to serve this critically-thinking community, and I am proud to say This is Berthoud.

<https://covid19.colorado.gov/covid-19-data>

https://drive.google.com/file/d/10NI_UdlO4kRsbTLgW4-OltTkFoO--NRP/view

https://mcusercontent.com/b8edaed9d386fc047dcd5cc35/files/213ac63d-5f2d-47b7-ab9f-9623fd51a4c7/Colorado_Unemployment_Insurance_Charts_Through_July_11_2020.pdf

<https://www.larimer.org/health/communicable-disease/coronavirus-covid-19/larimer-county-positive-covid-19-numbers>