

HOST: In Part Three of our conversation with Dr. Robert Anderson, the chief of mortality statistics at NCHS, we discussed the subject of excess deaths in the United States during the pandemic, and also the differences between when COVID-19 is listed as the underlying cause of death on the death certificate and those occasions when it is listed as a contributing cause but not the primary cause of death.

HOST: So now you mentioned excess deaths - what are excess deaths, how has COVID-19 contributed to these excess deaths?

ROBERT ANDERSON: So excess deaths are defined as the difference between the observed number of deaths in a specific time period and the expected or normal number of deaths in the same time period. So with the pandemic we're looking at the total number of weekly deaths that occurred in 2020 and so far in 2021, and we're comparing it with what we would expect in a comparable time period, essentially based on average weekly data from previous years. The advantage of looking at excess deaths is that it's not dependent on the accuracy of cause of death reporting - the focus is just on the total deaths, not deaths by cause. Now at this point COVID-19 explains about 3/4 of total excess deaths and the other quarter likely includes three components: there are deaths that should have been attributed to COVID-19 but were instead attributed to some other cause for whatever reason. Second, indirect deaths. And these are deaths that can be attributed to the circumstances of the pandemic but not directly to the virus. And this may be things like people not able to get health care during a crisis not related to the virus. Or perhaps they're afraid to seek care because the hospitals are full of people with COVID. And then, three: a third component is other causes of excess deaths. So you know there may be some excess deaths not associated with pandemic. This could include things like deaths due to natural disasters. This is generally going to be relatively small in comparison to what we're dealing with the pandemic but these are sort of another category of excess deaths.

HOST: There was some other speculation out there - rumors or what have you - that 2020 might have been actually a normal year in terms of total mortality in comparison to past years despite COVID-19. How were people getting confused about that?

ROBERT ANDERSON: Yeah the problem was that some folks were comparing incomplete counts for 2020 with complete counts for earlier years. And so it did look like there were about a normal number of deaths. The problem was that they weren't including all of the deaths that occurred for 2020. So we've made some changes to our website to try to make it more clear what the total number of deaths were for 2020.

HOST: So NCHS ranks leading causes of death according to the underlying cause of death, and you mentioned earlier that in 92%, approximately, of COVID-19 related deaths, COVID-19 was listed as the underlying cause of death. And in roughly the other 8% of COVID-19 related deaths COVID-19 was not listed as the underlying cause of death. Could you talk about that a little bit?

ROBERT ANDERSON: Sure. Let me start by saying that leading causes are ranked by the total number of deaths, and it's based on a standard cause of death tabulation list that we typically used. And if folks are interested in that we have a publication called "Deaths: Leading Causes for... insert the year - I think the most recent one that we have published right now is for 2018 -but you get the idea of exactly how NCHS does the rankings and how all of that came about. Now when tabulating and comparing causes of death it's important that we assign a single cause to each death so that we don't double count. We don't want to have deaths falling into multiple categories, so we select a single cause. And as we discussed earlier, certifiers typically report more than one condition on death certificates. Now fortunately, as we also discussed, the death certificate is designed to elicit the single underlying cause, and that's defined as the disease or injury that initiated that sequence of events leading to death. That sequence gets reported in Part One on the certificate, and if completed correctly the underlying cause will be at the beginning of the sequence on the lowest use line in Part One. So as I mentioned before you could have a sequence like respiratory distress due to viral pneumonia due to COVID-19. That's a logical sequence starting with the immediate cause - which is respiratory distress - and then working backwards through viral pneumonia, back to COVID-19, which is the underlying cause. So that is the condition then that we would select for tabulation when comparing causes of death. Now if the certificate is not completed correctly - and this does happen - we actually have a set of standardized selection rules to choose the best underlying cause for among those conditions listed. These rules are part of ICD-10, which we used to code mortality, and they're an international standard. So the all those rules get applied regardless of the cause of death in the same way and as a result we would select an underlying cause from among those conditions, assuming that the certificate is not completed correctly. Now with regard to the other 8 or 9 percent - I think it's something on the order of 91 point-something percent, underlying cause and then about 8 point-something percent not underlying cause. In cases where COVID-19 is not the underlying cause, we're typically seeing it reported in Part Two as a significant contributing factor. So if reported in Part Two, it may not be the underlying cause. It should be considered a significant factor that contributed to death. And this is an important distinction - if COVID-19 is not a factor it's not supposed to be reported on the death certificate.

MUSIC BRIDGE

HOST: Still to come next week in our discussion with Dr. Robert Anderson: How COVID-19 will be categorized among the other leading causes of death in the country, as well as more complicated scenarios facing certifiers on how to list COVID-19 on the death certificate.

MUSIC BRIDGE

HOST: The rate of multiple births in the United states declined in 2019, according to the latest final birth data released this week by NCHS. The new report also shows that more than 3 in 4 women began prenatal care during the first trimester of pregnancy. The percentage of women who smoke during pregnancy declined in 2019 - to 6% of all women who gave birth. Medicaid was the source of payment for over 4 in 10 births that occurred in 2019.

Another report published this week by NCHS looks at drug overdose death rates in the U.S. on a state by state basis. The report documents that the highest death rates from overdoses in 2019 were concentrated in jurisdictions that are in fairly close geographical proximity to one another: West Virginia, Delaware, DC, Ohio, Maryland and Pennsylvania. Nebraska had the lowest overdose death rate in the nation in 2019.