LISA WAGNER: Welcome and thank you for standing by.

At this time, all participants are in a listen-only mode.

Today's call is being recorded.

If you have any objections, you may disconnect at this time.

My name is Lisa Wagner and I am on the policy team at the National Center for Health Statistics (NCHS).

I am pleased to introduce today's speaker, Dr. Amy Branum, who currently serves as the Acting Associate Director for Science at NCHS.

Dr. Branum has been with NCHS since 2000 and has opened overseas clearance and approval of scientific products disseminated by NCHS.

Dr. Branum will provide an overview and highlights from today's 2018 final mortality release,

including details on maternal mortality life expectancy and leading causes of death.

The presentation will be followed by a question and answer session.

Just a reminder, the audience is currently in a listen-only mode.

Questions or comments may be entered through the chat box

and we will address them as time permits during the Q and A session.

I will now turn it over to Dr. Branum. Amy?

DR. AMY BRANUM: Thank you, Lisa, and welcome to all of you who have joined us on this webinar this afternoon.

I am going to go through several highlights from today's 2018 final mortality data release.

First, just an overview, but hopefully many of you are--or all of you,

better yet know what we are and who we are here at NCHS and what we do,

but for those of you who don't,

the National Center for Health Statistics monitors the nation's health by collecting,

analyzing, and disseminating health data for several purposes.

We compare these data across time, populations, providers, and geographic areas;

we identify health problems, risk factors, and disease patterns;

inform actions and policies to improve the health of the American people

and administer crosscutting, comprehensive, and foundational data collections

that address the full range of public health issues.

NCHS is a federal statistical agency and we are the designated federal statistical agency for health.

As such, we provide data that are unavailable elsewhere for informed decision making.

This is just a general overview of our major data systems here at NCHS.

Today, of course, you will be hearing about data from the National Vital Statistics System,

which includes mortality, birth data, and fetal death data.

The National Health Interview Survey, the National Health and Nutrition Examination Survey,

and our family of national healthcare surveys.

NCHS also conducts and administers the National Survey of Family Growth.

As I mentioned, the presentation today focuses on mortality data.

This slide describes how NCHS obtains our vital statistics data from states.

The states are responsible for collecting birth and death data within their jurisdictions.

Their contracts with NCHS, 57 jurisdictions share their data with us

so we can compile and disseminate national vital statistics.

The states conduct their operations autonomously,

but collect and provide data according to specifications and timelines agreed upon between the states and NCHS.

So, I'm going to start out today presenting our data on maternal mortality.

Over the next set of slides, I will present our official statistics on maternal mortality.

I will describe the extensive evaluation of the data that we undertook over the last year or so,

and finally, I will discuss the change in coding methods that was a result of the data evaluation.

So why is the reporting of the 2018 maternal mortality rate a big deal?

For reasons I will explain in subsequent slides,

NCHS has not published an official maternal mortality rate since 2007.

First, I would like to make clear which definition NCHS uses to count maternal deaths.

NCHS uses the WHO definition of maternal death, which is death of a woman while pregnant or within 42 days of pregnancy.

I would like to note that this is not synonymous with pregnancy-related death,

which is a term used to define maternal deaths that occur up to 1 year within the time of pregnancy.

And NCHS uses ICD-10 coding to classify causes of maternal death.

So, prior to 2003, research indicated that we may be undercounting maternal deaths and vital records.

It was recommended that a pregnancy checkbox item be used to help facilitate identification of maternal deaths.

While some states began implementing a checkbox item as part of their vital records at this time,

this was not adopted in a uniform way across all the states.

In 2003, both the standard birth and death certificate were revised.

The death certificate revision added the pregnancy checkbox item,

which was recommended for use by all states by the HHS Secretary.

This is a visual representation of the death certificate with the pregnancy checkbox item highlighted.

Although it is a little bit hard to see in this visual,

the certificate also includes a section where details of the cause of death can be filled in.

When a maternal death occurs, ideally this would be identified on the death record

through detailed information in the cause of death section, including information about the pregnancy.

In addition, the checkbox item would be accurately filled out to indicate whether the woman was currently pregnant,

pregnant within 42 days, pregnant within 43 days to a year, not pregnant, or unknown if pregnant.

The information from the cause of death section and the checkbox should work together to accurately identify maternal deaths.

However, as more states revised their certificates it became evident that in many records,

the checkbox was the only indication of pregnancy on the record.

When that happened, any of the causes of death recorded in the written section,

which in these cases were not necessarily related to pregnancy,

became converted to maternal causes and records then became coded as a maternal death.

Up until 2018 data, this was done routinely for women 10 to 54 years old.

For women older than 54, there was no reliance only on the checkbox

and the record was coded as maternal or nonmaternal using just the cause of death information.

This figure indicates the staggered implementation of the 2003 standard death certificate

and pregnancy checkbox by states over time.

As mentioned previously, NCHS stopped publishing an official maternal mortality rate in 2007

when it became evident that the inconsistency across states was making calculation of a national rate virtually impossible.

By 2018, all states were using the revised certificate and checkbox.

Although, I should note that California still used and still does use a different version of the checkbox than the one on the revised certificate.

However, they are transitioning to the standard checkbox item later this year.

I should also note that many states did not adopt the 2003 certificate until they implemented an electronic death reporting system.

So what was the effect of the use of the checkbox incrementally over time by the states?

As intended, the checkbox led to the identification of previously unreported maternal deaths, so ascertainment was improved.

As a result, the total number of identified maternal deaths in the U.S. began to increase.

However, since adoption of the checkbox was not uniform over time,

the ability to assess accurate trends became very difficult.

As more states started using the checkbox, it also became evident that the checkbox was often checked in error.

Research within some states indicated that these errors occurred in two directions.

They identified records as maternal that were not, or false positives,

and they also missed records that were maternal deaths, or false negatives.

However, evidence indicated that false positive cases seemed to be happening with more occurrence than false-negative cases.

As we near the adoption of the checkbox by all states,

NCHS underwent an evaluation of the checkbox to prepare for publication of the national rate.

So today, NCHS has released three accompanying reports with the release of the 2018 mortality data.

One report, a National Vital Statistics Report, evaluates the pregnancy status checkbox on identification of maternal deaths.

We found that the effect of checkbox implementation increased reporting, particularly for older women.

However, for the majority of this older age group,

the checkbox was likely checked in error and demonstrated the need to not rely solely on the checkbox

to identify maternal deaths for women younger than the current cutoff of 54 years.

NCHS also released today a vital and health statistics report which used sophisticated modeling techniques

to determine the impact of the staggered implementation of the checkbox by states over time.

By using a technique called regression discontinuity,

these models hypothetically predicted what the impacted use of the checkbox

would have been if all states had adopted it at the same time.

From these analyses, NCHS concluded that the observed increases in maternal mortality rates

that are seen if trends include both states that did and did not incorporate the checkbox

was largely due to the staggered implementation of the checkbox and better ascertainment

and not necessarily due to an increasing number of real maternal deaths.

Our third report out today on maternal mortality, another National Vital Statistics Report,

addresses changes in coding practice, publication, and data release for our maternal mortality data.

This table taken from the report illustrates the issue described earlier of checkbox errors occurring among the older age groups.

These numbers are taken from the 2013 mortality data,

where it was discovered records had a pregnancy indication from the checkbox among women at implausibly older ages.

And you can see here from the table the checkbox included records to women as old as 85 and over.

Although these women were not ultimately counted as maternal deaths due to the age restriction on the checkbox,

it demonstrates how the checkbox was being used in error.

Now that NCHS is poised to start releasing a national maternal mortality rate again,

and as a result of the errors uncovered by the evaluations,

NCHS is making changes to how maternal deaths are coded and ascertained.

The main coding change will be to use the checkbox to dictate whether a record was maternal,

the checkbox only cases among women 10 to 44 instead of women 10 to 54.

This change is supported by both the evidence we uncovered during our evaluations

as well as by other research conducted at the state level.

It's important to note that we recognize pregnancies are occurring more frequently for older women these days.

Therefore, if there is pregnancy information in the cause of death section

for records of women aged 55 and older, these still will still be coded as maternal deaths.

In addition to these reports and the standard 2018 public use mortality data out today,

NCHS is also releasing maternal mortality data from 2015 to 2018 coded in multiple ways

so researchers can analyze the impact of these different coding methods for themselves.

The data will be coded according to the original method,

recoded as if the checkbox were never used,

and coded according to the new revised method that the 2018 rate is based on.

Again, we feel this will allow researchers to evaluate the data in many different ways.

Now I will walk through a series of our data findings on maternal mortality.

Based on the new coding method, the national maternal mortality rate for 2018 is 17.4 deaths per 100,000 live births.

Looking at the data by race and Hispanic origin, we see there are significant differences among the three groups shown here.

We see the rate for non-Hispanic black women is approximately 2 and 1/2 times that of non-Hispanic white women,

and the rate among Hispanic women is slightly lower than that of non-Hispanic white women.

Here we show rates by age and, as you can see, the risk of maternal mortality increases greatly with age,

particularly to women of age 40 and over.

Rates among women 40 and over were approximately five times that of women 25 to 39.

This figure illustrates a very important point.

We cannot assess a real trend in the maternal mortality rate using the new coding method due to the issues I previously described.

However, we can examine at least a partial trend based on data we show in the first report I described,

where the data were coded as if there had been no checkbox.

If we look at the data recoded without the checkbox indicated by the lower lines,

we see that the trend looks fairly consistent for the most recent time periods for which we have this information.

As well as compared to 2002, the last year of data we have before checkbox implementation began.

However, we can also see the impact of the increased ascertainment of maternal deaths that the checkbox introduced,

as we are now reporting a rate that is about double that without the checkbox.

Again, it is important to remember that this increased rate is largely due to improved ascertainment of maternal deaths.

This 2018 rate cannot and should not be compared to any earlier time point as the coding methods are not comparable.

Efforts to improve the accuracy and quality of maternal death data will not stop with these reports and evaluations.

There are several initiatives that could improve reporting.

NCHS has recently requested funding to develop a web service designed to prompt the cause of death certifier

to confirm the information provided in the checkbox item to improve its accuracy.

We also will encourage cooperation between state vital records offices and maternal child health agencies

to conduct more rapid assessments of linkages between the death and birth or fetal death records.

We want to continue to innovate and create sustainable solutions to reporting and analysis challenges

but all of this does create the need for additional resources.

Today's release has been a massive effort by many staff here at NCHS.

While we still have more work to do to improve reporting, we have developed a specific NCHS maternal mortality webpage with many resources,

including additional descriptions of our coding changes and frequently asked questions.

The website also contains links to the three reports I described previously, as well as other information.

We will continue to use this page to provide updates as we have them on the maternal mortality data, and we encourage you to visit the page

to get more details on all of the information I have presented on today.

So now I'm going to talk about some of the highlights from today's general mortality release.

Each year, when the final mortality data are released, NCHS publishes a Data Brief highlighting the key mortality statistics.

Today we released Mortality in the United States, 2018, and I'm going to run through a few of the results.

This figure provides the age-adjusted mortality rates by race and Hispanic origin and sex.

Overall and for most groups, mortality rates decreased significantly between 2017 and 2018.

For non-Hispanic black and Hispanic males the rates did not change significantly between 2017 and 2018.

This figure shows mortality rates for the leading causes of death in 2018.

The 10 leading causes of death, which account for approximately three-quarters of all deaths in the United States, remain the same as in 2017.

There were significant decreases in the rates of heart disease, cancer, unintentional injury,

chronic lower respiratory diseases, stroke, and Alzheimer's disease.

Rates of flu and pneumonia and suicide increased between 2017 and 2018.

There was no change in the mortality rate for diabetes and kidney disease.

This brief also reports changes in infant mortality.

The infant mortality rate decreased 2.3%, from 579.3 infant deaths per 100,000 live births in 2017 to 566.2 in 2018.

Causes of infant death are ranked according to the number of infant deaths.

The 10 leading causes of infant deaths in 2018 accounted for approximately 70% of all infant deaths in the U.S.

These leading causes remain the same as in 2017.

The infant mortality rate decreased 9.9% for unintentional injuries and 12.8% for cord and placental complications.

Mortality rates for other leading causes of infant death did not change significantly between 2017 and 2018.

So now I'm going to switch gears a little bit and focus specifically on drug overdose death.

For the last few years, NCHS has also published a Data Brief focusing on drug overdose deaths

and we've been releasing those generally on the same day as the overall mortality release.

The Data Brief shows that the drug overdose rate in 2018, a rate of 20.7 per 100,000, was 4.6% lower than the rate in 2017.

It also illustrates the longer-term trend, which shows gradual increases in the rate through about 2016 and then a more precipitous increase.

This pattern is generally true for males and females but, as you can see, the rates are higher among males.

This figure illustrates trends in drug overdose death rates by type of specific opioid.

Drug overdose death rates involving synthetic opioids other than methadone,

which includes drugs such as Fentanyl, Fentanyl analogs, and Tramadol, continue to increase from 9.0 in 2017 to 9.9 in 2018.

The rates of drug overdose deaths involving heroin, natural and semi synthetic opioids, and methadone were lower in 2018 than in 2017.

And finally, this figure focuses on trends in drug overdose deaths due to psychostimulants, including cocaine,

and psychostimulants with abuse potential, which includes methamphetamines.

We can see that the rate of these drug overdose deaths has increased steadily and more sharply since about 2014.

There is some indication that the increasing trend of cocaine deaths may be leveling off somewhat more recently.

For those of you who are not familiar, NCHS publishes monthly provisional numbers of drug overdose deaths based on a 6-month lag period.

This month, we published numbers from June of 2019.

The monthly provisional provides these numbers for all drug deaths by specific type of drug and by state.

I am including this to illustrate that, while the final 2018 indicated a decline in drug deaths between 2017 and 2018,

the more recent provisional data from 2019 indicates that we are not continuing to see this decline in drug overdose deaths

and this is based on the data that we have through about halfway in 2019.

If you are interested in these provisional data then I encourage you to please visit the monthly provisional drug overdose death website for more information.

Finally, I would like to spend a few minutes describing our results on life expectancy from the final 2018 data.

This figure is included in the general mortality Data Brief that I referenced at the beginning of this portion of the talk.

In 2018, life expectancy at birth was 78.7 years for the total U.S. population,

an increase of 0.1 year from 78.6 years in 2017.

For those males and females, life expectancy increased by 0.1 year.

In 2018, life expectancy at age 65 for the total population increased 0.1 year from 2017.

For those males and females, life expectancy at age 65 also increased by 0.1 year.

Due to recent declines in life expectancy and the reversal of this trend in the most recent year,

NCHS wanted to put out a bit more information and context about life expectancy over the last decade or so.

To do this, we released a special report today, an NCHS Health E-Stat on changes at life expectancy at birth from 2010 to 2018.

This table from the report shows life expectancy by year and sex.

We can see that between 2010 and 2014, life expectancy increased overall and for males and females.

However, between 2014 and 2017 life expectancy declined overall

among males but remained stable for females after a decline between 2014 and 2015.

The increase of 0.1 year that we report in today's release brings overall life expectancy back up where it was in 2016

but still below the recent peak of 2014.

When looking at life expectancy, it is important to assess which causes of death contributed to those positive increases and negative declines.

Between 2014 and 2017, we see that causes like cancer, heart disease, and HIV contributed positively to increases in life expectancy,

which means mortality rates for these causes decreased.

However, we also know that mortality rates due to unintentional injuries and suicide increased during this time.

And that these increases offset the decreases in rates attributable to the causes in the other part of the table,

and this resulted in an overall decline in life expectancy.

This table shows how much these causes contributed relative to the overall positive contribution

and the negative contribution to overall life expectancy.

Cancer was the biggest contributor to the positive gains,

whereas unintentional injuries was the largest contributor to the negative gains.

This is a similar table that is showing only these contributors to life expectancy between 2017 and 2018.

Now we see the impact of the decreasing drug overdose death rate as unintentional injuries

are now moved up in the upper part of the table as a positive contributor.

Decreases in cancer, unintentional injury deaths, and deaths due to the other categories shown here

offset the increases in death rates we saw due to flu and pneumonia, suicide,

and the other causes shown in the lower part of the table.

This resulted in a net gain in life expectancy in 2018.

This is a listing of all of the reports I described in today's webinar.

We encourage you to please check out all of these reports or any that you may be interested in, in particular for more information.

With that, I conclude my presentation, and I look forward to your questions.

LISA WAGNER: Thank you, Amy. We are now entering the question and answer session.

As time allows, the presenter will address questions from the chat box.

If you have any questions, please write them, type them into the chat box in the Skype, and we will get to them as time allows.

If your question or comment is not addressed, please direct it to paoquery@cdc.gov. That is paoquery@cdc.gov.

Amy, we've gotten several questions from folks through the chat already about accessing the data.

Can you talk a little bit about what data are available now, both maternal mortality related and mortality related,

and then how people can get access to that, whether that will be through Wonder at some time later, what they can get now,

and how they could get access to perhaps more restricted data?

DR. AMY BRANUM: Absolutely, so today, with today's release, we put out a public use file on the 2018 mortality data overall, just as we do every year.

Those data are up on our website.

They are freely available to anyone who is ready to download them and start analyzing.

I believe that we do not have the mortality data loaded into CDC Wonder today.

We are hoping that it will be up in Wonder within, certainly, hopefully in a week or so.

At this time, it is not in Wonder and I am not exactly sure when it will be there.

And then, in addition to the 2018 overall mortality file, we have also made available,

and I just want to take a second here to pull it up--

we have also made available the 2015 to 2018 recoded maternal mortality file that I mentioned in the talk

and I think as I mentioned, this is not a public use file.

This is a restricted use file and it doesn't have to be used in our research data center,

but it does have to be used under a data use agreement, and information about that can be found at that maternal mortality website on our page.

LISA WAGNER: Can you say a little bit more about access to state-level data?

We have had some questions also on county-level data within the states and can you say what exactly is available at levels not national?

DR. AMY BRANUM: Sure, so we do disseminate our vital statistics files at the state and county level,

again the data with geography have to be accessed and used through a data use agreement with NCHS.

It's a fairly simple process to go through that, which is outlined on our National Vital Statistics webpage.

So basically researchers put in a brief proposal,

the staff in our Division of Vital Statistics take a look at that proposal

and make sure it meets our requirements, and then the data are shared under a special use agreement.

But, yes, we have data down to the county level.

LISA WAGNER: Do you know for, I guess we have gotten some questions around the age of a woman that was impacted by the change in the maternal mortality rates.

Can you talk a little bit more maybe again, reiterate around the coding method change for the age,

and then could you also maybe reiterate the age difference category as well that you spoke to as part of the maternal mortality data?

DR. AMY BRANUM: Sure, so up until 2018, the use of the checkbox, so if a record came in and the only indication of a pregnancy was through the checkbox,

for women 10 to 44 years old or 10 to 54 years old,

the information from the checkbox would have overridden anything else and so if there was checkbox only,

and no information about pregnancy in the written causes of death,

then that record would have been coded as a maternal death for women 10 to 54.

Now that is under what we call the old coding system or the system that was used up until the 2018 data.

So, then, when we started to see this evidence of the checkbox being used in error, particularly for women 40 and over and really 45 and over,

we made the decision to then narrow the use of the checkbox and those cases to women 10 to 44.

But as I mentioned this doesn't mean that for women older than 44 they never get coded as a maternal death.

It's just that we rely solely on the cause of death information for those records, and then if there is indication in that section of a pregnancy

or recent pregnancy then we would code according to the maternal death.

LISA WAGNER: Are there any state-level data available about maternal mortality rates by race?

DR. AMY BRANUM: No, so one thing we did put out today that was kind of a separate product

and not incorporated in any of the reports, is we did put out a table by state.

That table is available up on our website.

It includes both maternal deaths and late maternal deaths by state.

And I encourage people to go look at that table because what you will see,

Unfortunately, are a lot of states that don't have data that we can show,

and this is because we have to suppress the rates and the numbers for states that had, in this case, we did it for less than 10.

So if a state had less than 10 maternal deaths in 2018, we cannot show the rate in the table.

So the numbers when you break it up by state, because there are 658 maternal deaths overall that we counted in 2018, according to our new method,

so when you distribute that over 50 states, the numbers start to get fairly small, especially for the smaller states.

So, unfortunately, it is very difficult to make a reliable maternal mortality rate for all states, let alone states by race and Hispanic origin.

LISA WAGNER: Thank you.

So, speaking about maternal mortality data, can you explain how the California data is incorporated into a national rate?

I think we talked a little bit about--the not-adoption of the standard pregnancy checkbox item yet.

DR. AMY BRANUM: Right, and first I will describe how their item is different from the standard checkbox item.

So whereas with the standard item on the revised certificate, it allows you to see the timing of pregnancy.

So in that visual that I showed early on, it breaks down pregnancy according to current pregnancy, within 42 days, and then within 43 days to a year.

And the California item does not let you differentiate the timing of pregnancy.

It is current, I believe, and then within one year.

So that prevents us from being able to do a true maternal death rate from California because, again,

maternal deaths as NCHS counts them is based on deaths that occur within 42 days of pregnancy.

So by including California in the national rate, we know that it is, you know, again, we don't have a 100% national rate that is consistent.

But we feel that the impact of not including California is probably resulting in a slight underestimation of the national rate, but nothing,

you know, we think it is certainly within one percentage point just based on the evidence that we've seen.

LISA WAGNER: We've gotten a couple of questions about the maternal mortality data as compared to other OECD countries, so other countries in a similar economic setting as ours.

Can you speak a little bit about how people should be interpreting this and comparing it to other countries and what they should or should not be doing?

DR. AMY BRANUM: Well, I think any time we compare our data to other countries,

we have to be very cognizant of differences in the way that we report and collect our data versus how other countries do it.

Unfortunately, and I actually tried to look at this the other day, to see if I could find something,

it is very difficult to find information on methodology, differences, and similarities across countries in terms of how they code and report maternal deaths.

For example, we know that other countries use a checkbox similar, maybe,

to what we use in the United States, but it can be very difficult to find specific information on what that checkbox looks like

and whether or not they have errors, the errors we see in the United States.

So there are just several factors that make it difficult to do comparisons where you know you are really comparing apples to apples and not apples to oranges.

LISA WAGNER: What is the definition of unintentional death?

We are moving into the general, more general mortality conversation.

What is that definition for unintentional deaths?

DR. AMY BRANUM: Well, I have some members from DVS with me here so they can help me out.

So, when we talk about unintentional injuries, for the last few years of course the real focus there has been on drugs.

So drug overdose deaths are included within that category of unintentional injuries and so when we see unintentional injuries,

and, you know, cause-of-death tables, what I've shown as life expectancy tables, we're really talking about the drug overdose deaths.

Those are accounting for a good portion of the unintentional injuries. Is that fair to say?

[Indiscernible - multiple speakers]

Motor vehicles, falls, accidents, injuries that result from those mechanisms are also included, but drug overdoses have been the bigger story for that category more recently.

LISA WAGNER: For infant mortality data, our data published on infant mortality within a particular time period? How should people interpret infant mortality?

DR. AMY BRANUM: So I am not 100% sure I am understanding the question,

but the data we released today of course are for the infant deaths that occurred in 2018

and the infant mortality is defined as deaths that occur up to one year of birth.

LISA WAGNER: So there is a question on the sort of different impact of different causes of death on life expectancy.

The question is about, is there a publication you can point people to?

DR. AMY BRANUM: So the Health E-Stat that I referenced in my presentation includes those tables that I showed as part of the presentation.

It does not necessarily do a decomposition, which is something that is a little bit more of a formal technique that we would use to show,

you know, exactly how much a certain cause contributed positively and how many contributed negatively

and how the net affected that, ended up with in this case a net gain of 0.1 year.

So, at this time we don't have that available, but we will be working on a specific product that will have that information in it.

So for now, we have the Health E-Stat on life expectancy that I would point people towards and hopefully we get some additional information out soon.

LISA WAGNER: So could you speak again about the definition of a maternal death?

So we've had that a couple of times, I believe it has been answered by some folks on the chat box but for those who are on the phone as well,

can you reiterate a maternal death versus a pregnancy-related?

DR. AMY BRANUM: Sure, so maternal death as we define it at NCHS for our national statistic is based on death that occurs when a woman is currently pregnant

or within 42 days of pregnancy, so that is what we call maternal deaths.

Pregnancy-related death is the number, based on deaths that occur up to 1 year of the pregnancy.

So it's really the timeframe there is the big issue--big difference.

And again, I just want to reiterate that pregnancy-related deaths and maternal deaths, even though I think people use these terms generally to describe maternal death,

they are not synonymous and that is something important that we need to keep in our heads going forward.

LISA WAGNER: We have gotten some questions on the 2018 life table.

Will that be coming out as well?

DR. AMY BRANUM: It will be coming out later this year.

So hopefully, by, usually, I think it is somewhere, nowadays,

I think it may be coming out around 6 months or so after the final data release, but I could be wrong. But it will be this year.

LISA WAGNER: Okay.

Are there areas or groups that increased risk for infant mortality that are also at increased risk for maternal mortality?

Can we say that at all through any of our data?

DR. AMY BRANUM: Well, certainly our data help to facilitate analyses of groups that are higher at risk for mortality using the general mortality data.

We also have a linked infant birth and death data file that we disseminate every year,

and this file will link all of the infant deaths that occur within a given year to their birth certificates.

The states do this linkage and then they send it to us, and we compile it and disseminate it as a national file.

So certainly, we have data that will facilitate those analyses to look at risk factors and any mortality data as well, obviously.

Now that we are able to do a national maternal mortality rate,

again I hope this will open up some doors of new research that maybe we haven't been able to do at the national level in several years.

LISA WAGNER: So we have a question on drug overdose deaths.

What are some of the causes to the increase of drug overdose deaths in 2017 and 2018?

Can you reiterate that from the slides?

DR. AMY BRANUM: Sure.

So we saw a decrease between 2017 and 2018 in overall drug deaths and that was driven primarily by the decrease due to opioid deaths.

So opioids account for the largest proportion of all drug overdose deaths

and we saw the decline primarily with opioids and that drove the overall.

Now, we saw declines as well in other specific categories of opioids, but the opioids are what drove the decline.

And it also, it drove the increase that we saw prior to the decline in drug overdose deaths

and now what we are seeing are these continued increases in psychostimulants

with abuse potential, which, again includes methamphetamines. So we have seen some progress with one type of drug

and a lack of progress or even a worsening with other types and now,

from our provisional 2019 data it looks like opioids are--opioid deaths are starting to flatten out again

so there is a lot going on there and it is kind hard to keep up with the different trends,

but that has been the main driver.

LISA WAGNER: Does NCHS report on maternal mortality rates for Native American women?

DR. AMY BRANUM: So we do have data in the 2018 mortality data file.

Data are available for all race and Hispanic ethnicity groups.

The issue with Native Americans specifically is there is some concern about

the classification of the race as it is reported on the death certificate and then again,

the numbers, when you start to break it out by race and ethnicity,

the reason we only show those three groups that I showed on the visual earlier

is because those are the groups that we can reliably calculate a national rate for one single year.

When you start to break it out by the other race and ethnicity groups, you really start to lose the ability to make a reliable estimate, unfortunately.

LISA WAGNER: So we talked about the age-adjusted rate of overdose deaths going down for 2018,

do we have any data--is anything coming out on certain age groups that might be driving that decrease?

Will we have that data--or do we have the data broken up by age groups?

DR. AMY BRANUM: So I believe the drug overdose Data Brief does have a figure by age if I am remembering correctly.

In fact--bear with me for a second.

It does not. Okay.

So I forget it shows differences by states this year, not age.

So certainly this is the kind of information that can be extracted from Wonder very easily

and we do have in former Data Briefs, I believe there was an age breakout.

So when we look at drug overdose deaths, we certainly tried to look at it by as many different demographic factors as we can,

but I guess I can't answer just off the top of my head where exactly that information is,

but certainly, again, CDC Wonder facilitates those types of analyses and we did put out a drug overdose Data Brief last year with the 2017 data

and that Data Brief does include a figure looking at trends by race.

So if you go to our publications page at the NCHS webpage and go our Data Briefs and just search for drug overdose deaths,

I would encourage you to look through those.

LISA WAGNER: So we have a couple of questions around how we got the data from states,

how we work with states, can we--how can we work with them to maybe improve that data,

how can we make sure we are following up to get better data,

and what we can do to make sure they are verifying, particularly any maternal deaths that are taking place?

DR. AMY BRANUM: Sure, so we have a very long-standing relationship with the states.

It's actually, I believe, it is the oldest example of intergovernmental sharing of information in the U.S.

And so we have a very strong, long tenured relationship with the states and so it is a very mutual, you know,

feedback system in terms of, you know, when we give feedback to the states on things that we see,

maybe improvement, or are potentially problematic, and they give us feedback as well.

And we try to work together with the states which we do through various activities to, you know, improve reporting,

to improve the way that data are collected and disseminated, working with states to improve their electronic death registration systems,

you know, making changes to these revised certificates, that was definitely a joint effort between the states and NCHS.

So, you know, we have these long-standing partnerships

and it is great because it affords us the ability to have conversations around what we can be doing

to improve reporting of maternal mortality or drug overdose deaths or any number of things.

NCHS has also undertaken some training that we disseminate to not just the states, but also to physicians.

We provide guidance to physicians and certifiers on how to fill out the death certificate.

We do e-learning type training modules to help birth clerks fill out the birth certificate.

So we are always trying to improve the quality of the data and looking for ways that NCHS can help contribute in that area.

LISA WAGNER: We got a question--or a couple different questions.

One was on what's the difference between CDC's pregnancy mortality surveillance system and determining pregnancy-related deaths?

Can we talk a little bit about that difference?

Someone also at the same point asked about WHO's using a measure of a ratio versus a rate and, in that answer, can you also address that as well?

DR. AMY BRANUM: Sure.

So the pregnancy mortality surveillance system measures pregnancy-related death

and I think this is one reason why it's very important to make sure the definitions are understood and they are distinct.

The PMSS measures deaths that occur through one year

and they also do a more extensive investigation and evaluation of maternal death records.

So they start with vital records as well and then they do an evaluation based on the records they receive

and they do receive some linked data as well as from the states that have the ability to do those linkages.

That link, if there is a maternal death record,

then they look to see a corresponding birth or fetal death record

and they also use maternal mortality review committees to really delve into what happened around that death and it is a very,

more extensive investigation than what we do with the vital statistics dissemination.

So those are just kind of broad brush differences between the two.

And as far as the ratio--is that--I know--it's something I always get a little bit tripped up on.

[Indiscernible, muffled].

It is really the same.

DR. AMY BRANUM: So it is really the same--

Because certain groups can--

[Indiscernible - multiple speakers] More accurate--for what is being done.

DR. AMY BRANUM: Right, right.

[Indiscernible - multiple speakers] Then the denominator is live births and theoretically--all these other events involved with pregnancy--

DR. AMY BRANUM: Right.

[Indiscernible - multiple speakers] There are all these other events involved with pregnancy that are not included--

DR. AMY BRANUM: It is a technical, technical difference between--rate and ratio when you are using the denominator of live births, but it is the same measure?

Same measure.

LISA WAGNER: So we have gotten some questions about what is NCHS doing as a response to these data

and I wonder if you can just clarify what the role of NCHS is here within CDC

and how we work across HSS and CDC particularly where the data--etcetera.

DR. AMY BRANUM: Sure, so again, NCHS is, you know, we are part of the Centers for Disease Control, certainly,

but we also function again as a federal statistical agency

and we are the principal federal statistical health agency in the U.S.

So our mission is really about, you know, compiling, collecting, disseminating data that are unbiased, reliable, you know, are transparent,

all of our processes and procedures around how we collect data, how we put it out in the universe for people to use--it is all about,

you know, making sure that these data are as accurate and reliable, and again, as unbiased as we can make them.

So, you know, our mission is really about the data.

So we, when it comes to vital statistics data, the state, you know,

like I mentioned in my talk earlier, the data,

you know, come from the state so--and the states have some autonomy on how they do that and then the data comes to us

and we compile and disseminate them so that's kind of how we function in terms of vital statistics.

We are not, you know, collecting individual vital statistics records as these events happen ourselves.

The states are doing that and then they share the data with us.

Unlike our surveys, where we are going out and collecting this data ourselves through the use of contractors to do the field work.

So, I'm not sure if that completely covers what you were asking, but again, we're all about data. That kind of sums it up.

LISA WAGNER: Great. Well, we're getting close to the end of our time. Thank you, Dr. Amy Branum, and thank you to all for

joining this NCHS webinar on the release of the final 2018 mortality data.

This is the end of the webinar. If you have any additional questions, please email our Public Affairs staff

at paoquery@cdc.gov. That is paoquery@cdc.gov.

Thank you.