

WEBVTT

NOTE duration:"01:25:58.1680000"

NOTE language:en-us

NOTE Confidence: 0.900527834892273

00:00:00.000 --> 00:00:03.390 I. Good evening my friends.

NOTE Confidence: 0.900527834892273

00:00:03.390 --> 00:00:05.864 Welcome, it says it's a special night

NOTE Confidence: 0.900527834892273

00:00:05.864 --> 00:00:08.000 for the Yale Pediatric Ethics program.

NOTE Confidence: 0.900527834892273

00:00:08.000 --> 00:00:10.219 We are hosting along with the yellow

NOTE Confidence: 0.900527834892273

00:00:10.219 --> 00:00:11.610 program for biomedical ethics.

NOTE Confidence: 0.900527834892273

00:00:11.610 --> 00:00:12.922 A special session tonight

NOTE Confidence: 0.900527834892273

00:00:12.922 --> 00:00:14.234 with Doctor Rammers Kaiser.

NOTE Confidence: 0.900527834892273

00:00:14.240 --> 00:00:16.814 My name is mark material and I am the

NOTE Confidence: 0.900527834892273

00:00:16.814 --> 00:00:19.157 director of the Pediatric Ethics Program,

NOTE Confidence: 0.900527834892273

00:00:19.160 --> 00:00:21.776 an I welcome you on behalf of that,

NOTE Confidence: 0.900527834892273

00:00:21.780 --> 00:00:24.396 as well as the program for biomedical ethics.

NOTE Confidence: 0.900527834892273

00:00:24.400 --> 00:00:25.384 Are associates, directors,

NOTE Confidence: 0.900527834892273

00:00:25.384 --> 00:00:27.024 Jack Hughes and Serra Hall,

NOTE Confidence: 0.900527834892273

00:00:27.030 --> 00:00:28.670 and our manager, Karen Cove,

NOTE Confidence: 0.900527834892273  
00:00:28.670 --> 00:00:31.294 who was sitting very still in the corner  
NOTE Confidence: 0.900527834892273  
00:00:31.294 --> 00:00:33.968 of frame of your of your zoom picture.  
NOTE Confidence: 0.900527834892273  
00:00:33.970 --> 00:00:36.650 I. Of these these sessions,  
NOTE Confidence: 0.900527834892273  
00:00:36.650 --> 00:00:38.673 the way they go to remind you  
NOTE Confidence: 0.900527834892273  
00:00:38.673 --> 00:00:40.438 those of you who are new,  
NOTE Confidence: 0.900527834892273  
00:00:40.440 --> 00:00:42.337 we will hear from our guest speaker  
NOTE Confidence: 0.900527834892273  
00:00:42.337 --> 00:00:44.533 for about 45 minutes, plus or minus.  
NOTE Confidence: 0.900527834892273  
00:00:44.533 --> 00:00:45.988 After her talk is over,  
NOTE Confidence: 0.900527834892273  
00:00:45.990 --> 00:00:47.658 I'd invite you to submit questions  
NOTE Confidence: 0.900527834892273  
00:00:47.658 --> 00:00:49.736 and will have what amounts to a  
NOTE Confidence: 0.900527834892273  
00:00:49.736 --> 00:00:51.246 conversation in the zoom aerals.  
NOTE Confidence: 0.900527834892273  
00:00:51.250 --> 00:00:52.996 Submit your questions in the chat.  
NOTE Confidence: 0.900527834892273  
00:00:53.000 --> 00:00:54.968 I will take a look at those and  
NOTE Confidence: 0.900527834892273  
00:00:54.968 --> 00:00:56.862 share those with amorous an also  
NOTE Confidence: 0.900527834892273  
00:00:56.862 --> 00:00:58.542 I'll be monitoring this session.  
NOTE Confidence: 0.900527834892273

00:00:58.550 --> 00:01:00.878 I'll ask cameras and then she will respond.

NOTE Confidence: 0.900527834892273

00:01:00.880 --> 00:01:03.508 Then we will have a bit of a conversation.

NOTE Confidence: 0.900527834892273

00:01:03.510 --> 00:01:05.910 That way there will be a hard stop.

NOTE Confidence: 0.900527834892273

00:01:05.910 --> 00:01:08.006 At 6:30 I'm so I apologize if I

NOTE Confidence: 0.900527834892273

00:01:08.006 --> 00:01:10.009 don't get all your questions in,

NOTE Confidence: 0.900527834892273

00:01:10.010 --> 00:01:12.166 but I will stick to that agreement

NOTE Confidence: 0.900527834892273

00:01:12.166 --> 00:01:14.809 that we will end on time and that I

NOTE Confidence: 0.900527834892273

00:01:14.809 --> 00:01:16.825 may go very quickly 'cause I think

NOTE Confidence: 0.900527834892273

00:01:16.825 --> 00:01:19.087 it's going to be a very nice session.

NOTE Confidence: 0.900527834892273

00:01:19.087 --> 00:01:21.096 I want to introduce you an old

NOTE Confidence: 0.900527834892273

00:01:21.096 --> 00:01:23.198 friend of mine who is Doctor Amris.

NOTE Confidence: 0.900527834892273

00:01:23.200 --> 00:01:24.868 Kaiser Doctor Kaiser is an assistant

NOTE Confidence: 0.900527834892273

00:01:24.868 --> 00:01:26.319 professor of Pediatrics in the

NOTE Confidence: 0.900527834892273

00:01:26.319 --> 00:01:27.754 division of Neonatology at Johns

NOTE Confidence: 0.900527834892273

00:01:27.754 --> 00:01:29.350 Hopkins University School of Medicine.

NOTE Confidence: 0.900527834892273

00:01:29.350 --> 00:01:31.450 She's also the medical director of the

NOTE Confidence: 0.900527834892273

00:01:31.450 --> 00:01:33.238 Neonatal Intensive Care Unit at the

NOTE Confidence: 0.900527834892273

00:01:33.238 --> 00:01:34.912 Bayview Medical Center at Johns Hopkins.

NOTE Confidence: 0.900527834892273

00:01:34.920 --> 00:01:36.096 She received her undergraduate

NOTE Confidence: 0.900527834892273

00:01:36.096 --> 00:01:37.860 degree in the History of Medicine.

NOTE Confidence: 0.900527834892273

00:01:37.860 --> 00:01:41.598 At the University of Chicago and her.

NOTE Confidence: 0.900527834892273

00:01:41.600 --> 00:01:44.544 Anne and her medical degree from Mount Sinai.

NOTE Confidence: 0.900527834892273

00:01:44.550 --> 00:01:46.022 She did pediatric residency

NOTE Confidence: 0.900527834892273

00:01:46.022 --> 00:01:47.862 at Vanderbilt and of course,

NOTE Confidence: 0.900527834892273

00:01:47.870 --> 00:01:49.715 did a fellowship in neonatal

NOTE Confidence: 0.900527834892273

00:01:49.715 --> 00:01:51.560 perinatal medicine here at Yale.

NOTE Confidence: 0.900527834892273

00:01:51.560 --> 00:01:53.405 So this is her triumphant

NOTE Confidence: 0.900527834892273

00:01:53.405 --> 00:01:55.250 return to Yale well yell.

NOTE Confidence: 0.900527834892273

00:01:55.250 --> 00:01:57.368 She did some wonderful work over

NOTE Confidence: 0.900527834892273

00:01:57.368 --> 00:01:59.330 to school of Public Health.

NOTE Confidence: 0.900527834892273

00:01:59.330 --> 00:02:01.200 And in her research interests,

NOTE Confidence: 0.900527834892273

00:02:01.200 --> 00:02:03.888 which are her interests are in the perinatal

NOTE Confidence: 0.900527834892273

00:02:03.888 --> 00:02:05.669 Epidemiology and health disparities,

NOTE Confidence: 0.900527834892273

00:02:05.670 --> 00:02:07.908 where she works to elucidate the

NOTE Confidence: 0.900527834892273

00:02:07.908 --> 00:02:09.400 complex interactions between genetics,

NOTE Confidence: 0.900527834892273

00:02:09.400 --> 00:02:10.138 environmental context,

NOTE Confidence: 0.900527834892273

00:02:10.138 --> 00:02:12.352 maternal age and racial ethnic background

NOTE Confidence: 0.900527834892273

00:02:12.352 --> 00:02:14.619 that drive both outcomes and disparities?

NOTE Confidence: 0.900527834892273

00:02:14.620 --> 00:02:16.895 And so I've invited to amorous to

NOTE Confidence: 0.900527834892273

00:02:16.895 --> 00:02:18.926 come here tonight and she kindly

NOTE Confidence: 0.900527834892273

00:02:18.926 --> 00:02:20.912 accepted to speak to what about

NOTE Confidence: 0.900527834892273

00:02:20.912 --> 00:02:23.187 those disparities in outcomes for

NOTE Confidence: 0.900527834892273

00:02:23.187 --> 00:02:25.063 maternal and neonatal patients?

NOTE Confidence: 0.900527834892273

00:02:25.070 --> 00:02:27.646 And with that I want to turn

NOTE Confidence: 0.900527834892273

00:02:27.646 --> 00:02:29.958 the floor over to my friend.

NOTE Confidence: 0.900527834892273

00:02:29.960 --> 00:02:30.815 From Johns Hopkins,

NOTE Confidence: 0.900527834892273

00:02:30.815 --> 00:02:31.670 and most importantly,

NOTE Confidence: 0.900527834892273

00:02:31.670 --> 00:02:33.693 this is the best part about the

NOTE Confidence: 0.900527834892273

00:02:33.693 --> 00:02:35.652 teaching that we do here and everywhere

NOTE Confidence: 0.900527834892273

00:02:35.652 --> 00:02:37.860 is we get to see the students in

NOTE Confidence: 0.900527834892273

00:02:37.860 --> 00:02:39.630 the trainees that we work with

NOTE Confidence: 0.900527834892273

00:02:39.630 --> 00:02:41.360 go off and do wonderful things.

NOTE Confidence: 0.900527834892273

00:02:41.360 --> 00:02:43.070 So we're very proud of Amerson.

NOTE Confidence: 0.900527834892273

00:02:43.070 --> 00:02:44.870 Very glad that she made time

NOTE Confidence: 0.900527834892273

00:02:44.870 --> 00:02:46.070 to speak with this

NOTE Confidence: 0.828510403633118

00:02:46.140 --> 00:02:47.911 for a bit. Deceiving Doctor Kaiser,

NOTE Confidence: 0.828510403633118

00:02:47.911 --> 00:02:49.710 please take it away. Alright,

NOTE Confidence: 0.83200991153717

00:02:49.710 --> 00:02:51.336 well Doctor Mario, thank you so

NOTE Confidence: 0.83200991153717

00:02:51.336 --> 00:02:53.230 much for such a warm welcome.

NOTE Confidence: 0.83200991153717

00:02:53.230 --> 00:02:57.226 Give me just a moment to share my screen.

NOTE Confidence: 0.83200991153717

00:02:57.230 --> 00:03:05.390 Alright. So thank you so much for

NOTE Confidence: 0.83200991153717

00:03:05.390 --> 00:03:07.960 sending the opportunity for me to be

NOTE Confidence: 0.83200991153717

00:03:07.960 --> 00:03:10.186 here this evening and to talk with  
NOTE Confidence: 0.83200991153717

00:03:10.265 --> 00:03:12.750 folks a little bit about a topic  
NOTE Confidence: 0.83200991153717

00:03:12.750 --> 00:03:15.252 that's near and dear to my heart,  
NOTE Confidence: 0.83200991153717

00:03:15.252 --> 00:03:17.400 which is disparities in maternal immune.  
NOTE Confidence: 0.83200991153717

00:03:17.400 --> 00:03:19.190 It'll outcomes by race, ethnicity,  
NOTE Confidence: 0.83200991153717

00:03:19.190 --> 00:03:21.815 and really trying to dig into that.  
NOTE Confidence: 0.83200991153717

00:03:21.820 --> 00:03:26.111 Whoops Hold on,  
NOTE Confidence: 0.83200991153717

00:03:26.111 --> 00:03:30.666 I'm having some technical difficulties.  
NOTE Confidence: 0.83200991153717

00:03:30.670 --> 00:03:37.582 There we go OK so just ship to frame.  
NOTE Confidence: 0.83200991153717

00:03:37.590 --> 00:03:40.446 To frame our conversation this evening,  
NOTE Confidence: 0.83200991153717

00:03:40.450 --> 00:03:43.578 I really thought about this more as an  
NOTE Confidence: 0.83200991153717

00:03:43.578 --> 00:03:46.235 opportunity to provide some context and  
NOTE Confidence: 0.83200991153717

00:03:46.235 --> 00:03:48.935 background about kind of the general  
NOTE Confidence: 0.83200991153717

00:03:49.010 --> 00:03:51.338 epidemiological trends in maternal  
NOTE Confidence: 0.83200991153717

00:03:51.338 --> 00:03:54.248 and neonatal adverse birth outcomes,  
NOTE Confidence: 0.83200991153717

00:03:54.250 --> 00:03:57.922 and with that context to try to engender

NOTE Confidence: 0.83200991153717

00:03:57.922 --> 00:04:01.221 a conversation as we move into thinking

NOTE Confidence: 0.83200991153717

00:04:01.221 --> 00:04:04.095 about issues of disparities in these

NOTE Confidence: 0.83200991153717

00:04:04.095 --> 00:04:07.539 trends an in rates of things like

NOTE Confidence: 0.83200991153717

00:04:07.539 --> 00:04:09.366 maternal morbidity, maternal mortality.

NOTE Confidence: 0.83200991153717

00:04:09.366 --> 00:04:11.456 Preterm birth low birth weight

NOTE Confidence: 0.83200991153717

00:04:11.456 --> 00:04:12.710 and infant mortality.

NOTE Confidence: 0.83200991153717

00:04:12.710 --> 00:04:14.906 And so as a as I,

NOTE Confidence: 0.83200991153717

00:04:14.910 --> 00:04:16.278 I invite the conversation,

NOTE Confidence: 0.83200991153717

00:04:16.278 --> 00:04:18.775 but kind of is an overview and

NOTE Confidence: 0.83200991153717

00:04:18.775 --> 00:04:20.675 preface to this conversation I

NOTE Confidence: 0.83200991153717

00:04:20.675 --> 00:04:22.590 open with this statement that,

NOTE Confidence: 0.83200991153717

00:04:22.590 --> 00:04:24.420 compared to their white peers,

NOTE Confidence: 0.83200991153717

00:04:24.420 --> 00:04:26.250 minority women, especially black women,

NOTE Confidence: 0.83200991153717

00:04:26.250 --> 00:04:27.714 by also including Hispanic,

NOTE Confidence: 0.83200991153717

00:04:27.714 --> 00:04:29.718 American Indian, an Alaskan native women,

NOTE Confidence: 0.83200991153717



00:04:29.718 --> 00:04:32.165 are two to three times more likely  
NOTE Confidence: 0.83200991153717

00:04:32.165 --> 00:04:34.065 to experience adverse maternal  
NOTE Confidence: 0.83200991153717

00:04:34.065 --> 00:04:35.965 and neonatal pregnancy outcomes.  
NOTE Confidence: 0.83200991153717

00:04:35.970 --> 00:04:36.658 That is,  
NOTE Confidence: 0.83200991153717

00:04:36.658 --> 00:04:39.066 there's a huge body of research that  
NOTE Confidence: 0.83200991153717

00:04:39.066 --> 00:04:41.517 has evolved and grown that demonstrates  
NOTE Confidence: 0.83200991153717

00:04:41.517 --> 00:04:44.399 this time and time and time again,  
NOTE Confidence: 0.83200991153717

00:04:44.400 --> 00:04:46.686 and it's a very interesting phenomenon,  
NOTE Confidence: 0.83200991153717

00:04:46.690 --> 00:04:49.896 and we grapple with why that is.  
NOTE Confidence: 0.83200991153717

00:04:49.900 --> 00:04:52.159 So he in this talk I would like to  
NOTE Confidence: 0.83200991153717

00:04:52.159 --> 00:04:54.502 explore the literature that describes  
NOTE Confidence: 0.83200991153717

00:04:54.502 --> 00:04:56.026 epidemiological population level  
NOTE Confidence: 0.83200991153717

00:04:56.026 --> 00:04:58.506 trends and disparities in maternal  
NOTE Confidence: 0.83200991153717

00:04:58.506 --> 00:05:00.298 morbidity and maternal mortality.  
NOTE Confidence: 0.83200991153717

00:05:00.300 --> 00:05:01.900 Preterm birth, low birth,  
NOTE Confidence: 0.83200991153717

00:05:01.900 --> 00:05:03.500 weight and infant mortality.

NOTE Confidence: 0.83200991153717  
00:05:03.500 --> 00:05:06.540 And then after we kind of lay the  
NOTE Confidence: 0.83200991153717  
00:05:06.540 --> 00:05:08.698 groundwork with that for context,  
NOTE Confidence: 0.83200991153717  
00:05:08.700 --> 00:05:11.004 I want to talk a little bit more  
NOTE Confidence: 0.83200991153717  
00:05:11.004 --> 00:05:13.330 about the hypothesis that has been  
NOTE Confidence: 0.83200991153717  
00:05:13.330 --> 00:05:15.425 developed to begin to understand  
NOTE Confidence: 0.83200991153717  
00:05:15.425 --> 00:05:17.865 why disparities by race ethnicity  
NOTE Confidence: 0.83200991153717  
00:05:17.865 --> 00:05:20.305 in these different outcomes exist.  
NOTE Confidence: 0.83200991153717  
00:05:20.310 --> 00:05:22.870 And persist.  
NOTE Confidence: 0.83200991153717  
00:05:22.870 --> 00:05:23.360 OK,  
NOTE Confidence: 0.83200991153717  
00:05:23.360 --> 00:05:26.778 so we're going to start out with  
NOTE Confidence: 0.83200991153717  
00:05:26.778 --> 00:05:28.242 some contemporary statistics.  
NOTE Confidence: 0.83200991153717  
00:05:28.250 --> 00:05:31.603 We're going to start in the maternal  
NOTE Confidence: 0.83200991153717  
00:05:31.603 --> 00:05:35.577 realm and then move into the infant room.  
NOTE Confidence: 0.83200991153717  
00:05:35.580 --> 00:05:38.168 Kind of follow it.  
NOTE Confidence: 0.83200991153717  
00:05:38.168 --> 00:05:40.109 Follow that process.  
NOTE Confidence: 0.83200991153717

00:05:40.110 --> 00:05:42.948 So in terms of maternal mortality,  
NOTE Confidence: 0.83200991153717

00:05:42.950 --> 00:05:45.788 so it is a devastating occurrence.  
NOTE Confidence: 0.83200991153717

00:05:45.790 --> 00:05:48.150 It is a devastating outcome,  
NOTE Confidence: 0.83200991153717

00:05:48.150 --> 00:05:50.380 an extremely upsetting and problematic  
NOTE Confidence: 0.83200991153717

00:05:50.380 --> 00:05:53.350 for all those who were involved.  
NOTE Confidence: 0.83200991153717

00:05:53.350 --> 00:05:53.830 However,  
NOTE Confidence: 0.83200991153717

00:05:53.830 --> 00:05:56.710 it's important to think about it  
NOTE Confidence: 0.83200991153717

00:05:56.710 --> 00:05:59.595 and contextualize it in terms of  
NOTE Confidence: 0.83200991153717

00:05:59.595 --> 00:06:01.870 its actual incidence and frequency,  
NOTE Confidence: 0.83200991153717

00:06:01.870 --> 00:06:05.748 and thankfully it's a relatively rare event.  
NOTE Confidence: 0.83200991153717

00:06:05.750 --> 00:06:06.488 In 2018,  
NOTE Confidence: 0.83200991153717

00:06:06.488 --> 00:06:08.702 the most recent year in which  
NOTE Confidence: 0.83200991153717

00:06:08.702 --> 00:06:10.469 National Statistics were available,  
NOTE Confidence: 0.83200991153717

00:06:10.470 --> 00:06:12.430 it was documented that there  
NOTE Confidence: 0.83200991153717

00:06:12.430 --> 00:06:13.998 were 658 maternal deaths,  
NOTE Confidence: 0.83200991153717

00:06:14.000 --> 00:06:15.970 which is concerning is upsetting.

NOTE Confidence: 0.83200991153717

00:06:15.970 --> 00:06:19.106 But that's also in the context of almost

NOTE Confidence: 0.83200991153717

00:06:19.106 --> 00:06:21.857 3.8 million births in that same year.

NOTE Confidence: 0.83200991153717

00:06:21.860 --> 00:06:24.218 So again, the incidents is very,

NOTE Confidence: 0.83200991153717

00:06:24.220 --> 00:06:25.008 very low.

NOTE Confidence: 0.83200991153717

00:06:25.008 --> 00:06:26.190 It's high acuity,

NOTE Confidence: 0.83200991153717

00:06:26.190 --> 00:06:29.319 and there's a lot of implications for

NOTE Confidence: 0.83200991153717

00:06:29.319 --> 00:06:32.339 for the occurrence of a maternal death.

NOTE Confidence: 0.83200991153717

00:06:32.340 --> 00:06:33.034 So then,

NOTE Confidence: 0.83200991153717

00:06:33.034 --> 00:06:35.116 if the incidents is relatively low,

NOTE Confidence: 0.837044298648834

00:06:35.120 --> 00:06:37.332 why are we so compelled to really

NOTE Confidence: 0.837044298648834

00:06:37.332 --> 00:06:39.842 dig into it and figure out what's

NOTE Confidence: 0.837044298648834

00:06:39.842 --> 00:06:42.074 going on and what's driving it?

NOTE Confidence: 0.837044298648834

00:06:42.080 --> 00:06:44.752 Well, I think that there are a number

NOTE Confidence: 0.837044298648834

00:06:44.752 --> 00:06:46.960 of factors that that drive that,

NOTE Confidence: 0.837044298648834

00:06:46.960 --> 00:06:48.934 and one of the biggest factors is

NOTE Confidence: 0.837044298648834

00:06:48.934 --> 00:06:50.543 that rates of maternal mortality  
NOTE Confidence: 0.837044298648834

00:06:50.543 --> 00:06:52.631 in the United States are higher  
NOTE Confidence: 0.837044298648834

00:06:52.631 --> 00:06:54.959 than in other developed countries.  
NOTE Confidence: 0.837044298648834

00:06:54.960 --> 00:06:56.336 Specifically, our return mortality  
NOTE Confidence: 0.837044298648834

00:06:56.336 --> 00:06:58.400 rate is 17.4 maternal deaths per  
NOTE Confidence: 0.837044298648834

00:06:58.453 --> 00:07:00.180 100,000 live births, and again,  
NOTE Confidence: 0.837044298648834

00:07:00.180 --> 00:07:02.630 that's the most recent statistics that were.  
NOTE Confidence: 0.837044298648834

00:07:02.630 --> 00:07:03.839 Released in 2018.  
NOTE Confidence: 0.837044298648834

00:07:03.839 --> 00:07:07.540 But when you compare that rate to our peers,  
NOTE Confidence: 0.837044298648834

00:07:07.540 --> 00:07:09.580 were doing a lot worse,  
NOTE Confidence: 0.837044298648834

00:07:09.580 --> 00:07:12.040 so we're anywhere from you know,  
NOTE Confidence: 0.837044298648834

00:07:12.040 --> 00:07:14.896 1 1/2 to five to six times.  
NOTE Confidence: 0.837044298648834

00:07:14.900 --> 00:07:17.140 It's happening more frequently in  
NOTE Confidence: 0.837044298648834

00:07:17.140 --> 00:07:20.219 the United States than it is in use.  
NOTE Confidence: 0.837044298648834

00:07:20.220 --> 00:07:21.856 Other developed countries that  
NOTE Confidence: 0.837044298648834

00:07:21.856 --> 00:07:24.310 we consider to be our peers.

NOTE Confidence: 0.837044298648834

00:07:24.310 --> 00:07:27.166 And so thinking about that in looking

NOTE Confidence: 0.837044298648834

00:07:27.166 --> 00:07:30.438 at that, we know we can do better.

NOTE Confidence: 0.837044298648834

00:07:30.440 --> 00:07:33.359 We rank 47 out of 184 countries.

NOTE Confidence: 0.837044298648834

00:07:33.360 --> 00:07:35.550 At The Who derived internal

NOTE Confidence: 0.837044298648834

00:07:35.550 --> 00:07:37.740 mortality statistics back in 2015,

NOTE Confidence: 0.837044298648834

00:07:37.740 --> 00:07:41.240 and we have so much space to

NOTE Confidence: 0.837044298648834

00:07:41.240 --> 00:07:44.959 improve and we know we can do it.

NOTE Confidence: 0.837044298648834

00:07:44.960 --> 00:07:47.395 The second consideration is that

NOTE Confidence: 0.837044298648834

00:07:47.395 --> 00:07:49.830 the rates and maternal mortality

NOTE Confidence: 0.837044298648834

00:07:49.910 --> 00:07:53.270 in the United States appear to be

NOTE Confidence: 0.837044298648834

00:07:53.270 --> 00:07:55.167 increasing while concomitantly the

NOTE Confidence: 0.837044298648834

00:07:55.167 --> 00:07:57.841 rates in some of our peer countries

NOTE Confidence: 0.837044298648834

00:07:57.841 --> 00:08:02.118 have fallen and continue to fall.

NOTE Confidence: 0.837044298648834

00:08:02.120 --> 00:08:04.899 Here is a graph that just demonstrates

NOTE Confidence: 0.837044298648834

00:08:04.899 --> 00:08:07.289 overtime the maternal mortality ratios,

NOTE Confidence: 0.837044298648834

00:08:07.290 --> 00:08:10.258 and you can see that they certainly  
NOTE Confidence: 0.837044298648834

00:08:10.258 --> 00:08:13.654 do begin to rise in the early 2000s  
NOTE Confidence: 0.837044298648834

00:08:13.654 --> 00:08:16.769 and continue to do so even today.  
NOTE Confidence: 0.837044298648834

00:08:16.770 --> 00:08:19.213 I say that they appear to rise  
NOTE Confidence: 0.837044298648834

00:08:19.213 --> 00:08:21.478 because there is some question as  
NOTE Confidence: 0.837044298648834

00:08:21.478 --> 00:08:24.131 to whether or not this increase in  
NOTE Confidence: 0.837044298648834

00:08:24.210 --> 00:08:27.020 maternal mortality is driven more  
NOTE Confidence: 0.837044298648834

00:08:27.020 --> 00:08:29.268 by data collection considerations.  
NOTE Confidence: 0.837044298648834

00:08:29.270 --> 00:08:32.315 Back in 2003, there was consensus statement.  
NOTE Confidence: 0.837044298648834

00:08:32.320 --> 00:08:34.456 Look forward to change the death  
NOTE Confidence: 0.837044298648834

00:08:34.456 --> 00:08:36.896 certificate in the way that it  
NOTE Confidence: 0.837044298648834

00:08:36.896 --> 00:08:38.788 collected information about maternal  
NOTE Confidence: 0.837044298648834

00:08:38.788 --> 00:08:41.117 mortality to standardize the process  
NOTE Confidence: 0.837044298648834

00:08:41.117 --> 00:08:43.337 and make the data more accurate.  
NOTE Confidence: 0.837044298648834

00:08:43.340 --> 00:08:43.821 Unfortunately,  
NOTE Confidence: 0.837044298648834

00:08:43.821 --> 00:08:46.707 because that was rolled out and

NOTE Confidence: 0.837044298648834

00:08:46.707 --> 00:08:48.863 implemented across all 50 states

NOTE Confidence: 0.837044298648834

00:08:48.863 --> 00:08:51.089 over a span of almost 15 years,

NOTE Confidence: 0.837044298648834

00:08:51.090 --> 00:08:53.540 there was a lot of variability in

NOTE Confidence: 0.837044298648834

00:08:53.540 --> 00:08:56.502 how the data was collected and the

NOTE Confidence: 0.837044298648834

00:08:56.502 --> 00:08:59.244 veracity of the data was questionable.

NOTE Confidence: 0.837044298648834

00:08:59.250 --> 00:09:01.722 So much so that the National

NOTE Confidence: 0.837044298648834

00:09:01.722 --> 00:09:03.370 Center for Health Statistics.

NOTE Confidence: 0.837044298648834

00:09:03.370 --> 00:09:06.532 I just stop calculating their maternal

NOTE Confidence: 0.837044298648834

00:09:06.532 --> 00:09:09.993 mortality statistics for a period of almost

NOTE Confidence: 0.837044298648834

00:09:09.993 --> 00:09:13.759 10 years because of the issues with the data.

NOTE Confidence: 0.837044298648834

00:09:13.760 --> 00:09:14.412 So again,

NOTE Confidence: 0.837044298648834

00:09:14.412 --> 00:09:15.716 we see this statistic.

NOTE Confidence: 0.837044298648834

00:09:15.720 --> 00:09:17.360 We want to address it,

NOTE Confidence: 0.837044298648834

00:09:17.360 --> 00:09:19.736 but there is a little bit of uncertainty

NOTE Confidence: 0.837044298648834

00:09:19.736 --> 00:09:22.728 as to whether or not maternal mortality

NOTE Confidence: 0.837044298648834



00:09:22.728 --> 00:09:24.592 ratios are actually increasing.  
NOTE Confidence: 0.837044298648834

00:09:24.600 --> 00:09:27.252 But I would argue that most  
NOTE Confidence: 0.837044298648834

00:09:27.252 --> 00:09:29.020 concerningly about our maternal  
NOTE Confidence: 0.837044298648834

00:09:29.102 --> 00:09:31.754 mortality rate is that when maternal  
NOTE Confidence: 0.837044298648834

00:09:31.754 --> 00:09:34.309 deaths are reviewed by external  
NOTE Confidence: 0.837044298648834

00:09:34.309 --> 00:09:37.129 maternity mortality review committees,  
NOTE Confidence: 0.837044298648834

00:09:37.130 --> 00:09:39.630 nearly 2/3 of those committees  
NOTE Confidence: 0.837044298648834

00:09:39.630 --> 00:09:41.630 deemed the deaths preventable,  
NOTE Confidence: 0.837044298648834

00:09:41.630 --> 00:09:44.636 and so if that's the case,  
NOTE Confidence: 0.837044298648834

00:09:44.640 --> 00:09:48.488 we have no excuse to not address this  
NOTE Confidence: 0.837044298648834

00:09:48.488 --> 00:09:52.637 head on and to really find our way  
NOTE Confidence: 0.837044298648834

00:09:52.637 --> 00:09:56.189 in helping to improve the lives of.  
NOTE Confidence: 0.837044298648834

00:09:56.190 --> 00:09:58.900 Mothers and infants and all  
NOTE Confidence: 0.837044298648834

00:09:58.900 --> 00:10:00.526 those around them.  
NOTE Confidence: 0.837044298648834

00:10:00.530 --> 00:10:02.805 I also just want to make note  
NOTE Confidence: 0.837044298648834

00:10:02.805 --> 00:10:05.079 as you may have suspected,

NOTE Confidence: 0.837044298648834  
00:10:05.080 --> 00:10:06.970 that in terms of maternal  
NOTE Confidence: 0.837044298648834  
00:10:06.970 --> 00:10:08.482 mortality rates and statistics,  
NOTE Confidence: 0.850371897220612  
00:10:08.490 --> 00:10:11.136 there are definitely wide racial ethnic gaps.  
NOTE Confidence: 0.850371897220612  
00:10:11.140 --> 00:10:13.320 Unfortunately, minority women and black  
NOTE Confidence: 0.850371897220612  
00:10:13.320 --> 00:10:16.514 women are non Hispanic black women as I  
NOTE Confidence: 0.850371897220612  
00:10:16.514 --> 00:10:18.712 refer to them from this point forward,  
NOTE Confidence: 0.850371897220612  
00:10:18.720 --> 00:10:20.885 having incredible burden placed upon  
NOTE Confidence: 0.850371897220612  
00:10:20.885 --> 00:10:24.233 them wherein they are up to three times  
NOTE Confidence: 0.850371897220612  
00:10:24.233 --> 00:10:26.816 as likely to die from privacy related  
NOTE Confidence: 0.850371897220612  
00:10:26.892 --> 00:10:29.444 cause as white women are and I've put  
NOTE Confidence: 0.850371897220612  
00:10:29.444 --> 00:10:31.650 some of the statistics down there.  
NOTE Confidence: 0.850371897220612  
00:10:31.650 --> 00:10:33.870 For you, this is very worrisome  
NOTE Confidence: 0.850371897220612  
00:10:33.870 --> 00:10:36.640 that there is such a huge divide,  
NOTE Confidence: 0.850371897220612  
00:10:36.640 --> 00:10:39.020 and even though this is an event  
NOTE Confidence: 0.850371897220612  
00:10:39.020 --> 00:10:40.840 that doesn't occur frequently,  
NOTE Confidence: 0.850371897220612

00:10:40.840 --> 00:10:42.745 the burden is really shouldered  
NOTE Confidence: 0.850371897220612

00:10:42.745 --> 00:10:43.888 by certain groups,  
NOTE Confidence: 0.850371897220612

00:10:43.890 --> 00:10:46.234 and we owe it to them to figure  
NOTE Confidence: 0.850371897220612

00:10:46.234 --> 00:10:48.425 out what's driving the disparities  
NOTE Confidence: 0.850371897220612

00:10:48.425 --> 00:10:50.975 and to create interventions that  
NOTE Confidence: 0.850371897220612

00:10:50.975 --> 00:10:53.050 are specifically tailored for them  
NOTE Confidence: 0.850371897220612

00:10:53.050 --> 00:10:55.732 so that we can begin to close that  
NOTE Confidence: 0.850371897220612

00:10:55.732 --> 00:10:58.406 gap and assure good health for all.  
NOTE Confidence: 0.850371897220612

00:10:58.410 --> 00:11:00.606 I think it's interesting to note  
NOTE Confidence: 0.850371897220612

00:11:00.606 --> 00:11:02.680 also kind of in Devane.  
NOTE Confidence: 0.850371897220612

00:11:02.680 --> 00:11:05.235 Differences by race in maternal  
NOTE Confidence: 0.850371897220612

00:11:05.235 --> 00:11:08.827 mortality that the top causes of death  
NOTE Confidence: 0.850371897220612

00:11:08.827 --> 00:11:11.659 are not consistent across all women.  
NOTE Confidence: 0.850371897220612

00:11:11.660 --> 00:11:13.200 Mini stratified by race.  
NOTE Confidence: 0.850371897220612

00:11:13.200 --> 00:11:15.510 We find that non Hispanic black  
NOTE Confidence: 0.850371897220612

00:11:15.585 --> 00:11:18.140 women that the top causes of death

NOTE Confidence: 0.850371897220612  
00:11:18.140 --> 00:11:20.626 amongst that group is cardiomyopathy  
NOTE Confidence: 0.850371897220612  
00:11:20.626 --> 00:11:22.609 and cardiovascular conditions.  
NOTE Confidence: 0.850371897220612  
00:11:22.610 --> 00:11:25.238 However, among non Hispanic white women,  
NOTE Confidence: 0.850371897220612  
00:11:25.240 --> 00:11:27.228 mental health conditions account  
NOTE Confidence: 0.850371897220612  
00:11:27.228 --> 00:11:30.790 for the number one cause of death.  
NOTE Confidence: 0.850371897220612  
00:11:30.790 --> 00:11:33.566 And I will take this moment to mention  
NOTE Confidence: 0.850371897220612  
00:11:33.566 --> 00:11:35.845 that this is such an important  
NOTE Confidence: 0.850371897220612  
00:11:35.845 --> 00:11:38.101 topic to study and to research,  
NOTE Confidence: 0.850371897220612  
00:11:38.110 --> 00:11:40.798 but it can be very challenging because  
NOTE Confidence: 0.850371897220612  
00:11:40.798 --> 00:11:43.337 the incidents is so low and because  
NOTE Confidence: 0.850371897220612  
00:11:43.337 --> 00:11:45.800 of that the sample sizes are small,  
NOTE Confidence: 0.850371897220612  
00:11:45.800 --> 00:11:48.355 it can be very difficult to understand.  
NOTE Confidence: 0.850371897220612  
00:11:48.360 --> 00:11:48.703 Further,  
NOTE Confidence: 0.850371897220612  
00:11:48.703 --> 00:11:50.418 stratify your analysis to understand  
NOTE Confidence: 0.850371897220612  
00:11:50.418 --> 00:11:52.750 what's going on within individual groups.  
NOTE Confidence: 0.850371897220612

00:11:52.750 --> 00:11:55.305 We see a perfect example of that.  
NOTE Confidence: 0.850371897220612

00:11:55.310 --> 00:11:55.676 Yeah,  
NOTE Confidence: 0.850371897220612

00:11:55.676 --> 00:11:57.872 right here in that Hispanic women  
NOTE Confidence: 0.850371897220612

00:11:57.872 --> 00:11:59.340 there is insufficient data.  
NOTE Confidence: 0.850371897220612

00:11:59.340 --> 00:12:02.316 The numbers are too small for us to.  
NOTE Confidence: 0.850371897220612

00:12:02.320 --> 00:12:04.777 Figure out with the top cause of  
NOTE Confidence: 0.850371897220612

00:12:04.777 --> 00:12:07.329 death for that an ethnic group is.  
NOTE Confidence: 0.850371897220612

00:12:07.330 --> 00:12:10.266 Then I also want to mention that the  
NOTE Confidence: 0.850371897220612

00:12:10.266 --> 00:12:12.426 leading causes of death we talked  
NOTE Confidence: 0.850371897220612

00:12:12.426 --> 00:12:14.890 about top causes of death by race,  
NOTE Confidence: 0.850371897220612

00:12:14.890 --> 00:12:17.586 but top causes of death also vary by  
NOTE Confidence: 0.850371897220612

00:12:17.586 --> 00:12:20.290 the time at which the death occurs.  
NOTE Confidence: 0.850371897220612

00:12:20.290 --> 00:12:22.551 So for mothers who passed away within  
NOTE Confidence: 0.850371897220612

00:12:22.551 --> 00:12:24.969 the 1st two weeks after delivery,  
NOTE Confidence: 0.850371897220612

00:12:24.970 --> 00:12:27.130 the top causes of death are  
NOTE Confidence: 0.850371897220612

00:12:27.130 --> 00:12:27.850 postpartum hemorrhage.

NOTE Confidence: 0.850371897220612  
00:12:27.850 --> 00:12:28.963 Hypertension in sepsis.  
NOTE Confidence: 0.850371897220612  
00:12:28.963 --> 00:12:29.334 However,  
NOTE Confidence: 0.850371897220612  
00:12:29.334 --> 00:12:32.330 for mothers who are able to make it  
NOTE Confidence: 0.850371897220612  
00:12:32.330 --> 00:12:33.738 through that immediate postpartum  
NOTE Confidence: 0.850371897220612  
00:12:33.738 --> 00:12:35.896 period go on to be discharged  
NOTE Confidence: 0.850371897220612  
00:12:35.896 --> 00:12:37.936 from the hospital and go home.  
NOTE Confidence: 0.850371897220612  
00:12:37.940 --> 00:12:40.439 The top cause of death among women.  
NOTE Confidence: 0.850371897220612  
00:12:40.440 --> 00:12:42.939 Seven days to one year after deliveries.  
NOTE Confidence: 0.850371897220612  
00:12:42.940 --> 00:12:44.782 Cardiomyopathy and I just bring that  
NOTE Confidence: 0.850371897220612  
00:12:44.782 --> 00:12:47.178 up to kind of further reinforce the  
NOTE Confidence: 0.850371897220612  
00:12:47.178 --> 00:12:49.754 idea that we need to understand what's  
NOTE Confidence: 0.850371897220612  
00:12:49.823 --> 00:12:52.217 going on with in different populations,  
NOTE Confidence: 0.850371897220612  
00:12:52.220 --> 00:12:54.523 so that we can make sure that  
NOTE Confidence: 0.850371897220612  
00:12:54.523 --> 00:12:55.952 our screening counseling an  
NOTE Confidence: 0.850371897220612  
00:12:55.952 --> 00:12:57.464 interventions are really tailored  
NOTE Confidence: 0.850371897220612

00:12:57.464 --> 00:12:59.720 and so in this particular case,  
NOTE Confidence: 0.850371897220612

00:12:59.720 --> 00:13:01.470 to make sure that clinicians  
NOTE Confidence: 0.850371897220612

00:13:01.470 --> 00:13:02.870 and other medical providers  
NOTE Confidence: 0.850371897220612

00:13:02.870 --> 00:13:04.719 know what they're looking for,  
NOTE Confidence: 0.850371897220612

00:13:04.720 --> 00:13:06.412 what their counseling mothers  
NOTE Confidence: 0.850371897220612

00:13:06.412 --> 00:13:08.950 about to make sure that their  
NOTE Confidence: 0.850371897220612

00:13:09.031 --> 00:13:11.686 interventions are the most effective.  
NOTE Confidence: 0.850371897220612

00:13:11.690 --> 00:13:15.138 So you talked a bit about maternal mortality.  
NOTE Confidence: 0.850371897220612

00:13:15.140 --> 00:13:18.157 Now we're going to move into morbidity.  
NOTE Confidence: 0.850371897220612

00:13:18.160 --> 00:13:20.405 So the concept of severe  
NOTE Confidence: 0.850371897220612

00:13:20.405 --> 00:13:22.650 maternal morbidity as an adverse  
NOTE Confidence: 0.866304159164429

00:13:22.737 --> 00:13:25.293 pregnancy outcome is defined as a  
NOTE Confidence: 0.866304159164429

00:13:25.293 --> 00:13:28.072 woman who receives a life threatening  
NOTE Confidence: 0.866304159164429

00:13:28.072 --> 00:13:31.054 diagnosis or she needs to undergo  
NOTE Confidence: 0.866304159164429

00:13:31.054 --> 00:13:32.982 a lifesaving procedure during  
NOTE Confidence: 0.866304159164429

00:13:32.982 --> 00:13:34.846 the delivery hospitalization in

NOTE Confidence: 0.866304159164429  
00:13:34.846 --> 00:13:37.685 order to kind of standardized what  
NOTE Confidence: 0.866304159164429  
00:13:37.685 --> 00:13:40.373 that means a little bit further,  
NOTE Confidence: 0.866304159164429  
00:13:40.380 --> 00:13:42.956 the CDC has curated an maintains a  
NOTE Confidence: 0.866304159164429  
00:13:42.956 --> 00:13:46.380 list now of 21 identifiers of severe  
NOTE Confidence: 0.866304159164429  
00:13:46.380 --> 00:13:49.740 maternal morbidity with associated ICD codes.  
NOTE Confidence: 0.866304159164429  
00:13:49.740 --> 00:13:52.098 So that it's a very easy to figure out  
NOTE Confidence: 0.866304159164429  
00:13:52.098 --> 00:13:54.585 what they are, and that there's a lot  
NOTE Confidence: 0.866304159164429  
00:13:54.585 --> 00:13:56.200 more standardization within the research.  
NOTE Confidence: 0.866304159164429  
00:13:56.200 --> 00:13:59.272 Severe maternal morbidity affects more than  
NOTE Confidence: 0.866304159164429  
00:13:59.272 --> 00:14:03.060 60,000 lumen per year in the United States,  
NOTE Confidence: 0.866304159164429  
00:14:03.060 --> 00:14:05.832 and it's really kind of a warning  
NOTE Confidence: 0.866304159164429  
00:14:05.832 --> 00:14:09.002 sign prior to women have experiencing  
NOTE Confidence: 0.866304159164429  
00:14:09.002 --> 00:14:10.898 a maternal mortality.  
NOTE Confidence: 0.866304159164429  
00:14:10.900 --> 00:14:11.808 So really,  
NOTE Confidence: 0.866304159164429  
00:14:11.808 --> 00:14:14.532 really important to kind of think  
NOTE Confidence: 0.866304159164429



00:14:14.532 --> 00:14:17.758 about on that continuum of illness.  
NOTE Confidence: 0.866304159164429

00:14:17.760 --> 00:14:20.915 It is associated with significant  
NOTE Confidence: 0.866304159164429

00:14:20.915 --> 00:14:22.808 disability on cost.  
NOTE Confidence: 0.866304159164429

00:14:22.810 --> 00:14:25.402 Just to give you a sense of what kinds  
NOTE Confidence: 0.866304159164429

00:14:25.402 --> 00:14:27.529 of medical conditions and procedures  
NOTE Confidence: 0.866304159164429

00:14:27.529 --> 00:14:30.960 are used to indicate a severe morbidity,  
NOTE Confidence: 0.866304159164429

00:14:30.960 --> 00:14:33.608 I've listed them here for you and I  
NOTE Confidence: 0.866304159164429

00:14:33.608 --> 00:14:35.543 completely agree when when patients  
NOTE Confidence: 0.866304159164429

00:14:35.543 --> 00:14:37.548 experience these conditions or have  
NOTE Confidence: 0.866304159164429

00:14:37.548 --> 00:14:40.269 need for these kinds of interventions,  
NOTE Confidence: 0.866304159164429

00:14:40.270 --> 00:14:42.592 the acuity and severity of illness  
NOTE Confidence: 0.866304159164429

00:14:42.592 --> 00:14:43.753 is quite high.  
NOTE Confidence: 0.859401047229767

00:14:46.380 --> 00:14:48.718 So just to talk a little bit  
NOTE Confidence: 0.859401047229767

00:14:48.718 --> 00:14:50.407 about the general Epidemiology  
NOTE Confidence: 0.859401047229767

00:14:50.407 --> 00:14:52.847 of severe maternal morbidity.  
NOTE Confidence: 0.859401047229767

00:14:52.850 --> 00:14:54.982 Unfortunately for all women,

NOTE Confidence: 0.859401047229767  
00:14:54.982 --> 00:14:58.658 rates of severe morbidity are increasing and  
NOTE Confidence: 0.859401047229767  
00:14:58.658 --> 00:15:01.818 spend a little bit challenging to kind of.  
NOTE Confidence: 0.859401047229767  
00:15:01.820 --> 00:15:03.935 Cobble together and arrive population  
NOTE Confidence: 0.859401047229767  
00:15:03.935 --> 00:15:06.854 level estimates because there are so many  
NOTE Confidence: 0.859401047229767  
00:15:06.854 --> 00:15:09.086 kind of different fragmented data sources,  
NOTE Confidence: 0.859401047229767  
00:15:09.090 --> 00:15:11.596 but there are a couple of studies  
NOTE Confidence: 0.859401047229767  
00:15:11.596 --> 00:15:14.123 that have come out that use  
NOTE Confidence: 0.859401047229767  
00:15:14.123 --> 00:15:15.955 the national inpatient sample,  
NOTE Confidence: 0.859401047229767  
00:15:15.960 --> 00:15:17.440 which is a large,  
NOTE Confidence: 0.859401047229767  
00:15:17.440 --> 00:15:19.660 inpatient database managed by the Agency  
NOTE Confidence: 0.859401047229767  
00:15:19.724 --> 00:15:22.019 for Healthcare Quality and Research,  
NOTE Confidence: 0.859401047229767  
00:15:22.020 --> 00:15:24.519 which its function is to serve as  
NOTE Confidence: 0.859401047229767  
00:15:24.519 --> 00:15:26.541 a representative sample of the  
NOTE Confidence: 0.859401047229767  
00:15:26.541 --> 00:15:28.317 population so they purposefully  
NOTE Confidence: 0.859401047229767  
00:15:28.317 --> 00:15:30.093 sample from different community.  
NOTE Confidence: 0.859401047229767

00:15:30.100 --> 00:15:32.928 An urban hospitals across the United States.

NOTE Confidence: 0.859401047229767

00:15:32.930 --> 00:15:36.171 So that researchers are then able to

NOTE Confidence: 0.859401047229767

00:15:36.171 --> 00:15:38.475 calculate and extrapolate from that

NOTE Confidence: 0.859401047229767

00:15:38.475 --> 00:15:40.983 smaller sample size to the population

NOTE Confidence: 0.859401047229767

00:15:40.983 --> 00:15:44.439 level to derive population level estimates.

NOTE Confidence: 0.859401047229767

00:15:44.440 --> 00:15:46.036 So from this study,

NOTE Confidence: 0.859401047229767

00:15:46.036 --> 00:15:48.430 it was determined that the overall

NOTE Confidence: 0.859401047229767

00:15:48.508 --> 00:15:51.353 rate of severe maternal morbidity

NOTE Confidence: 0.859401047229767

00:15:51.353 --> 00:15:53.629 during a delivery hospitalization

NOTE Confidence: 0.859401047229767

00:15:53.629 --> 00:15:56.056 increased almost 200% over the

NOTE Confidence: 0.859401047229767

00:15:56.056 --> 00:15:58.954 time period from 1993 to 2014.

NOTE Confidence: 0.859401047229767

00:15:58.960 --> 00:16:02.218 There is a complementary study that

NOTE Confidence: 0.859401047229767

00:16:02.218 --> 00:16:05.788 was conducted by Callahan ET al that

NOTE Confidence: 0.859401047229767

00:16:05.788 --> 00:16:08.404 found similar increases over a 10

NOTE Confidence: 0.859401047229767

00:16:08.404 --> 00:16:11.602 year period of 75% in the incidents

NOTE Confidence: 0.859401047229767

00:16:11.602 --> 00:16:14.122 of severe maternal morbidity's most

NOTE Confidence: 0.859401047229767  
00:16:14.122 --> 00:16:16.909 frequent morbidity was a blood transfusion.  
NOTE Confidence: 0.859401047229767  
00:16:16.910 --> 00:16:19.240 And it's really remarkable how  
NOTE Confidence: 0.859401047229767  
00:16:19.240 --> 00:16:21.570 much they increased it increased  
NOTE Confidence: 0.859401047229767  
00:16:21.644 --> 00:16:23.500 by almost 400% of that.  
NOTE Confidence: 0.859401047229767  
00:16:23.500 --> 00:16:25.960 Really drove a lot of the  
NOTE Confidence: 0.859401047229767  
00:16:25.960 --> 00:16:28.010 statistics that you're seeing,  
NOTE Confidence: 0.859401047229767  
00:16:28.010 --> 00:16:31.062 but it's also noteworthy to mention that  
NOTE Confidence: 0.859401047229767  
00:16:31.062 --> 00:16:33.780 there were multiple other severe morbidities  
NOTE Confidence: 0.859401047229767  
00:16:33.780 --> 00:16:37.226 that increased by at least 75% over this.  
NOTE Confidence: 0.859401047229767  
00:16:37.226 --> 00:16:39.942 Same over that 10 year time period  
NOTE Confidence: 0.859401047229767  
00:16:39.942 --> 00:16:42.657 that included acute renal failure,  
NOTE Confidence: 0.859401047229767  
00:16:42.660 --> 00:16:43.992 shock from botic,  
NOTE Confidence: 0.859401047229767  
00:16:43.992 --> 00:16:44.880 pulmonary embolisms,  
NOTE Confidence: 0.859401047229767  
00:16:44.880 --> 00:16:47.655 AR DSQMI aneurysms in cardiac  
NOTE Confidence: 0.859401047229767  
00:16:47.655 --> 00:16:49.320 and pericardial surgeries.  
NOTE Confidence: 0.859401047229767

00:16:49.320 --> 00:16:51.630 And then as severe morbidities as  
NOTE Confidence: 0.859401047229767

00:16:51.630 --> 00:16:54.318 kind of harbingers or risk factors  
NOTE Confidence: 0.859401047229767

00:16:54.318 --> 00:16:57.013 for eventual mortality for delivery  
NOTE Confidence: 0.859401047229767

00:16:57.013 --> 00:16:59.190 hospitalizations where there was  
NOTE Confidence: 0.859401047229767

00:16:59.190 --> 00:17:02.130 a severe complication that in the  
NOTE Confidence: 0.859401047229767

00:17:02.130 --> 00:17:04.075 hospital proportionate mortality ranged  
NOTE Confidence: 0.859401047229767

00:17:04.075 --> 00:17:07.875 from not so much to upwards of 33%  
NOTE Confidence: 0.859401047229767

00:17:07.880 --> 00:17:10.575 depending on the specific morbidity  
NOTE Confidence: 0.859401047229767

00:17:10.575 --> 00:17:13.770 that the mother was diagnosed with.  
NOTE Confidence: 0.859401047229767

00:17:13.770 --> 00:17:16.461 So if we've gotten a little bit of the  
NOTE Confidence: 0.859401047229767

00:17:16.461 --> 00:17:19.919 lay of the land about how severe morbid  
NOTE Confidence: 0.859401047229767

00:17:19.919 --> 00:17:21.960 morbidities are increasing overtime,  
NOTE Confidence: 0.859401047229767

00:17:21.960 --> 00:17:23.520 many different factors could  
NOTE Confidence: 0.859401047229767

00:17:23.520 --> 00:17:25.080 be contributing to that.  
NOTE Confidence: 0.859401047229767

00:17:25.080 --> 00:17:26.640 But it's very concerning,  
NOTE Confidence: 0.859401047229767

00:17:26.640 --> 00:17:28.980 and certainly worthy of our attention.

NOTE Confidence: 0.859401047229767  
00:17:28.980 --> 00:17:31.017 And now we're going to turn our  
NOTE Confidence: 0.859401047229767  
00:17:31.017 --> 00:17:33.113 attention a little bit to disparities  
NOTE Confidence: 0.859401047229767  
00:17:33.113 --> 00:17:35.423 in the incidence of severe maternal  
NOTE Confidence: 0.859401047229767  
00:17:35.423 --> 00:17:37.585 morbidity's during the delivery  
NOTE Confidence: 0.859401047229767  
00:17:37.585 --> 00:17:38.729 hospitalization specifically.  
NOTE Confidence: 0.859401047229767  
00:17:38.730 --> 00:17:41.432 So there's a very elegant study that  
NOTE Confidence: 0.859401047229767  
00:17:41.432 --> 00:17:44.600 was done in 2018 by M on colleagues.  
NOTE Confidence: 0.859401047229767  
00:17:44.600 --> 00:17:46.950 That use the same national  
NOTE Confidence: 0.859401047229767  
00:17:46.950 --> 00:17:49.300 inpatient sample but a smaller.  
NOTE Confidence: 0.859401047229767  
00:17:49.300 --> 00:17:52.401 Time period from 2012 2015 to specifically  
NOTE Confidence: 0.859401047229767  
00:17:52.401 --> 00:17:54.838 generate population based estimates of #1.  
NOTE Confidence: 0.859401047229767  
00:17:54.840 --> 00:17:57.930 The prevalence of chronic physical and  
NOTE Confidence: 0.859401047229767  
00:17:57.930 --> 00:18:00.368 behavioral health conditions among women  
NOTE Confidence: 0.859401047229767  
00:18:00.368 --> 00:18:02.792 who come in to deliver an and then  
NOTE Confidence: 0.859401047229767  
00:18:02.792 --> 00:18:05.392 to the incidence of severe maternal  
NOTE Confidence: 0.859401047229767

00:18:05.392 --> 00:18:08.002 morbidity among those women as well.

NOTE Confidence: 0.859401047229767

00:18:08.002 --> 00:18:10.294 This is really to understand how

NOTE Confidence: 0.859401047229767

00:18:10.294 --> 00:18:13.309 the extent of the problem of the

NOTE Confidence: 0.859401047229767

00:18:13.309 --> 00:18:15.549 issue and then Furthermore they

NOTE Confidence: 0.859401047229767

00:18:15.549 --> 00:18:17.839 stratified their estimates by race,

NOTE Confidence: 0.859401047229767

00:18:17.840 --> 00:18:19.990 ethnicity and group folks into.

NOTE Confidence: 0.859401047229767

00:18:19.990 --> 00:18:21.510 Five or six different categories

NOTE Confidence: 0.859401047229767

00:18:21.510 --> 00:18:23.350 for the purposes of this talk,

NOTE Confidence: 0.859401047229767

00:18:23.350 --> 00:18:25.478 I will focus mostly on non Hispanic,

NOTE Confidence: 0.870102167129517

00:18:25.480 --> 00:18:28.186 white and non Hispanic black women.

NOTE Confidence: 0.870102167129517

00:18:28.190 --> 00:18:30.806 So they hypothesize that the prevalence

NOTE Confidence: 0.870102167129517

00:18:30.806 --> 00:18:33.005 of comorbid chronic conditions would

NOTE Confidence: 0.870102167129517

00:18:33.005 --> 00:18:34.925 be higher among minority women,

NOTE Confidence: 0.870102167129517

00:18:34.930 --> 00:18:37.870 and they found that to be true,

NOTE Confidence: 0.870102167129517

00:18:37.870 --> 00:18:39.975 and it was especially true

NOTE Confidence: 0.870102167129517

00:18:39.975 --> 00:18:42.080 for non Hispanic black women.

NOTE Confidence: 0.870102167129517

00:18:42.080 --> 00:18:44.750 They also hypothesize that the incidents

NOTE Confidence: 0.870102167129517

00:18:44.750 --> 00:18:46.976 of maternal severe morbidity would

NOTE Confidence: 0.870102167129517

00:18:46.976 --> 00:18:49.220 be higher among minority women women

NOTE Confidence: 0.870102167129517

00:18:49.220 --> 00:18:51.769 compared to non Hispanic white woman,

NOTE Confidence: 0.870102167129517

00:18:51.770 --> 00:18:53.862 an more pronounced among

NOTE Confidence: 0.870102167129517

00:18:53.862 --> 00:18:55.954 non Hispanic black women.

NOTE Confidence: 0.870102167129517

00:18:55.960 --> 00:18:58.180 So they did many fancy analysis

NOTE Confidence: 0.870102167129517

00:18:58.180 --> 00:19:00.550 with lots of fancy statistics,

NOTE Confidence: 0.870102167129517

00:19:00.550 --> 00:19:03.718 but at the end of the day they they

NOTE Confidence: 0.870102167129517

00:19:03.718 --> 00:19:06.073 confirmed both of their hypothesis

NOTE Confidence: 0.870102167129517

00:19:06.073 --> 00:19:08.468 and found that minority women,

NOTE Confidence: 0.870102167129517

00:19:08.470 --> 00:19:11.806 and specifically not has been in black women,

NOTE Confidence: 0.870102167129517

00:19:11.810 --> 00:19:14.306 have a higher burden of disease,

NOTE Confidence: 0.870102167129517

00:19:14.310 --> 00:19:16.655 as evidenced through higher prevalence

NOTE Confidence: 0.870102167129517

00:19:16.655 --> 00:19:19.000 of chronic conditions and higher

NOTE Confidence: 0.870102167129517



00:19:19.071 --> 00:19:21.645 incidence of maternal severe market is.  
NOTE Confidence: 0.870102167129517

00:19:21.650 --> 00:19:23.575 And what's really interesting is  
NOTE Confidence: 0.870102167129517

00:19:23.575 --> 00:19:26.606 they went on to do some additional  
NOTE Confidence: 0.870102167129517

00:19:26.606 --> 00:19:29.171 calculations to figure out basically  
NOTE Confidence: 0.870102167129517

00:19:29.171 --> 00:19:32.230 that the excess burden if you will.  
NOTE Confidence: 0.870102167129517

00:19:32.230 --> 00:19:34.384 So if all women experience the  
NOTE Confidence: 0.870102167129517

00:19:34.384 --> 00:19:36.483 same rates of severe morbidities  
NOTE Confidence: 0.870102167129517

00:19:36.483 --> 00:19:38.847 and chronic health conditions,  
NOTE Confidence: 0.870102167129517

00:19:38.850 --> 00:19:41.941 then we would see a 28% reduction  
NOTE Confidence: 0.870102167129517

00:19:41.941 --> 00:19:43.705 in severe morbidities among  
NOTE Confidence: 0.870102167129517

00:19:43.705 --> 00:19:45.910 racial and ethnic minority women,  
NOTE Confidence: 0.870102167129517

00:19:45.910 --> 00:19:48.794 and that reduction would be even more  
NOTE Confidence: 0.870102167129517

00:19:48.794 --> 00:19:51.660 pronounced for non Hispanic black women.  
NOTE Confidence: 0.870102167129517

00:19:51.660 --> 00:19:55.898 As we've been talking about South 28% at 41%,  
NOTE Confidence: 0.870102167129517

00:19:55.898 --> 00:19:59.321 and in addition for all women they  
NOTE Confidence: 0.870102167129517

00:19:59.321 --> 00:20:02.036 would see about a 15% reduction

NOTE Confidence: 0.870102167129517

00:20:02.036 --> 00:20:04.380 in severe maternal morbidity.

NOTE Confidence: 0.870102167129517

00:20:04.380 --> 00:20:07.272 So it's it reinforces that there

NOTE Confidence: 0.870102167129517

00:20:07.272 --> 00:20:09.200 is a disparity there,

NOTE Confidence: 0.870102167129517

00:20:09.200 --> 00:20:12.084 but it's also motivating to see how

NOTE Confidence: 0.870102167129517

00:20:12.084 --> 00:20:15.424 much of a difference in how much

NOTE Confidence: 0.870102167129517

00:20:15.424 --> 00:20:18.442 of an impact working to mitigate

NOTE Confidence: 0.870102167129517

00:20:18.540 --> 00:20:21.468 disparity specifically can have.

NOTE Confidence: 0.870102167129517

00:20:21.470 --> 00:20:22.964 Suggested the summary.

NOTE Confidence: 0.870102167129517

00:20:22.964 --> 00:20:25.952 Overall trends in maternal morbidity and

NOTE Confidence: 0.870102167129517

00:20:25.952 --> 00:20:28.840 mortality are concerning on multiple levels.

NOTE Confidence: 0.870102167129517

00:20:28.840 --> 00:20:31.654 One of the biggest challenges is

NOTE Confidence: 0.870102167129517

00:20:31.654 --> 00:20:34.552 assuring the quality of data that's

NOTE Confidence: 0.870102167129517

00:20:34.552 --> 00:20:36.897 being collected and towards that

NOTE Confidence: 0.870102167129517

00:20:36.897 --> 00:20:40.314 end the CDC and other government

NOTE Confidence: 0.870102167129517

00:20:40.314 --> 00:20:42.240 institutions have really.

NOTE Confidence: 0.870102167129517

00:20:42.240 --> 00:20:44.574 Made a point of developing different  
NOTE Confidence: 0.870102167129517

00:20:44.574 --> 00:20:46.520 programs to address that need,  
NOTE Confidence: 0.870102167129517

00:20:46.520 --> 00:20:49.229 because if the quality of the data  
NOTE Confidence: 0.870102167129517

00:20:49.229 --> 00:20:51.833 is not sufficient then we're not  
NOTE Confidence: 0.870102167129517

00:20:51.833 --> 00:20:54.103 going to have accurate understanding  
NOTE Confidence: 0.870102167129517

00:20:54.103 --> 00:20:56.510 of what's going on around us.  
NOTE Confidence: 0.870102167129517

00:20:56.510 --> 00:20:59.246 I think it also shows us that there  
NOTE Confidence: 0.870102167129517

00:20:59.246 --> 00:21:02.760 is a need for immediate intervention.  
NOTE Confidence: 0.870102167129517

00:21:02.760 --> 00:21:04.560 With respect to maternal mortality,  
NOTE Confidence: 0.870102167129517

00:21:04.560 --> 00:21:06.720 because of the high percentage of  
NOTE Confidence: 0.870102167129517

00:21:06.720 --> 00:21:08.520 preventable deaths, if these desperate,  
NOTE Confidence: 0.870102167129517

00:21:08.520 --> 00:21:09.240 deemed, preventable,  
NOTE Confidence: 0.870102167129517

00:21:09.240 --> 00:21:12.120 then there should be no reason why we  
NOTE Confidence: 0.870102167129517

00:21:12.120 --> 00:21:14.637 can't figure out how to prevent them.  
NOTE Confidence: 0.870102167129517

00:21:14.640 --> 00:21:16.895 So that seems like relatively  
NOTE Confidence: 0.870102167129517

00:21:16.895 --> 00:21:18.248 low hanging fruit.

NOTE Confidence: 0.870102167129517  
00:21:18.250 --> 00:21:20.406 And then I would argue that further  
NOTE Confidence: 0.870102167129517  
00:21:20.406 --> 00:21:22.820 because of the persistent disparities,  
NOTE Confidence: 0.870102167129517  
00:21:22.820 --> 00:21:25.424 there is a need for the interventions  
NOTE Confidence: 0.870102167129517  
00:21:25.424 --> 00:21:27.403 to decrease mortality and morbidity  
NOTE Confidence: 0.870102167129517  
00:21:27.403 --> 00:21:29.388 to specifically be geared towards  
NOTE Confidence: 0.870102167129517  
00:21:29.388 --> 00:21:31.730 black and other minority women to  
NOTE Confidence: 0.870102167129517  
00:21:31.730 --> 00:21:33.890 make sure that we optimize the  
NOTE Confidence: 0.870102167129517  
00:21:33.890 --> 00:21:35.393 efficacy of the interventions,  
NOTE Confidence: 0.870102167129517  
00:21:35.393 --> 00:21:37.679 and in so doing mitigate disparities,  
NOTE Confidence: 0.870102167129517  
00:21:37.680 --> 00:21:40.728 we want to have good health for all.  
NOTE Confidence: 0.870102167129517  
00:21:40.730 --> 00:21:45.010 And this is 1 Avenue of doing so.  
NOTE Confidence: 0.870102167129517  
00:21:45.010 --> 00:21:46.825 So we've talked again about  
NOTE Confidence: 0.870102167129517  
00:21:46.825 --> 00:21:48.640 mothers and their adverse outcomes,  
NOTE Confidence: 0.870102167129517  
00:21:48.640 --> 00:21:51.416 and now we're going to move into the  
NOTE Confidence: 0.870102167129517  
00:21:51.416 --> 00:21:53.968 infant realm and talk about birth  
NOTE Confidence: 0.870102167129517

00:21:53.968 --> 00:21:56.644 outcomes and trans in statistics overtime.  
NOTE Confidence: 0.870102167129517

00:21:56.650 --> 00:21:58.799 So because we're going to be talking  
NOTE Confidence: 0.870102167129517

00:21:58.799 --> 00:22:00.689 about this for a little while,  
NOTE Confidence: 0.870102167129517

00:22:00.690 --> 00:22:02.538 wanted to run through a couple  
NOTE Confidence: 0.870102167129517

00:22:02.538 --> 00:22:03.770 of definitions as in  
NOTE Confidence: 0.841591954231262

00:22:03.834 --> 00:22:05.018 unitologist pre term birth  
NOTE Confidence: 0.841591954231262

00:22:05.018 --> 00:22:07.220 is near and dear to my heart.  
NOTE Confidence: 0.841591954231262

00:22:07.220 --> 00:22:09.565 Makes up a large contingent of the  
NOTE Confidence: 0.841591954231262

00:22:09.565 --> 00:22:11.270 patient population that I care for.  
NOTE Confidence: 0.841591954231262

00:22:11.270 --> 00:22:13.382 This refers to infants who are born at  
NOTE Confidence: 0.841591954231262

00:22:13.382 --> 00:22:15.375 less than 3637 weeks gestation with  
NOTE Confidence: 0.841591954231262

00:22:15.375 --> 00:22:17.487 the normal gestation lasting 40 weeks.  
NOTE Confidence: 0.841591954231262

00:22:17.490 --> 00:22:19.308 Low birth weight infants are those  
NOTE Confidence: 0.841591954231262

00:22:19.308 --> 00:22:21.219 born at less than 2500 grams,  
NOTE Confidence: 0.841591954231262

00:22:21.220 --> 00:22:23.374 which is about 5 pounds, 8 ounces,  
NOTE Confidence: 0.841591954231262

00:22:23.374 --> 00:22:25.790 and the infant mortality is the number of

NOTE Confidence: 0.841591954231262

00:22:25.852 --> 00:22:28.460 infant deaths per live per 1000 live births.

NOTE Confidence: 0.841591954231262

00:22:28.460 --> 00:22:30.728 And those deaths occur prior to

NOTE Confidence: 0.841591954231262

00:22:30.728 --> 00:22:32.240 the infant's first birthday.

NOTE Confidence: 0.841591954231262

00:22:32.240 --> 00:22:35.656 So prior to 365 days of age.

NOTE Confidence: 0.841591954231262

00:22:35.660 --> 00:22:37.862 So you've got all these definitions

NOTE Confidence: 0.841591954231262

00:22:37.862 --> 00:22:39.980 and think about birth outcomes.

NOTE Confidence: 0.841591954231262

00:22:39.980 --> 00:22:43.124 What's the big deal about pre term birth?

NOTE Confidence: 0.841591954231262

00:22:43.130 --> 00:22:46.021 Well, I think that we need to

NOTE Confidence: 0.841591954231262

00:22:46.021 --> 00:22:48.239 kind of contextualize it as well.

NOTE Confidence: 0.841591954231262

00:22:48.240 --> 00:22:51.000 Pre term birth is the number one cause

NOTE Confidence: 0.841591954231262

00:22:51.000 --> 00:22:53.738 of infant mortality as it accounts for

NOTE Confidence: 0.841591954231262

00:22:53.738 --> 00:22:56.212 about 1/3 of infant deaths annually

NOTE Confidence: 0.841591954231262

00:22:56.212 --> 00:22:58.332 while low birth weight doesn't

NOTE Confidence: 0.841591954231262

00:22:58.332 --> 00:23:00.422 have quite the same contribution

NOTE Confidence: 0.841591954231262

00:23:00.422 --> 00:23:02.774 to our impact on infant mortality,

NOTE Confidence: 0.841591954231262

00:23:02.780 --> 00:23:05.162 it still is a significant risk  
NOTE Confidence: 0.841591954231262

00:23:05.162 --> 00:23:06.750 factor for infant mortality.  
NOTE Confidence: 0.841591954231262

00:23:06.750 --> 00:23:09.174 An an importantly survivors of preterm  
NOTE Confidence: 0.841591954231262

00:23:09.174 --> 00:23:12.597 birth and low birth weight are at risk  
NOTE Confidence: 0.841591954231262

00:23:12.597 --> 00:23:14.762 for complications in early childhood,  
NOTE Confidence: 0.841591954231262

00:23:14.770 --> 00:23:15.191 adolescence,  
NOTE Confidence: 0.841591954231262

00:23:15.191 --> 00:23:18.138 and offload all throughout the life course.  
NOTE Confidence: 0.841591954231262

00:23:18.140 --> 00:23:21.654 So it's very exciting to think about.  
NOTE Confidence: 0.841591954231262

00:23:21.660 --> 00:23:23.820 Decreasing rates of pre term  
NOTE Confidence: 0.841591954231262

00:23:23.820 --> 00:23:25.980 birth to mitigating disparities in  
NOTE Confidence: 0.841591954231262

00:23:26.056 --> 00:23:28.456 preterm birth and low birth weight.  
NOTE Confidence: 0.841591954231262

00:23:28.460 --> 00:23:30.836 Because in so doing will directly  
NOTE Confidence: 0.841591954231262

00:23:30.836 --> 00:23:33.560 drive down your infant mortality rate.  
NOTE Confidence: 0.841591954231262

00:23:33.560 --> 00:23:35.876 But Furthermore you are working towards  
NOTE Confidence: 0.841591954231262

00:23:35.876 --> 00:23:38.425 improving the health of individuals not  
NOTE Confidence: 0.841591954231262

00:23:38.425 --> 00:23:40.785 just during the birth hospitalization,

NOTE Confidence: 0.841591954231262

00:23:40.790 --> 00:23:43.340 not just during infancy and childhood,

NOTE Confidence: 0.841591954231262

00:23:43.340 --> 00:23:45.460 but across the entire life.

NOTE Confidence: 0.841591954231262

00:23:45.460 --> 00:23:48.355 Course is very very important pursuit.

NOTE Confidence: 0.841591954231262

00:23:48.355 --> 00:23:51.832 Just a little bit of the Epidemiology of pre

NOTE Confidence: 0.841591954231262

00:23:51.832 --> 00:23:54.745 term birth over the last couple of decades,

NOTE Confidence: 0.841591954231262

00:23:54.750 --> 00:23:57.566 so we've made strides chipped away at it.

NOTE Confidence: 0.841591954231262

00:23:57.570 --> 00:23:59.330 But starting in the 1990s,

NOTE Confidence: 0.841591954231262

00:23:59.330 --> 00:24:02.442 they rated pre term birth began to slowly

NOTE Confidence: 0.841591954231262

00:24:02.442 --> 00:24:06.015 rise and it did so for about 16 or 17 years.

NOTE Confidence: 0.841591954231262

00:24:06.020 --> 00:24:08.042 We saw a 20% rise over

NOTE Confidence: 0.841591954231262

00:24:08.042 --> 00:24:09.890 that time point in 2006.

NOTE Confidence: 0.841591954231262

00:24:09.890 --> 00:24:12.711 It peaked and then from that point

NOTE Confidence: 0.841591954231262

00:24:12.711 --> 00:24:15.460 forward began to decline and is to

NOTE Confidence: 0.841591954231262

00:24:15.460 --> 00:24:17.960 over the next eight years or so.

NOTE Confidence: 0.841591954231262

00:24:17.960 --> 00:24:21.056 It's worth mentioning that it's a

NOTE Confidence: 0.841591954231262



00:24:21.056 --> 00:24:23.556 pretty significant decrease in the  
NOTE Confidence: 0.841591954231262

00:24:23.556 --> 00:24:26.332 rate of pre term birth that we see  
NOTE Confidence: 0.841591954231262

00:24:26.332 --> 00:24:29.180 just around 2006 and that was driven  
NOTE Confidence: 0.841591954231262

00:24:29.180 --> 00:24:31.994 in very large part by a concentrated  
NOTE Confidence: 0.841591954231262

00:24:31.994 --> 00:24:33.984 effort within the acceptable community  
NOTE Confidence: 0.841591954231262

00:24:33.984 --> 00:24:36.213 to change their practices regarding  
NOTE Confidence: 0.841591954231262

00:24:36.213 --> 00:24:38.949 elective Caesarean sections prior to term.  
NOTE Confidence: 0.841591954231262

00:24:38.950 --> 00:24:39.375 Previously,  
NOTE Confidence: 0.841591954231262

00:24:39.375 --> 00:24:41.925 the kind of prevailing thought and  
NOTE Confidence: 0.841591954231262

00:24:41.925 --> 00:24:44.851 feeling had been all the baby at 35 or  
NOTE Confidence: 0.841591954231262

00:24:44.851 --> 00:24:47.088 36 weeks is close enough to determine  
NOTE Confidence: 0.841591954231262

00:24:47.088 --> 00:24:49.685 if we need to schedule a C-section.  
NOTE Confidence: 0.841591954231262

00:24:49.690 --> 00:24:51.480 An non medically indicated see  
NOTE Confidence: 0.841591954231262

00:24:51.480 --> 00:24:53.270 section A little bit early.  
NOTE Confidence: 0.841591954231262

00:24:53.270 --> 00:24:54.286 It will be fine.  
NOTE Confidence: 0.841591954231262

00:24:54.286 --> 00:24:56.297 The baby will be fine but not

NOTE Confidence: 0.841591954231262

00:24:56.297 --> 00:24:57.969 completely recognizing that although

NOTE Confidence: 0.841591954231262

00:24:57.969 --> 00:25:00.515 the chances of survival were excellent

NOTE Confidence: 0.841591954231262

00:25:00.515 --> 00:25:02.843 at that gestation elhage that pre

NOTE Confidence: 0.841591954231262

00:25:02.843 --> 00:25:04.982 maturity brings with it its own

NOTE Confidence: 0.841591954231262

00:25:04.982 --> 00:25:06.926 set of morbidities and that was

NOTE Confidence: 0.841591954231262

00:25:06.926 --> 00:25:09.439 not something to be taken lightly.

NOTE Confidence: 0.841591954231262

00:25:09.440 --> 00:25:10.692 That intervention and practice

NOTE Confidence: 0.841591954231262

00:25:10.692 --> 00:25:11.944 change was very successful.

NOTE Confidence: 0.841591954231262

00:25:11.950 --> 00:25:14.008 You can see that reflected on

NOTE Confidence: 0.841591954231262

00:25:14.008 --> 00:25:15.380 a national level by

NOTE Confidence: 0.834864795207977

00:25:15.450 --> 00:25:18.180 decreases in the rate of preterm birth.

NOTE Confidence: 0.834864795207977

00:25:18.180 --> 00:25:21.735 We have had success for a time for time,

NOTE Confidence: 0.834864795207977

00:25:21.740 --> 00:25:24.908 but since 2014 you can see at the rate

NOTE Confidence: 0.834864795207977

00:25:24.908 --> 00:25:27.921 is slowly starting to rise and has

NOTE Confidence: 0.834864795207977

00:25:27.921 --> 00:25:31.270 done so over these past six years and

NOTE Confidence: 0.834864795207977

00:25:31.270 --> 00:25:33.968 we're now back to pre 2010 levels.  
NOTE Confidence: 0.834864795207977

00:25:33.968 --> 00:25:36.614 So at its peak around 2006 2007  
NOTE Confidence: 0.834864795207977

00:25:36.614 --> 00:25:39.508 pre term birth rate was around 12%.  
NOTE Confidence: 0.834864795207977

00:25:39.510 --> 00:25:42.275 We driven it down to around 9,  
NOTE Confidence: 0.834864795207977

00:25:42.280 --> 00:25:44.315 maybe slightly below that and  
NOTE Confidence: 0.834864795207977

00:25:44.315 --> 00:25:47.029 now we're kind of coming back up.  
NOTE Confidence: 0.834864795207977

00:25:47.030 --> 00:25:50.770 2 into the time range.  
NOTE Confidence: 0.834864795207977

00:25:50.770 --> 00:25:53.710 And then we start to think about  
NOTE Confidence: 0.834864795207977

00:25:53.710 --> 00:25:56.315 disparities in rates of pre term  
NOTE Confidence: 0.834864795207977

00:25:56.315 --> 00:25:58.835 birth so that there certainly are  
NOTE Confidence: 0.834864795207977

00:25:58.835 --> 00:26:01.205 African American women have 1 1/2  
NOTE Confidence: 0.834864795207977

00:26:01.205 --> 00:26:03.890 to two times the risk of preterm  
NOTE Confidence: 0.834864795207977

00:26:03.890 --> 00:26:06.760 birth as do non Hispanic white women.  
NOTE Confidence: 0.834864795207977

00:26:06.760 --> 00:26:09.220 Even when you adjust for multiple  
NOTE Confidence: 0.834864795207977

00:26:09.220 --> 00:26:10.040 socio environmental.  
NOTE Confidence: 0.834864795207977

00:26:10.040 --> 00:26:11.300 Another confounding factors.

NOTE Confidence: 0.834864795207977  
00:26:11.300 --> 00:26:14.812 So part so big part over 2 is  
NOTE Confidence: 0.834864795207977  
00:26:14.812 --> 00:26:17.257 you're trying to understand what  
NOTE Confidence: 0.834864795207977  
00:26:17.257 --> 00:26:19.600 drives these disparities and how.  
NOTE Confidence: 0.834864795207977  
00:26:19.600 --> 00:26:22.358 How do how does the magnitude of  
NOTE Confidence: 0.834864795207977  
00:26:22.358 --> 00:26:24.240 those disparities change overtime?  
NOTE Confidence: 0.834864795207977  
00:26:24.240 --> 00:26:26.826 So this graph demonstrates over the  
NOTE Confidence: 0.834864795207977  
00:26:26.826 --> 00:26:30.199 same time period as we look at the  
NOTE Confidence: 0.834864795207977  
00:26:30.199 --> 00:26:33.100 trends and overall rates of preterm birth.  
NOTE Confidence: 0.834864795207977  
00:26:33.100 --> 00:26:35.175 Looking at the difference between  
NOTE Confidence: 0.834864795207977  
00:26:35.175 --> 00:26:37.742 rates in non Hispanic black and  
NOTE Confidence: 0.834864795207977  
00:26:37.742 --> 00:26:39.430 non Hispanic white infants.  
NOTE Confidence: 0.834864795207977  
00:26:39.430 --> 00:26:40.222 So similar,  
NOTE Confidence: 0.834864795207977  
00:26:40.222 --> 00:26:42.202 so thankfully the risk difference  
NOTE Confidence: 0.834864795207977  
00:26:42.202 --> 00:26:44.110 has been slowly declining.  
NOTE Confidence: 0.834864795207977  
00:26:44.110 --> 00:26:47.050 Since about 2006 and it looks like  
NOTE Confidence: 0.834864795207977

00:26:47.050 --> 00:26:50.273 there's actually been a very nice steady  
NOTE Confidence: 0.834864795207977

00:26:50.273 --> 00:26:53.105 downward trajectory of that risk difference,  
NOTE Confidence: 0.834864795207977

00:26:53.110 --> 00:26:55.889 so that gap was bit by bit  
NOTE Confidence: 0.834864795207977

00:26:55.889 --> 00:26:58.080 coming closer was narrowing.  
NOTE Confidence: 0.834864795207977

00:26:58.080 --> 00:26:59.920 But unfortunately it started  
NOTE Confidence: 0.834864795207977

00:26:59.920 --> 00:27:02.220 to rise in about 2013.  
NOTE Confidence: 0.834864795207977

00:27:02.220 --> 00:27:05.419 This is kind of concomitant with the  
NOTE Confidence: 0.834864795207977

00:27:05.419 --> 00:27:09.118 overall trend in uptick of pre term births.  
NOTE Confidence: 0.834864795207977

00:27:09.120 --> 00:27:12.800 An there is difference has now surpassed 5%,  
NOTE Confidence: 0.834864795207977

00:27:12.800 --> 00:27:16.232 which is above where it was kind of  
NOTE Confidence: 0.834864795207977

00:27:16.232 --> 00:27:19.239 during the height of its decline.  
NOTE Confidence: 0.834864795207977

00:27:19.240 --> 00:27:20.413 If you will.  
NOTE Confidence: 0.834864795207977

00:27:20.413 --> 00:27:22.759 So that is something concerning an  
NOTE Confidence: 0.834864795207977

00:27:22.759 --> 00:27:24.759 warrants further investigation.  
NOTE Confidence: 0.834864795207977

00:27:24.760 --> 00:27:27.550 Overtime to make sure that that  
NOTE Confidence: 0.834864795207977

00:27:27.550 --> 00:27:28.945 trend doesn't continue.

NOTE Confidence: 0.834864795207977

00:27:28.950 --> 00:27:29.412 OK,

NOTE Confidence: 0.834864795207977

00:27:29.412 --> 00:27:32.184 so you've talked about pre term

NOTE Confidence: 0.834864795207977

00:27:32.184 --> 00:27:35.224 birth and we're going to transition

NOTE Confidence: 0.834864795207977

00:27:35.224 --> 00:27:37.296 to low birth weight.

NOTE Confidence: 0.834864795207977

00:27:37.300 --> 00:27:41.213 So the trends that kind of overall

NOTE Confidence: 0.834864795207977

00:27:41.213 --> 00:27:43.993 epidemiological trends in low birth

NOTE Confidence: 0.834864795207977

00:27:43.993 --> 00:27:46.508 weight has been somewhat similar

NOTE Confidence: 0.834864795207977

00:27:46.508 --> 00:27:49.678 to pre term birth in that they

NOTE Confidence: 0.834864795207977

00:27:49.678 --> 00:27:52.521 rose for a period of 15 years,

NOTE Confidence: 0.834864795207977

00:27:52.521 --> 00:27:56.449 give or take an again by that 20%

NOTE Confidence: 0.834864795207977

00:27:56.450 --> 00:27:58.960 mark they peaked around 2006.

NOTE Confidence: 0.834864795207977

00:27:58.960 --> 00:28:02.390 Plateaued and then began to

NOTE Confidence: 0.834864795207977

00:28:02.390 --> 00:28:05.820 decrease and natured in 2012.

NOTE Confidence: 0.834864795207977

00:28:05.820 --> 00:28:08.040 But I think the biggest thing

NOTE Confidence: 0.834864795207977

00:28:08.040 --> 00:28:09.940 to note is that the.

NOTE Confidence: 0.834864795207977

00:28:09.940 --> 00:28:13.940 The the magnitude of that change is much  
NOTE Confidence: 0.834864795207977

00:28:13.940 --> 00:28:17.866 smaller than what we saw in pre term birth.  
NOTE Confidence: 0.834864795207977

00:28:17.870 --> 00:28:20.918 However, similarly to pre term birth,  
NOTE Confidence: 0.834864795207977

00:28:20.920 --> 00:28:23.782 we are now seeing that rate  
NOTE Confidence: 0.834864795207977

00:28:23.782 --> 00:28:26.510 of low birth weight rising.  
NOTE Confidence: 0.834864795207977

00:28:26.510 --> 00:28:29.681 It's risen 4% in the last seven  
NOTE Confidence: 0.834864795207977

00:28:29.681 --> 00:28:33.110 years and is currently at 8.28%,  
NOTE Confidence: 0.834864795207977

00:28:33.110 --> 00:28:36.350 which is higher than it was.  
NOTE Confidence: 0.834864795207977

00:28:36.350 --> 00:28:38.910 At its peak in 2006,  
NOTE Confidence: 0.834864795207977

00:28:38.910 --> 00:28:39.850 before falling.  
NOTE Confidence: 0.834864795207977

00:28:39.850 --> 00:28:40.790 So again,  
NOTE Confidence: 0.834864795207977

00:28:40.790 --> 00:28:43.610 something that we need to continue  
NOTE Confidence: 0.834864795207977

00:28:43.695 --> 00:28:46.271 to follow and see how this evolves  
NOTE Confidence: 0.834864795207977

00:28:46.271 --> 00:28:49.029 and see what that tells us about.  
NOTE Confidence: 0.834864795207977

00:28:49.030 --> 00:28:51.568 The nature of drivers of disparities.  
NOTE Confidence: 0.834864795207977

00:28:51.570 --> 00:28:53.880 I will also mention on that you

NOTE Confidence: 0.834864795207977

00:28:53.880 --> 00:28:56.766 can you can see that the risk

NOTE Confidence: 0.834864795207977

00:28:56.766 --> 00:28:59.031 difference between non Hispanic white

NOTE Confidence: 0.834864795207977

00:28:59.031 --> 00:29:01.914 and non Hispanic black low birth

NOTE Confidence: 0.834864795207977

00:29:01.914 --> 00:29:04.259 weight rates is fairly constant.

NOTE Confidence: 0.828729689121246

00:29:04.260 --> 00:29:07.636 Starks to kind of narrow a little bit,

NOTE Confidence: 0.828729689121246

00:29:07.640 --> 00:29:12.216 but we're starting to see widening that risk

NOTE Confidence: 0.828729689121246

00:29:12.216 --> 00:29:16.219 difference in these in the last few years.

NOTE Confidence: 0.828729689121246

00:29:16.220 --> 00:29:19.988 This is kind of a recapitulation of that.

NOTE Confidence: 0.828729689121246

00:29:19.990 --> 00:29:22.104 OK, so we talk through kind of

NOTE Confidence: 0.828729689121246

00:29:22.104 --> 00:29:24.689 trends in preterm birth and low birth

NOTE Confidence: 0.828729689121246

00:29:24.689 --> 00:29:26.301 weight Epidemiology that they're

NOTE Confidence: 0.828729689121246

00:29:26.301 --> 00:29:28.932 not exactly the same similar to one

NOTE Confidence: 0.828729689121246

00:29:28.932 --> 00:29:30.692 another in their overall trends.

NOTE Confidence: 0.828729689121246

00:29:30.700 --> 00:29:32.485 Overtime, the infant mortality has

NOTE Confidence: 0.828729689121246

00:29:32.485 --> 00:29:34.270 followed quite a different trend.

NOTE Confidence: 0.828729689121246



00:29:34.270 --> 00:29:36.502 First and foremost is worthwhile to  
NOTE Confidence: 0.828729689121246

00:29:36.502 --> 00:29:39.037 note that the amount of data and  
NOTE Confidence: 0.828729689121246

00:29:39.037 --> 00:29:40.987 the timeline over which that data  
NOTE Confidence: 0.828729689121246

00:29:40.987 --> 00:29:43.542 was collected is a lot more robust  
NOTE Confidence: 0.828729689121246

00:29:43.542 --> 00:29:45.694 and extensive than what we have,  
NOTE Confidence: 0.828729689121246

00:29:45.694 --> 00:29:47.479 especially your pre term birth,  
NOTE Confidence: 0.828729689121246

00:29:47.480 --> 00:29:49.280 because the statistics have been  
NOTE Confidence: 0.828729689121246

00:29:49.280 --> 00:29:50.720 captured for so long.  
NOTE Confidence: 0.828729689121246

00:29:50.720 --> 00:29:53.149 So we have good statistics starting at  
NOTE Confidence: 0.828729689121246

00:29:53.149 --> 00:29:55.879 the turn of the 20th century actually  
NOTE Confidence: 0.828729689121246

00:29:55.879 --> 00:29:58.297 show the rates for non Hispanic,  
NOTE Confidence: 0.828729689121246

00:29:58.300 --> 00:29:59.712 non Hispanic black infants,  
NOTE Confidence: 0.828729689121246

00:29:59.712 --> 00:30:03.347 and so that we can get a great sense of  
NOTE Confidence: 0.828729689121246

00:30:03.347 --> 00:30:06.001 what the trends have done overtime and  
NOTE Confidence: 0.828729689121246

00:30:06.001 --> 00:30:08.906 what the risk difference has been overtime.  
NOTE Confidence: 0.828729689121246

00:30:08.910 --> 00:30:10.840 So the overall happy story.

NOTE Confidence: 0.828729689121246

00:30:10.840 --> 00:30:13.688 Over the entire course of the 20th century,

NOTE Confidence: 0.828729689121246

00:30:13.690 --> 00:30:15.625 we see a continual decline

NOTE Confidence: 0.828729689121246

00:30:15.625 --> 00:30:17.560 in infant mortality rate for

NOTE Confidence: 0.828729689121246

00:30:17.636 --> 00:30:19.676 both black and white infants.

NOTE Confidence: 0.828729689121246

00:30:19.680 --> 00:30:20.225 However,

NOTE Confidence: 0.828729689121246

00:30:20.225 --> 00:30:24.040 what is striking is that the risk

NOTE Confidence: 0.828729689121246

00:30:24.040 --> 00:30:27.037 difference really didn't budg with the

NOTE Confidence: 0.828729689121246

00:30:27.037 --> 00:30:30.580 entire first half of the 20th century,

NOTE Confidence: 0.828729689121246

00:30:30.580 --> 00:30:33.694 and it may have widened at

NOTE Confidence: 0.828729689121246

00:30:33.694 --> 00:30:35.770 subsequent to that point,

NOTE Confidence: 0.828729689121246

00:30:35.770 --> 00:30:38.948 so there is 2 fold greater infant

NOTE Confidence: 0.828729689121246

00:30:38.948 --> 00:30:41.623 mortality rate for black newborns

NOTE Confidence: 0.828729689121246

00:30:41.623 --> 00:30:44.067 compared to white newborns,

NOTE Confidence: 0.828729689121246

00:30:44.070 --> 00:30:47.154 and it has really maintained that

NOTE Confidence: 0.828729689121246

00:30:47.154 --> 00:30:50.329 magnitude of difference if not widened.

NOTE Confidence: 0.828729689121246

00:30:50.330 --> 00:30:52.305 Despite advances in the treatment  
NOTE Confidence: 0.828729689121246

00:30:52.305 --> 00:30:54.280 and prevention of disease and  
NOTE Confidence: 0.828729689121246

00:30:54.347 --> 00:30:56.311 advances in sanitation, housing,  
NOTE Confidence: 0.828729689121246

00:30:56.311 --> 00:30:57.874 public health interventions,  
NOTE Confidence: 0.828729689121246

00:30:57.874 --> 00:31:02.007 and that trend continues even to the most  
NOTE Confidence: 0.828729689121246

00:31:02.007 --> 00:31:04.797 recent statistics published in like 2017.  
NOTE Confidence: 0.828729689121246

00:31:04.800 --> 00:31:06.063 So in summary,  
NOTE Confidence: 0.828729689121246

00:31:06.063 --> 00:31:08.589 thinking about trends in birth outcomes,  
NOTE Confidence: 0.828729689121246

00:31:08.590 --> 00:31:11.116 unadjusted trends in pre term birth,  
NOTE Confidence: 0.828729689121246

00:31:11.120 --> 00:31:12.380 low birth weight,  
NOTE Confidence: 0.828729689121246

00:31:12.380 --> 00:31:14.900 an infant mortality rate are similar,  
NOTE Confidence: 0.828729689121246

00:31:14.900 --> 00:31:16.584 but they're not interchangeable.  
NOTE Confidence: 0.828729689121246

00:31:16.584 --> 00:31:17.847 As we discussed.  
NOTE Confidence: 0.828729689121246

00:31:17.850 --> 00:31:18.960 I think really,  
NOTE Confidence: 0.828729689121246

00:31:18.960 --> 00:31:21.180 what what always strikes me is  
NOTE Confidence: 0.828729689121246

00:31:21.180 --> 00:31:23.504 how little variability there is

NOTE Confidence: 0.828729689121246

00:31:23.504 --> 00:31:25.849 in low birth weight overtime.

NOTE Confidence: 0.828729689121246

00:31:25.850 --> 00:31:27.534 How much more variability,

NOTE Confidence: 0.828729689121246

00:31:27.534 --> 00:31:28.797 comparatively infrequent birth,

NOTE Confidence: 0.828729689121246

00:31:28.800 --> 00:31:30.556 there has been overtime,

NOTE Confidence: 0.828729689121246

00:31:30.556 --> 00:31:33.190 and while both preterm birth and

NOTE Confidence: 0.828729689121246

00:31:33.270 --> 00:31:35.766 low birth weight look like they're

NOTE Confidence: 0.828729689121246

00:31:35.766 --> 00:31:38.510 starting to tick up a little bit.

NOTE Confidence: 0.828729689121246

00:31:38.510 --> 00:31:41.408 Infant mortality rate continues to decrease.

NOTE Confidence: 0.828729689121246

00:31:41.410 --> 00:31:43.948 As we noted that despite overall

NOTE Confidence: 0.828729689121246

00:31:43.948 --> 00:31:46.075 decreases in the crude rates

NOTE Confidence: 0.828729689121246

00:31:46.075 --> 00:31:47.865 of all three of these.

NOTE Confidence: 0.873050808906555

00:31:50.780 --> 00:31:53.260 Disparities persist across all three

NOTE Confidence: 0.873050808906555

00:31:53.260 --> 00:31:56.231 birth outcomes and the magnitude of

NOTE Confidence: 0.873050808906555

00:31:56.231 --> 00:31:58.697 the difference between rates by race.

NOTE Confidence: 0.873050808906555

00:31:58.700 --> 00:32:00.095 Ethnicity hasn't changed

NOTE Confidence: 0.873050808906555

00:32:00.095 --> 00:32:01.955 meaningfully over that time,  
NOTE Confidence: 0.873050808906555

00:32:01.960 --> 00:32:05.103 at all, so we've done well with  
NOTE Confidence: 0.873050808906555

00:32:05.103 --> 00:32:07.560 improving health kind of globally.  
NOTE Confidence: 0.873050808906555

00:32:07.560 --> 00:32:10.890 But we've not done well in  
NOTE Confidence: 0.873050808906555

00:32:10.890 --> 00:32:13.110 addressing this persistent disparity.  
NOTE Confidence: 0.873050808906555

00:32:13.110 --> 00:32:15.160 And as I mentioned earlier,  
NOTE Confidence: 0.873050808906555

00:32:15.160 --> 00:32:17.015 it's interesting to note that  
NOTE Confidence: 0.873050808906555

00:32:17.015 --> 00:32:18.870 the disparity persists even after  
NOTE Confidence: 0.873050808906555

00:32:18.932 --> 00:32:21.287 adjustment for traditional risk factors,  
NOTE Confidence: 0.873050808906555

00:32:21.290 --> 00:32:23.750 and So what that brings to  
NOTE Confidence: 0.873050808906555

00:32:23.750 --> 00:32:26.572 mind for me is to say, OK,  
NOTE Confidence: 0.873050808906555

00:32:26.572 --> 00:32:29.548 so if we adjust for all of these  
NOTE Confidence: 0.873050808906555

00:32:29.548 --> 00:32:31.883 different risk factors and it  
NOTE Confidence: 0.873050808906555

00:32:31.883 --> 00:32:34.228 doesn't make a difference that  
NOTE Confidence: 0.873050808906555

00:32:34.228 --> 00:32:36.647 there's still this excess risk.  
NOTE Confidence: 0.873050808906555

00:32:36.650 --> 00:32:38.636 There is unmeasured risk we haven't

NOTE Confidence: 0.873050808906555  
00:32:38.636 --> 00:32:40.439 been able to account for it,  
NOTE Confidence: 0.873050808906555  
00:32:40.440 --> 00:32:42.752 so our job really is to try and  
NOTE Confidence: 0.873050808906555  
00:32:42.752 --> 00:32:44.775 figure out what is that unmeasured  
NOTE Confidence: 0.873050808906555  
00:32:44.775 --> 00:32:47.390 risk and how do we account for it.  
NOTE Confidence: 0.873050808906555  
00:32:47.390 --> 00:32:50.868 But because it's kind of a. So complex.  
NOTE Confidence: 0.873050808906555  
00:32:50.868 --> 00:32:53.772 The greater question to ask is  
NOTE Confidence: 0.873050808906555  
00:32:53.772 --> 00:32:57.409 how do we conceptualize the risk?  
NOTE Confidence: 0.873050808906555  
00:32:57.410 --> 00:33:00.609 Do we think about risk as individual,  
NOTE Confidence: 0.873050808906555  
00:33:00.610 --> 00:33:02.450 individually identifiable risk factors?  
NOTE Confidence: 0.873050808906555  
00:33:02.450 --> 00:33:05.210 Do we think about combinations of  
NOTE Confidence: 0.873050808906555  
00:33:05.280 --> 00:33:07.468 risk factors? Groupings of exposures?  
NOTE Confidence: 0.873050808906555  
00:33:07.468 --> 00:33:10.204 Are we thinking about social context?  
NOTE Confidence: 0.873050808906555  
00:33:10.210 --> 00:33:12.522 Are we thinking about?  
NOTE Confidence: 0.873050808906555  
00:33:12.522 --> 00:33:13.678 Biologic influences?  
NOTE Confidence: 0.873050808906555  
00:33:13.680 --> 00:33:15.628 Or are we thinking?  
NOTE Confidence: 0.873050808906555

00:33:15.628 --> 00:33:19.465 Are we taking a step back and  
NOTE Confidence: 0.873050808906555

00:33:19.465 --> 00:33:21.862 thinking about frameworks  
NOTE Confidence: 0.873050808906555

00:33:21.862 --> 00:33:25.058 for conceptualizing the risk?  
NOTE Confidence: 0.873050808906555

00:33:25.060 --> 00:33:27.657 And so that's what we're going to  
NOTE Confidence: 0.873050808906555

00:33:27.657 --> 00:33:30.959 talk about a little bit more right now,  
NOTE Confidence: 0.873050808906555

00:33:30.960 --> 00:33:33.858 so we're now going to move in now that  
NOTE Confidence: 0.873050808906555

00:33:33.858 --> 00:33:36.401 we've kind of explored a little bit  
NOTE Confidence: 0.873050808906555

00:33:36.401 --> 00:33:38.955 the existence of an persistence of  
NOTE Confidence: 0.873050808906555

00:33:38.955 --> 00:33:41.565 disparities in poor birth outcomes.  
NOTE Confidence: 0.873050808906555

00:33:41.570 --> 00:33:43.976 Overtime we're going to talk through  
NOTE Confidence: 0.873050808906555

00:33:43.976 --> 00:33:45.976 the different hypothesis that have  
NOTE Confidence: 0.873050808906555

00:33:45.976 --> 00:33:48.648 been put forth to try to explain and  
NOTE Confidence: 0.873050808906555

00:33:48.648 --> 00:33:50.365 contextualize these disparities in  
NOTE Confidence: 0.873050808906555

00:33:50.365 --> 00:33:52.565 adverse pregnancy and birth outcomes.  
NOTE Confidence: 0.873050808906555

00:33:52.570 --> 00:33:55.730 With the focus is really on my birthday.  
NOTE Confidence: 0.873050808906555

00:33:55.730 --> 00:33:56.170 Pumps

NOTE Confidence: 0.849872887134552

00:33:58.560 --> 00:34:01.402 So there are many, many of them

NOTE Confidence: 0.849872887134552

00:34:01.402 --> 00:34:04.159 come from the social Sciences,

NOTE Confidence: 0.849872887134552

00:34:04.160 --> 00:34:06.842 and many of them have been

NOTE Confidence: 0.849872887134552

00:34:06.842 --> 00:34:09.300 around for many many years,

NOTE Confidence: 0.849872887134552

00:34:09.300 --> 00:34:12.716 and so that's where I'm going to start

NOTE Confidence: 0.849872887134552

00:34:12.716 --> 00:34:15.159 with weathering hypothesis that was

NOTE Confidence: 0.849872887134552

00:34:15.159 --> 00:34:18.165 originally developed in the late 70s,

NOTE Confidence: 0.849872887134552

00:34:18.170 --> 00:34:20.978 early 80s by Doctor Arlene Geronimus,

NOTE Confidence: 0.849872887134552

00:34:20.980 --> 00:34:24.249 who is at the University of Michigan.

NOTE Confidence: 0.849872887134552

00:34:24.250 --> 00:34:27.064 Ann. She was trying to think

NOTE Confidence: 0.849872887134552

00:34:27.064 --> 00:34:28.940 about an explanation for.

NOTE Confidence: 0.849872887134552

00:34:28.940 --> 00:34:32.066 4 two kind of simultaneous observations.

NOTE Confidence: 0.849872887134552

00:34:32.070 --> 00:34:35.214 One was the excess infant mortality

NOTE Confidence: 0.849872887134552

00:34:35.214 --> 00:34:38.351 rate among black infants and the

NOTE Confidence: 0.849872887134552

00:34:38.351 --> 00:34:41.183 other was why the teenage pregnancy

NOTE Confidence: 0.849872887134552



00:34:41.183 --> 00:34:43.871 rate among non Hispanic black  
NOTE Confidence: 0.849872887134552

00:34:43.871 --> 00:34:46.626 teenagers was markedly higher than  
NOTE Confidence: 0.849872887134552

00:34:46.626 --> 00:34:49.524 among non Hispanic white teenagers.  
NOTE Confidence: 0.849872887134552

00:34:49.524 --> 00:34:53.710 The prevailing thought at the time was  
NOTE Confidence: 0.849872887134552

00:34:53.805 --> 00:34:57.165 that teenagers have an increased risk  
NOTE Confidence: 0.849872887134552

00:34:57.165 --> 00:35:00.545 of poor birth outcomes that included  
NOTE Confidence: 0.849872887134552

00:35:00.545 --> 00:35:04.178 pre term birth and low birth weight,  
NOTE Confidence: 0.849872887134552

00:35:04.180 --> 00:35:07.408 which then kind of are perpetuated  
NOTE Confidence: 0.849872887134552

00:35:07.408 --> 00:35:10.233 into infant mortality that within  
NOTE Confidence: 0.849872887134552

00:35:10.233 --> 00:35:13.143 the African American community there  
NOTE Confidence: 0.849872887134552

00:35:13.143 --> 00:35:16.584 was a higher incidence or higher  
NOTE Confidence: 0.849872887134552

00:35:16.584 --> 00:35:19.139 percentage of women of childbearing  
NOTE Confidence: 0.849872887134552

00:35:19.139 --> 00:35:22.267 age who were teenagers having babies.  
NOTE Confidence: 0.849872887134552

00:35:22.267 --> 00:35:25.970 That it was these teenagers who accrued  
NOTE Confidence: 0.849872887134552

00:35:26.055 --> 00:35:29.121 the excess risk an who were really  
NOTE Confidence: 0.849872887134552

00:35:29.121 --> 00:35:31.562 driving the excess infant mortality

NOTE Confidence: 0.849872887134552

00:35:31.562 --> 00:35:35.209 rate because of because of the risk

NOTE Confidence: 0.849872887134552

00:35:35.209 --> 00:35:41.160 associated with with teenage birth. She.

NOTE Confidence: 0.849872887134552

00:35:41.160 --> 00:35:44.989 Did not buy that an actually thought.

NOTE Confidence: 0.849872887134552

00:35:44.990 --> 00:35:46.889 Quite the opposite.

NOTE Confidence: 0.849872887134552

00:35:46.889 --> 00:35:50.054 She was struck by the.

NOTE Confidence: 0.849872887134552

00:35:50.060 --> 00:35:50.630 Perpetual.

NOTE Confidence: 0.849872887134552

00:35:50.630 --> 00:35:52.910 Social disadvantage that many

NOTE Confidence: 0.849872887134552

00:35:52.910 --> 00:35:55.190 women within African American

NOTE Confidence: 0.849872887134552

00:35:55.190 --> 00:35:57.189 community we're experiencing,

NOTE Confidence: 0.849872887134552

00:35:57.190 --> 00:35:59.990 and she thought that it was actually

NOTE Confidence: 0.849872887134552

00:35:59.990 --> 00:36:02.873 the older women and the oldest women

NOTE Confidence: 0.849872887134552

00:36:02.873 --> 00:36:05.273 and not the younger or youngest

NOTE Confidence: 0.849872887134552

00:36:05.356 --> 00:36:07.942 women who were accruing the increased

NOTE Confidence: 0.849872887134552

00:36:07.942 --> 00:36:10.085 risk of poor birth outcomes,

NOTE Confidence: 0.849872887134552

00:36:10.085 --> 00:36:11.745 which was then translating

NOTE Confidence: 0.849872887134552

00:36:11.745 --> 00:36:13.405 into excess infant mortality,  
NOTE Confidence: 0.849872887134552

00:36:13.410 --> 00:36:16.242 and that was older women that  
NOTE Confidence: 0.849872887134552

00:36:16.242 --> 00:36:18.130 were driving that disparity.  
NOTE Confidence: 0.849872887134552

00:36:18.130 --> 00:36:20.812 So her original hypothesis was at  
NOTE Confidence: 0.849872887134552

00:36:20.812 --> 00:36:23.841 the health status of black women  
NOTE Confidence: 0.849872887134552

00:36:23.841 --> 00:36:26.157 begins to deteriorate earlier.  
NOTE Confidence: 0.849872887134552

00:36:26.160 --> 00:36:28.224 Specifically, in young adulthood,  
NOTE Confidence: 0.849872887134552

00:36:28.224 --> 00:36:31.320 as a consequence of prolonged exposure  
NOTE Confidence: 0.849872887134552

00:36:31.392 --> 00:36:34.327 to social and environmental disadvantage.  
NOTE Confidence: 0.849872887134552

00:36:34.330 --> 00:36:37.410 Because or or in concert with this  
NOTE Confidence: 0.849872887134552

00:36:37.410 --> 00:36:39.860 earlier deterioration of health status.  
NOTE Confidence: 0.849872887134552

00:36:39.860 --> 00:36:41.868 Reproductive health also suffers  
NOTE Confidence: 0.849872887134552

00:36:41.868 --> 00:36:44.378 and begins to deteriorate earlier  
NOTE Confidence: 0.849872887134552

00:36:44.378 --> 00:36:47.397 as well as more rapidly among black  
NOTE Confidence: 0.849872887134552

00:36:47.397 --> 00:36:49.540 women compared to white women.  
NOTE Confidence: 0.849872887134552

00:36:49.540 --> 00:36:52.450 And this in turn results importer

NOTE Confidence: 0.849872887134552  
00:36:52.450 --> 00:36:54.893 birth outcomes at relatively earlier  
NOTE Confidence: 0.849872887134552  
00:36:54.893 --> 00:36:57.833 ages for black but not white women,  
NOTE Confidence: 0.849872887134552  
00:36:57.840 --> 00:37:00.342 and that this then propagates a  
NOTE Confidence: 0.849872887134552  
00:37:00.342 --> 00:37:03.146 widening of disparities in poor birth  
NOTE Confidence: 0.849872887134552  
00:37:03.146 --> 00:37:05.258 outcomes with advancing maternal.  
NOTE Confidence: 0.849872887134552  
00:37:05.260 --> 00:37:05.678 Age.  
NOTE Confidence: 0.849872887134552  
00:37:05.678 --> 00:37:08.604 Now keep in mind that the original  
NOTE Confidence: 0.849872887134552  
00:37:08.604 --> 00:37:10.894 application in the original outcome  
NOTE Confidence: 0.849872887134552  
00:37:10.894 --> 00:37:13.636 in this study was infant mortality  
NOTE Confidence: 0.849872887134552  
00:37:13.636 --> 00:37:16.034 and the original population to  
NOTE Confidence: 0.849872887134552  
00:37:16.034 --> 00:37:18.359 which it was being applied.  
NOTE Confidence: 0.849872887134552  
00:37:18.360 --> 00:37:20.874 Was African American women and and  
NOTE Confidence: 0.849872887134552  
00:37:20.874 --> 00:37:23.639 this was the hypothesis to explain  
NOTE Confidence: 0.849872887134552  
00:37:23.639 --> 00:37:26.169 disparities in infant mortality rates.  
NOTE Confidence: 0.849872887134552  
00:37:26.170 --> 00:37:28.526 It's a fascinating hypothesis.  
NOTE Confidence: 0.849872887134552

00:37:28.526 --> 00:37:32.060 There's a lot of investigators who  
NOTE Confidence: 0.849872887134552

00:37:32.156 --> 00:37:34.874 have taken it an investigated it  
NOTE Confidence: 0.849872887134552

00:37:34.874 --> 00:37:37.778 and applied it to different datasets  
NOTE Confidence: 0.849872887134552

00:37:37.778 --> 00:37:41.264 an it's really come into its own  
NOTE Confidence: 0.849872887134552

00:37:41.264 --> 00:37:43.540 and to be accepted.  
NOTE Confidence: 0.849872887134552

00:37:43.540 --> 00:37:44.720 Mainstream hypothesis,  
NOTE Confidence: 0.849872887134552

00:37:44.720 --> 00:37:48.734 but in in that process of  
NOTE Confidence: 0.849872887134552

00:37:48.734 --> 00:37:52.810 evaluation it has been expanded.  
NOTE Confidence: 0.849872887134552

00:37:52.810 --> 00:37:56.685 From From an explanation for  
NOTE Confidence: 0.849872887134552

00:37:56.685 --> 00:37:59.785 disparities in infant mortality,  
NOTE Confidence: 0.849872887134552

00:37:59.790 --> 00:38:02.844 to be applied as an explanation  
NOTE Confidence: 0.849872887134552

00:38:02.844 --> 00:38:05.607 for differences in any health  
NOTE Confidence: 0.849872887134552

00:38:05.607 --> 00:38:08.099 outcome by race ethnicity.  
NOTE Confidence: 0.849872887134552

00:38:08.100 --> 00:38:10.850 So instead of justice African  
NOTE Confidence: 0.849872887134552

00:38:10.850 --> 00:38:13.600 American women experiencing this now  
NOTE Confidence: 0.849872887134552

00:38:13.688 --> 00:38:16.438 it's any African American person.

NOTE Confidence: 0.862885355949402  
00:38:16.440 --> 00:38:18.628 With any health outcome  
NOTE Confidence: 0.862885355949402  
00:38:18.628 --> 00:38:21.363 where there is a disparity,  
NOTE Confidence: 0.862885355949402  
00:38:21.370 --> 00:38:23.900 Anet has Furthermore been more  
NOTE Confidence: 0.862885355949402  
00:38:23.900 --> 00:38:27.102 broadly generalized to apply to any  
NOTE Confidence: 0.862885355949402  
00:38:27.102 --> 00:38:30.042 marginalized or minority population to  
NOTE Confidence: 0.862885355949402  
00:38:30.042 --> 00:38:33.087 explain disparities in health outcomes  
NOTE Confidence: 0.862885355949402  
00:38:33.087 --> 00:38:36.147 compared to the majority population.  
NOTE Confidence: 0.862885355949402  
00:38:36.150 --> 00:38:39.510 So it's interesting to see that evolution,  
NOTE Confidence: 0.862885355949402  
00:38:39.510 --> 00:38:45.108 but I think it it does beg the question.  
NOTE Confidence: 0.862885355949402  
00:38:45.110 --> 00:38:49.110 Is this hypothesis inappropriate?  
NOTE Confidence: 0.862885355949402  
00:38:49.110 --> 00:38:51.110 Explanation for.  
NOTE Confidence: 0.862885355949402  
00:38:51.110 --> 00:38:52.710 The existence of health disparities  
NOTE Confidence: 0.862885355949402  
00:38:52.710 --> 00:38:54.784 in in all of these different  
NOTE Confidence: 0.862885355949402  
00:38:54.784 --> 00:38:57.238 contexts and applied to all of  
NOTE Confidence: 0.862885355949402  
00:38:57.238 --> 00:38:58.465 these different populations.  
NOTE Confidence: 0.862885355949402

00:38:58.470 --> 00:39:02.484 Or do we need to be very thoughtful about?

NOTE Confidence: 0.862885355949402

00:39:02.490 --> 00:39:06.034 Evaluating two what populations?

NOTE Confidence: 0.862885355949402

00:39:06.034 --> 00:39:09.578 This can be applied.

NOTE Confidence: 0.862885355949402

00:39:09.580 --> 00:39:12.240 So her moving kind of from from

NOTE Confidence: 0.862885355949402

00:39:12.240 --> 00:39:14.672 the social Sciences a little bit

NOTE Confidence: 0.862885355949402

00:39:14.672 --> 00:39:17.090 into the Biological Sciences and we

NOTE Confidence: 0.862885355949402

00:39:17.090 --> 00:39:19.810 start to talk about allostatic load.

NOTE Confidence: 0.862885355949402

00:39:19.810 --> 00:39:22.266 I like to talk about this next because

NOTE Confidence: 0.862885355949402

00:39:22.266 --> 00:39:25.058 it's kind of the biological objective

NOTE Confidence: 0.862885355949402

00:39:25.058 --> 00:39:27.170 measurement counterpart to weathering.

NOTE Confidence: 0.862885355949402

00:39:27.170 --> 00:39:29.306 So the concept of allostatic load

NOTE Confidence: 0.862885355949402

00:39:29.306 --> 00:39:32.153 is that this is this concept is

NOTE Confidence: 0.862885355949402

00:39:32.153 --> 00:39:33.953 representative of the cumulative

NOTE Confidence: 0.862885355949402

00:39:33.953 --> 00:39:36.977 wear and tear on the body's systems.

NOTE Confidence: 0.862885355949402

00:39:36.980 --> 00:39:39.906 That is 02 repeated adaptation to stressors.

NOTE Confidence: 0.862885355949402

00:39:39.910 --> 00:39:42.591 I do want to emphasize that this

NOTE Confidence: 0.862885355949402

00:39:42.591 --> 00:39:45.878 is wear and tear that is due to

NOTE Confidence: 0.862885355949402

00:39:45.878 --> 00:39:47.923 not to the stressor itself,

NOTE Confidence: 0.862885355949402

00:39:47.930 --> 00:39:50.408 but to the body's reaction to your

NOTE Confidence: 0.862885355949402

00:39:50.408 --> 00:39:52.740 adaptation to this Dressler stressor.

NOTE Confidence: 0.862885355949402

00:39:52.740 --> 00:39:55.056 We think about A1 static load

NOTE Confidence: 0.862885355949402

00:39:55.056 --> 00:39:56.600 as the physiological burden

NOTE Confidence: 0.862885355949402

00:39:56.667 --> 00:39:58.359 that's imposed by stress,

NOTE Confidence: 0.862885355949402

00:39:58.360 --> 00:40:00.719 and it can be kind of quantified

NOTE Confidence: 0.862885355949402

00:40:00.719 --> 00:40:02.794 and indicated by thinking bout

NOTE Confidence: 0.862885355949402

00:40:02.794 --> 00:40:04.770 two categories of biomarkers.

NOTE Confidence: 0.862885355949402

00:40:04.770 --> 00:40:07.206 Do you get your primary mediators or

NOTE Confidence: 0.862885355949402

00:40:07.206 --> 00:40:09.580 biomarkers in your secondary mediators?

NOTE Confidence: 0.862885355949402

00:40:09.580 --> 00:40:11.122 The primary media?

NOTE Confidence: 0.862885355949402

00:40:11.122 --> 00:40:13.692 Are biomarkers are physical substances

NOTE Confidence: 0.862885355949402

00:40:13.692 --> 00:40:17.330 at the body releases in response to

NOTE Confidence: 0.862885355949402



00:40:17.330 --> 00:40:19.860 stress and the secondary mediators  
NOTE Confidence: 0.862885355949402

00:40:19.941 --> 00:40:22.347 are the effects that the body.  
NOTE Confidence: 0.862885355949402

00:40:22.350 --> 00:40:24.485 Feels from the release of  
NOTE Confidence: 0.862885355949402

00:40:24.485 --> 00:40:25.766 those primary mediators,  
NOTE Confidence: 0.862885355949402

00:40:25.770 --> 00:40:28.374 so the example of being a primary  
NOTE Confidence: 0.862885355949402

00:40:28.374 --> 00:40:29.976 mediator might be epinephrine  
NOTE Confidence: 0.862885355949402

00:40:29.976 --> 00:40:32.430 that your body is releasing in  
NOTE Confidence: 0.862885355949402

00:40:32.430 --> 00:40:35.190 response to a stressful situation,  
NOTE Confidence: 0.862885355949402

00:40:35.190 --> 00:40:37.455 and the secondary mediator would  
NOTE Confidence: 0.862885355949402

00:40:37.455 --> 00:40:40.304 be an elevated blood pressure in  
NOTE Confidence: 0.862885355949402

00:40:40.304 --> 00:40:42.348 response to epinephrine release.  
NOTE Confidence: 0.862885355949402

00:40:42.350 --> 00:40:43.180 Outside it,  
NOTE Confidence: 0.862885355949402

00:40:43.180 --> 00:40:46.085 load is operationalized as a numerical score.  
NOTE Confidence: 0.862885355949402

00:40:46.090 --> 00:40:48.586 Some scale of zero to 10,  
NOTE Confidence: 0.862885355949402

00:40:48.590 --> 00:40:52.046 a score of three to four correlates with an  
NOTE Confidence: 0.862885355949402

00:40:52.046 --> 00:40:54.828 increased risk of morbidity and mortality.

NOTE Confidence: 0.862885355949402  
00:40:54.830 --> 00:40:56.910 An, as I mentioned previously,  
NOTE Confidence: 0.862885355949402  
00:40:56.910 --> 00:40:58.990 this this approach is really  
NOTE Confidence: 0.862885355949402  
00:40:58.990 --> 00:41:00.238 able to quantify.  
NOTE Confidence: 0.862885355949402  
00:41:00.240 --> 00:41:03.145 I would argue the concept of weathering.  
NOTE Confidence: 0.862885355949402  
00:41:03.150 --> 00:41:05.230 There's no built into weathering.  
NOTE Confidence: 0.862885355949402  
00:41:05.230 --> 00:41:07.310 There was no objective measurement.  
NOTE Confidence: 0.862885355949402  
00:41:07.310 --> 00:41:10.080 There's no way to measure.  
NOTE Confidence: 0.862885355949402  
00:41:10.080 --> 00:41:11.062 Its effect,  
NOTE Confidence: 0.862885355949402  
00:41:11.062 --> 00:41:12.044 its extent,  
NOTE Confidence: 0.862885355949402  
00:41:12.044 --> 00:41:15.654 but being able to develop the outside  
NOTE Confidence: 0.862885355949402  
00:41:15.654 --> 00:41:19.609 load score as kind of the numerical  
NOTE Confidence: 0.862885355949402  
00:41:19.609 --> 00:41:21.860 representation of weathering.  
NOTE Confidence: 0.862885355949402  
00:41:21.860 --> 00:41:22.322 OK.  
NOTE Confidence: 0.862885355949402  
00:41:22.322 --> 00:41:25.556 So will then move into thinking about  
NOTE Confidence: 0.862885355949402  
00:41:25.556 --> 00:41:29.539 the life course perspective as a  
NOTE Confidence: 0.862885355949402

00:41:29.539 --> 00:41:32.499 framework for understanding disparities,  
NOTE Confidence: 0.862885355949402

00:41:32.500 --> 00:41:35.516 and this one has really come into its  
NOTE Confidence: 0.862885355949402

00:41:35.516 --> 00:41:38.769 own in the last couple of decades is  
NOTE Confidence: 0.862885355949402

00:41:38.769 --> 00:41:42.270 really kind of an integrative approach,  
NOTE Confidence: 0.862885355949402

00:41:42.270 --> 00:41:45.342 so the the idea of a life course  
NOTE Confidence: 0.862885355949402

00:41:45.342 --> 00:41:47.662 perspective is that early life  
NOTE Confidence: 0.862885355949402

00:41:47.662 --> 00:41:50.112 experiences have the ability to  
NOTE Confidence: 0.862885355949402

00:41:50.112 --> 00:41:53.382 shape health not only in the moment  
NOTE Confidence: 0.862885355949402

00:41:53.382 --> 00:41:55.587 but across the entire lifetime.  
NOTE Confidence: 0.862885355949402

00:41:55.590 --> 00:41:57.574 And potentially across generations  
NOTE Confidence: 0.862885355949402

00:41:57.574 --> 00:42:00.054 within the life course perspective,  
NOTE Confidence: 0.862885355949402

00:42:00.060 --> 00:42:02.024 there is an emphasis.  
NOTE Confidence: 0.862885355949402

00:42:02.024 --> 00:42:04.479 The timing and duration of  
NOTE Confidence: 0.862885355949402

00:42:04.479 --> 00:42:06.960 experiences and exposures and the  
NOTE Confidence: 0.862885355949402

00:42:06.960 --> 00:42:09.810 importance of when things happen and  
NOTE Confidence: 0.862885355949402

00:42:09.895 --> 00:42:12.595 that is because kind of thinking.

NOTE Confidence: 0.881542980670929

00:42:12.600 --> 00:42:15.240 A development in a developmental

NOTE Confidence: 0.881542980670929

00:42:15.240 --> 00:42:17.880 context that there are critical

NOTE Confidence: 0.881542980670929

00:42:17.962 --> 00:42:20.338 periods of development in the lives

NOTE Confidence: 0.881542980670929

00:42:20.338 --> 00:42:23.653 of all of us and they coincide with

NOTE Confidence: 0.881542980670929

00:42:23.653 --> 00:42:26.599 times when there's a lot of growth,

NOTE Confidence: 0.881542980670929

00:42:26.599 --> 00:42:28.944 development, and activities so that

NOTE Confidence: 0.881542980670929

00:42:28.944 --> 00:42:31.697 things like during fetal life during

NOTE Confidence: 0.881542980670929

00:42:31.697 --> 00:42:34.175 the first months, two years of.

NOTE Confidence: 0.881542980670929

00:42:34.175 --> 00:42:35.450 Infancy and childhood,

NOTE Confidence: 0.881542980670929

00:42:35.450 --> 00:42:37.991 when the rate of growth and formation

NOTE Confidence: 0.881542980670929

00:42:37.991 --> 00:42:40.159 of GNU connections and all these

NOTE Confidence: 0.881542980670929

00:42:40.159 --> 00:42:41.844 different things are going on

NOTE Confidence: 0.881542980670929

00:42:41.844 --> 00:42:44.335 and then we have another period

NOTE Confidence: 0.881542980670929

00:42:44.335 --> 00:42:46.083 during adolescence and puberty.

NOTE Confidence: 0.881542980670929

00:42:46.090 --> 00:42:47.710 When that happens again.

NOTE Confidence: 0.881542980670929

00:42:47.710 --> 00:42:50.140 So the the purpose of having  
NOTE Confidence: 0.881542980670929

00:42:50.222 --> 00:42:52.592 particular attention to the timing  
NOTE Confidence: 0.881542980670929

00:42:52.592 --> 00:42:55.462 and duration of these early life  
NOTE Confidence: 0.881542980670929

00:42:55.462 --> 00:42:57.562 experiences is that the magnitude  
NOTE Confidence: 0.881542980670929

00:42:57.562 --> 00:43:00.106 of the effect of the experience,  
NOTE Confidence: 0.881542980670929

00:43:00.106 --> 00:43:01.390 positive or negative,  
NOTE Confidence: 0.881542980670929

00:43:01.390 --> 00:43:03.808 can change based on whether it  
NOTE Confidence: 0.881542980670929

00:43:03.808 --> 00:43:05.938 happens during a critical period  
NOTE Confidence: 0.881542980670929

00:43:05.938 --> 00:43:08.614 of development or outside of that  
NOTE Confidence: 0.881542980670929

00:43:08.614 --> 00:43:11.277 period of development and the effect  
NOTE Confidence: 0.881542980670929

00:43:11.277 --> 00:43:13.779 of these different experiences is to  
NOTE Confidence: 0.881542980670929

00:43:13.779 --> 00:43:15.908 change the health trajectory overtime.  
NOTE Confidence: 0.881542980670929

00:43:15.908 --> 00:43:18.470 So thinking about the health trajectory's.  
NOTE Confidence: 0.881542980670929

00:43:18.470 --> 00:43:21.035 As I've malleable and responsive  
NOTE Confidence: 0.881542980670929

00:43:21.035 --> 00:43:24.888 entity that will change in reaction to  
NOTE Confidence: 0.881542980670929

00:43:24.888 --> 00:43:27.888 different stressors and exposures an

NOTE Confidence: 0.881542980670929  
00:43:27.888 --> 00:43:31.288 it's this conception that really helps  
NOTE Confidence: 0.881542980670929  
00:43:31.288 --> 00:43:34.816 us to think about adult health outcomes.  
NOTE Confidence: 0.881542980670929  
00:43:34.820 --> 00:43:38.593 ANAN Health later in life as being  
NOTE Confidence: 0.881542980670929  
00:43:38.593 --> 00:43:41.977 intimately connected with the early life  
NOTE Confidence: 0.881542980670929  
00:43:41.977 --> 00:43:45.319 experiences and the importance of thinking  
NOTE Confidence: 0.881542980670929  
00:43:45.319 --> 00:43:49.026 back when you are trying to understand.  
NOTE Confidence: 0.881542980670929  
00:43:49.030 --> 00:43:51.574 Why there might be?  
NOTE Confidence: 0.881542980670929  
00:43:51.574 --> 00:43:54.118 Differences or disparities in  
NOTE Confidence: 0.881542980670929  
00:43:54.118 --> 00:43:57.636 outcomes that present in older age  
NOTE Confidence: 0.881542980670929  
00:43:57.636 --> 00:44:00.846 that that you were risk factors.  
NOTE Confidence: 0.881542980670929  
00:44:00.850 --> 00:44:05.512 Protective factor could be very remote from  
NOTE Confidence: 0.881542980670929  
00:44:05.512 --> 00:44:09.769 the the manifestation of health or illness.  
NOTE Confidence: 0.881542980670929  
00:44:09.770 --> 00:44:10.518 In addition,  
NOTE Confidence: 0.881542980670929  
00:44:10.518 --> 00:44:11.266 of course,  
NOTE Confidence: 0.881542980670929  
00:44:11.266 --> 00:44:12.762 protective also explicitly considers  
NOTE Confidence: 0.881542980670929

00:44:12.762 --> 00:44:14.539 the role of social context,  
NOTE Confidence: 0.881542980670929

00:44:14.540 --> 00:44:17.124 not just at one point in time but  
NOTE Confidence: 0.881542980670929

00:44:17.124 --> 00:44:19.781 overtime and how the how that ongoing  
NOTE Confidence: 0.881542980670929

00:44:19.781 --> 00:44:22.255 context and changes in context can  
NOTE Confidence: 0.881542980670929

00:44:22.255 --> 00:44:24.600 shape and shift health trajectories.  
NOTE Confidence: 0.881542980670929

00:44:24.600 --> 00:44:28.040 And this is again particularly  
NOTE Confidence: 0.881542980670929

00:44:28.040 --> 00:44:30.792 relevant when we're thinking  
NOTE Confidence: 0.881542980670929

00:44:30.792 --> 00:44:34.018 about the childhood or early.  
NOTE Confidence: 0.881542980670929

00:44:34.020 --> 00:44:36.474 Early shaping of health and disease  
NOTE Confidence: 0.881542980670929

00:44:36.474 --> 00:44:38.591 trajectories over the life course  
NOTE Confidence: 0.881542980670929

00:44:38.591 --> 00:44:41.075 and the incidence of chronic disease.  
NOTE Confidence: 0.878303468227386

00:44:43.550 --> 00:44:46.504 So we kind of talked about these  
NOTE Confidence: 0.878303468227386

00:44:46.504 --> 00:44:48.741 different frameworks that really come  
NOTE Confidence: 0.878303468227386

00:44:48.741 --> 00:44:51.417 out of the social Sciences tradition.  
NOTE Confidence: 0.878303468227386

00:44:51.420 --> 00:44:53.958 We haven't talked as much about  
NOTE Confidence: 0.878303468227386

00:44:53.958 --> 00:44:57.525 the hard Sciences and so one of the

NOTE Confidence: 0.878303468227386  
00:44:57.525 --> 00:44:59.313 additional considerations that I  
NOTE Confidence: 0.878303468227386  
00:44:59.313 --> 00:45:02.831 wanted to be sure to bring into this  
NOTE Confidence: 0.878303468227386  
00:45:02.831 --> 00:45:05.338 conversation when we start to think  
NOTE Confidence: 0.878303468227386  
00:45:05.338 --> 00:45:07.762 about how do we frame explorations  
NOTE Confidence: 0.878303468227386  
00:45:07.762 --> 00:45:09.589 for understanding disparities in  
NOTE Confidence: 0.878303468227386  
00:45:09.589 --> 00:45:11.954 health outcomes is genetic factors.  
NOTE Confidence: 0.878303468227386  
00:45:11.960 --> 00:45:14.576 Now I know that there are.  
NOTE Confidence: 0.878303468227386  
00:45:14.580 --> 00:45:17.190 Strong opinions on both sides  
NOTE Confidence: 0.878303468227386  
00:45:17.190 --> 00:45:19.800 about where genetic factors lie,  
NOTE Confidence: 0.878303468227386  
00:45:19.800 --> 00:45:22.904 but I think that there is a very  
NOTE Confidence: 0.878303468227386  
00:45:22.904 --> 00:45:25.707 strong argument to consider genetic  
NOTE Confidence: 0.878303468227386  
00:45:25.707 --> 00:45:27.648 contribution when evaluating  
NOTE Confidence: 0.878303468227386  
00:45:27.648 --> 00:45:30.236 disparities in health outcomes.  
NOTE Confidence: 0.878303468227386  
00:45:30.240 --> 00:45:33.372 An for me, birth outcomes specific  
NOTE Confidence: 0.878303468227386  
00:45:33.372 --> 00:45:35.460 to disparities in reset.  
NOTE Confidence: 0.878303468227386



00:45:35.460 --> 00:45:36.651 Pre term birth,  
NOTE Confidence: 0.878303468227386

00:45:36.651 --> 00:45:39.430 we know that there is variation in  
NOTE Confidence: 0.878303468227386

00:45:39.509 --> 00:45:42.724 certain characteristics like broccoli and  
NOTE Confidence: 0.878303468227386

00:45:42.724 --> 00:45:45.939 just stational age between populations.  
NOTE Confidence: 0.878303468227386

00:45:45.940 --> 00:45:48.496 And at this May in fact  
NOTE Confidence: 0.878303468227386

00:45:48.496 --> 00:45:49.774 influence birth timing.  
NOTE Confidence: 0.878303468227386

00:45:49.780 --> 00:45:50.606 In addition,  
NOTE Confidence: 0.878303468227386

00:45:50.606 --> 00:45:53.497 we know that there's a a genetic  
NOTE Confidence: 0.878303468227386

00:45:53.497 --> 00:45:55.983 component or a strong genetic component  
NOTE Confidence: 0.878303468227386

00:45:55.983 --> 00:45:59.259 to birth timing in that a prior history,  
NOTE Confidence: 0.878303468227386

00:45:59.260 --> 00:46:00.908 either personal or familial,  
NOTE Confidence: 0.878303468227386

00:46:00.908 --> 00:46:03.380 of pre term birth increases risk.  
NOTE Confidence: 0.878303468227386

00:46:03.380 --> 00:46:06.096 So if a mother has had a  
NOTE Confidence: 0.878303468227386

00:46:06.096 --> 00:46:07.910 previous pre term birth,  
NOTE Confidence: 0.878303468227386

00:46:07.910 --> 00:46:10.382 she's at increased risk for having  
NOTE Confidence: 0.878303468227386

00:46:10.382 --> 00:46:12.030 a subsequent preterm birth,

NOTE Confidence: 0.878303468227386

00:46:12.030 --> 00:46:14.090 and similarly if she herself

NOTE Confidence: 0.878303468227386

00:46:14.090 --> 00:46:15.738 was born pre term,

NOTE Confidence: 0.878303468227386

00:46:15.740 --> 00:46:17.705 she has an increased risk

NOTE Confidence: 0.878303468227386

00:46:17.705 --> 00:46:20.270 of having a pre term birth.

NOTE Confidence: 0.878303468227386

00:46:20.270 --> 00:46:23.678 Or if she has a family member such

NOTE Confidence: 0.878303468227386

00:46:23.678 --> 00:46:27.648 as the sister who was born pre term,

NOTE Confidence: 0.878303468227386

00:46:27.650 --> 00:46:30.386 she also has an increased risk

NOTE Confidence: 0.878303468227386

00:46:30.386 --> 00:46:32.720 of delivering a preterm baby.

NOTE Confidence: 0.878303468227386

00:46:32.720 --> 00:46:33.652 In addition,

NOTE Confidence: 0.878303468227386

00:46:33.652 --> 00:46:35.982 heritability studies of pre term

NOTE Confidence: 0.878303468227386

00:46:35.982 --> 00:46:37.790 birth have demonstrated that.

NOTE Confidence: 0.878303468227386

00:46:37.790 --> 00:46:40.289 20 to 40% of the variability in

NOTE Confidence: 0.878303468227386

00:46:40.289 --> 00:46:43.327 preterm birth can be attributed to genetics,

NOTE Confidence: 0.878303468227386

00:46:43.330 --> 00:46:46.454 so it seems like.

NOTE Confidence: 0.878303468227386

00:46:46.454 --> 00:46:51.140 For looking looking at associations between.

NOTE Confidence: 0.878303468227386

00:46:51.140 --> 00:46:53.040 Genetics and pre term birth.  
NOTE Confidence: 0.878303468227386

00:46:53.040 --> 00:46:55.824 Broadly that there is a strong case to  
NOTE Confidence: 0.878303468227386

00:46:55.824 --> 00:46:58.719 be made that genetics play a factor.  
NOTE Confidence: 0.878303468227386

00:46:58.720 --> 00:47:01.636 So if we think that you guys can play  
NOTE Confidence: 0.878303468227386

00:47:01.636 --> 00:47:05.535 a factor in birth timing and pre term birth,  
NOTE Confidence: 0.878303468227386

00:47:05.540 --> 00:47:07.850 could it also play a role in  
NOTE Confidence: 0.878303468227386

00:47:07.850 --> 00:47:09.773 drive in driving disparities in  
NOTE Confidence: 0.878303468227386

00:47:09.773 --> 00:47:12.353 pre term birth and birth timing?  
NOTE Confidence: 0.878303468227386

00:47:12.360 --> 00:47:14.640 It's interesting to note that in  
NOTE Confidence: 0.878303468227386

00:47:14.640 --> 00:47:16.595 Genome wide Association studies when  
NOTE Confidence: 0.878303468227386

00:47:16.595 --> 00:47:18.430 they've been stratified by race,  
NOTE Confidence: 0.878303468227386

00:47:18.430 --> 00:47:21.470 ethnicity and and there is an analysis of.  
NOTE Confidence: 0.878303468227386

00:47:21.470 --> 00:47:23.306 Which single nucleotide polymorphism's  
NOTE Confidence: 0.878303468227386

00:47:23.306 --> 00:47:25.601 or which genetic variants are  
NOTE Confidence: 0.878303468227386

00:47:25.601 --> 00:47:27.290 associated with pre term birth?  
NOTE Confidence: 0.878303468227386

00:47:27.290 --> 00:47:30.058 Those may or may not be the same

NOTE Confidence: 0.878303468227386

00:47:30.058 --> 00:47:31.840 for different populations that

NOTE Confidence: 0.878303468227386

00:47:31.840 --> 00:47:34.365 are defined by race ethnicity.

NOTE Confidence: 0.878303468227386

00:47:34.370 --> 00:47:36.086 It's been challenging though,

NOTE Confidence: 0.878303468227386

00:47:36.086 --> 00:47:38.660 because the results have been very

NOTE Confidence: 0.878303468227386

00:47:38.736 --> 00:47:41.016 difficult to reproduce and we are.

NOTE Confidence: 0.878303468227386

00:47:41.020 --> 00:47:43.666 We are understanding more and more

NOTE Confidence: 0.878303468227386

00:47:43.666 --> 00:47:45.430 that individual variance produce

NOTE Confidence: 0.878303468227386

00:47:45.504 --> 00:47:47.676 a very small magnitude of affect,

NOTE Confidence: 0.878303468227386

00:47:47.680 --> 00:47:51.478 so you may need to have a lot of.

NOTE Confidence: 0.878303468227386

00:47:51.480 --> 00:47:55.179 A lot of variance to have to have the

NOTE Confidence: 0.878303468227386

00:47:55.179 --> 00:47:57.530 manifestation of a very small effect.

NOTE Confidence: 0.878303468227386

00:47:57.530 --> 00:48:00.836 And then there's also the additional

NOTE Confidence: 0.878303468227386

00:48:00.836 --> 00:48:03.723 challenge of the skepticism of

NOTE Confidence: 0.878303468227386

00:48:03.723 --> 00:48:06.099 sufficient homogeneity among self

NOTE Confidence: 0.878303468227386

00:48:06.099 --> 00:48:09.069 reported African Americans in in

NOTE Confidence: 0.878303468227386

00:48:09.158 --> 00:48:11.422 conducting these genetic studies  
NOTE Confidence: 0.878303468227386

00:48:11.422 --> 00:48:13.120 and how much.  
NOTE Confidence: 0.878303468227386

00:48:13.120 --> 00:48:16.340 Heterogeneity is there due to  
NOTE Confidence: 0.878303468227386

00:48:16.340 --> 00:48:19.560 mixing between folks of African  
NOTE Confidence: 0.878303468227386

00:48:19.673 --> 00:48:22.949 ancestry and European ancestry.  
NOTE Confidence: 0.878303468227386

00:48:22.950 --> 00:48:24.580 So all that being said,  
NOTE Confidence: 0.878303468227386

00:48:24.580 --> 00:48:27.496 I think it makes the case to say yes,  
NOTE Confidence: 0.878303468227386

00:48:27.500 --> 00:48:29.130 we should consider genetic factors,  
NOTE Confidence: 0.912489473819733

00:48:29.130 --> 00:48:32.040 but it's not a guarantee.  
NOTE Confidence: 0.912489473819733

00:48:32.040 --> 00:48:36.996 So. With all of that in mind,  
NOTE Confidence: 0.912489473819733

00:48:37.000 --> 00:48:38.938 where do we find ourselves right  
NOTE Confidence: 0.912489473819733

00:48:38.938 --> 00:48:40.828 now in terms of understanding  
NOTE Confidence: 0.912489473819733

00:48:40.828 --> 00:48:42.928 and evaluating disparities in  
NOTE Confidence: 0.912489473819733

00:48:42.928 --> 00:48:45.553 health outcomes in birth outcomes?  
NOTE Confidence: 0.912489473819733

00:48:45.560 --> 00:48:49.096 And how can we leverage what we talked  
NOTE Confidence: 0.912489473819733

00:48:49.096 --> 00:48:52.277 about today to make forward progress?

NOTE Confidence: 0.912489473819733

00:48:52.280 --> 00:48:57.448 So I think. At this point in time,

NOTE Confidence: 0.912489473819733

00:48:57.450 --> 00:49:01.338 based on the events of these past months

NOTE Confidence: 0.912489473819733

00:49:01.338 --> 00:49:05.095 and years and all of the work that

NOTE Confidence: 0.912489473819733

00:49:05.095 --> 00:49:08.847 has gone into helping us to understand

NOTE Confidence: 0.912489473819733

00:49:08.847 --> 00:49:11.947 what could be driving disparities,

NOTE Confidence: 0.912489473819733

00:49:11.950 --> 00:49:14.600 it's undeniable that structural racism

NOTE Confidence: 0.912489473819733

00:49:14.600 --> 00:49:17.914 an other social determinants of health

NOTE Confidence: 0.912489473819733

00:49:17.914 --> 00:49:20.819 are significant drivers of disparities.

NOTE Confidence: 0.912489473819733

00:49:20.820 --> 00:49:23.816 We know that the legacy of slavery

NOTE Confidence: 0.912489473819733

00:49:23.816 --> 00:49:27.291 is still active in our day to day

NOTE Confidence: 0.912489473819733

00:49:27.291 --> 00:49:29.391 lives and still influencing and

NOTE Confidence: 0.912489473819733

00:49:29.477 --> 00:49:32.655 informing health all and it has been

NOTE Confidence: 0.912489473819733

00:49:32.655 --> 00:49:35.340 pervasive in the insidious and very

NOTE Confidence: 0.912489473819733

00:49:35.340 --> 00:49:37.540 challenging to identify an address.

NOTE Confidence: 0.912489473819733

00:49:37.540 --> 00:49:40.726 But it must be addressed in

NOTE Confidence: 0.912489473819733

00:49:40.726 --> 00:49:42.850 order to improve health.  
NOTE Confidence: 0.912489473819733

00:49:42.850 --> 00:49:47.114 So we understand that.  
NOTE Confidence: 0.912489473819733

00:49:47.114 --> 00:49:49.246 External factors,  
NOTE Confidence: 0.912489473819733

00:49:49.250 --> 00:49:52.475 an environment and greater societal  
NOTE Confidence: 0.912489473819733

00:49:52.475 --> 00:49:55.055 structure plays a role.  
NOTE Confidence: 0.912489473819733

00:49:55.060 --> 00:49:59.071 However, it's not clear that that's the  
NOTE Confidence: 0.912489473819733

00:49:59.071 --> 00:50:04.190 only driver an is there still space for  
NOTE Confidence: 0.912489473819733

00:50:04.190 --> 00:50:08.120 other contributors to be investigated more?  
NOTE Confidence: 0.912489473819733

00:50:08.120 --> 00:50:10.949 Thoroughly and rigorously.  
NOTE Confidence: 0.912489473819733

00:50:10.950 --> 00:50:14.562 So I just wanted to talk a  
NOTE Confidence: 0.912489473819733

00:50:14.562 --> 00:50:18.030 little bit about the concept of.  
NOTE Confidence: 0.912489473819733

00:50:18.030 --> 00:50:20.390 Genetics, genomics and personal biology.  
NOTE Confidence: 0.912489473819733

00:50:20.390 --> 00:50:23.222 When it comes to conversations about  
NOTE Confidence: 0.912489473819733

00:50:23.222 --> 00:50:26.530 race and disparities in outcomes by race,  
NOTE Confidence: 0.912489473819733

00:50:26.530 --> 00:50:28.890 so time and time again,  
NOTE Confidence: 0.912489473819733

00:50:28.890 --> 00:50:32.658 we hear that race is a social construct.

NOTE Confidence: 0.912489473819733  
00:50:32.660 --> 00:50:35.020 And so because of that,  
NOTE Confidence: 0.912489473819733  
00:50:35.020 --> 00:50:37.405 there's no biological underpinning or  
NOTE Confidence: 0.912489473819733  
00:50:37.405 --> 00:50:40.210 no genetic underpinning to that idea,  
NOTE Confidence: 0.912489473819733  
00:50:40.210 --> 00:50:44.107 and there's kind of an 1 one side people  
NOTE Confidence: 0.912489473819733  
00:50:44.107 --> 00:50:48.284 who feel that race is a social construct.  
NOTE Confidence: 0.912489473819733  
00:50:48.290 --> 00:50:49.698 That's all it is.  
NOTE Confidence: 0.912489473819733  
00:50:49.698 --> 00:50:53.039 An can't be can't ever be anything more.  
NOTE Confidence: 0.912489473819733  
00:50:53.040 --> 00:50:56.648 And then there are kind of a contingent  
NOTE Confidence: 0.912489473819733  
00:50:56.648 --> 00:51:01.032 of folks who see race as a potential  
NOTE Confidence: 0.912489473819733  
00:51:01.032 --> 00:51:03.288 genetic or biological construct.  
NOTE Confidence: 0.912489473819733  
00:51:03.290 --> 00:51:04.763 Slightly different perspective.  
NOTE Confidence: 0.912489473819733  
00:51:04.763 --> 00:51:08.736 So if we dig into this idea that  
NOTE Confidence: 0.912489473819733  
00:51:08.736 --> 00:51:10.956 race is a social construct,  
NOTE Confidence: 0.912489473819733  
00:51:10.960 --> 00:51:13.676 what it means is that conceptually it  
NOTE Confidence: 0.912489473819733  
00:51:13.676 --> 00:51:17.171 is fluid and it can change based on  
NOTE Confidence: 0.912489473819733



00:51:17.171 --> 00:51:19.970 socially derived definitions is not fixed.

NOTE Confidence: 0.912489473819733

00:51:19.970 --> 00:51:21.362 It's not innate,

NOTE Confidence: 0.912489473819733

00:51:21.362 --> 00:51:24.146 and because of that there is

NOTE Confidence: 0.912489473819733

00:51:24.146 --> 00:51:26.639 no genetic basis to it.

NOTE Confidence: 0.912489473819733

00:51:26.640 --> 00:51:27.448 And Furthermore,

NOTE Confidence: 0.912489473819733

00:51:27.448 --> 00:51:29.872 some would argue that there is

NOTE Confidence: 0.912489473819733

00:51:29.872 --> 00:51:32.391 no relationship between race and

NOTE Confidence: 0.912489473819733

00:51:32.391 --> 00:51:34.029 innate biological characteristics,

NOTE Confidence: 0.912489473819733

00:51:34.030 --> 00:51:37.726 instead arguing that we are all one race.

NOTE Confidence: 0.912489473819733

00:51:37.730 --> 00:51:40.122 We are all human.

NOTE Confidence: 0.912489473819733

00:51:40.122 --> 00:51:44.566 And so there are 4, four that viewpoint.

NOTE Confidence: 0.912489473819733

00:51:44.566 --> 00:51:47.940 There are a few reasons that commonly

NOTE Confidence: 0.912489473819733

00:51:48.026 --> 00:51:51.218 genetics is rejected as an explanation

NOTE Confidence: 0.912489473819733

00:51:51.218 --> 00:51:54.180 for disparities in health outcomes.

NOTE Confidence: 0.912489473819733

00:51:54.180 --> 00:51:56.718 One common one is the observation

NOTE Confidence: 0.912489473819733

00:51:56.718 --> 00:51:59.734 of the statement that there is

NOTE Confidence: 0.912489473819733

00:51:59.734 --> 00:52:02.226 greater genetic variability within

NOTE Confidence: 0.912489473819733

00:52:02.226 --> 00:52:04.718 populations than between populations,

NOTE Confidence: 0.912489473819733

00:52:04.720 --> 00:52:07.786 and this was really this kind

NOTE Confidence: 0.912489473819733

00:52:07.786 --> 00:52:10.530 of came to the fore.

NOTE Confidence: 0.912489473819733

00:52:10.530 --> 00:52:12.660 It was popularized by Richard.

NOTE Confidence: 0.912489473819733

00:52:12.660 --> 00:52:15.692 We want him back in the 70s who

NOTE Confidence: 0.912489473819733

00:52:15.692 --> 00:52:18.418 was looking at variation in blood

NOTE Confidence: 0.912489473819733

00:52:18.418 --> 00:52:21.580 group proteins an he found that 85%

NOTE Confidence: 0.912489473819733

00:52:21.580 --> 00:52:23.914 of the variation in blood protein

NOTE Confidence: 0.912489473819733

00:52:23.914 --> 00:52:26.508 types could be accounted for by

NOTE Confidence: 0.912489473819733

00:52:26.508 --> 00:52:27.957 variation within populations.

NOTE Confidence: 0.912489473819733

00:52:27.960 --> 00:52:30.930 An races and only 15% by variation

NOTE Confidence: 0.912489473819733

00:52:30.930 --> 00:52:33.480 across them. So he had taken.

NOTE Confidence: 0.912489473819733

00:52:33.480 --> 00:52:36.090 He had a large contingent of

NOTE Confidence: 0.912489473819733

00:52:36.090 --> 00:52:38.727 subjects who he divided into races

NOTE Confidence: 0.912489473819733

00:52:38.727 --> 00:52:40.757 and then look into see.  
NOTE Confidence: 0.73415225148201

00:52:40.760 --> 00:52:44.790 Ann. If there was a.  
NOTE Confidence: 0.73415225148201

00:52:44.790 --> 00:52:47.760 What the genetic variability was.  
NOTE Confidence: 0.73415225148201

00:52:47.760 --> 00:52:48.945 And not surprisingly,  
NOTE Confidence: 0.73415225148201

00:52:48.945 --> 00:52:51.710 based on that methodology came up with  
NOTE Confidence: 0.73415225148201

00:52:51.780 --> 00:52:54.546 these results and concluded that most  
NOTE Confidence: 0.73415225148201

00:52:54.546 --> 00:52:57.007 variation between humans because of  
NOTE Confidence: 0.73415225148201

00:52:57.007 --> 00:52:59.203 differences between individuals and  
NOTE Confidence: 0.73415225148201

00:52:59.203 --> 00:53:01.399 not differences between populations.  
NOTE Confidence: 0.73415225148201

00:53:01.400 --> 00:53:03.780 So we have that is 1 Parliament.  
NOTE Confidence: 0.73415225148201

00:53:03.780 --> 00:53:05.835 Another reason for the rejection  
NOTE Confidence: 0.73415225148201

00:53:05.835 --> 00:53:08.423 of genetics as an explanation for  
NOTE Confidence: 0.73415225148201

00:53:08.423 --> 00:53:11.114 disparities in health outcomes, I think,  
NOTE Confidence: 0.73415225148201

00:53:11.114 --> 00:53:14.450 is a very real and well founded fear  
NOTE Confidence: 0.73415225148201

00:53:14.550 --> 00:53:17.520 that history will repeat itself.  
NOTE Confidence: 0.73415225148201

00:53:17.520 --> 00:53:22.584 In the past, medicine and science

NOTE Confidence: 0.73415225148201  
00:53:22.584 --> 00:53:28.779 has been used and manipulated too.  
NOTE Confidence: 0.73415225148201  
00:53:28.780 --> 00:53:32.230 Create, maintain an propagate hierarchies  
NOTE Confidence: 0.73415225148201  
00:53:32.230 --> 00:53:37.675 of worth and lend credence to them from  
NOTE Confidence: 0.73415225148201  
00:53:37.675 --> 00:53:40.820 a scientific standpoint or endorsed  
NOTE Confidence: 0.73415225148201  
00:53:40.820 --> 00:53:44.319 by scientific principles objective.  
NOTE Confidence: 0.73415225148201  
00:53:44.320 --> 00:53:50.080 Objective principles And that.  
NOTE Confidence: 0.73415225148201  
00:53:50.080 --> 00:53:51.752 And as has happened,  
NOTE Confidence: 0.73415225148201  
00:53:51.752 --> 00:53:54.260 not only was kind of science  
NOTE Confidence: 0.73415225148201  
00:53:54.347 --> 00:53:56.480 and medicine manipulated,  
NOTE Confidence: 0.73415225148201  
00:53:56.480 --> 00:53:59.426 but then once that manipulation happened,  
NOTE Confidence: 0.73415225148201  
00:53:59.430 --> 00:54:02.226 there is complicity on the part  
NOTE Confidence: 0.73415225148201  
00:54:02.226 --> 00:54:04.774 of the scientific and medical  
NOTE Confidence: 0.73415225148201  
00:54:04.774 --> 00:54:08.320 establishment to stand up against that.  
NOTE Confidence: 0.73415225148201  
00:54:08.320 --> 00:54:10.810 Miss Construction of of results  
NOTE Confidence: 0.73415225148201  
00:54:10.810 --> 00:54:14.169 are of the science and a concern  
NOTE Confidence: 0.73415225148201

00:54:14.169 --> 00:54:17.265 that if we start to go down this  
NOTE Confidence: 0.73415225148201

00:54:17.362 --> 00:54:20.734 path way of thinking about genetics  
NOTE Confidence: 0.73415225148201

00:54:20.734 --> 00:54:23.445 as drivers of disparities in.  
NOTE Confidence: 0.73415225148201

00:54:23.445 --> 00:54:26.175 Outcomes by race that we might  
NOTE Confidence: 0.73415225148201

00:54:26.175 --> 00:54:28.130 find ourselves back there.  
NOTE Confidence: 0.73415225148201

00:54:28.130 --> 00:54:33.866 And that also in so doing there is  
NOTE Confidence: 0.73415225148201

00:54:33.866 --> 00:54:38.080 D humanization that then results.  
NOTE Confidence: 0.73415225148201

00:54:38.080 --> 00:54:40.978 In or allows for the justification  
NOTE Confidence: 0.73415225148201

00:54:40.978 --> 00:54:42.910 to perpetuate social inequality,  
NOTE Confidence: 0.73415225148201

00:54:42.910 --> 00:54:48.650 which is what we are all fighting so hard to.  
NOTE Confidence: 0.73415225148201

00:54:48.650 --> 00:54:53.906 Get ourselves. Out of and on better footing.  
NOTE Confidence: 0.73415225148201

00:54:53.910 --> 00:54:55.908 And then the last concern is  
NOTE Confidence: 0.73415225148201

00:54:55.908 --> 00:54:58.502 that there is a fear that the  
NOTE Confidence: 0.73415225148201

00:54:58.502 --> 00:55:00.866 characterization of race as a fixed  
NOTE Confidence: 0.73415225148201

00:55:00.866 --> 00:55:03.608 or innate characteristic that cannot  
NOTE Confidence: 0.73415225148201

00:55:03.608 --> 00:55:06.448 be changed absolves responsibility on

NOTE Confidence: 0.73415225148201

00:55:06.448 --> 00:55:08.796 the part of medical professionals.

NOTE Confidence: 0.73415225148201

00:55:08.796 --> 00:55:11.016 Investigators on the other stakeholders

NOTE Confidence: 0.73415225148201

00:55:11.016 --> 00:55:13.612 in society to intervene to improve

NOTE Confidence: 0.73415225148201

00:55:13.612 --> 00:55:14.446 the disparities.

NOTE Confidence: 0.73415225148201

00:55:14.450 --> 00:55:16.635 They thought that if there's

NOTE Confidence: 0.73415225148201

00:55:16.635 --> 00:55:17.946 a genetic predisposition,

NOTE Confidence: 0.73415225148201

00:55:17.950 --> 00:55:20.995 there's nothing we can do about it.

NOTE Confidence: 0.73415225148201

00:55:21.000 --> 00:55:24.087 So why try or the idea that?

NOTE Confidence: 0.73415225148201

00:55:24.090 --> 00:55:25.209 Biology is destiny.

NOTE Confidence: 0.73415225148201

00:55:25.209 --> 00:55:28.873 Ann and I just bring this up because in

NOTE Confidence: 0.73415225148201

00:55:28.873 --> 00:55:31.288 in the conversations and interactions

NOTE Confidence: 0.73415225148201

00:55:31.288 --> 00:55:34.045 that I've had in conversations

NOTE Confidence: 0.73415225148201

00:55:34.045 --> 00:55:36.505 about disparities and understanding

NOTE Confidence: 0.73415225148201

00:55:36.505 --> 00:55:39.427 drivers of disparities and talking

NOTE Confidence: 0.73415225148201

00:55:39.427 --> 00:55:42.626 with folks who come more from a

NOTE Confidence: 0.73415225148201

00:55:42.626 --> 00:55:45.289 social Sciences training background.  
NOTE Confidence: 0.73415225148201

00:55:45.290 --> 00:55:47.840 There definitely is push back  
NOTE Confidence: 0.73415225148201

00:55:47.840 --> 00:55:49.370 against that idea,  
NOTE Confidence: 0.73415225148201

00:55:49.370 --> 00:55:53.780 and these are some of the concerns  
NOTE Confidence: 0.73415225148201

00:55:53.780 --> 00:55:56.979 or objections that are cited.  
NOTE Confidence: 0.73415225148201

00:55:56.980 --> 00:55:57.346 However,  
NOTE Confidence: 0.73415225148201

00:55:57.346 --> 00:56:00.274 I think there are also reasons to accept  
NOTE Confidence: 0.73415225148201

00:56:00.274 --> 00:56:02.445 genetics as a potential explanation  
NOTE Confidence: 0.73415225148201

00:56:02.445 --> 00:56:04.620 for disparities in health outcomes.  
NOTE Confidence: 0.73415225148201

00:56:04.620 --> 00:56:07.077 I think it's it's very the idea  
NOTE Confidence: 0.73415225148201

00:56:07.077 --> 00:56:10.099 that people of the same race self  
NOTE Confidence: 0.73415225148201

00:56:10.099 --> 00:56:12.464 identified race share common genetic  
NOTE Confidence: 0.73415225148201

00:56:12.464 --> 00:56:14.846 traits or variance is valid and  
NOTE Confidence: 0.73415225148201

00:56:14.846 --> 00:56:17.482 that has to some extent been born  
NOTE Confidence: 0.73415225148201

00:56:17.482 --> 00:56:19.487 out in the scientific literature,  
NOTE Confidence: 0.73415225148201

00:56:19.490 --> 00:56:21.814 and I think we also can't ignore

NOTE Confidence: 0.73415225148201

00:56:21.814 --> 00:56:24.386 the fact that when we adjust for

NOTE Confidence: 0.73415225148201

00:56:24.386 --> 00:56:26.261 multiple con founders who try

NOTE Confidence: 0.73415225148201

00:56:26.261 --> 00:56:28.809 and understand this relationship.

NOTE Confidence: 0.73415225148201

00:56:28.810 --> 00:56:31.300 And that adjustments fails to account

NOTE Confidence: 0.73415225148201

00:56:31.300 --> 00:56:34.209 for the disparities in outcomes by race.

NOTE Confidence: 0.73415225148201

00:56:34.210 --> 00:56:36.586 It opens up the possibility that

NOTE Confidence: 0.73415225148201

00:56:36.586 --> 00:56:38.170 there's an underlying predisposition

NOTE Confidence: 0.73415225148201

00:56:38.237 --> 00:56:40.017 towards developing the outcome.

NOTE Confidence: 0.73415225148201

00:56:40.020 --> 00:56:42.282 That is biologic that is genetic

NOTE Confidence: 0.73415225148201

00:56:42.282 --> 00:56:45.231 as not to say that that's the

NOTE Confidence: 0.73415225148201

00:56:45.231 --> 00:56:47.486 entire T of the explanation,

NOTE Confidence: 0.73415225148201

00:56:47.490 --> 00:56:49.560 but to refuse to entertain

NOTE Confidence: 0.73415225148201

00:56:49.560 --> 00:56:51.216 that as a possibility.

NOTE Confidence: 0.73415225148201

00:56:51.220 --> 00:56:53.948 I think is shortsighted.

NOTE Confidence: 0.852860033512115

00:56:53.950 --> 00:56:56.482 I would Furthermore going to say

NOTE Confidence: 0.852860033512115



00:56:56.482 --> 00:56:59.185 that in there been some challenges  
NOTE Confidence: 0.852860033512115

00:56:59.185 --> 00:57:01.975 in growing pains in the past,  
NOTE Confidence: 0.852860033512115

00:57:01.980 --> 00:57:04.988 there was alot around the time that the  
NOTE Confidence: 0.852860033512115

00:57:04.988 --> 00:57:07.199 human genome was sequenced completely  
NOTE Confidence: 0.852860033512115

00:57:07.199 --> 00:57:09.971 and there was all this excitement  
NOTE Confidence: 0.852860033512115

00:57:09.971 --> 00:57:12.450 about the endless capabilities of  
NOTE Confidence: 0.852860033512115

00:57:12.450 --> 00:57:14.870 genome candidate gene studies in  
NOTE Confidence: 0.852860033512115

00:57:14.870 --> 00:57:16.533 Genome wide Association studies.  
NOTE Confidence: 0.852860033512115

00:57:16.533 --> 00:57:19.270 In being able to finally help us  
NOTE Confidence: 0.852860033512115

00:57:19.347 --> 00:57:22.305 understand the kind of biologic and  
NOTE Confidence: 0.852860033512115

00:57:22.305 --> 00:57:24.277 mechanistic underpinnings of disease.  
NOTE Confidence: 0.852860033512115

00:57:24.280 --> 00:57:26.968 There was a lot of confidence,  
NOTE Confidence: 0.852860033512115

00:57:26.970 --> 00:57:29.700 perhaps misplaced over confidence in the  
NOTE Confidence: 0.852860033512115

00:57:29.700 --> 00:57:32.808 ability of variation at the genome level,  
NOTE Confidence: 0.852860033512115

00:57:32.810 --> 00:57:35.900 to explain disparities in health outcomes  
NOTE Confidence: 0.852860033512115

00:57:35.900 --> 00:57:39.938 and overtime as it has become clear that.

NOTE Confidence: 0.852860033512115  
00:57:39.940 --> 00:57:42.526 The extent to which genetic variants  
NOTE Confidence: 0.852860033512115  
00:57:42.526 --> 00:57:44.779 do not independently cause complex  
NOTE Confidence: 0.852860033512115  
00:57:44.779 --> 00:57:47.491 disease is very great that investigators  
NOTE Confidence: 0.852860033512115  
00:57:47.491 --> 00:57:50.051 have been humbled and more willing  
NOTE Confidence: 0.852860033512115  
00:57:50.051 --> 00:57:52.313 and more accepting and more excited  
NOTE Confidence: 0.852860033512115  
00:57:52.313 --> 00:57:56.090 to try to take a step back and say,  
NOTE Confidence: 0.852860033512115  
00:57:56.090 --> 00:57:59.037 OK, well if it's not this one  
NOTE Confidence: 0.852860033512115  
00:57:59.037 --> 00:58:01.618 genetic variant in and of itself,  
NOTE Confidence: 0.852860033512115  
00:58:01.620 --> 00:58:03.415 how do I evaluate combinations  
NOTE Confidence: 0.852860033512115  
00:58:03.415 --> 00:58:05.846 between different parts of the genome  
NOTE Confidence: 0.852860033512115  
00:58:05.846 --> 00:58:07.568 between different modifications,  
NOTE Confidence: 0.852860033512115  
00:58:07.570 --> 00:58:09.294 protein expression, etc etc?  
NOTE Confidence: 0.852860033512115  
00:58:09.294 --> 00:58:11.880 How do I evaluate interactions with?  
NOTE Confidence: 0.852860033512115  
00:58:11.880 --> 00:58:12.976 The environment.  
NOTE Confidence: 0.852860033512115  
00:58:12.976 --> 00:58:16.812 How do we kind of look for  
NOTE Confidence: 0.852860033512115

00:58:16.812 --> 00:58:18.929 those higher level?  
NOTE Confidence: 0.852860033512115

00:58:18.930 --> 00:58:23.640 Interactions an and higher level.  
NOTE Confidence: 0.852860033512115

00:58:23.640 --> 00:58:25.092 Associations between different  
NOTE Confidence: 0.852860033512115

00:58:25.092 --> 00:58:27.512 factors that individually may not  
NOTE Confidence: 0.852860033512115

00:58:27.512 --> 00:58:30.507 give us the answer we're looking for,  
NOTE Confidence: 0.852860033512115

00:58:30.510 --> 00:58:34.008 but collectively may get us there.  
NOTE Confidence: 0.852860033512115

00:58:34.010 --> 00:58:36.446 I think that there's no more of  
NOTE Confidence: 0.852860033512115

00:58:36.446 --> 00:58:39.319 an emphasis on the biology of the  
NOTE Confidence: 0.852860033512115

00:58:39.319 --> 00:58:41.509 individual as dynamic and influenced  
NOTE Confidence: 0.852860033512115

00:58:41.509 --> 00:58:44.149 by the surrounding environment,  
NOTE Confidence: 0.852860033512115

00:58:44.150 --> 00:58:47.069 and there's less emphasis on a fixed  
NOTE Confidence: 0.852860033512115

00:58:47.069 --> 00:58:49.611 genetic code that there are fixed  
NOTE Confidence: 0.852860033512115

00:58:49.611 --> 00:58:52.425 parts and there are mobile parks and  
NOTE Confidence: 0.852860033512115

00:58:52.506 --> 00:58:55.915 we need to investigate both pieces and  
NOTE Confidence: 0.852860033512115

00:58:55.915 --> 00:58:58.232 that Furthermore genetic factors and  
NOTE Confidence: 0.852860033512115

00:58:58.232 --> 00:59:00.362 the contribution of genetic factors

NOTE Confidence: 0.852860033512115  
00:59:00.362 --> 00:59:03.057 to disparities can now be interpreted  
NOTE Confidence: 0.852860033512115  
00:59:03.057 --> 00:59:05.763 more broadly and conceptualize more broadly.  
NOTE Confidence: 0.852860033512115  
00:59:05.770 --> 00:59:09.100 Not just the genetic code itself,  
NOTE Confidence: 0.852860033512115  
00:59:09.100 --> 00:59:13.328 but all of these other again modifiable  
NOTE Confidence: 0.852860033512115  
00:59:13.328 --> 00:59:16.300 factors that downstream impact how.  
NOTE Confidence: 0.852860033512115  
00:59:16.300 --> 00:59:18.720 That impacted the interactions and  
NOTE Confidence: 0.852860033512115  
00:59:18.720 --> 00:59:21.140 reactions with this surrounding environment,  
NOTE Confidence: 0.852860033512115  
00:59:21.140 --> 00:59:24.521 so that includes studies of the genome  
NOTE Confidence: 0.852860033512115  
00:59:24.521 --> 00:59:26.462 epigenome, the metabolome proteome,  
NOTE Confidence: 0.852860033512115  
00:59:26.462 --> 00:59:29.164 transcriptome microbiome, etc etc.  
NOTE Confidence: 0.852860033512115  
00:59:29.164 --> 00:59:30.898 Multi omics.  
NOTE Confidence: 0.852860033512115  
00:59:30.900 --> 00:59:36.206 So just a couple of parting thoughts.  
NOTE Confidence: 0.852860033512115  
00:59:36.210 --> 00:59:38.135 Through the process of preparing  
NOTE Confidence: 0.852860033512115  
00:59:38.135 --> 00:59:39.675 this presentation and thinking  
NOTE Confidence: 0.852860033512115  
00:59:39.675 --> 00:59:41.120 about these disparities,  
NOTE Confidence: 0.852860033512115

00:59:41.120 --> 00:59:43.836 I was struck again by the thought  
NOTE Confidence: 0.852860033512115

00:59:43.836 --> 00:59:45.947 that complex diseases really are  
NOTE Confidence: 0.852860033512115

00:59:45.947 --> 00:59:47.695 multifactorial and variation in  
NOTE Confidence: 0.852860033512115

00:59:47.695 --> 00:59:51.057 risk is unlikely to be caused by a  
NOTE Confidence: 0.852860033512115

00:59:51.057 --> 00:59:52.977 single factor acting in isolation.  
NOTE Confidence: 0.852860033512115

00:59:52.980 --> 00:59:55.428 So whether that's a single exposure,  
NOTE Confidence: 0.852860033512115

00:59:55.430 --> 00:59:57.480 whether that's a single snook,  
NOTE Confidence: 0.852860033512115

00:59:57.480 --> 01:00:00.609 it's unlikely that that that one piece  
NOTE Confidence: 0.852860033512115

01:00:00.609 --> 01:00:03.866 will account for the entire T of what  
NOTE Confidence: 0.852860033512115

01:00:03.866 --> 01:00:07.080 we're seeing in terms of the disparities.  
NOTE Confidence: 0.852860033512115

01:00:07.080 --> 01:00:09.876 There are lots of different hypothesis  
NOTE Confidence: 0.852860033512115

01:00:09.876 --> 01:00:11.274 for understanding disparities  
NOTE Confidence: 0.852860033512115

01:00:11.274 --> 01:00:13.717 in pregnancy and birth outcomes,  
NOTE Confidence: 0.852860033512115

01:00:13.720 --> 01:00:16.336 and it's important to remember that  
NOTE Confidence: 0.852860033512115

01:00:16.336 --> 01:00:18.930 they are not mutually exclusive,  
NOTE Confidence: 0.852860033512115

01:00:18.930 --> 01:00:21.765 so there is no need to necessarily

NOTE Confidence: 0.852860033512115

01:00:21.765 --> 01:00:25.089 discount any of these hypothesis upfront,

NOTE Confidence: 0.852860033512115

01:00:25.090 --> 01:00:27.940 but rather to think through them,

NOTE Confidence: 0.852860033512115

01:00:27.940 --> 01:00:28.980 entertain them,

NOTE Confidence: 0.852860033512115

01:00:28.980 --> 01:00:32.100 evaluate them and really try to

NOTE Confidence: 0.852860033512115

01:00:32.100 --> 01:00:34.676 figure out does this hypothesis

NOTE Confidence: 0.852860033512115

01:00:34.676 --> 01:00:37.550 fit in the context of this?

NOTE Confidence: 0.852860033512115

01:00:37.550 --> 01:00:39.366 Relationship and this outcome

NOTE Confidence: 0.852860033512115

01:00:39.366 --> 01:00:41.636 that I'm trying to examine.

NOTE Confidence: 0.852860033512115

01:00:41.640 --> 01:00:44.848 And then I also just wanted to make

NOTE Confidence: 0.852860033512115

01:00:44.848 --> 01:00:48.146 mention of the fact that in the

NOTE Confidence: 0.852860033512115

01:00:48.146 --> 01:00:50.546 United States self identified race

NOTE Confidence: 0.890774071216583

01:00:50.638 --> 01:00:54.220 is reasonable proxy for genetic ancestry,

NOTE Confidence: 0.890774071216583

01:00:54.220 --> 01:00:57.284 and I think that that is the direction

NOTE Confidence: 0.890774071216583

01:00:57.284 --> 01:01:00.388 where folks are moving who really are

NOTE Confidence: 0.890774071216583

01:01:00.388 --> 01:01:03.398 interested in cultivating a multi multi

NOTE Confidence: 0.890774071216583

01:01:03.398 --> 01:01:06.086 faceted multidisciplinary approach to  
NOTE Confidence: 0.890774071216583

01:01:06.086 --> 01:01:08.774 evaluating disparities in outcomes.  
NOTE Confidence: 0.890774071216583

01:01:08.780 --> 01:01:11.135 While it's true that race  
NOTE Confidence: 0.890774071216583

01:01:11.135 --> 01:01:13.019 is a social construct,  
NOTE Confidence: 0.890774071216583

01:01:13.020 --> 01:01:15.375 differences in genetic ancestry track  
NOTE Confidence: 0.890774071216583

01:01:15.375 --> 01:01:17.730 reasonably well alongside those constructs.  
NOTE Confidence: 0.890774071216583

01:01:17.730 --> 01:01:21.210 So in the absence of having  
NOTE Confidence: 0.890774071216583

01:01:21.210 --> 01:01:22.370 readily available.  
NOTE Confidence: 0.890774071216583

01:01:22.370 --> 01:01:25.212 Gene typing for all it seems a  
NOTE Confidence: 0.890774071216583

01:01:25.212 --> 01:01:27.739 reasonable proxy to use for race  
NOTE Confidence: 0.890774071216583

01:01:27.739 --> 01:01:30.175 as a proxy for genetic ancestry  
NOTE Confidence: 0.890774071216583

01:01:30.175 --> 01:01:32.408 while recognizing its limitations  
NOTE Confidence: 0.890774071216583

01:01:32.408 --> 01:01:35.303 and the absence of absolutes.  
NOTE Confidence: 0.890774071216583

01:01:35.310 --> 01:01:38.148 And it's interesting to note also  
NOTE Confidence: 0.890774071216583

01:01:38.148 --> 01:01:40.563 that self identified African Americans  
NOTE Confidence: 0.890774071216583

01:01:40.563 --> 01:01:43.215 in the United States derive about

NOTE Confidence: 0.890774071216583

01:01:43.215 --> 01:01:45.933 on average 80% of their genetic

NOTE Confidence: 0.890774071216583

01:01:45.933 --> 01:01:47.777 ancestry from enslaved Africans.

NOTE Confidence: 0.890774071216583

01:01:47.780 --> 01:01:51.014 So although there is a lot of

NOTE Confidence: 0.890774071216583

01:01:51.014 --> 01:01:52.400 conversation about admixture,

NOTE Confidence: 0.890774071216583

01:01:52.400 --> 01:01:54.260 and certainly that percentage

NOTE Confidence: 0.890774071216583

01:01:54.260 --> 01:01:55.655 changes and fluctuates.

NOTE Confidence: 0.890774071216583

01:01:55.660 --> 01:01:58.384 Based mostly on geography and where

NOTE Confidence: 0.890774071216583

01:01:58.384 --> 01:02:00.940 in the United States you are.

NOTE Confidence: 0.890774071216583

01:02:00.940 --> 01:02:03.160 Again it lends additional credence

NOTE Confidence: 0.890774071216583

01:02:03.160 --> 01:02:05.882 to the idea that self identified

NOTE Confidence: 0.890774071216583

01:02:05.882 --> 01:02:08.822 race can be used as a reasonable

NOTE Confidence: 0.890774071216583

01:02:08.822 --> 01:02:11.730 proxy for genetic against ancestry.

NOTE Confidence: 0.890774071216583

01:02:11.730 --> 01:02:12.628 And ultimately,

NOTE Confidence: 0.890774071216583

01:02:12.628 --> 01:02:15.771 that by staying open to all these

NOTE Confidence: 0.890774071216583

01:02:15.771 --> 01:02:17.733 different possibilities and new

NOTE Confidence: 0.890774071216583



01:02:17.733 --> 01:02:19.645 ideas as a researcher,  
NOTE Confidence: 0.890774071216583

01:02:19.650 --> 01:02:22.230 you have the opportunity to  
NOTE Confidence: 0.890774071216583

01:02:22.230 --> 01:02:25.281 leverage all of this knowledge and  
NOTE Confidence: 0.890774071216583

01:02:25.281 --> 01:02:27.567 all of this power to help,  
NOTE Confidence: 0.890774071216583

01:02:27.570 --> 01:02:30.235 to disentangle in understand drivers  
NOTE Confidence: 0.890774071216583

01:02:30.235 --> 01:02:32.900 of disparities in birth outcomes.  
NOTE Confidence: 0.890774071216583

01:02:32.900 --> 01:02:35.368 Thank you very much.  
NOTE Confidence: 0.890774071216583

01:02:35.370 --> 01:02:36.920 Wow, Amherst, that was it.  
NOTE Confidence: 0.890774071216583

01:02:36.920 --> 01:02:37.540 That was  
NOTE Confidence: 0.827258288860321

01:02:37.540 --> 01:02:39.710 an amazing talk. Thank you very much.  
NOTE Confidence: 0.827258288860321

01:02:39.710 --> 01:02:41.570 I'm sure there's going to be.  
NOTE Confidence: 0.827258288860321

01:02:41.570 --> 01:02:43.225 There's already some questions lined  
NOTE Confidence: 0.827258288860321

01:02:43.225 --> 01:02:45.910 up and I'm sure if you want to ask,  
NOTE Confidence: 0.827258288860321

01:02:45.910 --> 01:02:47.933 but I'd like to take my moderators  
NOTE Confidence: 0.827258288860321

01:02:47.933 --> 01:02:49.845 prerogative and ask the first question  
NOTE Confidence: 0.827258288860321

01:02:49.845 --> 01:02:51.485 if I understood you correctly.

NOTE Confidence: 0.827258288860321

01:02:51.490 --> 01:02:53.416 You spoke about how the usual

NOTE Confidence: 0.827258288860321

01:02:53.416 --> 01:02:55.077 demographic things that we started

NOTE Confidence: 0.827258288860321

01:02:55.077 --> 01:02:56.967 to try and explain the disparity

NOTE Confidence: 0.827258288860321

01:02:56.967 --> 01:02:59.237 didn't pan out as the cause of those.

NOTE Confidence: 0.827258288860321

01:02:59.240 --> 01:03:01.410 If we control for things like income,

NOTE Confidence: 0.827258288860321

01:03:01.410 --> 01:03:02.036 education, etc.

NOTE Confidence: 0.827258288860321

01:03:02.036 --> 01:03:03.914 That that we still see the

NOTE Confidence: 0.827258288860321

01:03:03.914 --> 01:03:04.820 disparity that was.

NOTE Confidence: 0.827258288860321

01:03:04.820 --> 01:03:06.460 That was your point, so.

NOTE Confidence: 0.827258288860321

01:03:06.460 --> 01:03:08.230 What an and in in putting

NOTE Confidence: 0.827258288860321

01:03:08.230 --> 01:03:10.019 together all the things you said,

NOTE Confidence: 0.827258288860321

01:03:10.020 --> 01:03:11.510 it leads me to wonder,

NOTE Confidence: 0.827258288860321

01:03:11.510 --> 01:03:13.286 can we control for other things?

NOTE Confidence: 0.827258288860321

01:03:13.290 --> 01:03:15.366 We talk about the influence, for example,

NOTE Confidence: 0.827258288860321

01:03:15.366 --> 01:03:16.831 of stressors of environmental stressors

NOTE Confidence: 0.827258288860321

01:03:16.831 --> 01:03:18.639 of the history of racism attrition.  
NOTE Confidence: 0.827258288860321

01:03:18.640 --> 01:03:20.416 Is there way to control some  
NOTE Confidence: 0.827258288860321

01:03:20.416 --> 01:03:21.304 measure for that?  
NOTE Confidence: 0.827258288860321

01:03:21.310 --> 01:03:22.350 Which makes me wonder,  
NOTE Confidence: 0.827258288860321

01:03:22.350 --> 01:03:24.310 how does the United States in that  
NOTE Confidence: 0.827258288860321

01:03:24.310 --> 01:03:26.060 disparity that black white disparity?  
NOTE Confidence: 0.827258288860321

01:03:26.060 --> 01:03:27.545 How does the United States  
NOTE Confidence: 0.827258288860321

01:03:27.545 --> 01:03:28.733 compared to other countries?  
NOTE Confidence: 0.827258288860321

01:03:28.740 --> 01:03:31.710 Have you know we saw a lot of of usdata,  
NOTE Confidence: 0.827258288860321

01:03:31.710 --> 01:03:33.523 but I wonder if other countries that  
NOTE Confidence: 0.827258288860321

01:03:33.523 --> 01:03:35.510 perhaps have a different history or  
NOTE Confidence: 0.827258288860321

01:03:35.510 --> 01:03:37.050 a different current environment.  
NOTE Confidence: 0.827258288860321

01:03:37.050 --> 01:03:39.330 Um, if their disparity is higher or lower,  
NOTE Confidence: 0.827258288860321

01:03:39.330 --> 01:03:40.470 or how that looks.  
NOTE Confidence: 0.878355801105499

01:03:41.260 --> 01:03:43.885 That's a fantastic question. I have two,  
NOTE Confidence: 0.878355801105499

01:03:43.890 --> 01:03:46.224 so it's something that I'm interested

NOTE Confidence: 0.878355801105499  
01:03:46.224 --> 01:03:48.760 in really getting into in the future,  
NOTE Confidence: 0.878355801105499  
01:03:48.760 --> 01:03:51.147 but I have to admit I haven't  
NOTE Confidence: 0.878355801105499  
01:03:51.147 --> 01:03:53.088 looked at those statistics in  
NOTE Confidence: 0.878355801105499  
01:03:53.088 --> 01:03:55.552 a really long time, so I don't.  
NOTE Confidence: 0.878355801105499  
01:03:55.552 --> 01:03:57.886 I don't know that I have a great  
NOTE Confidence: 0.878355801105499  
01:03:57.886 --> 01:04:00.382 answer for you about kind of  
NOTE Confidence: 0.878355801105499  
01:04:00.382 --> 01:04:02.194 contemporary outcomes and disparities  
NOTE Confidence: 0.878355801105499  
01:04:02.194 --> 01:04:04.890 in places like written, for instance,  
NOTE Confidence: 0.878355801105499  
01:04:04.890 --> 01:04:07.890 so I'm not I'm not sure off hand.  
NOTE Confidence: 0.878355801105499  
01:04:07.890 --> 01:04:11.265 I do recall from way back that there was.  
NOTE Confidence: 0.878355801105499  
01:04:11.270 --> 01:04:14.768 A study that was looking at  
NOTE Confidence: 0.878355801105499  
01:04:14.768 --> 01:04:17.940 risk of preterm birth among.  
NOTE Confidence: 0.878355801105499  
01:04:17.940 --> 01:04:21.585 Among parents who were not of the same race,  
NOTE Confidence: 0.878355801105499  
01:04:21.590 --> 01:04:25.073 so they looked at the risk of pre term  
NOTE Confidence: 0.878355801105499  
01:04:25.073 --> 01:04:28.897 birth for a black mother and a black father,  
NOTE Confidence: 0.878355801105499

01:04:28.900 --> 01:04:32.939 a black father and a white mother.  
NOTE Confidence: 0.878355801105499

01:04:32.940 --> 01:04:35.764 A black mother and a white father and  
NOTE Confidence: 0.878355801105499

01:04:35.764 --> 01:04:38.596 a white mother and a white father.  
NOTE Confidence: 0.878355801105499

01:04:38.600 --> 01:04:41.015 And they found that the risk of  
NOTE Confidence: 0.878355801105499

01:04:41.015 --> 01:04:43.727 preterm birth was the highest for the  
NOTE Confidence: 0.878355801105499

01:04:43.727 --> 01:04:46.133 couple where both parents were black.  
NOTE Confidence: 0.878355801105499

01:04:46.140 --> 01:04:48.234 The lowest where both parents were  
NOTE Confidence: 0.878355801105499

01:04:48.234 --> 01:04:50.502 white and for the two interracial  
NOTE Confidence: 0.878355801105499

01:04:50.502 --> 01:04:52.914 couples the risk was in between.  
NOTE Confidence: 0.878355801105499

01:04:52.920 --> 01:04:56.970 The risk was higher when the mom was black.  
NOTE Confidence: 0.878355801105499

01:04:56.970 --> 01:04:59.378 And when the mom was white and I  
NOTE Confidence: 0.878355801105499

01:04:59.378 --> 01:05:01.414 believe that that study was either  
NOTE Confidence: 0.878355801105499

01:05:01.414 --> 01:05:03.999 done primarily or there was a like a.  
NOTE Confidence: 0.878355801105499

01:05:04.000 --> 01:05:06.360 Kind of a validation study that was done.  
NOTE Confidence: 0.871606230735779

01:05:08.430 --> 01:05:11.401 It was not in this country, but I can't.  
NOTE Confidence: 0.871606230735779

01:05:11.401 --> 01:05:14.410 I can't remember if it was Northern Africa.

NOTE Confidence: 0.871606230735779  
01:05:14.410 --> 01:05:16.106 I think it may have been Northern Africa.  
NOTE Confidence: 0.838320434093475  
01:05:17.170 --> 01:05:18.338 This is fascinating stuff.  
NOTE Confidence: 0.838320434093475  
01:05:18.338 --> 01:05:19.506 Thank you so much.  
NOTE Confidence: 0.838320434093475  
01:05:19.510 --> 01:05:21.268 I'm going to get to some  
NOTE Confidence: 0.838320434093475  
01:05:21.268 --> 01:05:22.440 of these questions here.  
NOTE Confidence: 0.838320434093475  
01:05:22.440 --> 01:05:24.784 I'd invite you folks to put your questions.  
NOTE Confidence: 0.838320434093475  
01:05:24.790 --> 01:05:26.834 I see summer in chat in summer,  
NOTE Confidence: 0.838320434093475  
01:05:26.840 --> 01:05:28.300 in Q&A, so going forward,  
NOTE Confidence: 0.838320434093475  
01:05:28.300 --> 01:05:30.644 go ahead and put your questions in chat,  
NOTE Confidence: 0.838320434093475  
01:05:30.650 --> 01:05:32.946 but I'm going to look and see some  
NOTE Confidence: 0.838320434093475  
01:05:32.946 --> 01:05:34.747 stuff that's in the Q&A portion.  
NOTE Confidence: 0.838320434093475  
01:05:34.750 --> 01:05:35.918 So amorous someone asks,  
NOTE Confidence: 0.838320434093475  
01:05:35.918 --> 01:05:36.794 excuse my ignorance,  
NOTE Confidence: 0.838320434093475  
01:05:36.800 --> 01:05:38.558 but what are some examples of  
NOTE Confidence: 0.838320434093475  
01:05:38.558 --> 01:05:39.437 the environmental disadvantages?  
NOTE Confidence: 0.838320434093475

01:05:39.440 --> 01:05:41.030 I think this question came through

NOTE Confidence: 0.838320434093475

01:05:41.030 --> 01:05:42.454 relatively early in your talk

NOTE Confidence: 0.838320434093475

01:05:42.454 --> 01:05:43.730 about the disadvantages that

NOTE Confidence: 0.838320434093475

01:05:43.730 --> 01:05:45.006 could influence the disparity.

NOTE Confidence: 0.886445999145508

01:05:45.560 --> 01:05:48.524 Absolutely, so it's it's many of

NOTE Confidence: 0.886445999145508

01:05:48.524 --> 01:05:51.537 the things that we're talking about

NOTE Confidence: 0.886445999145508

01:05:51.537 --> 01:05:54.906 a lot these days, so it's poverty,

NOTE Confidence: 0.886445999145508

01:05:54.906 --> 01:05:55.890 intergenerational poverty,

NOTE Confidence: 0.886445999145508

01:05:55.890 --> 01:05:57.858 its lack of education,

NOTE Confidence: 0.886445999145508

01:05:57.858 --> 01:06:00.810 lack of access to medical care,

NOTE Confidence: 0.886445999145508

01:06:00.810 --> 01:06:03.978 lack of access to healthy foods.

NOTE Confidence: 0.886445999145508

01:06:03.980 --> 01:06:08.720 All all those kinds of socio

NOTE Confidence: 0.886445999145508

01:06:08.720 --> 01:06:10.300 environmental challenges.

NOTE Confidence: 0.886445999145508

01:06:10.300 --> 01:06:11.840 Concerns about personal safety like

NOTE Confidence: 0.886445999145508

01:06:11.840 --> 01:06:14.429 are you live in a safe environment?

NOTE Confidence: 0.886445999145508

01:06:14.430 --> 01:06:16.838 Are you able to get to work?

NOTE Confidence: 0.886445999145508  
01:06:16.840 --> 01:06:18.898 Is that in a safe environment?  
NOTE Confidence: 0.886445999145508  
01:06:18.900 --> 01:06:21.273 Do you have what kind of transportation  
NOTE Confidence: 0.886445999145508  
01:06:21.273 --> 01:06:23.716 do you have access to? Is it?  
NOTE Confidence: 0.886445999145508  
01:06:23.716 --> 01:06:25.774 Are you relying on public transportation?  
NOTE Confidence: 0.886445999145508  
01:06:25.780 --> 01:06:29.220 An it is stressful to be able to manage that.  
NOTE Confidence: 0.886445999145508  
01:06:29.220 --> 01:06:31.476 So it's all these kind of different different  
NOTE Confidence: 0.886445999145508  
01:06:31.476 --> 01:06:33.349 levels and different considerations,  
NOTE Confidence: 0.886445999145508  
01:06:33.350 --> 01:06:34.282 and it's.  
NOTE Confidence: 0.886445999145508  
01:06:34.282 --> 01:06:36.146 Yeah, I'll stop there.  
NOTE Confidence: 0.886445999145508  
01:06:36.150 --> 01:06:36.500 Thank  
NOTE Confidence: 0.812438368797302  
01:06:36.500 --> 01:06:37.724 you, so here's a.  
NOTE Confidence: 0.812438368797302  
01:06:37.724 --> 01:06:40.310 It's more of an observation and suggestion.  
NOTE Confidence: 0.812438368797302  
01:06:40.310 --> 01:06:42.040 Thank you for this overview.  
NOTE Confidence: 0.812438368797302  
01:06:42.040 --> 01:06:43.942 Doctor Kaiser, I would suggest that  
NOTE Confidence: 0.812438368797302  
01:06:43.942 --> 01:06:46.036 instead of genetics at the focus  
NOTE Confidence: 0.812438368797302



01:06:46.036 --> 01:06:47.568 on researching perinatal health,  
NOTE Confidence: 0.812438368797302

01:06:47.570 --> 01:06:49.250 disparities should be on epigenomics  
NOTE Confidence: 0.812438368797302

01:06:49.250 --> 01:06:50.930 on how the adverse exposures  
NOTE Confidence: 0.812438368797302

01:06:50.990 --> 01:06:52.394 influence gene expression and  
NOTE Confidence: 0.812438368797302

01:06:52.394 --> 01:06:54.149 you actually commented on that.  
NOTE Confidence: 0.812438368797302

01:06:54.150 --> 01:06:56.220 Briefly, talk about genomics as well.  
NOTE Confidence: 0.812438368797302

01:06:56.220 --> 01:06:58.428 And also there are genetic methods  
NOTE Confidence: 0.812438368797302

01:06:58.428 --> 01:07:00.593 and platforms to determine ancestry so  
NOTE Confidence: 0.812438368797302

01:07:00.593 --> 01:07:02.798 we can control for that in studies,  
NOTE Confidence: 0.812438368797302

01:07:02.800 --> 01:07:05.236 even among racial ethnic groups in it.  
NOTE Confidence: 0.812438368797302

01:07:05.240 --> 01:07:07.656 Things to my something I thought of when  
NOTE Confidence: 0.812438368797302

01:07:07.656 --> 01:07:09.718 you mentioned you want is work in 1972.  
NOTE Confidence: 0.812438368797302

01:07:09.720 --> 01:07:10.904 I couldn't help wondering.  
NOTE Confidence: 0.812438368797302

01:07:10.904 --> 01:07:12.988 I wonder what level of sophistication he  
NOTE Confidence: 0.812438368797302

01:07:12.988 --> 01:07:14.773 had for looking at the genetic variation  
NOTE Confidence: 0.812438368797302

01:07:14.773 --> 01:07:16.719 both within groups and between groups etc.

NOTE Confidence: 0.863000243902207  
01:07:17.330 --> 01:07:20.870 Absolutely. Absolutely thank you for that.  
NOTE Confidence: 0.863000243902207  
01:07:20.870 --> 01:07:22.710 I appreciate that feedback. OK,  
NOTE Confidence: 0.844646811485291  
01:07:22.710 --> 01:07:24.178 now here's some more  
NOTE Confidence: 0.844646811485291  
01:07:24.178 --> 01:07:25.646 thoughts from your audience.  
NOTE Confidence: 0.844646811485291  
01:07:25.650 --> 01:07:28.170 Can you comment on Elizabeth how's work  
NOTE Confidence: 0.844646811485291  
01:07:28.170 --> 01:07:30.650 in New York City that showed that both  
NOTE Confidence: 0.844646811485291  
01:07:30.650 --> 01:07:33.039 black and white women were at higher  
NOTE Confidence: 0.844646811485291  
01:07:33.039 --> 01:07:35.443 risk for morbidity and mortality at  
NOTE Confidence: 0.844646811485291  
01:07:35.443 --> 01:07:37.427 primarily black serving hospitals,  
NOTE Confidence: 0.844646811485291  
01:07:37.430 --> 01:07:39.174 suggesting that a significant  
NOTE Confidence: 0.844646811485291  
01:07:39.174 --> 01:07:40.918 tributed contributed to disparities  
NOTE Confidence: 0.844646811485291  
01:07:40.918 --> 01:07:42.808 is poor quality of care.  
NOTE Confidence: 0.844646811485291  
01:07:42.810 --> 01:07:44.538 Similarly, could you comment on why  
NOTE Confidence: 0.844646811485291  
01:07:44.538 --> 01:07:46.514 outcomes in the US are substantially  
NOTE Confidence: 0.844646811485291  
01:07:46.514 --> 01:07:48.800 worse than other high income countries?  
NOTE Confidence: 0.844646811485291

01:07:48.800 --> 01:07:50.465 How are the health systems  
NOTE Confidence: 0.844646811485291

01:07:50.465 --> 01:07:51.797 in those countries different?  
NOTE Confidence: 0.844646811485291

01:07:51.800 --> 01:07:54.416 How do they do it better?  
NOTE Confidence: 0.844646811485291

01:07:54.420 --> 01:07:56.772 ETC so the first part of her  
NOTE Confidence: 0.844646811485291

01:07:56.772 --> 01:07:58.662 question related to white women  
NOTE Confidence: 0.844646811485291

01:07:58.662 --> 01:08:00.692 and the morbidity mortality being  
NOTE Confidence: 0.844646811485291

01:08:00.692 --> 01:08:03.396 cared for it in hospitals that  
NOTE Confidence: 0.844646811485291

01:08:03.396 --> 01:08:05.756 primarily sort of black communities.  
NOTE Confidence: 0.888244807720184

01:08:06.450 --> 01:08:09.826 Absolutely, so I have read her work an  
NOTE Confidence: 0.888244807720184

01:08:09.826 --> 01:08:13.392 she's got kind of a lot of different  
NOTE Confidence: 0.888244807720184

01:08:13.392 --> 01:08:15.755 facets to this specific questions  
NOTE Confidence: 0.888244807720184

01:08:15.755 --> 01:08:20.510 that she asks in answers. It does.  
NOTE Confidence: 0.888244807720184

01:08:20.510 --> 01:08:23.534 Begin to speak to quality of care,  
NOTE Confidence: 0.888244807720184

01:08:23.540 --> 01:08:25.862 but I think that there's also  
NOTE Confidence: 0.888244807720184

01:08:25.862 --> 01:08:27.978 there also issues of residential  
NOTE Confidence: 0.888244807720184

01:08:27.978 --> 01:08:30.900 segregation that may be at play.

NOTE Confidence: 0.888244807720184  
01:08:30.900 --> 01:08:34.158 To be honest, I would have to go back  
NOTE Confidence: 0.888244807720184  
01:08:34.158 --> 01:08:37.546 to that specific article and read a  
NOTE Confidence: 0.888244807720184  
01:08:37.546 --> 01:08:40.858 little bit more about what her like,  
NOTE Confidence: 0.888244807720184  
01:08:40.860 --> 01:08:43.030 how the analysis was structured,  
NOTE Confidence: 0.888244807720184  
01:08:43.030 --> 01:08:45.900 but I appreciate the comment and I  
NOTE Confidence: 0.888244807720184  
01:08:45.900 --> 01:08:48.128 think that must absolutely there  
NOTE Confidence: 0.888244807720184  
01:08:48.128 --> 01:08:51.320 there is embedded in all of this.  
NOTE Confidence: 0.888244807720184  
01:08:51.320 --> 01:08:52.772 Quality of care access.  
NOTE Confidence: 0.888244807720184  
01:08:52.772 --> 01:08:54.587 If care and variability in  
NOTE Confidence: 0.888244807720184  
01:08:54.587 --> 01:08:55.760 outcomes by hospital,  
NOTE Confidence: 0.888244807720184  
01:08:55.760 --> 01:08:58.720 that's its own kind of its own contingent.  
NOTE Confidence: 0.888244807720184  
01:08:58.720 --> 01:09:00.940 An area of research as well.  
NOTE Confidence: 0.888244807720184  
01:09:00.940 --> 01:09:03.106 And it sounds like this study  
NOTE Confidence: 0.888244807720184  
01:09:03.106 --> 01:09:05.010 falls into that as well.  
NOTE Confidence: 0.888244807720184  
01:09:05.010 --> 01:09:08.340 So yes, that's most likely a part of it,  
NOTE Confidence: 0.888244807720184

01:09:08.340 --> 01:09:11.436 but how it fits into the.  
NOTE Confidence: 0.888244807720184

01:09:11.440 --> 01:09:13.210 The entire T of the context.  
NOTE Confidence: 0.888244807720184

01:09:13.210 --> 01:09:15.005 The broader context is a  
NOTE Confidence: 0.888244807720184

01:09:15.005 --> 01:09:16.800 little bit challenging to say.  
NOTE Confidence: 0.888244807720184

01:09:16.800 --> 01:09:18.280 At this point, thank  
NOTE Confidence: 0.820562198048546

01:09:18.280 --> 01:09:20.458 you. Emirates to these studies and  
NOTE Confidence: 0.820562198048546

01:09:20.458 --> 01:09:22.375 disparity control for the higher  
NOTE Confidence: 0.820562198048546

01:09:22.375 --> 01:09:24.370 incidence of hypertension and obesity  
NOTE Confidence: 0.820562198048546

01:09:24.370 --> 01:09:29.460 in Blacks compared to whites. Yes. Yes,  
NOTE Confidence: 0.781315624713898

01:09:29.460 --> 01:09:31.890 so great that. Here's a  
NOTE Confidence: 0.83316171169281

01:09:31.890 --> 01:09:32.847 question for me.  
NOTE Confidence: 0.83316171169281

01:09:32.847 --> 01:09:35.440 Here's a question for the modern very nice.  
NOTE Confidence: 0.83316171169281

01:09:35.440 --> 01:09:37.125 Will this presentation be available  
NOTE Confidence: 0.83316171169281

01:09:37.125 --> 01:09:38.990 after the live web and R?  
NOTE Confidence: 0.83316171169281

01:09:38.990 --> 01:09:41.574 And the answer is thanks to our friend,  
NOTE Confidence: 0.83316171169281

01:09:41.580 --> 01:09:42.498 Doctor Kaiser? Yes,

NOTE Confidence: 0.83316171169281  
01:09:42.498 --> 01:09:44.640 this will be available on the website  
NOTE Confidence: 0.83316171169281  
01:09:44.698 --> 01:09:46.738 for the program for biomedical ethics.  
NOTE Confidence: 0.83316171169281  
01:09:46.740 --> 01:09:49.647 If you just go to biomedical ethics at Yale,  
NOTE Confidence: 0.83316171169281  
01:09:49.650 --> 01:09:52.499 you will find it there very soon.  
NOTE Confidence: 0.83316171169281  
01:09:52.500 --> 01:09:53.661 OK, another question.  
NOTE Confidence: 0.83316171169281  
01:09:53.661 --> 01:09:55.596 I think for our speaker,  
NOTE Confidence: 0.83316171169281  
01:09:55.600 --> 01:09:57.440 if there is a significant  
NOTE Confidence: 0.83316171169281  
01:09:57.440 --> 01:09:58.544 epigenetic component to  
NOTE Confidence: 0.83316171169281  
01:09:58.544 --> 01:09:59.850 disproportionate black mortality,  
NOTE Confidence: 0.83316171169281  
01:09:59.850 --> 01:10:02.214 how can you disentangle that from  
NOTE Confidence: 0.83316171169281  
01:10:02.214 --> 01:10:04.607 structural racism and the history of  
NOTE Confidence: 0.83316171169281  
01:10:04.607 --> 01:10:07.204 anti black racism in the United States?  
NOTE Confidence: 0.83316171169281  
01:10:07.210 --> 01:10:09.950 So there's a pretty easy question so.  
NOTE Confidence: 0.83316171169281  
01:10:09.950 --> 01:10:10.922 But I mean,  
NOTE Confidence: 0.83316171169281  
01:10:10.922 --> 01:10:13.190 I'll put an important one affair question.  
NOTE Confidence: 0.83316171169281

01:10:13.190 --> 01:10:15.080 This is this is hard stuff  
NOTE Confidence: 0.83316171169281

01:10:15.080 --> 01:10:17.079 to China on sort of stuff.  
NOTE Confidence: 0.83316171169281

01:10:17.080 --> 01:10:18.838 It's also a little bit frustrating  
NOTE Confidence: 0.83316171169281

01:10:18.838 --> 01:10:20.715 how with all the genetic technology  
NOTE Confidence: 0.83316171169281

01:10:20.715 --> 01:10:22.969 and data available as well as all  
NOTE Confidence: 0.83316171169281

01:10:22.969 --> 01:10:24.729 the demographic data available that  
NOTE Confidence: 0.83316171169281

01:10:24.729 --> 01:10:27.102 we still don't have a better answer  
NOTE Confidence: 0.83316171169281

01:10:27.102 --> 01:10:29.216 for why this disparity or a complete  
NOTE Confidence: 0.83316171169281

01:10:29.216 --> 01:10:31.328 answer for why this disparity exists.  
NOTE Confidence: 0.83316171169281

01:10:31.330 --> 01:10:33.010 But perhaps you'd like to.  
NOTE Confidence: 0.83316171169281

01:10:33.010 --> 01:10:34.520 Poverty caused by structural racism.  
NOTE Confidence: 0.83316171169281

01:10:34.520 --> 01:10:35.788 All that I'm sorry.  
NOTE Confidence: 0.83316171169281

01:10:35.788 --> 01:10:38.026 That's the next question should be so  
NOTE Confidence: 0.83316171169281

01:10:38.026 --> 01:10:39.930 the last question will get to that  
NOTE Confidence: 0.845977246761322

01:10:39.930 --> 01:10:42.850 in a moment. Netex from structure isn't.  
NOTE Confidence: 0.845977246761322

01:10:42.850 --> 01:10:45.923 I mean, I think that's a really

NOTE Confidence: 0.845977246761322  
01:10:45.923 --> 01:10:48.503 excellent question and I think we're  
NOTE Confidence: 0.845977246761322  
01:10:48.503 --> 01:10:51.240 at the point where we're only just  
NOTE Confidence: 0.845977246761322  
01:10:51.321 --> 01:10:53.955 beginning to delve into and beginning  
NOTE Confidence: 0.845977246761322  
01:10:53.955 --> 01:10:57.352 to ready to here to really hear what,  
NOTE Confidence: 0.845977246761322  
01:10:57.352 --> 01:10:59.800 how pervasive and what the extent  
NOTE Confidence: 0.845977246761322  
01:10:59.881 --> 01:11:02.146 of structural racism has been.  
NOTE Confidence: 0.845977246761322  
01:11:02.150 --> 01:11:06.440 So, I mean, we can point to examples of it,  
NOTE Confidence: 0.845977246761322  
01:11:06.440 --> 01:11:08.200 but really, understanding the  
NOTE Confidence: 0.845977246761322  
01:11:08.200 --> 01:11:11.589 entire T of it is going to take.  
NOTE Confidence: 0.845977246761322  
01:11:11.590 --> 01:11:14.425 A long time and a lot of work and  
NOTE Confidence: 0.845977246761322  
01:11:14.425 --> 01:11:17.605 I don't know how from where I sit  
NOTE Confidence: 0.845977246761322  
01:11:17.605 --> 01:11:20.868 right now to begin to dis entangle.  
NOTE Confidence: 0.845977246761322  
01:11:20.870 --> 01:11:22.262 Epigenetics are from structural  
NOTE Confidence: 0.845977246761322  
01:11:22.262 --> 01:11:23.306 racism per say.  
NOTE Confidence: 0.845977246761322  
01:11:23.310 --> 01:11:26.442 It's going to have to be attention to detail,  
NOTE Confidence: 0.845977246761322



01:11:26.450 --> 01:11:28.690 attention to the subtlety Anna lot of  
NOTE Confidence: 0.845977246761322

01:11:28.690 --> 01:11:30.931 thought about how you structure your  
NOTE Confidence: 0.845977246761322

01:11:30.931 --> 01:11:33.428 analysis, an what data set you're using,  
NOTE Confidence: 0.845977246761322

01:11:33.430 --> 01:11:35.880 and how you handle that data set.  
NOTE Confidence: 0.845977246761322

01:11:35.880 --> 01:11:39.450 It's a great question, but I don't.  
NOTE Confidence: 0.845977246761322

01:11:39.450 --> 01:11:40.970 I don't know that.  
NOTE Confidence: 0.845977246761322

01:11:40.970 --> 01:11:42.870 I mean there's like that.  
NOTE Confidence: 0.845977246761322

01:11:42.870 --> 01:11:44.960 That literature is growing so  
NOTE Confidence: 0.845977246761322

01:11:44.960 --> 01:11:47.784 rapidly and it's so bulky to be  
NOTE Confidence: 0.845977246761322

01:11:47.784 --> 01:11:50.087 able to delve into it process it,  
NOTE Confidence: 0.845977246761322

01:11:50.090 --> 01:11:52.780 synthesize it, and then take.  
NOTE Confidence: 0.845977246761322

01:11:52.780 --> 01:11:58.549 From that What you want to apply to inform?  
NOTE Confidence: 0.845977246761322

01:11:58.550 --> 01:12:01.415 Analysis about epigenetics.  
NOTE Confidence: 0.845977246761322

01:12:01.415 --> 01:12:04.280 It's monumental undertaking.  
NOTE Confidence: 0.845977246761322

01:12:04.280 --> 01:12:04.600 Here's  
NOTE Confidence: 0.809897661209106

01:12:04.600 --> 01:12:06.980 a question. I think you that you

NOTE Confidence: 0.809897661209106  
01:12:06.980 --> 01:12:08.927 you're talking touched on to some  
NOTE Confidence: 0.809897661209106  
01:12:08.927 --> 01:12:10.655 point in answer to some extent,  
NOTE Confidence: 0.809897661209106  
01:12:10.660 --> 01:12:13.522 but but I'm curious on your thoughts on this.  
NOTE Confidence: 0.809897661209106  
01:12:13.530 --> 01:12:15.914 Do you think poverty and low income are  
NOTE Confidence: 0.809897661209106  
01:12:15.914 --> 01:12:17.997 the underlying causes of the disparities?  
NOTE Confidence: 0.809897661209106  
01:12:18.000 --> 01:12:19.908 Now you based on my understanding,  
NOTE Confidence: 0.809897661209106  
01:12:19.910 --> 01:12:22.350 you pointed out that if you control for  
NOTE Confidence: 0.809897661209106  
01:12:22.350 --> 01:12:24.698 income that you still see the disparity.  
NOTE Confidence: 0.809897661209106  
01:12:24.700 --> 01:12:26.996 But there was an interesting aspect of  
NOTE Confidence: 0.809897661209106  
01:12:26.996 --> 01:12:28.846 this question which is. For example,  
NOTE Confidence: 0.809897661209106  
01:12:28.846 --> 01:12:30.436 microbiome is influenced by environment,  
NOTE Confidence: 0.809897661209106  
01:12:30.440 --> 01:12:31.536 the diet, stress etc,  
NOTE Confidence: 0.809897661209106  
01:12:31.536 --> 01:12:32.906 and those who experience poverty  
NOTE Confidence: 0.809897661209106  
01:12:32.906 --> 01:12:34.270 are impacted tremendously.  
NOTE Confidence: 0.809897661209106  
01:12:34.270 --> 01:12:36.566 But if poverty caused by structural racism.  
NOTE Confidence: 0.809897661209106

01:12:36.570 --> 01:12:39.218 Then we need to address racism as well.

NOTE Confidence: 0.809897661209106

01:12:39.220 --> 01:12:39.882 Question mark,

NOTE Confidence: 0.809897661209106

01:12:39.882 --> 01:12:41.537 but you're saying that poverty

NOTE Confidence: 0.809897661209106

01:12:41.537 --> 01:12:43.556 if you control for poverty you

NOTE Confidence: 0.809897661209106

01:12:43.556 --> 01:12:44.848 still see the difference.

NOTE Confidence: 0.903273642063141

01:12:45.460 --> 01:12:49.450 I am and this is. This is kind of a.

NOTE Confidence: 0.903273642063141

01:12:49.450 --> 01:12:51.622 A tricky question, and when we

NOTE Confidence: 0.903273642063141

01:12:51.622 --> 01:12:54.458 begin to see how everything is so.

NOTE Confidence: 0.903273642063141

01:12:54.460 --> 01:12:57.634 Intertwined and I guess that really

NOTE Confidence: 0.903273642063141

01:12:57.634 --> 01:13:00.793 what really what I'm saying is

NOTE Confidence: 0.903273642063141

01:13:00.793 --> 01:13:03.625 from where we stand right now.

NOTE Confidence: 0.903273642063141

01:13:03.630 --> 01:13:05.494 I wouldn't discount anything.

NOTE Confidence: 0.903273642063141

01:13:05.494 --> 01:13:08.290 I think that's really the message

NOTE Confidence: 0.903273642063141

01:13:08.366 --> 01:13:10.655 that I wanted to get across is.

NOTE Confidence: 0.824338495731354

01:13:12.840 --> 01:13:18.460 I yeah. I wouldn't discount anything.

NOTE Confidence: 0.824338495731354

01:13:18.460 --> 01:13:20.210 I think that that all of these

NOTE Confidence: 0.824338495731354

01:13:20.210 --> 01:13:21.640 approaches are legitimate possibilities.

NOTE Confidence: 0.824338495731354

01:13:21.640 --> 01:13:23.368 But to Opry Ori say no,

NOTE Confidence: 0.824338495731354

01:13:23.370 --> 01:13:24.810 it can't be one thing.

NOTE Confidence: 0.824338495731354

01:13:24.810 --> 01:13:27.330 It can only be the other thing I think is

NOTE Confidence: 0.824338495731354

01:13:27.393 --> 01:13:29.724 is a disservice is doing a disservice.

NOTE Confidence: 0.824338495731354

01:13:29.730 --> 01:13:30.594 Well, I appreciate.

NOTE Confidence: 0.824338495731354

01:13:30.594 --> 01:13:32.034 I appreciate that sentiment in

NOTE Confidence: 0.856106340885162

01:13:32.040 --> 01:13:34.287 particular. It may be 'cause I actually

NOTE Confidence: 0.856106340885162

01:13:34.287 --> 01:13:36.389 had written down some questions as we

NOTE Confidence: 0.856106340885162

01:13:36.389 --> 01:13:38.597 went along in the talk was so nice

NOTE Confidence: 0.856106340885162

01:13:38.597 --> 01:13:40.445 that as you went along you answered

NOTE Confidence: 0.856106340885162

01:13:40.445 --> 01:13:42.150 my questions and stuff, you know.

NOTE Confidence: 0.856106340885162

01:13:42.150 --> 01:13:43.851 But when I wanted to talk about

NOTE Confidence: 0.856106340885162

01:13:43.851 --> 01:13:46.131 one of my questions was is there

NOTE Confidence: 0.856106340885162

01:13:46.131 --> 01:13:47.615 actually a political price?

NOTE Confidence: 0.856106340885162

01:13:47.620 --> 01:13:51.365 For endorsing or not endorsing a potential  
NOTE Confidence: 0.856106340885162

01:13:51.365 --> 01:13:54.730 genetic role in disparities and I,  
NOTE Confidence: 0.856106340885162

01:13:54.730 --> 01:13:58.660 I think that you've kind of.  
NOTE Confidence: 0.856106340885162

01:13:58.660 --> 01:13:59.488 Well, I'll ask,  
NOTE Confidence: 0.856106340885162

01:13:59.488 --> 01:14:01.768 ask you to speak to that because I  
NOTE Confidence: 0.856106340885162

01:14:01.768 --> 01:14:03.742 think that you imply that there are  
NOTE Confidence: 0.856106340885162

01:14:03.742 --> 01:14:05.662 some people who feel stronger than  
NOTE Confidence: 0.856106340885162

01:14:05.662 --> 01:14:07.600 we shouldn't go in that direction  
NOTE Confidence: 0.856106340885162

01:14:07.600 --> 01:14:09.686 for all the reasons you talked about.  
NOTE Confidence: 0.856106340885162

01:14:09.690 --> 01:14:10.954 And by the way,  
NOTE Confidence: 0.856106340885162

01:14:10.954 --> 01:14:12.850 the history of eugenics in medicine  
NOTE Confidence: 0.856106340885162

01:14:12.918 --> 01:14:14.158 is not a subtle one.  
NOTE Confidence: 0.856106340885162

01:14:14.160 --> 01:14:15.948 In New Haven's role and major  
NOTE Confidence: 0.856106340885162

01:14:15.948 --> 01:14:17.140 academic institutions all over,  
NOTE Confidence: 0.856106340885162

01:14:17.140 --> 01:14:18.892 including Yale's role in eugenics in  
NOTE Confidence: 0.856106340885162

01:14:18.892 --> 01:14:21.009 the earlier part of the 20th century.

NOTE Confidence: 0.856106340885162  
01:14:21.010 --> 01:14:22.792 In we carry this legacy with  
NOTE Confidence: 0.856106340885162  
01:14:22.792 --> 01:14:23.683 us as physicians,  
NOTE Confidence: 0.856106340885162  
01:14:23.690 --> 01:14:23.986 unfortunately,  
NOTE Confidence: 0.856106340885162  
01:14:23.986 --> 01:14:25.762 and his academics so that that  
NOTE Confidence: 0.856106340885162  
01:14:25.762 --> 01:14:26.970 caution is certainly there.  
NOTE Confidence: 0.856106340885162  
01:14:26.970 --> 01:14:28.830 But your message seems to be.  
NOTE Confidence: 0.856106340885162  
01:14:28.830 --> 01:14:31.399 Let's keep every door open and let's  
NOTE Confidence: 0.856106340885162  
01:14:31.399 --> 01:14:33.822 look everywhere we can amass strikes me  
NOTE Confidence: 0.856106340885162  
01:14:33.822 --> 01:14:36.509 as as as as something that strikes me.  
NOTE Confidence: 0.856106340885162  
01:14:36.510 --> 01:14:37.707 Amerson, you concomitant,  
NOTE Confidence: 0.856106340885162  
01:14:37.707 --> 01:14:40.918 you seem less married to a specific answer  
NOTE Confidence: 0.856106340885162  
01:14:40.918 --> 01:14:43.375 then you are to solving the problem.  
NOTE Confidence: 0.856106340885162  
01:14:43.380 --> 01:14:44.210 I agree,  
NOTE Confidence: 0.862392723560333  
01:14:44.210 --> 01:14:47.108 I think that in my in my short career  
NOTE Confidence: 0.862392723560333  
01:14:47.108 --> 01:14:49.769 just reading and talking and networking  
NOTE Confidence: 0.862392723560333

01:14:49.769 --> 01:14:53.015 and being exposed to all different ideas

NOTE Confidence: 0.862392723560333

01:14:53.015 --> 01:14:56.172 in many different contexts has I can.

NOTE Confidence: 0.862392723560333

01:14:56.180 --> 01:14:59.071 I can see how it shifted and

NOTE Confidence: 0.862392723560333

01:14:59.071 --> 01:15:01.678 refined my view. And so I I.

NOTE Confidence: 0.862392723560333

01:15:01.678 --> 01:15:04.307 I come to this question with thoughts

NOTE Confidence: 0.862392723560333

01:15:04.307 --> 01:15:07.744 about how I'd like to investigate it.

NOTE Confidence: 0.862392723560333

01:15:07.750 --> 01:15:10.634 An roads I'd like to go down,

NOTE Confidence: 0.862392723560333

01:15:10.640 --> 01:15:13.356 but there's so many twists and turns

NOTE Confidence: 0.862392723560333

01:15:13.356 --> 01:15:17.578 and it's so complex. That I think.

NOTE Confidence: 0.862392723560333

01:15:17.580 --> 01:15:19.130 Said saying at the outset,

NOTE Confidence: 0.862392723560333

01:15:19.130 --> 01:15:21.506 this is what it must be.

NOTE Confidence: 0.862392723560333

01:15:21.510 --> 01:15:24.219 An I reject everything else has the

NOTE Confidence: 0.862392723560333

01:15:24.219 --> 01:15:26.750 has the potential to actually further

NOTE Confidence: 0.862392723560333

01:15:26.750 --> 01:15:29.767 undermine and hurt the very people that

NOTE Confidence: 0.862392723560333

01:15:29.843 --> 01:15:32.777 you're trying to help by excluding

NOTE Confidence: 0.862392723560333

01:15:32.777 --> 01:15:35.143 them from potentially benefiting from

NOTE Confidence: 0.862392723560333  
01:15:35.143 --> 01:15:38.367 something like I think about it in a  
NOTE Confidence: 0.862392723560333  
01:15:38.367 --> 01:15:41.521 similar way to the lack of inclusion  
NOTE Confidence: 0.862392723560333  
01:15:41.521 --> 01:15:44.311 of African American folks in clinical  
NOTE Confidence: 0.862392723560333  
01:15:44.311 --> 01:15:47.089 trials in vaccine trials like it.  
NOTE Confidence: 0.862392723560333  
01:15:47.090 --> 01:15:48.419 In my mind,  
NOTE Confidence: 0.862392723560333  
01:15:48.419 --> 01:15:51.520 it seems very clear that there was.  
NOTE Confidence: 0.862392723560333  
01:15:51.520 --> 01:15:54.100 Kind of a dual mistrusted  
NOTE Confidence: 0.862392723560333  
01:15:54.100 --> 01:15:55.648 the medical institution,  
NOTE Confidence: 0.862392723560333  
01:15:55.650 --> 01:15:59.255 but also maybe not wanting to two.  
NOTE Confidence: 0.862392723560333  
01:15:59.260 --> 01:16:02.473 Go out of one's way to bring in members  
NOTE Confidence: 0.862392723560333  
01:16:02.473 --> 01:16:05.448 from this group that has a history  
NOTE Confidence: 0.862392723560333  
01:16:05.448 --> 01:16:08.684 of being a manipulated by or taken  
NOTE Confidence: 0.862392723560333  
01:16:08.684 --> 01:16:11.606 advantage of by the medical establishment.  
NOTE Confidence: 0.862392723560333  
01:16:11.610 --> 01:16:14.226 They were not included and therefore  
NOTE Confidence: 0.862392723560333  
01:16:14.226 --> 01:16:17.289 did not have the opportunity to.  
NOTE Confidence: 0.862392723560333



01:16:17.290 --> 01:16:18.802 Benefit from discoveries that  
NOTE Confidence: 0.862392723560333

01:16:18.802 --> 01:16:20.314 may have been made.  
NOTE Confidence: 0.862392723560333

01:16:20.320 --> 01:16:23.344 So I'm not saying that's what would happen,  
NOTE Confidence: 0.862392723560333

01:16:23.350 --> 01:16:25.245 but that's that's my worry  
NOTE Confidence: 0.862392723560333

01:16:25.245 --> 01:16:27.140 that if we say upfront,  
NOTE Confidence: 0.862392723560333

01:16:27.140 --> 01:16:27.494 no,  
NOTE Confidence: 0.862392723560333

01:16:27.494 --> 01:16:30.326 this can't be that you have denied the  
NOTE Confidence: 0.862392723560333

01:16:30.326 --> 01:16:32.450 opportunity to benefit from something.  
NOTE Confidence: 0.862392723560333

01:16:32.450 --> 01:16:35.096 If it turns out to be there.  
NOTE Confidence: 0.886369776725769

01:16:35.800 --> 01:16:38.300 Thank you. Another question, please,  
NOTE Confidence: 0.886369776725769

01:16:38.300 --> 01:16:40.682 are you aware of quality improvement  
NOTE Confidence: 0.886369776725769

01:16:40.682 --> 01:16:42.270 initiatives or other interventions  
NOTE Confidence: 0.886369776725769

01:16:42.329 --> 01:16:44.520 that have shown the ability to narrow  
NOTE Confidence: 0.886369776725769

01:16:44.520 --> 01:16:46.469 the disparities in maternal neonate?  
NOTE Confidence: 0.886369776725769

01:16:46.470 --> 01:16:48.320 Allowed comma and black women?  
NOTE Confidence: 0.886369776725769

01:16:48.320 --> 01:16:50.180 Better access to care, etc.

NOTE Confidence: 0.886369776725769

01:16:50.180 --> 01:16:52.434 Are you aware of research that looks

NOTE Confidence: 0.886369776725769

01:16:52.434 --> 01:16:53.876 specifically at adverse childhood

NOTE Confidence: 0.886369776725769

01:16:53.876 --> 01:16:55.966 events and racial disparities in

NOTE Confidence: 0.886369776725769

01:16:55.966 --> 01:16:57.970 maternal neonatal outcomes? So two

NOTE Confidence: 0.851955533027649

01:16:57.970 --> 01:16:59.233 somewhat different questions,

NOTE Confidence: 0.851955533027649

01:16:59.233 --> 01:17:02.618 so I am aware of broadly research in

NOTE Confidence: 0.851955533027649

01:17:02.618 --> 01:17:04.796 both of those domains because it's.

NOTE Confidence: 0.851955533027649

01:17:04.800 --> 01:17:09.030 That's not the space that I work in as much.

NOTE Confidence: 0.851955533027649

01:17:09.030 --> 01:17:11.680 I haven't really been in.

NOTE Confidence: 0.851955533027649

01:17:11.680 --> 01:17:13.850 An exploring that literature recently.

NOTE Confidence: 0.851955533027649

01:17:13.850 --> 01:17:15.770 But there's certain there certainly

NOTE Confidence: 0.851955533027649

01:17:15.770 --> 01:17:17.690 is a robust literature about

NOTE Confidence: 0.851955533027649

01:17:17.750 --> 01:17:19.910 average early childhood experiences,

NOTE Confidence: 0.851955533027649

01:17:19.910 --> 01:17:22.070 aces, and how those experiences

NOTE Confidence: 0.851955533027649

01:17:22.070 --> 01:17:23.366 can drive disparities,

NOTE Confidence: 0.851955533027649

01:17:23.370 --> 01:17:25.540 and in terms of interventions.  
NOTE Confidence: 0.851955533027649

01:17:25.540 --> 01:17:28.612 I come across them as I'm kind of  
NOTE Confidence: 0.851955533027649

01:17:28.612 --> 01:17:31.598 looking for articles on other topics,  
NOTE Confidence: 0.851955533027649

01:17:31.600 --> 01:17:35.056 so I know that certainly they do exist,  
NOTE Confidence: 0.851955533027649

01:17:35.060 --> 01:17:37.270 and there have been some.  
NOTE Confidence: 0.851955533027649

01:17:37.270 --> 01:17:39.310 Strides need an people are  
NOTE Confidence: 0.851955533027649

01:17:39.310 --> 01:17:41.779 putting their work out there so  
NOTE Confidence: 0.851955533027649

01:17:41.779 --> 01:17:43.879 you know that that does exist,  
NOTE Confidence: 0.851955533027649

01:17:43.880 --> 01:17:48.000 but it hasn't been in kind of a.  
NOTE Confidence: 0.851955533027649

01:17:48.000 --> 01:17:52.837 A sweeping manner that's been able to  
NOTE Confidence: 0.851955533027649

01:17:52.837 --> 01:17:57.508 kind of infiltrate on a national scale.  
NOTE Confidence: 0.851955533027649

01:17:57.510 --> 01:17:59.730 Practice patterns.  
NOTE Confidence: 0.851955533027649

01:17:59.730 --> 01:18:00.840 Here's  
NOTE Confidence: 0.850763525281634

01:18:00.840 --> 01:18:02.644 a provocative.  
NOTE Confidence: 0.850763525281634

01:18:02.644 --> 01:18:07.154 Point that must be raised.  
NOTE Confidence: 0.850763525281634

01:18:07.160 --> 01:18:08.164 Door we didn't open.

NOTE Confidence: 0.850763525281634  
01:18:08.164 --> 01:18:09.670 We talked about leaving all the  
NOTE Confidence: 0.850763525281634  
01:18:09.727 --> 01:18:11.351 doors open to try and get to the  
NOTE Confidence: 0.850763525281634  
01:18:11.351 --> 01:18:12.728 answer to make things better.  
NOTE Confidence: 0.850763525281634  
01:18:12.730 --> 01:18:15.022 The door we didn't open was  
NOTE Confidence: 0.850763525281634  
01:18:15.022 --> 01:18:16.550 physician behavior in practice,  
NOTE Confidence: 0.850763525281634  
01:18:16.550 --> 01:18:18.460 and that's the one thing  
NOTE Confidence: 0.850763525281634  
01:18:18.460 --> 01:18:19.988 we can always control.  
NOTE Confidence: 0.850763525281634  
01:18:19.990 --> 01:18:22.280 We really perpetuated a lack  
NOTE Confidence: 0.850763525281634  
01:18:22.280 --> 01:18:23.654 of physician accountability.  
NOTE Confidence: 0.850763525281634  
01:18:23.660 --> 01:18:25.085 To a group of learning  
NOTE Confidence: 0.850763525281634  
01:18:25.085 --> 01:18:26.225 medical providers no less.  
NOTE Confidence: 0.850763525281634  
01:18:26.230 --> 01:18:27.946 That's the common on this thing,  
NOTE Confidence: 0.850763525281634  
01:18:27.950 --> 01:18:30.238 so a lack of position to kind of.  
NOTE Confidence: 0.850763525281634  
01:18:30.240 --> 01:18:32.528 I don't know if that's been perpetuate it,  
NOTE Confidence: 0.850763525281634  
01:18:32.530 --> 01:18:34.792 but I have to say I  
NOTE Confidence: 0.850763525281634

01:18:34.792 --> 01:18:35.923 found this traumatizing.  
NOTE Confidence: 0.850763525281634

01:18:35.930 --> 01:18:37.659 Do you want to comment on that?  
NOTE Confidence: 0.849719047546387

01:18:39.560 --> 01:18:42.220 What was traumatizing, I'm sorry, well I get  
NOTE Confidence: 0.849719047546387

01:18:42.220 --> 01:18:44.700 the sense from the from the from the  
NOTE Confidence: 0.849719047546387

01:18:44.700 --> 01:18:46.649 question that that the concern here  
NOTE Confidence: 0.849719047546387

01:18:46.649 --> 01:18:48.970 was that we didn't talk about physician  
NOTE Confidence: 0.849719047546387

01:18:48.970 --> 01:18:51.483 accountability and that this is this is  
NOTE Confidence: 0.849719047546387

01:18:51.483 --> 01:18:54.262 this has been raised but we didn't talk  
NOTE Confidence: 0.849719047546387

01:18:54.262 --> 01:18:56.324 specifically about what there may be  
NOTE Confidence: 0.849719047546387

01:18:56.324 --> 01:18:58.208 a physician's role in this disparity,  
NOTE Confidence: 0.849719047546387

01:18:58.210 --> 01:19:00.534 because as I know you know well,  
NOTE Confidence: 0.849719047546387

01:19:00.540 --> 01:19:02.574 amorous that there have been studies  
NOTE Confidence: 0.849719047546387

01:19:02.574 --> 01:19:04.951 that show that even among those that  
NOTE Confidence: 0.849719047546387

01:19:04.951 --> 01:19:07.191 are quite sure we're doing it right.  
NOTE Confidence: 0.849719047546387

01:19:07.200 --> 01:19:08.436 In fact, we're not.  
NOTE Confidence: 0.849719047546387

01:19:08.436 --> 01:19:10.660 Can not always everyone all the time,

NOTE Confidence: 0.849719047546387  
01:19:10.660 --> 01:19:12.760 but in fact there are certainly disparities  
NOTE Confidence: 0.849719047546387  
01:19:12.760 --> 01:19:14.889 in the way we care for patients.  
NOTE Confidence: 0.849719047546387  
01:19:14.890 --> 01:19:18.178 Do you do you want to comment on  
NOTE Confidence: 0.849719047546387  
01:19:18.178 --> 01:19:20.890 how physician action activity may?  
NOTE Confidence: 0.849719047546387  
01:19:20.890 --> 01:19:22.875 Be impacting that disparity specifically  
NOTE Confidence: 0.849719047546387  
01:19:22.875 --> 01:19:24.860 in maternal and neonatal outcomes.  
NOTE Confidence: 0.90438574552536  
01:19:27.020 --> 01:19:32.519 So it is always a challenge because I think.  
NOTE Confidence: 0.90438574552536  
01:19:32.520 --> 01:19:38.460 In the. Nick, you it can feel like we have.  
NOTE Confidence: 0.90438574552536  
01:19:38.460 --> 01:19:40.700 More control over the immediate  
NOTE Confidence: 0.90438574552536  
01:19:40.700 --> 01:19:42.492 environment of the patient  
NOTE Confidence: 0.90438574552536  
01:19:42.492 --> 01:19:44.640 because they were there with us.  
NOTE Confidence: 0.90438574552536  
01:19:44.640 --> 01:19:50.048 And we don't. Necessarily recognize  
NOTE Confidence: 0.90438574552536  
01:19:50.048 --> 01:19:54.692 in ourselves when perhaps we are  
NOTE Confidence: 0.90438574552536  
01:19:54.692 --> 01:19:58.398 perpetuating some of the disparities.  
NOTE Confidence: 0.90438574552536  
01:19:58.400 --> 01:19:59.980 I guess I'm not really.  
NOTE Confidence: 0.90438574552536

01:19:59.980 --> 01:20:02.180 I mean, it's it's true, it is.  
NOTE Confidence: 0.90438574552536

01:20:02.180 --> 01:20:03.440 It is a huge.  
NOTE Confidence: 0.910863816738129

01:20:07.250 --> 01:20:09.642 It is a topic that is right for  
NOTE Confidence: 0.910863816738129

01:20:09.642 --> 01:20:11.859 discussion that needs to be discussed  
NOTE Confidence: 0.910863816738129

01:20:11.859 --> 01:20:13.415 and should be incorporated.  
NOTE Confidence: 0.910863816738129

01:20:13.420 --> 01:20:16.300 I will say I didn't really incorporate it  
NOTE Confidence: 0.910863816738129

01:20:16.300 --> 01:20:19.276 into this conversation as much because I.  
NOTE Confidence: 0.910863816738129

01:20:19.280 --> 01:20:22.990 I'm thinking more at the  
NOTE Confidence: 0.910863816738129

01:20:22.990 --> 01:20:26.700 population level and it's very.  
NOTE Confidence: 0.910863816738129

01:20:26.700 --> 01:20:30.040 If it's a challenging.  
NOTE Confidence: 0.910863816738129

01:20:30.040 --> 01:20:32.505 It's a challenging realization to  
NOTE Confidence: 0.910863816738129

01:20:32.505 --> 01:20:36.439 have that you may be perpetuate ING.  
NOTE Confidence: 0.910863816738129

01:20:36.440 --> 01:20:40.208 Stereotypes in situations where.  
NOTE Confidence: 0.857612729072571

01:20:42.380 --> 01:20:44.339 You're propagating disparities,  
NOTE Confidence: 0.857612729072571

01:20:44.339 --> 01:20:47.830 but I'm not. I guess I don't really  
NOTE Confidence: 0.828336596488953

01:20:47.830 --> 01:20:49.054 know what to say.

NOTE Confidence: 0.828336596488953

01:20:49.054 --> 01:20:50.890 I know I appreciate that Emerson.

NOTE Confidence: 0.828336596488953

01:20:50.890 --> 01:20:52.941 I appreciate that went through a lot

NOTE Confidence: 0.828336596488953

01:20:52.941 --> 01:20:55.168 of things and you didn't you didn't.

NOTE Confidence: 0.828336596488953

01:20:55.170 --> 01:20:57.618 You didn't in this talk at the cover,

NOTE Confidence: 0.828336596488953

01:20:57.620 --> 01:20:59.150 every possible aspect of this,

NOTE Confidence: 0.828336596488953

01:20:59.150 --> 01:21:00.836 but there was an awful lot

NOTE Confidence: 0.828336596488953

01:21:00.836 --> 01:21:02.520 of things that were covered,

NOTE Confidence: 0.828336596488953

01:21:02.520 --> 01:21:04.350 but certainly our role as physicians,

NOTE Confidence: 0.828336596488953

01:21:04.350 --> 01:21:05.782 our complicity as physicians,

NOTE Confidence: 0.828336596488953

01:21:05.782 --> 01:21:07.572 and perhaps contributing to those

NOTE Confidence: 0.828336596488953

01:21:07.572 --> 01:21:09.558 disparities are something we need to look at.

NOTE Confidence: 0.828336596488953

01:21:09.560 --> 01:21:11.090 And this is where again,

NOTE Confidence: 0.828336596488953

01:21:11.090 --> 01:21:12.968 I think the comparison to other

NOTE Confidence: 0.828336596488953

01:21:12.968 --> 01:21:14.809 countries where perhaps the racism is.

NOTE Confidence: 0.828336596488953

01:21:14.810 --> 01:21:16.847 And other settings where racism is different,

NOTE Confidence: 0.828336596488953



01:21:16.850 --> 01:21:18.262 perhaps less, perhaps more.  
NOTE Confidence: 0.828336596488953

01:21:18.262 --> 01:21:20.380 How all these things could compare  
NOTE Confidence: 0.828336596488953

01:21:20.438 --> 01:21:22.086 to see to see how we do this.  
NOTE Confidence: 0.828336596488953

01:21:22.090 --> 01:21:23.830 Again, I think the ultimate goal,  
NOTE Confidence: 0.828336596488953

01:21:23.830 --> 01:21:25.345 and I appreciate the sentiment  
NOTE Confidence: 0.828336596488953

01:21:25.345 --> 01:21:27.770 you're trying to do is to try and  
NOTE Confidence: 0.828336596488953

01:21:27.770 --> 01:21:29.456 find out what's causing the problem  
NOTE Confidence: 0.828336596488953

01:21:29.456 --> 01:21:31.396 so that you can make it better.  
NOTE Confidence: 0.828336596488953

01:21:31.400 --> 01:21:33.381 You and a lot of other smart  
NOTE Confidence: 0.828336596488953

01:21:33.381 --> 01:21:35.180 people trying to sort this out,  
NOTE Confidence: 0.828336596488953

01:21:35.180 --> 01:21:37.508 and no doubt I shouldn't say no doubt.  
NOTE Confidence: 0.828336596488953

01:21:37.510 --> 01:21:39.822 I think most of us would agree that  
NOTE Confidence: 0.828336596488953

01:21:39.822 --> 01:21:41.042 physician behavior is certainly  
NOTE Confidence: 0.828336596488953

01:21:41.042 --> 01:21:42.218 part of the problem.  
NOTE Confidence: 0.828336596488953

01:21:42.220 --> 01:21:43.984 And this is something that we  
NOTE Confidence: 0.828336596488953

01:21:43.984 --> 01:21:46.415 have to keep our eyes open to

NOTE Confidence: 0.828336596488953  
01:21:46.415 --> 01:21:47.600 another question please,  
NOTE Confidence: 0.828336596488953  
01:21:47.600 --> 01:21:50.280 I'm wondering if you can comment on the  
NOTE Confidence: 0.828336596488953  
01:21:50.280 --> 01:21:51.958 relationship between low birth weight,  
NOTE Confidence: 0.828336596488953  
01:21:51.960 --> 01:21:53.304 preterm birth and racism,  
NOTE Confidence: 0.828336596488953  
01:21:53.304 --> 01:21:53.640 i.e.  
NOTE Confidence: 0.828336596488953  
01:21:53.640 --> 01:21:55.320 Through mechanisms like increased cortisol,  
NOTE Confidence: 0.828336596488953  
01:21:55.320 --> 01:21:57.651 are there studies that have looked at  
NOTE Confidence: 0.828336596488953  
01:21:57.651 --> 01:21:59.712 perceived racism and how that itself  
NOTE Confidence: 0.828336596488953  
01:21:59.712 --> 01:22:01.704 is associated with low birth weight?  
NOTE Confidence: 0.841551423072815  
01:22:02.560 --> 01:22:06.208 So there are studies that have looked at  
NOTE Confidence: 0.841551423072815  
01:22:06.208 --> 01:22:10.299 that the results are somewhat conflicting.  
NOTE Confidence: 0.841551423072815  
01:22:10.300 --> 01:22:13.618 Ann are not the most robust.  
NOTE Confidence: 0.841551423072815  
01:22:13.620 --> 01:22:17.604 I think some of the more  
NOTE Confidence: 0.841551423072815  
01:22:17.604 --> 01:22:20.740 interesting studies have looked at.  
NOTE Confidence: 0.841551423072815  
01:22:20.740 --> 01:22:23.278 Have looked at women who underwent.  
NOTE Confidence: 0.841551423072815

01:22:23.280 --> 01:22:26.430 I'd like a an acute stressor during  
NOTE Confidence: 0.841551423072815

01:22:26.430 --> 01:22:29.324 the pregnancy and then followed them  
NOTE Confidence: 0.841551423072815

01:22:29.324 --> 01:22:32.228 to see what happened with their  
NOTE Confidence: 0.841551423072815

01:22:32.228 --> 01:22:35.099 babies and there was an increased.  
NOTE Confidence: 0.841551423072815

01:22:35.100 --> 01:22:38.420 Risk or rate of very low birth weight.  
NOTE Confidence: 0.841551423072815

01:22:38.420 --> 01:22:40.264 I'm thinking specifically about  
NOTE Confidence: 0.841551423072815

01:22:40.264 --> 01:22:43.454 kind of a cross sectional study that  
NOTE Confidence: 0.841551423072815

01:22:43.454 --> 01:22:45.883 was done in Iowa before an after.  
NOTE Confidence: 0.841551423072815

01:22:45.890 --> 01:22:49.210 I believe it was an ice raid for to look  
NOTE Confidence: 0.841551423072815

01:22:49.293 --> 01:22:52.527 for illegal immigrants and deport them,  
NOTE Confidence: 0.841551423072815

01:22:52.530 --> 01:22:54.646 and they looked at.  
NOTE Confidence: 0.841551423072815

01:22:54.646 --> 01:22:57.820 They looked at the at the.  
NOTE Confidence: 0.841551423072815

01:22:57.820 --> 01:22:59.560 Rate of low birth weight,  
NOTE Confidence: 0.841551423072815

01:22:59.560 --> 01:23:02.108 kind of in the year before that  
NOTE Confidence: 0.841551423072815

01:23:02.108 --> 01:23:04.345 happened and then in the nine  
NOTE Confidence: 0.841551423072815

01:23:04.345 --> 01:23:06.837 months to a year after that happened

NOTE Confidence: 0.841551423072815  
01:23:06.919 --> 01:23:08.999 in compared between the two.  
NOTE Confidence: 0.841551423072815  
01:23:09.000 --> 01:23:14.047 But in terms of in terms of.  
NOTE Confidence: 0.841551423072815  
01:23:14.050 --> 01:23:16.554 That that relationship with.  
NOTE Confidence: 0.841551423072815  
01:23:16.554 --> 01:23:19.684 With how with experienced racism,  
NOTE Confidence: 0.841551423072815  
01:23:19.690 --> 01:23:21.840 it's it's often self report.  
NOTE Confidence: 0.841551423072815  
01:23:21.840 --> 01:23:24.224 I just have I think that we that  
NOTE Confidence: 0.841551423072815  
01:23:24.224 --> 01:23:27.458 we are still struggling to find a  
NOTE Confidence: 0.841551423072815  
01:23:27.458 --> 01:23:29.506 good measurement measurement tool  
NOTE Confidence: 0.841551423072815  
01:23:29.506 --> 01:23:32.160 that's more accurate and reliable.  
NOTE Confidence: 0.841551423072815  
01:23:32.160 --> 01:23:33.672 But the court,  
NOTE Confidence: 0.841551423072815  
01:23:33.672 --> 01:23:35.688 like the correlation doesn't  
NOTE Confidence: 0.841551423072815  
01:23:35.688 --> 01:23:37.940 is not that robust.  
NOTE Confidence: 0.841551423072815  
01:23:37.940 --> 01:23:40.508 From the few studies I've seen.  
NOTE Confidence: 0.841551423072815  
01:23:40.510 --> 01:23:40.990 There are  
NOTE Confidence: 0.837317883968353  
01:23:40.990 --> 01:23:42.355 a couple other questions which  
NOTE Confidence: 0.837317883968353

01:23:42.355 --> 01:23:43.720 are interesting which I'm not  
NOTE Confidence: 0.837317883968353

01:23:43.769 --> 01:23:45.085 going to have time to get to,  
NOTE Confidence: 0.837317883968353

01:23:45.090 --> 01:23:46.553 but I'm going to encourage the people  
NOTE Confidence: 0.837317883968353

01:23:46.553 --> 01:23:48.404 who ask him one related to the potential  
NOTE Confidence: 0.837317883968353

01:23:48.404 --> 01:23:50.163 role of doulas in reducing stress is  
NOTE Confidence: 0.837317883968353

01:23:50.163 --> 01:23:51.777 another about policy actions that you  
NOTE Confidence: 0.837317883968353

01:23:51.777 --> 01:23:53.390 might recommend so I would I would  
NOTE Confidence: 0.837317883968353

01:23:53.390 --> 01:23:54.780 ask those individuals if you send  
NOTE Confidence: 0.837317883968353

01:23:54.780 --> 01:23:56.418 something to me through that website.  
NOTE Confidence: 0.837317883968353

01:23:56.420 --> 01:23:58.100 I mentioned to biomedical ethics at Yale,  
NOTE Confidence: 0.837317883968353

01:23:58.100 --> 01:23:59.654 I'm if you reach out to that  
NOTE Confidence: 0.837317883968353

01:23:59.654 --> 01:24:00.999 to Karen who's our manager.  
NOTE Confidence: 0.837317883968353

01:24:01.000 --> 01:24:02.632 I'll see that these questions get  
NOTE Confidence: 0.837317883968353

01:24:02.632 --> 01:24:04.413 to Doctor Kaiser and if you have  
NOTE Confidence: 0.837317883968353

01:24:04.413 --> 01:24:05.897 a minute or two to think about  
NOTE Confidence: 0.837317883968353

01:24:05.947 --> 01:24:07.255 it to respond to an email.

NOTE Confidence: 0.837317883968353

01:24:07.260 --> 01:24:09.116 If you want amorous but I knew I

NOTE Confidence: 0.837317883968353

01:24:09.116 --> 01:24:10.818 wouldn't be able to get everything and

NOTE Confidence: 0.837317883968353

01:24:10.818 --> 01:24:13.058 now we only have a minute or two left.

NOTE Confidence: 0.837317883968353

01:24:13.060 --> 01:24:15.100 But I want to leave it with a

NOTE Confidence: 0.837317883968353

01:24:15.100 --> 01:24:17.019 chance for you to share with us.

NOTE Confidence: 0.837317883968353

01:24:17.020 --> 01:24:19.492 Any final thoughts you have any

NOTE Confidence: 0.837317883968353

01:24:19.492 --> 01:24:21.615 suggestions you have about the

NOTE Confidence: 0.837317883968353

01:24:21.615 --> 01:24:23.625 direction this work should go?

NOTE Confidence: 0.837317883968353

01:24:23.630 --> 01:24:24.780 I want you to just.

NOTE Confidence: 0.837317883968353

01:24:24.780 --> 01:24:26.604 We've got just a minute or two left.

NOTE Confidence: 0.837317883968353

01:24:26.610 --> 01:24:28.482 I want you to have the final word on

NOTE Confidence: 0.837317883968353

01:24:28.482 --> 01:24:30.269 this on whatever topic you want to.

NOTE Confidence: 0.837317883968353

01:24:30.270 --> 01:24:31.866 However you want to address the topic.

NOTE Confidence: 0.877221047878265

01:24:32.400 --> 01:24:34.224 I think it's a.

NOTE Confidence: 0.877221047878265

01:24:34.224 --> 01:24:36.504 It's a hard topic there.

NOTE Confidence: 0.877221047878265

01:24:36.510 --> 01:24:38.414 Challenging conversations to have.  
NOTE Confidence: 0.877221047878265

01:24:38.414 --> 01:24:40.318 It's really exciting because  
NOTE Confidence: 0.877221047878265

01:24:40.318 --> 01:24:42.908 of the opportunity to work in,  
NOTE Confidence: 0.877221047878265

01:24:42.910 --> 01:24:44.734 uh, in multidisciplinary teams.  
NOTE Confidence: 0.877221047878265

01:24:44.734 --> 01:24:47.940 This problem. This issue is so complex.  
NOTE Confidence: 0.877221047878265

01:24:47.940 --> 01:24:50.964 It's so multi layered everything is  
NOTE Confidence: 0.877221047878265

01:24:50.964 --> 01:24:54.139 so entangled that you really need.  
NOTE Confidence: 0.877221047878265

01:24:54.140 --> 01:24:57.908 Awareness of the research and the  
NOTE Confidence: 0.877221047878265

01:24:57.908 --> 01:25:01.995 ideas that are being discussed in  
NOTE Confidence: 0.877221047878265

01:25:01.995 --> 01:25:06.357 other realms outside of the hospital.  
NOTE Confidence: 0.877221047878265

01:25:06.360 --> 01:25:08.370 That that will enrich the work,  
NOTE Confidence: 0.877221047878265

01:25:08.370 --> 01:25:10.715 but I guess what I'm left with  
NOTE Confidence: 0.877221047878265

01:25:10.715 --> 01:25:11.720 is the importance,  
NOTE Confidence: 0.877221047878265

01:25:11.720 --> 01:25:13.688 the necessity of working in teams  
NOTE Confidence: 0.877221047878265

01:25:13.688 --> 01:25:16.079 so that you can amass the team.  
NOTE Confidence: 0.877221047878265

01:25:16.080 --> 01:25:18.054 That's going to have the expertise

NOTE Confidence: 0.877221047878265  
 01:25:18.054 --> 01:25:20.893 to be able to delve into all of  
 NOTE Confidence: 0.877221047878265  
 01:25:20.893 --> 01:25:22.708 these different realms and begin  
 NOTE Confidence: 0.877221047878265  
 01:25:22.708 --> 01:25:24.788 to make sense of all of it,  
 NOTE Confidence: 0.877221047878265  
 01:25:24.790 --> 01:25:28.399 and to make sense of how it fits together  
 NOTE Confidence: 0.877221047878265  
 01:25:28.399 --> 01:25:32.179 so that we understand where we go next.  
 NOTE Confidence: 0.877221047878265  
 01:25:32.180 --> 01:25:32.520 Thank  
 NOTE Confidence: 0.769068837165833  
 01:25:32.520 --> 01:25:33.804 you very much Doctor,  
 NOTE Confidence: 0.769068837165833  
 01:25:33.804 --> 01:25:35.730 Amorous casual this has been an  
 NOTE Confidence: 0.769068837165833  
 01:25:35.799 --> 01:25:37.679 extraordinary 90 minutes and we're  
 NOTE Confidence: 0.769068837165833  
 01:25:37.679 --> 01:25:40.242 very grateful for your time and your  
 NOTE Confidence: 0.769068837165833  
 01:25:40.242 --> 01:25:42.405 expertise and we look forward to your  
 NOTE Confidence: 0.769068837165833  
 01:25:42.405 --> 01:25:45.100 next visit in person back home to Yale.  
 NOTE Confidence: 0.769068837165833  
 01:25:45.100 --> 01:25:47.820 Thank you all very much for attending an.  
 NOTE Confidence: 0.769068837165833  
 01:25:47.820 --> 01:25:49.220 We're getting nice comments  
 NOTE Confidence: 0.769068837165833  
 01:25:49.220 --> 01:25:51.320 here from folks who very much  
 NOTE Confidence: 0.769068837165833



01:25:51.390 --> 01:25:53.160 appreciate the talk amorous I owe

NOTE Confidence: 0.769068837165833

01:25:53.160 --> 01:25:55.640 you 1 this was terrific. Thank you

NOTE Confidence: 0.765932667255402

01:25:55.640 --> 01:25:58.165 so much. Goodnight folks. Here.