

WEBVTT

NOTE duration:"00:18:21.3370000"

NOTE language:en-us

NOTE Confidence: 0.918878495693207

00:00:00.000 --> 00:00:02.610 I would like to now introduce

NOTE Confidence: 0.918878495693207

00:00:02.610 --> 00:00:04.722 our next speaker, a Doctor,

NOTE Confidence: 0.918878495693207

00:00:04.722 --> 00:00:06.727 Forrest Crawford, now to Crossville,

NOTE Confidence: 0.918878495693207

00:00:06.730 --> 00:00:09.544 is an associate professor of high statistics,

NOTE Confidence: 0.918878495693207

00:00:09.550 --> 00:00:11.154 associate professor of ecology

NOTE Confidence: 0.918878495693207

00:00:11.154 --> 00:00:12.357 and evolutionary biology,

NOTE Confidence: 0.918878495693207

00:00:12.360 --> 00:00:14.168 associated professor of Management

NOTE Confidence: 0.918878495693207

00:00:14.168 --> 00:00:15.976 and associate professor of

NOTE Confidence: 0.918878495693207

00:00:15.976 --> 00:00:17.720 statistics and data science.

NOTE Confidence: 0.918878495693207

00:00:17.720 --> 00:00:20.492 Out of Crawford's work focuses on

NOTE Confidence: 0.918878495693207

00:00:20.492 --> 00:00:22.340 mathematical and statistical problems

NOTE Confidence: 0.918878495693207

00:00:22.414 --> 00:00:24.462 related to discrete structures

NOTE Confidence: 0.918878495693207

00:00:24.462 --> 00:00:26.486 in stochastic processes, mapping,

NOTE Confidence: 0.918878495693207

00:00:26.486 --> 00:00:28.430 genealogy, public health, bio,

NOTE Confidence: 0.918878495693207
00:00:28.430 --> 00:00:30.402 medison and Evolutionary Science.
NOTE Confidence: 0.918878495693207
00:00:30.402 --> 00:00:33.790 Doctor Crawford thank you for being here.
NOTE Confidence: 0.907876074314117
00:00:34.780 --> 00:00:36.560 Great, thank you very much.
NOTE Confidence: 0.907876074314117
00:00:36.560 --> 00:00:38.696 I'm very happy to be here.
NOTE Confidence: 0.907876074314117
00:00:38.700 --> 00:00:40.475 Very honored to be among
NOTE Confidence: 0.907876074314117
00:00:40.475 --> 00:00:41.540 these amazing presenters.
NOTE Confidence: 0.907876074314117
00:00:41.540 --> 00:00:44.081 I would like to present for you
NOTE Confidence: 0.907876074314117
00:00:44.081 --> 00:00:46.612 2 recent projects and I won't go
NOTE Confidence: 0.907876074314117
00:00:46.612 --> 00:00:48.658 into a lot of technical detail.
NOTE Confidence: 0.907876074314117
00:00:48.660 --> 00:00:50.084 There's some mathematics and
NOTE Confidence: 0.907876074314117
00:00:50.084 --> 00:00:51.508 statistics behind this work,
NOTE Confidence: 0.907876074314117
00:00:51.510 --> 00:00:55.070 and I'm not going to talk about any of that.
NOTE Confidence: 0.907876074314117
00:00:55.070 --> 00:00:57.896 I'll just try to talk about.
NOTE Confidence: 0.907876074314117
00:00:57.900 --> 00:01:00.203 Uh, the need that we were trying
NOTE Confidence: 0.907876074314117
00:01:00.203 --> 00:01:02.811 to respond to when we worked on
NOTE Confidence: 0.907876074314117

00:01:02.811 --> 00:01:05.127 these projects and what the research
NOTE Confidence: 0.907876074314117

00:01:05.208 --> 00:01:07.924 product square and where to find them.
NOTE Confidence: 0.907876074314117

00:01:07.930 --> 00:01:10.814 So this is joint work with post
NOTE Confidence: 0.907876074314117

00:01:10.814 --> 00:01:13.130 doc solely omarova Richard Lee.
NOTE Confidence: 0.907876074314117

00:01:13.130 --> 00:01:15.722 So hey Lexi and PhD students
NOTE Confidence: 0.907876074314117

00:01:15.722 --> 00:01:16.586 Margaret Earline's,
NOTE Confidence: 0.907876074314117

00:01:16.590 --> 00:01:19.242 daughter Jinhao Son and also the
NOTE Confidence: 0.907876074314117

00:01:19.242 --> 00:01:21.010 COVID-19 statistics policy modeling
NOTE Confidence: 0.907876074314117

00:01:21.079 --> 00:01:22.900 and Epidemiology collective.
NOTE Confidence: 0.907876074314117

00:01:22.900 --> 00:01:25.258 So the first thing that happened,
NOTE Confidence: 0.907876074314117

00:01:25.260 --> 00:01:28.228 I think this was in in late
NOTE Confidence: 0.907876074314117

00:01:28.228 --> 00:01:30.520 March was that we heard.
NOTE Confidence: 0.907876074314117

00:01:30.520 --> 00:01:33.464 That there was an acute needed to Yale.
NOTE Confidence: 0.907876074314117

00:01:33.470 --> 00:01:35.310 New Haven health system for
NOTE Confidence: 0.907876074314117

00:01:35.310 --> 00:01:36.782 help with capacity planning.
NOTE Confidence: 0.907876074314117

00:01:36.790 --> 00:01:38.955 Trying to prepare the hospital

NOTE Confidence: 0.907876074314117
00:01:38.955 --> 00:01:40.254 and health system.
NOTE Confidence: 0.907876074314117
00:01:40.260 --> 00:01:43.612 For what was then believed to be a
NOTE Confidence: 0.907876074314117
00:01:43.612 --> 00:01:45.849 coming onslaught of new patients,
NOTE Confidence: 0.907876074314117
00:01:45.850 --> 00:01:48.514 which had the potential to overwhelm
NOTE Confidence: 0.907876074314117
00:01:48.514 --> 00:01:51.332 the health system to overwhelm the
NOTE Confidence: 0.907876074314117
00:01:51.332 --> 00:01:54.200 supply of ICU beds and Ventilators?
NOTE Confidence: 0.907876074314117
00:01:54.200 --> 00:01:58.394 So we we tried to respond to this challenge,
NOTE Confidence: 0.907876074314117
00:01:58.400 --> 00:01:59.426 which came,
NOTE Confidence: 0.907876074314117
00:01:59.426 --> 00:02:00.452 I think,
NOTE Confidence: 0.907876074314117
00:02:00.452 --> 00:02:03.017 from directly from senior hospital
NOTE Confidence: 0.907876074314117
00:02:03.017 --> 00:02:04.940 leadership to build a model,
NOTE Confidence: 0.907876074314117
00:02:04.940 --> 00:02:06.872 an idealized representation of
NOTE Confidence: 0.907876074314117
00:02:06.872 --> 00:02:09.287 the dynamics of patient flow
NOTE Confidence: 0.907876074314117
00:02:09.287 --> 00:02:11.164 through the hospital COVID-19
NOTE Confidence: 0.907876074314117
00:02:11.164 --> 00:02:13.804 patients who presented to the Ed.
NOTE Confidence: 0.907876074314117

00:02:13.810 --> 00:02:17.079 And then we moved to the floor,
NOTE Confidence: 0.907876074314117

00:02:17.080 --> 00:02:18.948 possibly released their move,
NOTE Confidence: 0.907876074314117

00:02:18.948 --> 00:02:20.816 possibly to the ICU,
NOTE Confidence: 0.907876074314117

00:02:20.820 --> 00:02:24.810 and then received care in the hospital.
NOTE Confidence: 0.907876074314117

00:02:24.810 --> 00:02:27.216 And we are especially interested in
NOTE Confidence: 0.907876074314117

00:02:27.216 --> 00:02:29.750 helping the health system helping Yale,
NOTE Confidence: 0.907876074314117

00:02:29.750 --> 00:02:32.102 New Haven and also other health
NOTE Confidence: 0.907876074314117

00:02:32.102 --> 00:02:34.228 systems to plan their expansion
NOTE Confidence: 0.907876074314117

00:02:34.228 --> 00:02:37.114 in capacity to plan the ability
NOTE Confidence: 0.907876074314117

00:02:37.114 --> 00:02:39.325 to accommodate patients who are
NOTE Confidence: 0.907876074314117

00:02:39.325 --> 00:02:41.754 coming in every day so that the
NOTE Confidence: 0.907876074314117

00:02:41.754 --> 00:02:43.382 systems would not be overwhelmed.
NOTE Confidence: 0.907876074314117

00:02:43.382 --> 00:02:46.223 And we ended up in a very short
NOTE Confidence: 0.907876074314117

00:02:46.223 --> 00:02:48.797 amount of time writing software for
NOTE Confidence: 0.907876074314117

00:02:48.797 --> 00:02:50.614 web application that implemented
NOTE Confidence: 0.907876074314117

00:02:50.614 --> 00:02:52.386 in mathematical model whose

NOTE Confidence: 0.907876074314117

00:02:52.386 --> 00:02:55.366 structure I I'm not going to show.

NOTE Confidence: 0.907876074314117

00:02:55.366 --> 00:02:58.900 I guess beyond beyond this last this diagram.

NOTE Confidence: 0.907876074314117

00:02:58.900 --> 00:03:01.222 And the idea here is that if you are

NOTE Confidence: 0.907876074314117

00:03:01.222 --> 00:03:03.178 helping to manage the health system,

NOTE Confidence: 0.907876074314117

00:03:03.180 --> 00:03:05.493 then you can dial in a lot of the

NOTE Confidence: 0.907876074314117

00:03:05.493 --> 00:03:07.168 features of your health system,

NOTE Confidence: 0.907876074314117

00:03:07.170 --> 00:03:07.716 the capacity,

NOTE Confidence: 0.907876074314117

00:03:07.716 --> 00:03:10.300 the number of beds you have in the floor,

NOTE Confidence: 0.907876074314117

00:03:10.300 --> 00:03:11.608 and I see you.

NOTE Confidence: 0.907876074314117

00:03:11.608 --> 00:03:13.570 How you expect the patterns of

NOTE Confidence: 0.907876074314117

00:03:13.646 --> 00:03:15.390 change of patient presentations

NOTE Confidence: 0.907876074314117

00:03:15.390 --> 00:03:18.006 to the D to change overtime,

NOTE Confidence: 0.907876074314117

00:03:18.010 --> 00:03:20.824 you can dial in your expected or

NOTE Confidence: 0.907876074314117

00:03:20.824 --> 00:03:22.421 planned capacity increases in

NOTE Confidence: 0.907876074314117

00:03:22.421 --> 00:03:24.347 terms of beds into the future,

NOTE Confidence: 0.907876074314117

00:03:24.350 --> 00:03:26.966 and you can look to see how how
NOTE Confidence: 0.907876074314117

00:03:26.966 --> 00:03:29.007 patients will end up flowing
NOTE Confidence: 0.907876074314117

00:03:29.007 --> 00:03:30.315 through the hospital.
NOTE Confidence: 0.907876074314117

00:03:30.320 --> 00:03:32.920 So I think this was this was useful
NOTE Confidence: 0.907876074314117

00:03:32.920 --> 00:03:35.286 in augmenting some of the existing
NOTE Confidence: 0.907876074314117

00:03:35.286 --> 00:03:37.341 capacity planning tools and software
NOTE Confidence: 0.907876074314117

00:03:37.341 --> 00:03:40.018 that Yale New Haven Health System had,
NOTE Confidence: 0.907876074314117

00:03:40.020 --> 00:03:42.204 and we did receive feedback from
NOTE Confidence: 0.907876074314117

00:03:42.204 --> 00:03:44.190 health systems throughout the country.
NOTE Confidence: 0.907876074314117

00:03:44.190 --> 00:03:47.100 That they were using this and
NOTE Confidence: 0.907876074314117

00:03:47.100 --> 00:03:50.040 other tools to help plan for.
NOTE Confidence: 0.907876074314117

00:03:50.040 --> 00:03:52.728 For a very rapidly increasing number
NOTE Confidence: 0.907876074314117

00:03:52.728 --> 00:03:55.030 of patients presenting to the D,
NOTE Confidence: 0.907876074314117

00:03:55.030 --> 00:03:57.480 so this was this is a project
NOTE Confidence: 0.907876074314117

00:03:57.480 --> 00:03:58.530 that was done
NOTE Confidence: 0.89890593290329

00:03:58.619 --> 00:04:01.587 very quickly in late March in anticipation

NOTE Confidence: 0.89890593290329

00:04:01.587 --> 00:04:05.222 of a very fast increase in the number

NOTE Confidence: 0.89890593290329

00:04:05.222 --> 00:04:07.969 of cases were very fortunate in

NOTE Confidence: 0.89890593290329

00:04:07.969 --> 00:04:10.264 Connecticut that hospital systems were

NOTE Confidence: 0.89890593290329

00:04:10.264 --> 00:04:12.893 able to expand capacity quite rapidly

NOTE Confidence: 0.89890593290329

00:04:12.893 --> 00:04:15.420 and at the state level at least.

NOTE Confidence: 0.89890593290329

00:04:15.420 --> 00:04:17.680 The number of covered patients

NOTE Confidence: 0.89890593290329

00:04:17.680 --> 00:04:19.940 did not outpaced the hospital's

NOTE Confidence: 0.89890593290329

00:04:20.017 --> 00:04:22.057 ability to accommodate them.

NOTE Confidence: 0.89890593290329

00:04:22.060 --> 00:04:25.462 So I think the the need for this particular

NOTE Confidence: 0.89890593290329

00:04:25.462 --> 00:04:27.972 application has waned a little bit

NOTE Confidence: 0.89890593290329

00:04:27.972 --> 00:04:30.032 since mid April when hospitalization,

NOTE Confidence: 0.89890593290329

00:04:30.040 --> 00:04:31.632 census covert hospitalization census

NOTE Confidence: 0.89890593290329

00:04:31.632 --> 00:04:33.622 began to decline in Connecticut.

NOTE Confidence: 0.89890593290329

00:04:33.630 --> 00:04:36.423 If there is a second wave of

NOTE Confidence: 0.89890593290329

00:04:36.423 --> 00:04:37.620 infections in Connecticut,

NOTE Confidence: 0.89890593290329

00:04:37.620 --> 00:04:40.115 we anticipate this tool becoming
NOTE Confidence: 0.89890593290329

00:04:40.115 --> 00:04:42.610 very useful and relevant again.
NOTE Confidence: 0.89890593290329

00:04:42.610 --> 00:04:44.906 But the main thing that I'd like
NOTE Confidence: 0.89890593290329

00:04:44.906 --> 00:04:47.999 to talk to you about today is work
NOTE Confidence: 0.89890593290329

00:04:47.999 --> 00:04:50.024 in support of the Connecticut
NOTE Confidence: 0.89890593290329

00:04:50.102 --> 00:04:52.928 governor's plans to reopen the state.
NOTE Confidence: 0.89890593290329

00:04:52.930 --> 00:04:55.723 Governor Lamont convened a panel of experts
NOTE Confidence: 0.89890593290329

00:04:55.723 --> 00:04:57.850 that reopened Connecticut advisory panel,
NOTE Confidence: 0.89890593290329

00:04:57.850 --> 00:04:59.900 including many people from Yale,
NOTE Confidence: 0.89890593290329

00:04:59.900 --> 00:05:03.040 and I was asked to support the work of that
NOTE Confidence: 0.89890593290329

00:05:03.121 --> 00:05:06.046 panel by providing modeling projections,
NOTE Confidence: 0.89890593290329

00:05:06.050 --> 00:05:06.870 transmission, modeling,
NOTE Confidence: 0.89890593290329

00:05:06.870 --> 00:05:08.510 projections of COVID-19 incidents,
NOTE Confidence: 0.89890593290329

00:05:08.510 --> 00:05:08.920 hospitalizations,
NOTE Confidence: 0.89890593290329

00:05:08.920 --> 00:05:10.970 and deaths under reopening scenarios.
NOTE Confidence: 0.89890593290329

00:05:10.970 --> 00:05:13.420 Articulated at the time in a very

NOTE Confidence: 0.89890593290329

00:05:13.420 --> 00:05:16.450 general way by the governor to plan

NOTE Confidence: 0.89890593290329

00:05:16.450 --> 00:05:18.350 for interventions like testing,

NOTE Confidence: 0.89890593290329

00:05:18.350 --> 00:05:20.846 contact tracing and to assess the

NOTE Confidence: 0.89890593290329

00:05:20.846 --> 00:05:23.950 risk of a second wave of infections

NOTE Confidence: 0.89890593290329

00:05:23.950 --> 00:05:27.600 occurring over the summer or in the fall.

NOTE Confidence: 0.89890593290329

00:05:27.600 --> 00:05:30.180 Following reopen and release of

NOTE Confidence: 0.89890593290329

00:05:30.180 --> 00:05:32.760 contact that had been suppressed

NOTE Confidence: 0.89890593290329

00:05:32.850 --> 00:05:34.950 during the state lockdown.

NOTE Confidence: 0.89890593290329

00:05:34.950 --> 00:05:37.534 As you probably know,

NOTE Confidence: 0.89890593290329

00:05:37.534 --> 00:05:40.118 Connecticut began its reopening

NOTE Confidence: 0.89890593290329

00:05:40.118 --> 00:05:42.610 phases yesterday on May 20th.

NOTE Confidence: 0.89890593290329

00:05:42.610 --> 00:05:45.298 And the work of this this committee

NOTE Confidence: 0.89890593290329

00:05:45.298 --> 00:05:47.676 to assist in that process may

NOTE Confidence: 0.89890593290329

00:05:47.676 --> 00:05:49.576 be coming to a close.

NOTE Confidence: 0.89890593290329

00:05:49.580 --> 00:05:52.212 But I think that there is a very

NOTE Confidence: 0.89890593290329

00:05:52.212 --> 00:05:54.369 important ongoing need for projections

NOTE Confidence: 0.89890593290329

00:05:54.369 --> 00:05:56.744 to inform decision making and

NOTE Confidence: 0.89890593290329

00:05:56.744 --> 00:05:58.446 epidemiological study design at

NOTE Confidence: 0.89890593290329

00:05:58.446 --> 00:06:00.161 the Department of Public health

NOTE Confidence: 0.89890593290329

00:06:00.161 --> 00:06:02.276 and at the state level overall,

NOTE Confidence: 0.89890593290329

00:06:02.276 --> 00:06:04.810 as the state considers how to move

NOTE Confidence: 0.89890593290329

00:06:04.881 --> 00:06:06.986 forward in its reopening phases,

NOTE Confidence: 0.89890593290329

00:06:06.990 --> 00:06:09.702 whether there is a need to revert to

NOTE Confidence: 0.89890593290329

00:06:09.702 --> 00:06:12.180 a previous more restrictive phase and

NOTE Confidence: 0.89890593290329

00:06:12.180 --> 00:06:14.772 how this process should play out.

NOTE Confidence: 0.89890593290329

00:06:14.780 --> 00:06:15.564 In particular,

NOTE Confidence: 0.89890593290329

00:06:15.564 --> 00:06:17.524 I think policymakers are very

NOTE Confidence: 0.89890593290329

00:06:17.524 --> 00:06:19.401 interested in having an early

NOTE Confidence: 0.89890593290329

00:06:19.401 --> 00:06:21.315 warning system that could tell them

NOTE Confidence: 0.89890593290329

00:06:21.315 --> 00:06:23.527 if there is a coming but hidden

NOTE Confidence: 0.89890593290329

00:06:23.527 --> 00:06:25.504 wave of new infections that will

NOTE Confidence: 0.89890593290329

00:06:25.504 --> 00:06:27.360 become hospitalizations and deaths

NOTE Confidence: 0.89890593290329

00:06:27.360 --> 00:06:29.216 in the near future.

NOTE Confidence: 0.89890593290329

00:06:29.220 --> 00:06:31.692 I think that it is fair to say

NOTE Confidence: 0.89890593290329

00:06:31.692 --> 00:06:33.240 that Connecticut policymakers,

NOTE Confidence: 0.89890593290329

00:06:33.240 --> 00:06:35.430 along with a lot of decision

NOTE Confidence: 0.89890593290329

00:06:35.430 --> 00:06:36.890 makers throughout the world,

NOTE Confidence: 0.89890593290329

00:06:36.890 --> 00:06:39.536 have access to very high quality data

NOTE Confidence: 0.89890593290329

00:06:39.536 --> 00:06:41.424 streams that describe the current

NOTE Confidence: 0.89890593290329

00:06:41.424 --> 00:06:43.818 state of the pandemic in their area.

NOTE Confidence: 0.89890593290329

00:06:43.820 --> 00:06:44.951 Here in Connecticut,

NOTE Confidence: 0.89890593290329

00:06:44.951 --> 00:06:47.213 the governor has access to various

NOTE Confidence: 0.89890593290329

00:06:47.213 --> 00:06:49.066 dashboards and reports daily reports

NOTE Confidence: 0.89890593290329

00:06:49.066 --> 00:06:51.190 from the Department of Public Health

NOTE Confidence: 0.89890593290329

00:06:51.252 --> 00:06:53.310 on the number of tests administered,

NOTE Confidence: 0.89890593290329

00:06:53.310 --> 00:06:55.506 the number of positive tests the

NOTE Confidence: 0.89890593290329

00:06:55.506 --> 00:06:56.604 Connecticut Hospital Association
NOTE Confidence: 0.89890593290329

00:06:56.604 --> 00:06:57.330 reports daily.
NOTE Confidence: 0.89890593290329

00:06:57.330 --> 00:06:58.790 The hospitalization census from
NOTE Confidence: 0.89890593290329

00:06:58.790 --> 00:06:59.885 the previous night.
NOTE Confidence: 0.89890593290329

00:06:59.890 --> 00:07:02.466 The number of beds that are theoretically
NOTE Confidence: 0.89890593290329

00:07:02.466 --> 00:07:04.180 available for kovid patients,
NOTE Confidence: 0.89890593290329

00:07:04.180 --> 00:07:06.754 including search capacity and beds that
NOTE Confidence: 0.89890593290329

00:07:06.754 --> 00:07:09.880 have been added on a temporary basis.
NOTE Confidence: 0.89890593290329

00:07:09.880 --> 00:07:12.052 Decision makers have access to near
NOTE Confidence: 0.89890593290329

00:07:12.052 --> 00:07:14.227 real time information about case counts
NOTE Confidence: 0.89890593290329

00:07:14.227 --> 00:07:16.225 and deaths and possibly excess deaths
NOTE Confidence: 0.89890593290329

00:07:16.225 --> 00:07:18.909 that are occurring in major Health Systems.
NOTE Confidence: 0.89890593290329

00:07:18.910 --> 00:07:19.694 An outside.
NOTE Confidence: 0.89890593290329

00:07:19.694 --> 00:07:22.046 And this is very good policy.
NOTE Confidence: 0.928750038146973

00:07:22.050 --> 00:07:23.885 Makers have access to this
NOTE Confidence: 0.928750038146973

00:07:23.885 --> 00:07:24.986 real time information.

NOTE Confidence: 0.928750038146973
00:07:24.990 --> 00:07:26.406 But that information alone
NOTE Confidence: 0.928750038146973
00:07:26.406 --> 00:07:28.955 may not be enough to tell them
NOTE Confidence: 0.928750038146973
00:07:28.955 --> 00:07:31.055 when a second wave is building,
NOTE Confidence: 0.928750038146973
00:07:31.060 --> 00:07:33.572 and about two occur, and if that is
NOTE Confidence: 0.928750038146973
00:07:33.572 --> 00:07:36.058 going to occur sooner this summer.
NOTE Confidence: 0.928750038146973
00:07:36.060 --> 00:07:37.960 The model projections that
NOTE Confidence: 0.928750038146973
00:07:37.960 --> 00:07:40.335 my group has been developing.
NOTE Confidence: 0.928750038146973
00:07:40.340 --> 00:07:42.636 Have the ability to tell us about
NOTE Confidence: 0.928750038146973
00:07:42.636 --> 00:07:44.251 possible futures instead of the
NOTE Confidence: 0.928750038146973
00:07:44.251 --> 00:07:45.949 current state of the metrics that
NOTE Confidence: 0.928750038146973
00:07:45.949 --> 00:07:47.708 the state has chosen to track.
NOTE Confidence: 0.928750038146973
00:07:47.710 --> 00:07:49.516 What we're really interested in is
NOTE Confidence: 0.928750038146973
00:07:49.516 --> 00:07:51.389 what might occur in the future.
NOTE Confidence: 0.928750038146973
00:07:51.390 --> 00:07:53.560 What are the things that we can't
NOTE Confidence: 0.928750038146973
00:07:53.560 --> 00:07:55.658 see today that will become observable
NOTE Confidence: 0.928750038146973

00:07:55.658 --> 00:07:57.854 two or three weeks from now?
NOTE Confidence: 0.928750038146973

00:07:57.860 --> 00:07:59.096 So in particular,
NOTE Confidence: 0.928750038146973

00:07:59.096 --> 00:08:01.568 we want these projections to inform
NOTE Confidence: 0.928750038146973

00:08:01.568 --> 00:08:03.358 reopening phases in the state.
NOTE Confidence: 0.928750038146973

00:08:03.360 --> 00:08:06.104 The decision about how and even whether
NOTE Confidence: 0.928750038146973

00:08:06.104 --> 00:08:08.860 to open schools for for young people,
NOTE Confidence: 0.928750038146973

00:08:08.860 --> 00:08:11.390 and also colleges and universities.
NOTE Confidence: 0.928750038146973

00:08:11.390 --> 00:08:14.282 How to inform efforts to expand
NOTE Confidence: 0.928750038146973

00:08:14.282 --> 00:08:17.452 testing and contact tracing in a way
NOTE Confidence: 0.928750038146973

00:08:17.452 --> 00:08:19.756 that is equitable and also targets
NOTE Confidence: 0.928750038146973

00:08:19.756 --> 00:08:22.519 the areas that are highest need.
NOTE Confidence: 0.928750038146973

00:08:22.520 --> 00:08:25.334 And how to develop continued or
NOTE Confidence: 0.928750038146973

00:08:25.334 --> 00:08:26.741 modified distancing guidelines
NOTE Confidence: 0.928750038146973

00:08:26.741 --> 00:08:29.084 into the future and possibly
NOTE Confidence: 0.928750038146973

00:08:29.084 --> 00:08:31.339 change those guidelines as needed.
NOTE Confidence: 0.896908164024353

00:08:33.520 --> 00:08:36.472 And in doing this work we asked ourselves

NOTE Confidence: 0.896908164024353
00:08:36.472 --> 00:08:39.200 and probably other people ask themselves,
NOTE Confidence: 0.896908164024353
00:08:39.200 --> 00:08:41.636 does the world really need another
NOTE Confidence: 0.896908164024353
00:08:41.636 --> 00:08:42.854 COVID-19 transmission model?
NOTE Confidence: 0.896908164024353
00:08:42.860 --> 00:08:46.505 and I think you know at the worldwide level,
NOTE Confidence: 0.896908164024353
00:08:46.510 --> 00:08:48.540 even at the national level,
NOTE Confidence: 0.896908164024353
00:08:48.540 --> 00:08:50.590 the answer is probably no.
NOTE Confidence: 0.896908164024353
00:08:50.590 --> 00:08:52.460 But locally at least I
NOTE Confidence: 0.896908164024353
00:08:52.460 --> 00:08:53.956 think that Connecticut does.
NOTE Confidence: 0.896908164024353
00:08:53.960 --> 00:08:56.198 We saw a very acute need,
NOTE Confidence: 0.896908164024353
00:08:56.200 --> 00:08:58.198 especially at the state level right
NOTE Confidence: 0.896908164024353
00:08:58.198 --> 00:09:00.456 now to develop a scenario analysis
NOTE Confidence: 0.896908164024353
00:09:00.456 --> 00:09:02.601 tool that is specifically responsive
NOTE Confidence: 0.896908164024353
00:09:02.601 --> 00:09:04.996 to the needs of Connecticut leadership
NOTE Confidence: 0.896908164024353
00:09:04.996 --> 00:09:07.727 as they plan to re inform to inform
NOTE Confidence: 0.896908164024353
00:09:07.727 --> 00:09:09.569 reopening strategies to reopen the state
NOTE Confidence: 0.896908164024353

00:09:09.569 --> 00:09:11.933 and to design interventions that are
NOTE Confidence: 0.896908164024353

00:09:11.933 --> 00:09:13.777 appropriate for Connecticut specifically.
NOTE Confidence: 0.896908164024353

00:09:13.780 --> 00:09:16.372 And to do that we have access to a
NOTE Confidence: 0.896908164024353

00:09:16.372 --> 00:09:19.013 lot of data streams that essentially
NOTE Confidence: 0.896908164024353

00:09:19.013 --> 00:09:21.288 none of the national level.
NOTE Confidence: 0.896908164024353

00:09:21.290 --> 00:09:23.990 Transmission modeling efforts have access to.
NOTE Confidence: 0.896908164024353

00:09:23.990 --> 00:09:24.810 In particular,
NOTE Confidence: 0.896908164024353

00:09:24.810 --> 00:09:27.270 we have a connection to the
NOTE Confidence: 0.896908164024353

00:09:27.270 --> 00:09:28.940 Connecticut Hospital Association,
NOTE Confidence: 0.896908164024353

00:09:28.940 --> 00:09:31.646 so we know exactly how many
NOTE Confidence: 0.896908164024353

00:09:31.646 --> 00:09:32.999 patients are hospitalized.
NOTE Confidence: 0.896908164024353

00:09:33.000 --> 00:09:35.124 Throughout the state and what the
NOTE Confidence: 0.896908164024353

00:09:35.124 --> 00:09:37.671 bed capacity is as a dynamically
NOTE Confidence: 0.896908164024353

00:09:37.671 --> 00:09:38.727 changes overtime.
NOTE Confidence: 0.896908164024353

00:09:38.730 --> 00:09:40.560 We can calibrate transmission models
NOTE Confidence: 0.896908164024353

00:09:40.560 --> 00:09:42.024 in particularly clinical models,

NOTE Confidence: 0.896908164024353
00:09:42.030 --> 00:09:44.028 of what happens to patients after
NOTE Confidence: 0.896908164024353
00:09:44.028 --> 00:09:46.235 they enter the health system using
NOTE Confidence: 0.896908164024353
00:09:46.235 --> 00:09:48.265 patient trajectory data from Yale.
NOTE Confidence: 0.896908164024353
00:09:48.270 --> 00:09:50.258 New Haven health system.
NOTE Confidence: 0.896908164024353
00:09:50.258 --> 00:09:52.743 We've accessed at Yale here.
NOTE Confidence: 0.896908164024353
00:09:52.750 --> 00:09:55.170 Fortunately to the ale emerging
NOTE Confidence: 0.896908164024353
00:09:55.170 --> 00:09:56.138 infections program,
NOTE Confidence: 0.896908164024353
00:09:56.140 --> 00:09:58.300 surveillance data from DPH and
NOTE Confidence: 0.896908164024353
00:09:58.300 --> 00:10:01.047 close connection to people who are
NOTE Confidence: 0.896908164024353
00:10:01.047 --> 00:10:03.087 planning and conducting testing
NOTE Confidence: 0.896908164024353
00:10:03.087 --> 00:10:05.127 and seroprevalence surveys to
NOTE Confidence: 0.896908164024353
00:10:05.127 --> 00:10:07.629 inform further scientific efforts.
NOTE Confidence: 0.896908164024353
00:10:07.630 --> 00:10:09.678 I hope that in the future we will
NOTE Confidence: 0.896908164024353
00:10:09.678 --> 00:10:11.624 continue to have access to colleagues
NOTE Confidence: 0.896908164024353
00:10:11.624 --> 00:10:13.676 at the Department of Public health
NOTE Confidence: 0.896908164024353

00:10:13.739 --> 00:10:15.631 who are actually implementing
NOTE Confidence: 0.896908164024353

00:10:15.631 --> 00:10:17.050 the intervention strategies.
NOTE Confidence: 0.896908164024353

00:10:17.050 --> 00:10:18.782 Contact tracing and testing,
NOTE Confidence: 0.896908164024353

00:10:18.782 --> 00:10:20.514 and encouraging individuals who
NOTE Confidence: 0.896908164024353

00:10:20.514 --> 00:10:22.267 test positive to isolate themselves
NOTE Confidence: 0.896908164024353

00:10:22.267 --> 00:10:24.686 and we want to be able to help
NOTE Confidence: 0.896908164024353

00:10:24.686 --> 00:10:26.418 them design those interventions.
NOTE Confidence: 0.896908164024353

00:10:26.420 --> 00:10:28.300 So we built a model.
NOTE Confidence: 0.896908164024353

00:10:28.300 --> 00:10:30.925 I'm not going to show the structure.
NOTE Confidence: 0.896908164024353

00:10:30.930 --> 00:10:33.555 It is a generalization of the sci,
NOTE Confidence: 0.896908164024353

00:10:33.560 --> 00:10:35.440 our class of transmission models
NOTE Confidence: 0.896908164024353

00:10:35.440 --> 00:10:37.320 that has been described previously.
NOTE Confidence: 0.896908164024353

00:10:37.320 --> 00:10:39.973 Today we fit that model along with
NOTE Confidence: 0.896908164024353

00:10:39.973 --> 00:10:42.325 the information that we have about
NOTE Confidence: 0.896908164024353

00:10:42.325 --> 00:10:44.220 when the governor closed schools
NOTE Confidence: 0.896908164024353

00:10:44.220 --> 00:10:46.919 and when the state lockdown occurred.

NOTE Confidence: 0.896908164024353
00:10:46.920 --> 00:10:48.267 To produce projections,
NOTE Confidence: 0.896908164024353
00:10:48.267 --> 00:10:50.961 and here I'm showing projections that
NOTE Confidence: 0.896908164024353
00:10:50.961 --> 00:10:53.959 begin in early March and we have real data,
NOTE Confidence: 0.896908164024353
00:10:53.960 --> 00:10:55.910 actual observed data up to,
NOTE Confidence: 0.896908164024353
00:10:55.910 --> 00:10:58.256 I think yesterday overlaid as dots.
NOTE Confidence: 0.896908164024353
00:10:58.260 --> 00:11:01.648 So on the left we have hospitalizations.
NOTE Confidence: 0.896908164024353
00:11:01.650 --> 00:11:03.918 Reported an projected and we have
NOTE Confidence: 0.896908164024353
00:11:03.918 --> 00:11:05.899 cumulative deaths on the right
NOTE Confidence: 0.896908164024353
00:11:05.899 --> 00:11:07.909 and the model overall recovers.
NOTE Confidence: 0.896908164024353
00:11:07.910 --> 00:11:09.470 Historical dynamics of hospitalizations
NOTE Confidence: 0.896908164024353
00:11:09.470 --> 00:11:11.364 and deaths very, very accurately,
NOTE Confidence: 0.896908164024353
00:11:11.364 --> 00:11:13.898 and I think this is partly because
NOTE Confidence: 0.896908164024353
00:11:13.898 --> 00:11:15.989 we have very specific information
NOTE Confidence: 0.896908164024353
00:11:15.989 --> 00:11:18.890 about what the governor did and when.
NOTE Confidence: 0.896908164024353
00:11:18.890 --> 00:11:22.760 And how those interventions affected
NOTE Confidence: 0.896908164024353

00:11:22.760 --> 00:11:26.630 transmission and these downstream outcomes?

NOTE Confidence: 0.896908164024353

00:11:26.630 --> 00:11:28.658 Here are some projections that the

NOTE Confidence: 0.896908164024353

00:11:28.658 --> 00:11:30.509 group just finished working on this.

NOTE Confidence: 0.896908164024353

00:11:30.510 --> 00:11:32.750 I should have said earlier this is

NOTE Confidence: 0.896908164024353

00:11:32.750 --> 00:11:34.380 specifically joint work with oleum,

NOTE Confidence: 0.896908164024353

00:11:34.380 --> 00:11:36.000 rozafa and and Richard Lee,

NOTE Confidence: 0.896908164024353

00:11:36.000 --> 00:11:38.238 who have worked tirelessly over the

NOTE Confidence: 0.896908164024353

00:11:38.238 --> 00:11:41.026 last couple of days to put all of

NOTE Confidence: 0.896908164024353

00:11:41.026 --> 00:11:43.271 this together and also to write 2

NOTE Confidence: 0.896908164024353

00:11:43.271 --> 00:11:45.305 reports which I'll tell you about

NOTE Confidence: 0.896908164024353

00:11:45.305 --> 00:11:46.322 in the moment.

NOTE Confidence: 0.896908164024353

00:11:46.330 --> 00:11:50.326 So in the upper left hand corner we have.

NOTE Confidence: 0.896908164024353

00:11:50.330 --> 00:11:52.790 A representation of the amount of

NOTE Confidence: 0.896908164024353

00:11:52.790 --> 00:11:54.430 interpersonal contact that occurs

NOTE Confidence: 0.928373873233795

00:11:54.492 --> 00:11:55.410 in Connecticut,

NOTE Confidence: 0.928373873233795

00:11:55.410 --> 00:11:58.180 historically prior to March 20th.

NOTE Confidence: 0.928373873233795
00:11:58.180 --> 00:12:00.910 Sorry, May 20th the first drop is
NOTE Confidence: 0.928373873233795
00:12:00.910 --> 00:12:03.636 due to the governor's closure of
NOTE Confidence: 0.928373873233795
00:12:03.636 --> 00:12:07.052 schools in the second drop is due
NOTE Confidence: 0.928373873233795
00:12:07.141 --> 00:12:09.976 to the state stay at home order.
NOTE Confidence: 0.928373873233795
00:12:09.980 --> 00:12:12.518 And the changes in that contact
NOTE Confidence: 0.928373873233795
00:12:12.518 --> 00:12:15.000 curve that occur after May 20th.
NOTE Confidence: 0.928373873233795
00:12:15.000 --> 00:12:17.765 Our guess is this is a scenario
NOTE Confidence: 0.928373873233795
00:12:17.765 --> 00:12:19.910 that we developed based on
NOTE Confidence: 0.928373873233795
00:12:19.910 --> 00:12:22.100 ideas about a slow reopening,
NOTE Confidence: 0.928373873233795
00:12:22.100 --> 00:12:23.840 in which contact between
NOTE Confidence: 0.928373873233795
00:12:23.840 --> 00:12:25.580 individuals returns to baseline
NOTE Confidence: 0.928373873233795
00:12:25.580 --> 00:12:27.948 or returns to normal very slowly,
NOTE Confidence: 0.928373873233795
00:12:27.950 --> 00:12:31.339 and by slowly I mean that 10% of
NOTE Confidence: 0.928373873233795
00:12:31.339 --> 00:12:33.634 this latent suppressed contact is
NOTE Confidence: 0.928373873233795
00:12:33.634 --> 00:12:35.990 released roughly once per month.
NOTE Confidence: 0.928373873233795

00:12:35.990 --> 00:12:38.902 And so the time series of contact
NOTE Confidence: 0.928373873233795

00:12:38.902 --> 00:12:41.616 going forward is just the step
NOTE Confidence: 0.928373873233795

00:12:41.616 --> 00:12:44.473 function that increases by 10% of
NOTE Confidence: 0.928373873233795

00:12:44.473 --> 00:12:47.288 the suppressed amount every month.
NOTE Confidence: 0.928373873233795

00:12:47.290 --> 00:12:48.736 So this is what we imagine.
NOTE Confidence: 0.928373873233795

00:12:48.740 --> 00:12:49.945 This is not necessarily what
NOTE Confidence: 0.928373873233795

00:12:49.945 --> 00:12:51.150 will occur in real life.
NOTE Confidence: 0.928373873233795

00:12:51.150 --> 00:12:52.830 It could be better, could be worse,
NOTE Confidence: 0.928373873233795

00:12:52.830 --> 00:12:54.769 but this is one scenario that we
NOTE Confidence: 0.928373873233795

00:12:54.769 --> 00:12:56.588 want to present to the governor.
NOTE Confidence: 0.928373873233795

00:12:56.590 --> 00:12:56.950 Um?
NOTE Confidence: 0.928373873233795

00:12:56.950 --> 00:12:59.470 And here we look at the implications
NOTE Confidence: 0.928373873233795

00:12:59.470 --> 00:13:02.569 of this scenario in terms of new
NOTE Confidence: 0.928373873233795

00:13:02.569 --> 00:13:04.405 infections or daily incidents.
NOTE Confidence: 0.928373873233795

00:13:04.410 --> 00:13:06.654 In Connecticut we see a small
NOTE Confidence: 0.928373873233795

00:13:06.654 --> 00:13:07.776 spike after reopening,

NOTE Confidence: 0.928373873233795
00:13:07.780 --> 00:13:09.976 but daily incidence remains low and
NOTE Confidence: 0.928373873233795
00:13:09.976 --> 00:13:12.639 begins to rise only into late August.
NOTE Confidence: 0.928373873233795
00:13:12.640 --> 00:13:15.418 In the lower left hand corner.
NOTE Confidence: 0.928373873233795
00:13:15.420 --> 00:13:16.932 We see hospitalizations.
NOTE Confidence: 0.928373873233795
00:13:16.932 --> 00:13:20.460 The dotted line above is the overalls
NOTE Confidence: 0.928373873233795
00:13:20.548 --> 00:13:23.558 hospital bed capacity in Connecticut,
NOTE Confidence: 0.928373873233795
00:13:23.560 --> 00:13:26.810 including temporary or search beds.
NOTE Confidence: 0.928373873233795
00:13:26.810 --> 00:13:29.414 And you can see that under this
NOTE Confidence: 0.928373873233795
00:13:29.414 --> 00:13:31.270 very slow reopening scenario,
NOTE Confidence: 0.928373873233795
00:13:31.270 --> 00:13:33.290 hospitalization continues its slow decline,
NOTE Confidence: 0.928373873233795
00:13:33.290 --> 00:13:35.320 becomes very flat in July,
NOTE Confidence: 0.928373873233795
00:13:35.320 --> 00:13:36.856 and part of August,
NOTE Confidence: 0.928373873233795
00:13:36.856 --> 00:13:39.160 and begins to rise very slowly
NOTE Confidence: 0.928373873233795
00:13:39.239 --> 00:13:41.389 as we get towards September.
NOTE Confidence: 0.928373873233795
00:13:41.390 --> 00:13:43.282 But overall hospitalization remains
NOTE Confidence: 0.928373873233795

00:13:43.282 --> 00:13:46.120 well below the census peak which
NOTE Confidence: 0.928373873233795

00:13:46.195 --> 00:13:48.613 occurred in mid April and likewise
NOTE Confidence: 0.928373873233795

00:13:48.613 --> 00:13:50.859 deaths begin to flatten out and.
NOTE Confidence: 0.928373873233795

00:13:50.860 --> 00:13:53.352 And we end up with almost 6000
NOTE Confidence: 0.928373873233795

00:13:53.352 --> 00:13:55.480 deaths in our simulations.
NOTE Confidence: 0.928373873233795

00:13:55.480 --> 00:13:56.740 In this scenario,
NOTE Confidence: 0.928373873233795

00:13:56.740 --> 00:13:58.000 under slow reopening,
NOTE Confidence: 0.928373873233795

00:13:58.000 --> 00:14:00.940 I think this is an optimistic scenario.
NOTE Confidence: 0.928373873233795

00:14:00.940 --> 00:14:03.628 Here's a more pessimistic scenario in
NOTE Confidence: 0.928373873233795

00:14:03.628 --> 00:14:06.260 which contact for returns much more
NOTE Confidence: 0.928373873233795

00:14:06.260 --> 00:14:08.920 quickly to the pre lock down baseline.
NOTE Confidence: 0.928373873233795

00:14:08.920 --> 00:14:11.888 Here we release 10% of this latent
NOTE Confidence: 0.928373873233795

00:14:11.888 --> 00:14:13.960 suppressed contact every two weeks.
NOTE Confidence: 0.928373873233795

00:14:13.960 --> 00:14:17.740 This is a much more rapid rise in contact.
NOTE Confidence: 0.928373873233795

00:14:17.740 --> 00:14:18.165 Again,
NOTE Confidence: 0.928373873233795

00:14:18.165 --> 00:14:21.565 we don't know what exactly will happen when.

NOTE Confidence: 0.928373873233795
00:14:21.570 --> 00:14:23.892 People return to work and maybe
NOTE Confidence: 0.928373873233795
00:14:23.892 --> 00:14:26.190 children return to summer camps in
NOTE Confidence: 0.928373873233795
00:14:26.190 --> 00:14:28.224 day cares and things like that,
NOTE Confidence: 0.928373873233795
00:14:28.230 --> 00:14:30.505 but this is perhaps a more pessimistic
NOTE Confidence: 0.928373873233795
00:14:30.505 --> 00:14:32.781 scenario in which people experience much
NOTE Confidence: 0.928373873233795
00:14:32.781 --> 00:14:35.259 more interpersonal contact than they did,
NOTE Confidence: 0.928373873233795
00:14:35.260 --> 00:14:35.618 say,
NOTE Confidence: 0.928373873233795
00:14:35.618 --> 00:14:36.692 a week ago.
NOTE Confidence: 0.928373873233795
00:14:36.692 --> 00:14:39.897 Here we see a really dramatic rise in
NOTE Confidence: 0.928373873233795
00:14:39.897 --> 00:14:42.819 daily incidents into August and September.
NOTE Confidence: 0.928373873233795
00:14:42.820 --> 00:14:43.302 Uh,
NOTE Confidence: 0.928373873233795
00:14:43.302 --> 00:14:46.194 with very large numbers of individuals
NOTE Confidence: 0.928373873233795
00:14:46.194 --> 00:14:49.179 getting infected per day in Connecticut.
NOTE Confidence: 0.928373873233795
00:14:49.180 --> 00:14:49.606 Likewise,
NOTE Confidence: 0.928373873233795
00:14:49.606 --> 00:14:51.310 hospitalizations rise very dramatically
NOTE Confidence: 0.928373873233795

00:14:51.310 --> 00:14:53.440 in August under this scenario,
NOTE Confidence: 0.928373873233795

00:14:53.440 --> 00:14:56.142 and we are looking at the possibility
NOTE Confidence: 0.928373873233795

00:14:56.142 --> 00:14:58.549 of possibly exceeding hospital capacity.
NOTE Confidence: 0.928373873233795

00:14:58.550 --> 00:15:01.106 Even the surge capacity by mid
NOTE Confidence: 0.928373873233795

00:15:01.106 --> 00:15:02.810 August or early September,
NOTE Confidence: 0.928373873233795

00:15:02.810 --> 00:15:06.254 and this is very bad because people
NOTE Confidence: 0.928373873233795

00:15:06.254 --> 00:15:08.533 who need hospitalization but don't
NOTE Confidence: 0.928373873233795

00:15:08.533 --> 00:15:11.413 get it are very likely to die much
NOTE Confidence: 0.928373873233795

00:15:11.504 --> 00:15:14.209 faster than they would otherwise.
NOTE Confidence: 0.928373873233795

00:15:14.210 --> 00:15:14.577 Likewise,
NOTE Confidence: 0.928373873233795

00:15:14.577 --> 00:15:16.779 here we see a dramatic increase
NOTE Confidence: 0.928373873233795

00:15:16.779 --> 00:15:18.430 in deaths in August,
NOTE Confidence: 0.928373873233795

00:15:18.430 --> 00:15:20.734 and it just gets worse into
NOTE Confidence: 0.928373873233795

00:15:20.734 --> 00:15:22.270 September under this scenario.
NOTE Confidence: 0.928373873233795

00:15:22.270 --> 00:15:24.190 So I think in reality,
NOTE Confidence: 0.92046046257019

00:15:24.190 --> 00:15:26.410 what will occur in Connecticut is

NOTE Confidence: 0.92046046257019
00:15:26.410 --> 00:15:27.890 probably something between these
NOTE Confidence: 0.92046046257019
00:15:27.954 --> 00:15:29.994 two extreme scenarios, but these,
NOTE Confidence: 0.92046046257019
00:15:29.994 --> 00:15:32.406 I think might be benchmarks against
NOTE Confidence: 0.92046046257019
00:15:32.406 --> 00:15:34.626 which we measure the governments
NOTE Confidence: 0.92046046257019
00:15:34.626 --> 00:15:37.302 true response and the response of
NOTE Confidence: 0.92046046257019
00:15:37.302 --> 00:15:40.237 the people in terms of their contact.
NOTE Confidence: 0.92046046257019
00:15:40.240 --> 00:15:43.180 We're not just interested in looking into
NOTE Confidence: 0.92046046257019
00:15:43.180 --> 00:15:46.387 a crystal ball an predicting the future.
NOTE Confidence: 0.92046046257019
00:15:46.390 --> 00:15:49.710 We also want to be able to inform
NOTE Confidence: 0.92046046257019
00:15:49.710 --> 00:15:51.220 concrete intervention efforts,
NOTE Confidence: 0.92046046257019
00:15:51.220 --> 00:15:52.504 including scientific intervention,
NOTE Confidence: 0.92046046257019
00:15:52.504 --> 00:15:54.644 with scientific efforts to learn
NOTE Confidence: 0.92046046257019
00:15:54.644 --> 00:15:56.900 more about the Epidemiology of
NOTE Confidence: 0.92046046257019
00:15:56.900 --> 00:15:58.688 COVID-19 specifically in Connecticut.
NOTE Confidence: 0.92046046257019
00:15:58.690 --> 00:15:59.470 In particular,
NOTE Confidence: 0.92046046257019

00:15:59.470 --> 00:16:01.420 the design and planning and
NOTE Confidence: 0.92046046257019

00:16:01.420 --> 00:16:03.165 implementation of future seroprevalence
NOTE Confidence: 0.92046046257019

00:16:03.165 --> 00:16:05.209 studies will require accurate
NOTE Confidence: 0.92046046257019

00:16:05.209 --> 00:16:07.253 estimates of cumulative incidence.
NOTE Confidence: 0.92046046257019

00:16:07.260 --> 00:16:08.150 That is,
NOTE Confidence: 0.92046046257019

00:16:08.150 --> 00:16:10.820 the number of people in Connecticut
NOTE Confidence: 0.92046046257019

00:16:10.820 --> 00:16:14.149 who have evidence of prior infection.
NOTE Confidence: 0.92046046257019

00:16:14.150 --> 00:16:16.334 And so these are things that
NOTE Confidence: 0.92046046257019

00:16:16.334 --> 00:16:18.520 actually will come out of the
NOTE Confidence: 0.92046046257019

00:16:18.520 --> 00:16:20.488 model projections if you plan to
NOTE Confidence: 0.92046046257019

00:16:20.488 --> 00:16:23.146 run so prevalent study in a month,
NOTE Confidence: 0.92046046257019

00:16:23.150 --> 00:16:25.670 we can tell you under different scenarios,
NOTE Confidence: 0.92046046257019

00:16:25.670 --> 00:16:27.740 roughly how many people are likely
NOTE Confidence: 0.92046046257019

00:16:27.740 --> 00:16:30.056 to have evidence of prior infections
NOTE Confidence: 0.92046046257019

00:16:30.056 --> 00:16:32.660 at that moment under the assumptions
NOTE Confidence: 0.92046046257019

00:16:32.660 --> 00:16:34.240 articulated in the model.

NOTE Confidence: 0.92046046257019
00:16:34.240 --> 00:16:36.914 So we hope that this tool will
NOTE Confidence: 0.92046046257019
00:16:36.914 --> 00:16:39.056 be useful prospectively for study
NOTE Confidence: 0.92046046257019
00:16:39.056 --> 00:16:41.356 planning and design of testing
NOTE Confidence: 0.92046046257019
00:16:41.356 --> 00:16:42.736 and other interventions,
NOTE Confidence: 0.92046046257019
00:16:42.740 --> 00:16:45.736 In addition to just predicting the future.
NOTE Confidence: 0.92046046257019
00:16:45.740 --> 00:16:50.360 So, uh, so going forward?
NOTE Confidence: 0.92046046257019
00:16:50.360 --> 00:16:53.488 We want to be able to share this
NOTE Confidence: 0.92046046257019
00:16:53.488 --> 00:16:56.474 information in the form of reports
NOTE Confidence: 0.92046046257019
00:16:56.474 --> 00:16:57.978 with policymakers, policymakers,
NOTE Confidence: 0.92046046257019
00:16:57.978 --> 00:16:59.770 in the state government,
NOTE Confidence: 0.92046046257019
00:16:59.770 --> 00:17:02.458 and decision makers throughout the state.
NOTE Confidence: 0.92046046257019
00:17:02.460 --> 00:17:05.034 So we put together a website
NOTE Confidence: 0.92046046257019
00:17:05.034 --> 00:17:07.767 along with the code for software
NOTE Confidence: 0.92046046257019
00:17:07.767 --> 00:17:10.067 and two reports so far.
NOTE Confidence: 0.92046046257019
00:17:10.070 --> 00:17:12.650 One policy report in one technical
NOTE Confidence: 0.92046046257019

00:17:12.650 --> 00:17:15.449 report on how the model works,
NOTE Confidence: 0.92046046257019

00:17:15.450 --> 00:17:18.138 this website just went live about
NOTE Confidence: 0.92046046257019

00:17:18.138 --> 00:17:21.309 an hour ago and now now these?
NOTE Confidence: 0.92046046257019

00:17:21.310 --> 00:17:23.055 Reports are posted publicly for
NOTE Confidence: 0.92046046257019

00:17:23.055 --> 00:17:25.647 anyone to see as we update these
NOTE Confidence: 0.92046046257019

00:17:25.647 --> 00:17:27.199 reports in real time.
NOTE Confidence: 0.92046046257019

00:17:27.200 --> 00:17:29.324 We will document the updates and
NOTE Confidence: 0.92046046257019

00:17:29.324 --> 00:17:31.610 post new versions on the website.
NOTE Confidence: 0.92046046257019

00:17:31.610 --> 00:17:33.450 If we ever change anything,
NOTE Confidence: 0.92046046257019

00:17:33.450 --> 00:17:35.682 we will provide a note saying
NOTE Confidence: 0.92046046257019

00:17:35.682 --> 00:17:38.319 what has changed so that you can
NOTE Confidence: 0.92046046257019

00:17:38.319 --> 00:17:40.449 follow our progress as we go.
NOTE Confidence: 0.92046046257019

00:17:40.450 --> 00:17:42.724 We will post these reports roughly
NOTE Confidence: 0.92046046257019

00:17:42.724 --> 00:17:45.693 once every four to six weeks to
NOTE Confidence: 0.92046046257019

00:17:45.693 --> 00:17:47.983 coincide with the governor's stated
NOTE Confidence: 0.92046046257019

00:17:47.983 --> 00:17:50.407 reopening phase plans and so I will.

NOTE Confidence: 0.92046046257019
00:17:50.410 --> 00:17:52.890 Paste a link here in the web and
NOTE Confidence: 0.92046046257019
00:17:52.890 --> 00:17:55.162 our chat window if you'd like
NOTE Confidence: 0.92046046257019
00:17:55.162 --> 00:17:57.132 to check out this website,
NOTE Confidence: 0.92046046257019
00:17:57.140 --> 00:17:59.964 you don't have to copy down the URL.
NOTE Confidence: 0.92046046257019
00:17:59.970 --> 00:18:00.305 Basically,
NOTE Confidence: 0.92046046257019
00:18:00.305 --> 00:18:02.985 over the next few months will try to
NOTE Confidence: 0.92046046257019
00:18:02.985 --> 00:18:04.581 provide actionable intelligence to
NOTE Confidence: 0.92046046257019
00:18:04.581 --> 00:18:07.360 state decision makers so that they can
NOTE Confidence: 0.92046046257019
00:18:07.421 --> 00:18:10.165 better plan the states response an reopening.
NOTE Confidence: 0.92046046257019
00:18:10.170 --> 00:18:11.337 In this crisis.
NOTE Confidence: 0.92046046257019
00:18:11.337 --> 00:18:14.060 And that's all I have for you.
NOTE Confidence: 0.92046046257019
00:18:14.060 --> 00:18:15.048 Thank you very much.
NOTE Confidence: 0.816341102123261
00:18:16.600 --> 00:18:21.334 Thank you very much, I'd like.