

WEBVTT

NOTE duration:"01:13:39.6800000"

NOTE language:en-us

NOTE Confidence: 0.8750484

00:00:00.000 --> 00:00:03.094 As well as those of you who

NOTE Confidence: 0.8750484

00:00:03.094 --> 00:00:05.609 were listening on just heard,

NOTE Confidence: 0.8750484

00:00:05.610 --> 00:00:08.440 we have three incredible presentations

NOTE Confidence: 0.8750484

00:00:08.440 --> 00:00:12.499 coming up in the next three weeks.

NOTE Confidence: 0.8750484

00:00:12.500 --> 00:00:17.030 Next week is the inaugural.

NOTE Confidence: 0.8750484

00:00:17.030 --> 00:00:20.168 The first of two inaugural lectures

NOTE Confidence: 0.8750484

00:00:20.168 --> 00:00:23.839 that have been endowed by an alumnus

NOTE Confidence: 0.8750484

00:00:23.839 --> 00:00:26.319 of our Department named Byram.

NOTE Confidence: 0.8750484

00:00:26.320 --> 00:00:29.205 Karasu, Doctor Karasu was a

NOTE Confidence: 0.8750484

00:00:29.205 --> 00:00:31.513 longtime chair of psychiatry

NOTE Confidence: 0.8750484

00:00:31.513 --> 00:00:34.937 at Einstein School of Medicine.

NOTE Confidence: 0.8750484

00:00:34.940 --> 00:00:40.088 And very active in in the in the American

NOTE Confidence: 0.8750484

00:00:40.088 --> 00:00:44.228 Psychiatric Association and other places an.

NOTE Confidence: 0.8750484

00:00:44.230 --> 00:00:45.860 That has endowed one lecture,

NOTE Confidence: 0.8750484

00:00:45.860 --> 00:00:47.848 the first of which will be next

NOTE Confidence: 0.8750484

00:00:47.848 --> 00:00:49.760 week in the second lecture,

NOTE Confidence: 0.8750484

00:00:49.760 --> 00:00:52.360 which we hope to hold over this summer.

NOTE Confidence: 0.8750484

00:00:52.360 --> 00:00:54.310 The first lecture is related to.

NOTE Confidence: 0.860791

00:00:56.830 --> 00:01:01.708 Psychotherapy the humanities.

NOTE Confidence: 0.860791

00:01:01.710 --> 00:01:04.881 And and sort of a more humanistic

NOTE Confidence: 0.860791

00:01:04.881 --> 00:01:07.542 aspects of psychiatry and to kick

NOTE Confidence: 0.860791

00:01:07.542 --> 00:01:09.966 off that lecture we have urban

NOTE Confidence: 0.860791

00:01:09.966 --> 00:01:13.801 yellow who as you know is both a

NOTE Confidence: 0.860791

00:01:13.801 --> 00:01:15.235 leading psychotherapy researcher

NOTE Confidence: 0.860791

00:01:15.240 --> 00:01:17.946 from Stanford and also a novelist.

NOTE Confidence: 0.860791

00:01:17.950 --> 00:01:22.060 In case any of you have read any of his

NOTE Confidence: 0.860791

00:01:22.171 --> 00:01:25.610 novels, including when I read about it,

NOTE Confidence: 0.860791

00:01:25.610 --> 00:01:28.316 a murder set around a psychoanalytic

NOTE Confidence: 0.860791

00:01:28.316 --> 00:01:31.599 Institute. Fun, fun, read.

NOTE Confidence: 0.860791

00:01:31.600 --> 00:01:34.638 Anyway, so so we will watch and
NOTE Confidence: 0.860791

00:01:34.638 --> 00:01:36.785 edited interview conducted by David
NOTE Confidence: 0.860791

00:01:36.785 --> 00:01:39.083 Ross of Irving Yellow next week.
NOTE Confidence: 0.860791

00:01:39.090 --> 00:01:42.275 Then you have the opportunity to discuss
NOTE Confidence: 0.860791

00:01:42.275 --> 00:01:45.738 it and that should be a lot of fun.
NOTE Confidence: 0.860791

00:01:45.740 --> 00:01:49.082 Yellow is obviously one of the
NOTE Confidence: 0.860791

00:01:49.082 --> 00:01:51.310 great leaders in psychotherapy.
NOTE Confidence: 0.860791

00:01:51.310 --> 00:01:54.646 Of his generation in our time.
NOTE Confidence: 0.860791

00:01:54.650 --> 00:01:56.813 The following week is the last minute
NOTE Confidence: 0.860791

00:01:56.813 --> 00:01:59.060 word lecture and the Lustman awardee's,
NOTE Confidence: 0.860791

00:01:59.060 --> 00:02:00.750 literally in the 10 minutes
NOTE Confidence: 0.860791

00:02:00.750 --> 00:02:01.764 before this lecture,
NOTE Confidence: 0.860791

00:02:01.770 --> 00:02:03.218 just received their notifications
NOTE Confidence: 0.860791

00:02:03.218 --> 00:02:06.025 of words so they will have as much
NOTE Confidence: 0.860791

00:02:06.025 --> 00:02:07.445 time to prepare their lecture
NOTE Confidence: 0.860791

00:02:07.445 --> 00:02:09.807 as I will have to prepare the

NOTE Confidence: 0.860791

00:02:09.807 --> 00:02:11.255 state of Department lecture,

NOTE Confidence: 0.860791

00:02:11.260 --> 00:02:13.168 which is going to be the

NOTE Confidence: 0.860791

00:02:13.168 --> 00:02:15.229 following week on June 4th and

NOTE Confidence: 0.860791

00:02:15.229 --> 00:02:17.019 which I'm looking forward to.

NOTE Confidence: 0.7515993

00:02:19.340 --> 00:02:23.260 But today's lecture is a special a

NOTE Confidence: 0.7515993

00:02:23.260 --> 00:02:27.669 special lecture for us, and our lecture

NOTE Confidence: 0.7515993

00:02:27.669 --> 00:02:31.284 is Professor Suchitra Krishnan Sarin.

NOTE Confidence: 0.7515993

00:02:31.290 --> 00:02:33.705 She's obviously a professor in

NOTE Confidence: 0.7515993

00:02:33.705 --> 00:02:36.611 our Department and chair of one

NOTE Confidence: 0.7515993

00:02:36.611 --> 00:02:39.035 of the IRB committees at Yale.

NOTE Confidence: 0.7515993

00:02:39.040 --> 00:02:42.225 She got her bachelor's degree in India,

NOTE Confidence: 0.7515993

00:02:42.230 --> 00:02:44.966 then PhD in pharmacology at Purdue,

NOTE Confidence: 0.7515993

00:02:44.970 --> 00:02:47.896 and then she came to Yale 1994

NOTE Confidence: 0.7515993

00:02:47.896 --> 00:02:49.990 to pursue addiction research,

NOTE Confidence: 0.7515993

00:02:49.990 --> 00:02:51.810 training, and the rest.

NOTE Confidence: 0.7515993

00:02:51.810 --> 00:02:55.750 As they say, is history.
NOTE Confidence: 0.7515993

00:02:55.750 --> 00:02:58.055 You know she's really been
NOTE Confidence: 0.7515993

00:02:58.055 --> 00:03:01.050 a pioneer in so many areas.
NOTE Confidence: 0.7515993

00:03:01.050 --> 00:03:03.582 One of the most important areas
NOTE Confidence: 0.7515993

00:03:03.582 --> 00:03:06.217 where she's really had an enormous
NOTE Confidence: 0.7515993

00:03:06.217 --> 00:03:08.797 impact has been in trying to
NOTE Confidence: 0.7515993

00:03:08.797 --> 00:03:11.021 understand and develop treatments
NOTE Confidence: 0.7515993

00:03:11.021 --> 00:03:13.577 for addictions in adolescence,
NOTE Confidence: 0.7515993

00:03:13.580 --> 00:03:15.604 particularly adolescent smoking and
NOTE Confidence: 0.7515993

00:03:15.604 --> 00:03:19.159 and her development of research in that
NOTE Confidence: 0.7515993

00:03:19.159 --> 00:03:22.260 area coincided with the emergence of vaping,
NOTE Confidence: 0.7515993

00:03:22.260 --> 00:03:25.146 the so-called safe alternative to smoking,
NOTE Confidence: 0.7515993

00:03:25.150 --> 00:03:28.918 which turns out not to be.
NOTE Confidence: 0.7515993

00:03:28.920 --> 00:03:35.416 So safe and so in two large major
NOTE Confidence: 0.7515993

00:03:35.416 --> 00:03:39.645 national initiatives that that Doctor
NOTE Confidence: 0.7515993

00:03:39.645 --> 00:03:44.553 Krishnan Sarin is led with with.

NOTE Confidence: 0.7515993

00:03:44.560 --> 00:03:46.388 Stephanie O'Malley and other

NOTE Confidence: 0.7515993

00:03:46.388 --> 00:03:50.610 faculty in the Department, the.

NOTE Confidence: 0.7515993

00:03:50.610 --> 00:03:52.734 The teacher can now the transdisciplinary

NOTE Confidence: 0.7515993

00:03:52.734 --> 00:03:53.796 regulation Smoking Regulation

NOTE Confidence: 0.7515993

00:03:53.796 --> 00:03:55.240 Center for regulatory science.

NOTE Confidence: 0.7515993

00:03:55.240 --> 00:03:56.272 I knew it.

NOTE Confidence: 0.7515993

00:03:56.272 --> 00:03:58.336 It's going to need to look

NOTE Confidence: 0.7515993

00:03:58.336 --> 00:04:00.929 at it to get the name right.

NOTE Confidence: 0.7991861

00:04:04.170 --> 00:04:07.277 Sojitra has really led an important

NOTE Confidence: 0.7991861

00:04:07.277 --> 00:04:09.862 initiative to both understanding intervene

NOTE Confidence: 0.7991861

00:04:09.862 --> 00:04:12.460 in adolescent smoking and vaping,

NOTE Confidence: 0.7991861

00:04:12.460 --> 00:04:16.485 but also to understand and better inform

NOTE Confidence: 0.7991861

00:04:16.485 --> 00:04:19.595 the regulatory process and the payoff

NOTE Confidence: 0.7991861

00:04:19.595 --> 00:04:23.229 of their work and that of others has

NOTE Confidence: 0.7991861

00:04:23.229 --> 00:04:26.439 had enormous impact on public health.

NOTE Confidence: 0.7991861

00:04:26.440 --> 00:04:29.030 It's no accident, for example,
NOTE Confidence: 0.7991861

00:04:29.030 --> 00:04:32.578 that the FDA banned.
NOTE Confidence: 0.7991861

00:04:32.580 --> 00:04:36.150 Inclusion of menthol in cigarettes,
NOTE Confidence: 0.7991861

00:04:36.150 --> 00:04:39.615 which is a remarkable remarkable
NOTE Confidence: 0.7991861

00:04:39.615 --> 00:04:43.916 statement about the FDA's awareness about
NOTE Confidence: 0.7991861

00:04:43.916 --> 00:04:47.566 how various aspects besides nicotine,
NOTE Confidence: 0.7991861

00:04:47.570 --> 00:04:50.171 can drive addiction,
NOTE Confidence: 0.7991861

00:04:50.171 --> 00:04:53.639 and particularly in in
NOTE Confidence: 0.7991861

00:04:53.639 --> 00:04:57.390 vulnerable populations. Anne.
NOTE Confidence: 0.7991861

00:04:57.390 --> 00:04:59.510 Although her lecture today is
NOTE Confidence: 0.7991861

00:04:59.510 --> 00:05:02.130 not going to focus on this,
NOTE Confidence: 0.7991861

00:05:02.130 --> 00:05:04.716 she's contributed to many other areas,
NOTE Confidence: 0.7991861

00:05:04.720 --> 00:05:07.268 and in particular for me have been
NOTE Confidence: 0.7991861

00:05:07.268 --> 00:05:09.645 a really important valued can key
NOTE Confidence: 0.7991861

00:05:09.645 --> 00:05:12.075 investigator in our in IEEE supported
NOTE Confidence: 0.7991861

00:05:12.075 --> 00:05:14.236 Center for the translational

NOTE Confidence: 0.7991861

00:05:14.236 --> 00:05:15.919 neuroscience of alcoholism,

NOTE Confidence: 0.7991861

00:05:15.920 --> 00:05:18.912 where she's LED projects in the in the

NOTE Confidence: 0.7991861

00:05:18.912 --> 00:05:20.755 laboratory studying the pharmacology

NOTE Confidence: 0.7991861

00:05:20.755 --> 00:05:22.815 of Alcohol Self Administration,

NOTE Confidence: 0.7991861

00:05:22.820 --> 00:05:25.455 which is really been been

NOTE Confidence: 0.7991861

00:05:25.455 --> 00:05:27.036 fascinating and informative.

NOTE Confidence: 0.7991861

00:05:27.040 --> 00:05:30.554 So she should also leads an American

NOTE Confidence: 0.7991861

00:05:30.554 --> 00:05:33.000 Heart Association funded center in

NOTE Confidence: 0.7991861

00:05:33.000 --> 00:05:36.003 addition to as if that wasn't enough,

NOTE Confidence: 0.7991861

00:05:36.010 --> 00:05:38.836 the American Heart Association funded Center,

NOTE Confidence: 0.7991861

00:05:38.840 --> 00:05:41.804 which is developing youth focus prevention

NOTE Confidence: 0.7991861

00:05:41.804 --> 00:05:44.274 and cessation interventions for E

NOTE Confidence: 0.7991861

00:05:44.274 --> 00:05:46.389 cigarettes and tobacco use behavior,

NOTE Confidence: 0.7991861

00:05:46.390 --> 00:05:49.774 and she's really been an extremely

NOTE Confidence: 0.7991861

00:05:49.774 --> 00:05:51.466 productive investigator with

NOTE Confidence: 0.7991861

00:05:51.466 --> 00:05:54.270 over 217 research publications.
NOTE Confidence: 0.7991861

00:05:54.270 --> 00:05:56.538 As I alluded to in talking
NOTE Confidence: 0.7991861

00:05:56.538 --> 00:05:58.879 about the impact of her work,
NOTE Confidence: 0.7991861

00:05:58.880 --> 00:06:01.202 Suchitra is really been an important
NOTE Confidence: 0.7991861

00:06:01.202 --> 00:06:03.869 national leader in the area of smoking.
NOTE Confidence: 0.7991861

00:06:03.870 --> 00:06:05.785 She's been involved in several
NOTE Confidence: 0.7991861

00:06:05.785 --> 00:06:06.934 Surgeon General's reports,
NOTE Confidence: 0.7991861

00:06:06.940 --> 00:06:09.628 an adult and youth tobacco use behaviors.
NOTE Confidence: 0.7991861

00:06:09.630 --> 00:06:12.110 She served as a member of the FDA's
NOTE Confidence: 0.7991861

00:06:12.110 --> 00:06:13.703 Tobacco Product Scientific Advisory
NOTE Confidence: 0.7991861

00:06:13.703 --> 00:06:15.983 Committee on the CDC's Interagency
NOTE Confidence: 0.7991861

00:06:15.983 --> 00:06:18.079 Committee on Smoking and Health,
NOTE Confidence: 0.7991861

00:06:18.080 --> 00:06:20.000 led by the Surgeon General,
NOTE Confidence: 0.7991861

00:06:20.000 --> 00:06:21.536 and she's been involved
NOTE Confidence: 0.7991861

00:06:21.536 --> 00:06:22.688 in other organizations.
NOTE Confidence: 0.7991861

00:06:22.690 --> 00:06:25.224 A consultant to the Tobacco Free Initiative

NOTE Confidence: 0.7991861

00:06:25.224 --> 00:06:27.670 of the World Health Organization.

NOTE Confidence: 0.7991861

00:06:27.670 --> 00:06:32.120 She for 20 to 21 has been president of the

NOTE Confidence: 0.7991861

00:06:32.229 --> 00:06:36.996 Society for Research on Nicotine and Tobacco.

NOTE Confidence: 0.7991861

00:06:37.000 --> 00:06:40.850 She plays editorial roles in three journals,

NOTE Confidence: 0.7991861

00:06:40.850 --> 00:06:43.595 including including being a senior

NOTE Confidence: 0.7991861

00:06:43.595 --> 00:06:46.340 editor of Tobacco Regulatory Science,

NOTE Confidence: 0.7991861

00:06:46.340 --> 00:06:49.080 and she's also been incredibly

NOTE Confidence: 0.7991861

00:06:49.080 --> 00:06:50.176 public spirited,

NOTE Confidence: 0.7991861

00:06:50.180 --> 00:06:52.956 involved in educational initiatives,

NOTE Confidence: 0.7991861

00:06:52.956 --> 00:06:55.038 community initiatives doing

NOTE Confidence: 0.7991861

00:06:55.038 --> 00:06:58.039 doing a Ted Med Talk.

NOTE Confidence: 0.7991861

00:06:58.040 --> 00:07:01.176 A really somebody who is not just

NOTE Confidence: 0.7991861

00:07:01.176 --> 00:07:03.619 generating the research but but paying

NOTE Confidence: 0.7991861

00:07:03.619 --> 00:07:06.540 it back to in ways that that have

NOTE Confidence: 0.7991861

00:07:06.540 --> 00:07:09.372 an important effect on our community

NOTE Confidence: 0.7991861

00:07:09.372 --> 00:07:11.216 on our educational environment.
NOTE Confidence: 0.7991861

00:07:11.216 --> 00:07:12.920 In our research community.
NOTE Confidence: 0.7991861

00:07:12.920 --> 00:07:16.736 Through her role in the hics so so teacher,
NOTE Confidence: 0.7991861

00:07:16.740 --> 00:07:19.666 I want to acknowledge your very special
NOTE Confidence: 0.7991861

00:07:19.666 --> 00:07:22.270 contributions not only as an investigator,
NOTE Confidence: 0.7991861

00:07:22.270 --> 00:07:24.769 but also as a leader and and
NOTE Confidence: 0.7991861

00:07:24.769 --> 00:07:27.370 how much we appreciate that.
NOTE Confidence: 0.7991861

00:07:27.370 --> 00:07:28.882 So without further ado.
NOTE Confidence: 0.7991861

00:07:28.882 --> 00:07:32.204 Please take it away and tell us about
NOTE Confidence: 0.7991861

00:07:32.204 --> 00:07:34.644 the advances in regulatory regulation.
NOTE Confidence: 0.7991861

00:07:34.650 --> 00:07:35.748 You thank you.
NOTE Confidence: 0.7991861

00:07:35.748 --> 00:07:36.480 Thank you,
NOTE Confidence: 0.7991861

00:07:36.480 --> 00:07:36.846 John.
NOTE Confidence: 0.7991861

00:07:36.846 --> 00:07:37.578 Thank you
NOTE Confidence: 0.8801329

00:07:37.580 --> 00:07:39.776 for that very very kind and
NOTE Confidence: 0.8801329

00:07:39.776 --> 00:07:41.240 very nice invitation unblushing.

NOTE Confidence: 0.8801329

00:07:41.240 --> 00:07:44.160 In case you can see it on screen.

NOTE Confidence: 0.8801329

00:07:44.160 --> 00:07:47.454 But that was that was really very nice I've.

NOTE Confidence: 0.8801329

00:07:47.460 --> 00:07:50.492 I think one of the things I always

NOTE Confidence: 0.8801329

00:07:50.492 --> 00:07:53.070 tell people is that I enjoy every

NOTE Confidence: 0.8801329

00:07:53.070 --> 00:07:56.310 little bit of what I do and I enjoy

NOTE Confidence: 0.8801329

00:07:56.310 --> 00:07:59.170 the signs that comes with it so it

NOTE Confidence: 0.8801329

00:07:59.170 --> 00:08:00.995 makes life interesting and exciting.

NOTE Confidence: 0.8801329

00:08:01.000 --> 00:08:04.437 So let me share my screen here.

NOTE Confidence: 0.8801329

00:08:04.440 --> 00:08:07.176 And well, I'm already at the bottom sorry,

NOTE Confidence: 0.8801329

00:08:07.180 --> 00:08:09.924 I just did a run through my slides.

NOTE Confidence: 0.79668915

00:08:16.950 --> 00:08:19.897 OK can you see my slides now?

NOTE Confidence: 0.79668915

00:08:19.900 --> 00:08:23.160 Trisha yes yes alright so.

NOTE Confidence: 0.79668915

00:08:23.160 --> 00:08:24.304 So like John said,

NOTE Confidence: 0.79668915

00:08:24.304 --> 00:08:27.146 I do a lot of work in the tobacco

NOTE Confidence: 0.79668915

00:08:27.146 --> 00:08:30.050 area as well as in the alcohol area.

NOTE Confidence: 0.79668915

00:08:30.050 --> 00:08:32.269 I'm not going to talk about the
NOTE Confidence: 0.79668915

00:08:32.269 --> 00:08:34.164 alcohol area today and I really
NOTE Confidence: 0.79668915

00:08:34.164 --> 00:08:36.208 thought I would give you a flavor
NOTE Confidence: 0.79668915

00:08:36.271 --> 00:08:38.798 for what we're doing and some very
NOTE Confidence: 0.79668915

00:08:38.798 --> 00:08:40.491 contemporary issues in tobacco
NOTE Confidence: 0.79668915

00:08:40.491 --> 00:08:43.496 regulation which are coming up.
NOTE Confidence: 0.79668915

00:08:43.500 --> 00:08:47.084 You know today and over the next few
NOTE Confidence: 0.79668915

00:08:47.084 --> 00:08:51.864 months in state legislatures as well as
NOTE Confidence: 0.79668915

00:08:51.864 --> 00:08:54.892 federale legislatures for consideration.
NOTE Confidence: 0.79668915

00:08:54.900 --> 00:08:57.116 Just start out just to let you all
NOTE Confidence: 0.79668915

00:08:57.116 --> 00:08:59.518 know that I and this is always a
NOTE Confidence: 0.79668915

00:08:59.518 --> 00:09:01.134 very important issue for anybody
NOTE Confidence: 0.79668915

00:09:01.134 --> 00:09:03.294 working in the field of tobacco.
NOTE Confidence: 0.79668915

00:09:03.300 --> 00:09:05.414 To acknowledge that I do not have
NOTE Confidence: 0.79668915

00:09:05.414 --> 00:09:07.035 any tobacco industry funding and
NOTE Confidence: 0.79668915

00:09:07.035 --> 00:09:08.660 all everything I'll be talking

NOTE Confidence: 0.79668915

00:09:08.660 --> 00:09:10.758 about is funded through NIH or FDA.

NOTE Confidence: 0.7859833

00:09:15.310 --> 00:09:18.206 Scoop up, take a so the basics basic

NOTE Confidence: 0.7859833

00:09:18.206 --> 00:09:21.498 problem are why this issue of tobacco

NOTE Confidence: 0.7859833

00:09:21.498 --> 00:09:23.988 regulation become became very important,

NOTE Confidence: 0.7859833

00:09:23.990 --> 00:09:26.531 as probably many of you know is

NOTE Confidence: 0.7859833

00:09:26.531 --> 00:09:29.200 because of the cigarette epidemic.

NOTE Confidence: 0.7859833

00:09:29.200 --> 00:09:31.880 You know cigarette consumption went

NOTE Confidence: 0.7859833

00:09:31.880 --> 00:09:34.968 up significantly after the World Wars

NOTE Confidence: 0.7859833

00:09:34.968 --> 00:09:37.875 in in the US and all over the world.

NOTE Confidence: 0.7859833

00:09:37.880 --> 00:09:39.616 A commercial cigarette consumption.

NOTE Confidence: 0.7859833

00:09:39.616 --> 00:09:42.220 And as this graph clearly shows,

NOTE Confidence: 0.7859833

00:09:42.220 --> 00:09:45.760 there were a lot of regulatory.

NOTE Confidence: 0.7859833

00:09:45.760 --> 00:09:47.832 Not a lot of laws and other kinds

NOTE Confidence: 0.7859833

00:09:47.832 --> 00:09:49.311 of mechanisms that were put into

NOTE Confidence: 0.7859833

00:09:49.311 --> 00:09:51.857 place in the US to try and stem this

NOTE Confidence: 0.7859833

00:09:51.857 --> 00:09:53.369 increase in cigarette consumption.

NOTE Confidence: 0.7859833

00:09:53.370 --> 00:09:54.390 And you see,

NOTE Confidence: 0.7859833

00:09:54.390 --> 00:09:56.770 some of those listed on this slide.

NOTE Confidence: 0.7859833

00:09:56.770 --> 00:09:58.066 Now, despite all this,

NOTE Confidence: 0.7859833

00:09:58.066 --> 00:10:00.010 there are still people who smoke

NOTE Confidence: 0.7859833

00:10:00.073 --> 00:10:02.017 cigarettes and smoke quite a lot,

NOTE Confidence: 0.7859833

00:10:02.020 --> 00:10:04.218 and therefore one of the things the

NOTE Confidence: 0.7859833

00:10:04.218 --> 00:10:06.806 FDA had been trying to do for a very

NOTE Confidence: 0.7859833

00:10:06.806 --> 00:10:09.103 long time was to get the authority

NOTE Confidence: 0.7859833

00:10:09.103 --> 00:10:11.068 to actually regulate the components

NOTE Confidence: 0.7859833

00:10:11.068 --> 00:10:13.220 of the constituents of cigarettes so

NOTE Confidence: 0.7859833

00:10:13.220 --> 00:10:15.789 that they could make it safe for use.

NOTE Confidence: 0.7859833

00:10:15.790 --> 00:10:17.692 Because the tobacco industry has been

NOTE Confidence: 0.7859833

00:10:17.692 --> 00:10:19.671 known over the years to manipulate

NOTE Confidence: 0.7859833

00:10:19.671 --> 00:10:21.639 the content contents of these products

NOTE Confidence: 0.7859833

00:10:21.639 --> 00:10:23.990 to make them more addictive and get

NOTE Confidence: 0.7859833

00:10:23.990 --> 00:10:25.630 more people using these products

NOTE Confidence: 0.7859833

00:10:25.630 --> 00:10:27.620 and addicted to these products.

NOTE Confidence: 0.7859833

00:10:27.620 --> 00:10:29.120 And as you know,

NOTE Confidence: 0.7859833

00:10:29.120 --> 00:10:30.620 as we all know,

NOTE Confidence: 0.7859833

00:10:30.620 --> 00:10:32.140 cigarette consumption are cigarette.

NOTE Confidence: 0.7859833

00:10:32.140 --> 00:10:35.208 Smoking is still one of the biggest public

NOTE Confidence: 0.7859833

00:10:35.208 --> 00:10:37.749 health problems in the US and worldwide.

NOTE Confidence: 0.7859833

00:10:37.750 --> 00:10:38.779 So in 2009,

NOTE Confidence: 0.7859833

00:10:38.779 --> 00:10:40.151 President Obama signed what's

NOTE Confidence: 0.7859833

00:10:40.151 --> 00:10:41.662 called the Family Smoking

NOTE Confidence: 0.7859833

00:10:41.662 --> 00:10:43.747 Prevention and Tobacco Control Act,

NOTE Confidence: 0.7859833

00:10:43.750 --> 00:10:46.666 and this act gave the FDA the authority for

NOTE Confidence: 0.7859833

00:10:46.666 --> 00:10:49.748 the first time to regulate the manufacture,

NOTE Confidence: 0.7859833

00:10:49.750 --> 00:10:50.875 distribution and marketing

NOTE Confidence: 0.7859833

00:10:50.875 --> 00:10:52.000 of tobacco products.

NOTE Confidence: 0.7859833

00:10:52.000 --> 00:10:54.265 Now I have underlying manufacturer
NOTE Confidence: 0.7859833

00:10:54.265 --> 00:10:56.961 here because that is what was
NOTE Confidence: 0.7859833

00:10:56.961 --> 00:10:59.404 really a key feature of this act.
NOTE Confidence: 0.7859833

00:10:59.410 --> 00:11:00.702 The distribution and marketing
NOTE Confidence: 0.7859833

00:11:00.702 --> 00:11:02.317 was something that was already
NOTE Confidence: 0.7859833

00:11:02.317 --> 00:11:03.999 being controlled by various laws,
NOTE Confidence: 0.7859833

00:11:04.000 --> 00:11:06.544 but the FDA never had any control over
NOTE Confidence: 0.7859833

00:11:06.544 --> 00:11:08.588 what actually went into a cigarette,
NOTE Confidence: 0.7859833

00:11:08.590 --> 00:11:10.558 and this is since 2009 they
NOTE Confidence: 0.7859833

00:11:10.558 --> 00:11:11.870 have had that authority.
NOTE Confidence: 0.7859833

00:11:11.870 --> 00:11:13.838 That's when they got this authority.
NOTE Confidence: 0.7859833

00:11:13.840 --> 00:11:16.339 They realized that they had very little
NOTE Confidence: 0.7859833

00:11:16.339 --> 00:11:18.757 signs to support how to do this work.
NOTE Confidence: 0.7859833

00:11:18.760 --> 00:11:20.728 Like how do we regulate it?
NOTE Confidence: 0.7859833

00:11:20.730 --> 00:11:22.698 What level of nicotine is safe?
NOTE Confidence: 0.7859833

00:11:22.700 --> 00:11:24.989 What level of what pH is safe?

NOTE Confidence: 0.7859833

00:11:24.990 --> 00:11:25.318 What?

NOTE Confidence: 0.7859833

00:11:25.318 --> 00:11:27.942 How can we make the product less addictive?

NOTE Confidence: 0.7859833

00:11:27.950 --> 00:11:29.660 So on and so forth?

NOTE Confidence: 0.7859833

00:11:29.660 --> 00:11:31.748 So many questions that they had.

NOTE Confidence: 0.7859833

00:11:31.750 --> 00:11:34.526 They did not know how to do it,

NOTE Confidence: 0.7859833

00:11:34.530 --> 00:11:36.962 so they decided to come up with a

NOTE Confidence: 0.7859833

00:11:36.962 --> 00:11:39.190 comprehensive plan for how they would

NOTE Confidence: 0.7859833

00:11:39.190 --> 00:11:41.140 approach tobacco and nicotine regulation.

NOTE Confidence: 0.7859833

00:11:41.140 --> 00:11:44.272 And some of these are listed on the slide.

NOTE Confidence: 0.7859833

00:11:44.280 --> 00:11:46.015 They really wanted to have

NOTE Confidence: 0.7859833

00:11:46.015 --> 00:11:47.403 regulatory policies on addiction,

NOTE Confidence: 0.7859833

00:11:47.410 --> 00:11:49.090 appeal and sensation and assigned

NOTE Confidence: 0.7859833

00:11:49.090 --> 00:11:51.189 space review of all tobacco products

NOTE Confidence: 0.7859833

00:11:51.189 --> 00:11:53.319 and a youth tobacco prevention plan.

NOTE Confidence: 0.7859833

00:11:53.320 --> 00:11:55.414 These are the three key features

NOTE Confidence: 0.7859833

00:11:55.414 --> 00:11:57.548 of this comprehensive plan that the
NOTE Confidence: 0.7859833

00:11:57.548 --> 00:11:59.238 FDA has and from investigators.
NOTE Confidence: 0.7859833

00:11:59.240 --> 00:12:00.700 What they really want.
NOTE Confidence: 0.7859833

00:12:00.700 --> 00:12:03.530 You know, was how do we implement this?
NOTE Confidence: 0.7859833

00:12:03.530 --> 00:12:05.898 How do we go about doing this so
NOTE Confidence: 0.7859833

00:12:05.898 --> 00:12:07.637 they look for and occasionally
NOTE Confidence: 0.7859833

00:12:07.637 --> 00:12:10.605 they will come out and tell us we
NOTE Confidence: 0.7859833

00:12:10.605 --> 00:12:12.885 are looking for evidence on this
NOTE Confidence: 0.7859833

00:12:12.885 --> 00:12:14.025 or this particular
NOTE Confidence: 0.84032905

00:12:14.030 --> 00:12:16.174 issue and we as a tobacco center are
NOTE Confidence: 0.84032905

00:12:16.174 --> 00:12:18.667 will will put our efforts into creating
NOTE Confidence: 0.84032905

00:12:18.667 --> 00:12:20.562 that scientific evidence to support
NOTE Confidence: 0.84032905

00:12:20.622 --> 00:12:22.777 whatever legal course they're taking.
NOTE Confidence: 0.84032905

00:12:22.780 --> 00:12:25.420 And some of the things that they highlighted
NOTE Confidence: 0.84032905

00:12:25.420 --> 00:12:27.677 in what they were interested in,
NOTE Confidence: 0.84032905

00:12:27.680 --> 00:12:29.104 was it dramatical product,

NOTE Confidence: 0.84032905

00:12:29.104 --> 00:12:30.528 standard for nicotine levels

NOTE Confidence: 0.84032905

00:12:30.528 --> 00:12:32.009 in combustible cigarettes so?

NOTE Confidence: 0.84032905

00:12:32.010 --> 00:12:34.710 The question they had is it can be lower

NOTE Confidence: 0.84032905

00:12:34.710 --> 00:12:37.340 the levels of nicotine in cigarettes,

NOTE Confidence: 0.84032905

00:12:37.340 --> 00:12:38.925 straight minimal or non addictive

NOTE Confidence: 0.84032905

00:12:38.925 --> 00:12:40.939 level and created a product nicotine

NOTE Confidence: 0.84032905

00:12:40.939 --> 00:12:42.784 standard which would decrease the

NOTE Confidence: 0.84032905

00:12:42.784 --> 00:12:44.790 addictive potential of these products.

NOTE Confidence: 0.84032905

00:12:44.790 --> 00:12:46.890 Another issue that they were very

NOTE Confidence: 0.84032905

00:12:46.890 --> 00:12:49.151 interested in was the regulation of

NOTE Confidence: 0.84032905

00:12:49.151 --> 00:12:51.521 flavors in tobacco products and they

NOTE Confidence: 0.84032905

00:12:51.521 --> 00:12:53.909 continue to this day try to figure

NOTE Confidence: 0.84032905

00:12:53.909 --> 00:12:55.802 out how to regulate these product.

NOTE Confidence: 0.84032905

00:12:55.802 --> 00:12:58.336 So what I'm going to go through

NOTE Confidence: 0.84032905

00:12:58.336 --> 00:13:00.876 over the next few slides is tell

NOTE Confidence: 0.84032905

00:13:00.876 --> 00:13:02.611 you a little bit about.
NOTE Confidence: 0.84032905

00:13:02.620 --> 00:13:05.788 What's going on in each of these areas?
NOTE Confidence: 0.84032905

00:13:05.790 --> 00:13:08.558 And then also tell you as about E
NOTE Confidence: 0.84032905

00:13:08.558 --> 00:13:10.857 cigarettes and what the public health
NOTE Confidence: 0.84032905

00:13:10.857 --> 00:13:13.694 debate around this is and what scientific
NOTE Confidence: 0.84032905

00:13:13.694 --> 00:13:16.478 evidence we have for this product.
NOTE Confidence: 0.84032905

00:13:16.480 --> 00:13:17.270 So anyway,
NOTE Confidence: 0.84032905

00:13:17.270 --> 00:13:19.245 in order to do this,
NOTE Confidence: 0.84032905

00:13:19.250 --> 00:13:20.798 generate all the scientific
NOTE Confidence: 0.84032905

00:13:20.798 --> 00:13:22.733 evidence the FT established tobacco
NOTE Confidence: 0.84032905

00:13:22.733 --> 00:13:24.400 Center of regulatory science,
NOTE Confidence: 0.84032905

00:13:24.400 --> 00:13:27.955 and that's what you see on this slide here.
NOTE Confidence: 0.84032905

00:13:27.960 --> 00:13:30.336 These are. There are nine centers.
NOTE Confidence: 0.84032905

00:13:30.340 --> 00:13:32.830 This is actually the second iteration.
NOTE Confidence: 0.84032905

00:13:32.830 --> 00:13:34.154 In the first situation,
NOTE Confidence: 0.84032905

00:13:34.154 --> 00:13:35.478 there were 14 centers,

NOTE Confidence: 0.84032905

00:13:35.480 --> 00:13:37.532 and then nine were renewed for

NOTE Confidence: 0.84032905

00:13:37.532 --> 00:13:39.537 another five years and we were

NOTE Confidence: 0.84032905

00:13:39.537 --> 00:13:41.525 fortunate to be one of the ones

NOTE Confidence: 0.84032905

00:13:41.525 --> 00:13:43.746 that was ripped that were renewed.

NOTE Confidence: 0.84032905

00:13:43.750 --> 00:13:46.342 And this is this shows you where the

NOTE Confidence: 0.84032905

00:13:46.342 --> 00:13:49.182 nine centers are in the US as far as the

NOTE Confidence: 0.84032905

00:13:49.182 --> 00:13:51.699 year Tobacco Center of Regulatory Science,

NOTE Confidence: 0.84032905

00:13:51.700 --> 00:13:53.618 our goal is to really examine how

NOTE Confidence: 0.84032905

00:13:53.618 --> 00:13:54.913 the constituents and characteristics

NOTE Confidence: 0.84032905

00:13:54.913 --> 00:13:56.988 of tobacco products alter appeal.

NOTE Confidence: 0.84032905

00:13:56.990 --> 00:13:58.314 Addictive potential use behaviors

NOTE Confidence: 0.84032905

00:13:58.314 --> 00:13:59.969 and toxicity of these products.

NOTE Confidence: 0.84032905

00:13:59.970 --> 00:14:02.840 So really generate the science to support.

NOTE Confidence: 0.84032905

00:14:02.840 --> 00:14:04.940 If you're religious.

NOTE Confidence: 0.84032905

00:14:04.940 --> 00:14:06.686 This is a very busy slide,

NOTE Confidence: 0.84032905

00:14:06.690 --> 00:14:08.145 but this is Anna probably

NOTE Confidence: 0.84032905

00:14:08.145 --> 00:14:09.600 missing a few people here,

NOTE Confidence: 0.84032905

00:14:09.600 --> 00:14:10.449 but there are.

NOTE Confidence: 0.84032905

00:14:10.449 --> 00:14:11.864 This is everyone who's involved

NOTE Confidence: 0.84032905

00:14:11.864 --> 00:14:13.668 in our tobacco center so far,

NOTE Confidence: 0.84032905

00:14:13.670 --> 00:14:15.884 and they have all made amazing

NOTE Confidence: 0.84032905

00:14:15.884 --> 00:14:17.977 contributions to the field so far

NOTE Confidence: 0.84032905

00:14:17.977 --> 00:14:20.153 and I will be showing you some data

NOTE Confidence: 0.84032905

00:14:20.223 --> 00:14:22.168 from any of these individuals.

NOTE Confidence: 0.84032905

00:14:22.170 --> 00:14:24.948 Throughout my talk.

NOTE Confidence: 0.84032905

00:14:24.950 --> 00:14:27.326 So the first issue is that of flavors.

NOTE Confidence: 0.80367464

00:14:30.610 --> 00:14:32.482 For those of you who have

NOTE Confidence: 0.80367464

00:14:32.482 --> 00:14:34.820 smoked or use any black product,

NOTE Confidence: 0.80367464

00:14:34.820 --> 00:14:37.368 you know that flavors exist in almost

NOTE Confidence: 0.80367464

00:14:37.368 --> 00:14:39.389 every tobacco product on the market.

NOTE Confidence: 0.80367464

00:14:39.390 --> 00:14:41.496 You see here, Flavors in their

NOTE Confidence: 0.80367464

00:14:41.496 --> 00:14:42.900 flavors and in cigarettes.

NOTE Confidence: 0.80367464

00:14:42.900 --> 00:14:45.462 There are flavors in smokeless tobacco

NOTE Confidence: 0.80367464

00:14:45.462 --> 00:14:47.810 in cigars cigarillos which you see

NOTE Confidence: 0.80367464

00:14:47.810 --> 00:14:50.074 on the left hand side here and then

NOTE Confidence: 0.80367464

00:14:50.139 --> 00:14:52.442 also of course now in E cigarettes

NOTE Confidence: 0.80367464

00:14:52.442 --> 00:14:54.080 which have over 15,000 flavors.

NOTE Confidence: 0.80367464

00:14:54.080 --> 00:14:55.705 So flavors are an important

NOTE Confidence: 0.80367464

00:14:55.705 --> 00:14:57.640 component of most tobacco products,

NOTE Confidence: 0.80367464

00:14:57.640 --> 00:14:59.480 and the thought is that.

NOTE Confidence: 0.80367464

00:14:59.480 --> 00:15:02.469 Flavors in some way make the product

NOTE Confidence: 0.80367464

00:15:02.469 --> 00:15:05.150 more palatable and more easy to use,

NOTE Confidence: 0.80367464

00:15:05.150 --> 00:15:06.920 so the inclusion of flavors is

NOTE Confidence: 0.80367464

00:15:06.920 --> 00:15:09.230 not by accident or something which

NOTE Confidence: 0.80367464

00:15:09.230 --> 00:15:10.832 Michael industry purposefully

NOTE Confidence: 0.80367464

00:15:10.832 --> 00:15:12.434 introduced into products.

NOTE Confidence: 0.80367464

00:15:12.440 --> 00:15:14.060 Now flavored tobacco products
NOTE Confidence: 0.80367464

00:15:14.060 --> 00:15:15.680 are also very important,
NOTE Confidence: 0.80367464

00:15:15.680 --> 00:15:18.551 as you can see here on this is the
NOTE Confidence: 0.80367464

00:15:18.551 --> 00:15:20.880 proportion of current tobacco product
NOTE Confidence: 0.80367464

00:15:20.880 --> 00:15:23.778 users who report using flavored products,
NOTE Confidence: 0.80367464

00:15:23.780 --> 00:15:26.286 and they seem to be very important
NOTE Confidence: 0.80367464

00:15:26.286 --> 00:15:28.240 from an initiation perspective.
NOTE Confidence: 0.80367464

00:15:28.240 --> 00:15:31.250 There people were starting use of these.
NOTE Confidence: 0.80367464

00:15:31.250 --> 00:15:33.588 Products really need the flavors to help
NOTE Confidence: 0.80367464

00:15:33.588 --> 00:15:35.879 them get through the initial irritant.
NOTE Confidence: 0.80367464

00:15:35.880 --> 00:15:38.616 Effects of tobacco are that tobacco
NOTE Confidence: 0.80367464

00:15:38.616 --> 00:15:41.040 nicotine produces in your throat.
NOTE Confidence: 0.80367464

00:15:41.040 --> 00:15:44.178 They also seem to be important
NOTE Confidence: 0.80367464

00:15:44.178 --> 00:15:47.026 for continuing the diction and
NOTE Confidence: 0.80367464

00:15:47.026 --> 00:15:49.670 preventing people from quitting.
NOTE Confidence: 0.80367464

00:15:49.670 --> 00:15:50.037 Nine,

NOTE Confidence: 0.80367464

00:15:50.037 --> 00:15:52.973 2009 there was a statutory ban on all

NOTE Confidence: 0.80367464

00:15:52.973 --> 00:15:55.789 flavors and cigarettes other than mental.

NOTE Confidence: 0.80367464

00:15:55.790 --> 00:15:57.850 So cigarettes only combustible cigarettes

NOTE Confidence: 0.80367464

00:15:57.850 --> 00:16:00.280 have not had flavors since 2009,

NOTE Confidence: 0.80367464

00:16:00.280 --> 00:16:03.095 but menthol is still existed

NOTE Confidence: 0.80367464

00:16:03.095 --> 00:16:04.784 in these products.

NOTE Confidence: 0.80367464

00:16:04.790 --> 00:16:06.806 There has been a lot of moves

NOTE Confidence: 0.80367464

00:16:06.806 --> 00:16:08.742 along with reports created by the

NOTE Confidence: 0.80367464

00:16:08.742 --> 00:16:10.422 safety community asking the FDA

NOTE Confidence: 0.80367464

00:16:10.422 --> 00:16:12.538 to remove mental from cigarettes.

NOTE Confidence: 0.80367464

00:16:12.540 --> 00:16:13.212 For example,

NOTE Confidence: 0.80367464

00:16:13.212 --> 00:16:14.556 the FDS tobacco product

NOTE Confidence: 0.80367464

00:16:14.556 --> 00:16:15.564 Scientific advisory committee.

NOTE Confidence: 0.80367464

00:16:15.570 --> 00:16:18.266 This was before I served on the committee.

NOTE Confidence: 0.80367464

00:16:18.270 --> 00:16:20.400 They wrote a report and recommended

NOTE Confidence: 0.80367464

00:16:20.400 --> 00:16:22.643 that removal of menthol from the
NOTE Confidence: 0.80367464

00:16:22.643 --> 00:16:24.538 marketplace would benefit public health
NOTE Confidence: 0.80367464

00:16:24.538 --> 00:16:26.797 in the United States and they said
NOTE Confidence: 0.80367464

00:16:26.797 --> 00:16:29.052 this based on a lot of evidence which
NOTE Confidence: 0.80367464

00:16:29.052 --> 00:16:31.404 essentially I have tried to summarize here,
NOTE Confidence: 0.80367464

00:16:31.410 --> 00:16:33.734 which showed that the presence of menthol
NOTE Confidence: 0.80367464

00:16:33.734 --> 00:16:35.280 cigarettes and associated marketing.
NOTE Confidence: 0.80367464

00:16:35.280 --> 00:16:36.044 Increased experimentation,
NOTE Confidence: 0.80367464

00:16:36.044 --> 00:16:36.808 regular smoking,
NOTE Confidence: 0.80367464

00:16:36.808 --> 00:16:39.100 especially among youth and African Americans,
NOTE Confidence: 0.80367464

00:16:39.100 --> 00:16:40.930 that it increased addiction among
NOTE Confidence: 0.80367464

00:16:40.930 --> 00:16:43.580 young people who smoke and the to
NOTE Confidence: 0.80367464

00:16:43.580 --> 00:16:45.470 decrease the chances of smoking
NOTE Confidence: 0.80367464

00:16:45.470 --> 00:16:47.890 cessation among African Americans who smoke.
NOTE Confidence: 0.80367464

00:16:47.890 --> 00:16:48.271 Now,
NOTE Confidence: 0.80367464

00:16:48.271 --> 00:16:50.557 why am I specifically talking about

NOTE Confidence: 0.80367464

00:16:50.557 --> 00:16:51.319 African Americans?

NOTE Confidence: 0.80367464

00:16:51.320 --> 00:16:53.931 It is pretty well known that the

NOTE Confidence: 0.80367464

00:16:53.931 --> 00:16:55.937 tobacco industry has targeted different

NOTE Confidence: 0.80367464

00:16:55.937 --> 00:16:59.201 populations for a very long time and in

NOTE Confidence: 0.80367464

00:16:59.275 --> 00:17:02.019 the US there there have been very slow.

NOTE Confidence: 0.80367464

00:17:02.020 --> 00:17:04.035 It's been very specific targeting

NOTE Confidence: 0.80367464

00:17:04.035 --> 00:17:05.647 of specific populations and.

NOTE Confidence: 0.80367464

00:17:05.650 --> 00:17:07.170 Two populations that stand out

NOTE Confidence: 0.80367464

00:17:07.170 --> 00:17:09.037 our youth because they knew that

NOTE Confidence: 0.80367464

00:17:09.037 --> 00:17:10.747 they could get them hooked young.

NOTE Confidence: 0.80367464

00:17:10.750 --> 00:17:12.418 Then they would stay using their

NOTE Confidence: 0.80367464

00:17:12.418 --> 00:17:14.600 products for a much longer period of

NOTE Confidence: 0.80367464

00:17:14.600 --> 00:17:16.622 time and after the African American

NOTE Confidence: 0.80367464

00:17:16.622 --> 00:17:18.110 population there have been very

NOTE Confidence: 0.80367464

00:17:18.110 --> 00:17:20.197 specific ads like what you see here.

NOTE Confidence: 0.80367464

00:17:20.197 --> 00:17:22.879 That have been used to target
NOTE Confidence: 0.80367464

00:17:22.879 --> 00:17:23.773 this population,
NOTE Confidence: 0.80367464

00:17:23.780 --> 00:17:26.246 and if you look at the left hand side
NOTE Confidence: 0.80367464

00:17:26.246 --> 00:17:28.644 figure it shows you if you consider
NOTE Confidence: 0.80367464

00:17:28.644 --> 00:17:30.877 just menthol cigarette use it shows
NOTE Confidence: 0.80367464

00:17:30.877 --> 00:17:32.872 you menthol cigarette use among
NOTE Confidence: 0.80367464

00:17:32.872 --> 00:17:35.108 different subgroups and you can see
NOTE Confidence: 0.80367464

00:17:35.108 --> 00:17:37.530 that really the rates of use amongst
NOTE Confidence: 0.80367464

00:17:37.603 --> 00:17:39.906 Blacks is the highest in the US.
NOTE Confidence: 0.8308736

00:17:39.910 --> 00:17:42.080 This is evidence of very nice drive
NOTE Confidence: 0.8308736

00:17:42.080 --> 00:17:44.358 put together by the truth initiative,
NOTE Confidence: 0.8308736

00:17:44.360 --> 00:17:46.355 so this is a very important issue
NOTE Confidence: 0.8308736

00:17:46.355 --> 00:17:48.133 because you have the industry
NOTE Confidence: 0.8308736

00:17:48.133 --> 00:17:49.845 targeting a particular subgroup.
NOTE Confidence: 0.8308736

00:17:49.850 --> 00:17:51.700 How do we counteract this?
NOTE Confidence: 0.8308736

00:17:51.700 --> 00:17:55.020 Issue and how do we get rid of these mental

NOTE Confidence: 0.8308736

00:17:55.104 --> 00:17:58.240 cigarettes so we don't get continue to

NOTE Confidence: 0.8308736

00:17:58.240 --> 00:18:01.060 get people addicted to these products?

NOTE Confidence: 0.8308736

00:18:01.060 --> 00:18:03.346 Now our center here retail has

NOTE Confidence: 0.8308736

00:18:03.346 --> 00:18:06.348 done a lot of work to support,

NOTE Confidence: 0.8308736

00:18:06.350 --> 00:18:07.978 provide more supports the

NOTE Confidence: 0.8308736

00:18:07.978 --> 00:18:09.606 support of scientific evidence.

NOTE Confidence: 0.8308736

00:18:09.610 --> 00:18:12.305 We have really focused on trying to

NOTE Confidence: 0.8308736

00:18:12.305 --> 00:18:14.803 understand how does mentored really change

NOTE Confidence: 0.8308736

00:18:14.803 --> 00:18:17.750 or make these products easier to use.

NOTE Confidence: 0.8308736

00:18:17.750 --> 00:18:19.780 There wasn't so much evidence

NOTE Confidence: 0.8308736

00:18:19.780 --> 00:18:20.998 earlier on this.

NOTE Confidence: 0.8308736

00:18:21.000 --> 00:18:21.700 This is.

NOTE Confidence: 0.8308736

00:18:21.700 --> 00:18:23.450 Animal work generated by Spaniard

NOTE Confidence: 0.8308736

00:18:23.450 --> 00:18:25.401 and his group where they

NOTE Confidence: 0.8308736

00:18:25.401 --> 00:18:27.069 looked at tobacco cigarettes.

NOTE Confidence: 0.8308736

00:18:27.070 --> 00:18:28.686 Actually in animal models.
NOTE Confidence: 0.8308736

00:18:28.686 --> 00:18:31.110 Looking at use of tobacco cigarettes
NOTE Confidence: 0.8308736

00:18:31.181 --> 00:18:33.749 and then also use of E cigarette vapors.
NOTE Confidence: 0.8308736

00:18:33.750 --> 00:18:36.718 You're welcome to that a little bit later,
NOTE Confidence: 0.8308736

00:18:36.720 --> 00:18:39.816 but just focus on the left hand side
NOTE Confidence: 0.8308736

00:18:39.816 --> 00:18:42.660 graph what you can see here is Ben.
NOTE Confidence: 0.8308736

00:18:42.660 --> 00:18:44.595 Animals are given cigarettes that
NOTE Confidence: 0.8308736

00:18:44.595 --> 00:18:46.143 contain just regular cigarettes
NOTE Confidence: 0.8308736

00:18:46.143 --> 00:18:47.971 without menthol versus when they
NOTE Confidence: 0.8308736

00:18:47.971 --> 00:18:49.706 contain in their given cigarettes.
NOTE Confidence: 0.8308736

00:18:49.710 --> 00:18:53.016 With menthol there is a definite.
NOTE Confidence: 0.8308736

00:18:53.020 --> 00:18:55.211 Change in the amount of time that
NOTE Confidence: 0.8308736

00:18:55.211 --> 00:18:57.310 they hold their breath or breath.
NOTE Confidence: 0.8308736

00:18:57.310 --> 00:18:59.020 Holding is basically called breaking
NOTE Confidence: 0.8308736

00:18:59.020 --> 00:19:01.598 or how long the animal is the animal.
NOTE Confidence: 0.8308736

00:19:01.600 --> 00:19:02.668 Find something irritating.

NOTE Confidence: 0.8308736

00:19:02.668 --> 00:19:05.532 They hold their breath so when you when

NOTE Confidence: 0.8308736

00:19:05.532 --> 00:19:07.660 you give them just regular smoke they

NOTE Confidence: 0.8308736

00:19:07.660 --> 00:19:09.849 they hold their breath a lot longer.

NOTE Confidence: 0.8308736

00:19:09.850 --> 00:19:11.734 But then when you give them

NOTE Confidence: 0.8308736

00:19:11.734 --> 00:19:13.480 smoke that also contains mental.

NOTE Confidence: 0.8308736

00:19:13.480 --> 00:19:15.406 So this basically tells you that

NOTE Confidence: 0.8308736

00:19:15.406 --> 00:19:16.690 menthol is definitely altering

NOTE Confidence: 0.8308736

00:19:16.742 --> 00:19:18.078 the irritating properties of

NOTE Confidence: 0.8308736

00:19:18.078 --> 00:19:19.748 cigarette smoke in in animals.

NOTE Confidence: 0.8308736

00:19:19.750 --> 00:19:21.574 And then there was this very

NOTE Confidence: 0.8308736

00:19:21.574 --> 00:19:23.460 elegant study done by Christian.

NOTE Confidence: 0.8308736

00:19:23.460 --> 00:19:26.425 Old in our center where she used

NOTE Confidence: 0.8308736

00:19:26.425 --> 00:19:28.550 human experimental model to examine.

NOTE Confidence: 0.8308736

00:19:28.550 --> 00:19:31.189 If you gave people who were mental

NOTE Confidence: 0.8308736

00:19:31.189 --> 00:19:33.818 smokers and told them they could

NOTE Confidence: 0.8308736

00:19:33.818 --> 00:19:36.178 only use non ventilated cigarettes.

NOTE Confidence: 0.8308736

00:19:36.180 --> 00:19:38.300 I'm not presenting the entire

NOTE Confidence: 0.8308736

00:19:38.300 --> 00:19:39.996 design to you here,

NOTE Confidence: 0.8308736

00:19:40.000 --> 00:19:42.110 but essentially she recruited menthol

NOTE Confidence: 0.8308736

00:19:42.110 --> 00:19:45.080 smokers and gave them only non menthol.

NOTE Confidence: 0.8308736

00:19:45.080 --> 00:19:48.048 Same brand non menthol cigarettes to use.

NOTE Confidence: 0.8308736

00:19:48.050 --> 00:19:50.720 And then she examined what happened

NOTE Confidence: 0.8308736

00:19:50.720 --> 00:19:53.374 to their use behaviors and what

NOTE Confidence: 0.8308736

00:19:53.374 --> 00:19:55.349 this clearly shows is when.

NOTE Confidence: 0.8308736

00:19:55.350 --> 00:19:57.612 They are given the non menthol

NOTE Confidence: 0.8308736

00:19:57.612 --> 00:19:59.120 cigarettes their cigarette smoking

NOTE Confidence: 0.8308736

00:19:59.183 --> 00:20:01.169 actually goes down and so did

NOTE Confidence: 0.8308736

00:20:01.169 --> 00:20:02.916 their dependence scores and they

NOTE Confidence: 0.8308736

00:20:02.916 --> 00:20:04.741 also expressed interest in study

NOTE Confidence: 0.8308736

00:20:04.741 --> 00:20:06.554 more interest in quitting smoking.

NOTE Confidence: 0.8308736

00:20:06.554 --> 00:20:08.962 So this data tells you that removing

NOTE Confidence: 0.8308736

00:20:08.962 --> 00:20:11.213 mental is definitely going to have

NOTE Confidence: 0.8308736

00:20:11.213 --> 00:20:13.088 an impact on menthol smokers,

NOTE Confidence: 0.8308736

00:20:13.090 --> 00:20:14.900 in that they're probably going

NOTE Confidence: 0.8308736

00:20:14.900 --> 00:20:16.348 to decrease their smoking.

NOTE Confidence: 0.8308736

00:20:16.350 --> 00:20:18.384 They they may also have decreased

NOTE Confidence: 0.8308736

00:20:18.384 --> 00:20:20.569 independence and may want to have

NOTE Confidence: 0.8308736

00:20:20.569 --> 00:20:22.494 increased interest in quitting smoking.

NOTE Confidence: 0.8308736

00:20:22.500 --> 00:20:25.396 So this again just drives home the point,

NOTE Confidence: 0.8308736

00:20:25.400 --> 00:20:28.158 how important the inclusion of menthol is.

NOTE Confidence: 0.8308736

00:20:28.160 --> 00:20:30.045 Instagram's in fact there have

NOTE Confidence: 0.8308736

00:20:30.045 --> 00:20:31.930 been some modeling studies that

NOTE Confidence: 0.8308736

00:20:31.991 --> 00:20:33.447 have actually been done.

NOTE Confidence: 0.8308736

00:20:33.450 --> 00:20:35.907 This is not work done in RT cores but

NOTE Confidence: 0.8308736

00:20:35.907 --> 00:20:38.827 by other T course that show that the

NOTE Confidence: 0.8308736

00:20:38.827 --> 00:20:40.964 prevalence of menthol cigarettes may

NOTE Confidence: 0.8308736

00:20:40.964 --> 00:20:43.832 actually have reduced the decline in
NOTE Confidence: 0.8308736

00:20:43.832 --> 00:20:45.936 cigarette problems over the years.
NOTE Confidence: 0.8308736

00:20:45.936 --> 00:20:48.610 And you see some numbers that they're
NOTE Confidence: 0.82550967

00:20:48.691 --> 00:20:51.218 citing here on the right hand side,
NOTE Confidence: 0.82550967

00:20:51.220 --> 00:20:54.236 they predict that that from 1980 to 2018,
NOTE Confidence: 0.82550967

00:20:54.240 --> 00:20:55.876 menthol cigarettes were responsible
NOTE Confidence: 0.82550967

00:20:55.876 --> 00:20:57.921 for reducing the decline in
NOTE Confidence: 0.82550967

00:20:57.921 --> 00:20:59.448 cigarette prevalence by 2.6%.
NOTE Confidence: 0.82550967

00:20:59.450 --> 00:21:03.365 And these are the number of extra smokers and
NOTE Confidence: 0.82550967

00:21:03.365 --> 00:21:07.066 lives years lost because of the continued
NOTE Confidence: 0.82550967

00:21:07.066 --> 00:21:10.468 presence of these products in the market.
NOTE Confidence: 0.82550967

00:21:10.470 --> 00:21:12.840 So based on all this evidence,
NOTE Confidence: 0.82550967

00:21:12.840 --> 00:21:14.815 a lot of countries have
NOTE Confidence: 0.82550967

00:21:14.815 --> 00:21:16.000 banned menthol already,
NOTE Confidence: 0.82550967

00:21:16.000 --> 00:21:20.368 and The Who has made a specific.
NOTE Confidence: 0.82550967

00:21:20.370 --> 00:21:22.974 Put out a statement stating that

NOTE Confidence: 0.82550967

00:21:22.974 --> 00:21:25.389 menthols should be banned by Paul.

NOTE Confidence: 0.82550967

00:21:25.390 --> 00:21:27.425 Cigarettes should be banned and

NOTE Confidence: 0.82550967

00:21:27.425 --> 00:21:29.964 the EU just banned the menthol

NOTE Confidence: 0.82550967

00:21:29.964 --> 00:21:32.484 cigarettes in just in May 2022.

NOTE Confidence: 0.82550967

00:21:32.490 --> 00:21:35.886 Now in the US the response

NOTE Confidence: 0.82550967

00:21:35.886 --> 00:21:38.770 has been much lower the.

NOTE Confidence: 0.82550967

00:21:38.770 --> 00:21:41.476 The in in in April 12,

NOTE Confidence: 0.82550967

00:21:41.480 --> 00:21:43.640 2013 because there was no

NOTE Confidence: 0.82550967

00:21:43.640 --> 00:21:46.440 action in this on this issue,

NOTE Confidence: 0.82550967

00:21:46.440 --> 00:21:49.152 there was a citizen's petition that

NOTE Confidence: 0.82550967

00:21:49.152 --> 00:21:52.808 was filed asking the US FDA to stop

NOTE Confidence: 0.82550967

00:21:52.808 --> 00:21:55.008 and remove menthol from cigarettes.

NOTE Confidence: 0.82550967

00:21:55.010 --> 00:21:58.655 This was put together by a lot of very

NOTE Confidence: 0.82550967

00:21:58.655 --> 00:22:01.770 prominent health organizations in the US,

NOTE Confidence: 0.82550967

00:22:01.770 --> 00:22:04.030 including the American Medical Association,

NOTE Confidence: 0.82550967

00:22:04.030 --> 00:22:06.560 American Cancer Society, and the
NOTE Confidence: 0.82550967

00:22:06.560 --> 00:22:09.090 Variety of American Heart Association.
NOTE Confidence: 0.82550967

00:22:09.090 --> 00:22:11.040 But there was no movement and
NOTE Confidence: 0.82550967

00:22:11.040 --> 00:22:13.109 based on that and June 17th,
NOTE Confidence: 0.82550967

00:22:13.110 --> 00:22:13.445 2020,
NOTE Confidence: 0.82550967

00:22:13.445 --> 00:22:15.790 the FDA was sued over menthol cigarettes.
NOTE Confidence: 0.82550967

00:22:15.790 --> 00:22:19.140 This was a suit put forward by the I'm sorry.
NOTE Confidence: 0.82550967

00:22:19.140 --> 00:22:20.814 I don't mean glasses here because
NOTE Confidence: 0.82550967

00:22:20.814 --> 00:22:23.586 I have a very small screen by the
NOTE Confidence: 0.82550967

00:22:23.586 --> 00:22:25.178 American Tobacco Control Leadership
NOTE Confidence: 0.82550967

00:22:25.178 --> 00:22:27.613 Council and the action on Smoking and
NOTE Confidence: 0.82550967

00:22:27.613 --> 00:22:29.832 Health and they were joined in this
NOTE Confidence: 0.82550967

00:22:29.832 --> 00:22:31.758 by a variety of other organizations
NOTE Confidence: 0.82550967

00:22:31.758 --> 00:22:33.973 and they sued the FDA over their
NOTE Confidence: 0.82550967

00:22:33.973 --> 00:22:36.230 lack of action on menthol cigarettes.
NOTE Confidence: 0.82550967

00:22:36.230 --> 00:22:38.869 And the FDA actually had to provide

NOTE Confidence: 0.82550967

00:22:38.869 --> 00:22:39.623 a comment.

NOTE Confidence: 0.82550967

00:22:39.630 --> 00:22:42.350 Response to the suit by April 30th or

NOTE Confidence: 0.82550967

00:22:42.350 --> 00:22:44.730 April 29th, I believe of this year,

NOTE Confidence: 0.82550967

00:22:44.730 --> 00:22:47.166 which is what they did so the

NOTE Confidence: 0.82550967

00:22:47.166 --> 00:22:48.810 Biden administration as you saw,

NOTE Confidence: 0.82550967

00:22:48.810 --> 00:22:50.622 put out a statement stating that

NOTE Confidence: 0.82550967

00:22:50.622 --> 00:22:52.310 they actually plan to remove

NOTE Confidence: 0.82550967

00:22:52.310 --> 00:22:53.570 mental from cigarettes.

NOTE Confidence: 0.82550967

00:22:53.570 --> 00:22:55.270 But I'll tell you this,

NOTE Confidence: 0.82550967

00:22:55.270 --> 00:22:58.330 it's not that the story is not done here.

NOTE Confidence: 0.82550967

00:22:58.330 --> 00:23:00.292 There's more to come because they're

NOTE Confidence: 0.82550967

00:23:00.292 --> 00:23:02.707 still open to the issue of legal

NOTE Confidence: 0.82550967

00:23:02.707 --> 00:23:04.447 action by the tobacco industry.

NOTE Confidence: 0.82550967

00:23:04.450 --> 00:23:06.150 The tobacco industry can still

NOTE Confidence: 0.82550967

00:23:06.150 --> 00:23:07.850 Sue them for this action,

NOTE Confidence: 0.82550967

00:23:07.850 --> 00:23:10.314 and there's a lot of concern about.
NOTE Confidence: 0.82550967

00:23:10.320 --> 00:23:13.850 A loss of revenue at the at the local level.
NOTE Confidence: 0.82550967

00:23:13.850 --> 00:23:15.764 Mental cigarettes account for a huge
NOTE Confidence: 0.82550967

00:23:15.764 --> 00:23:18.089 amount of sales in many communities.
NOTE Confidence: 0.82550967

00:23:18.090 --> 00:23:20.554 And there's also concern about black market.
NOTE Confidence: 0.82550967

00:23:20.560 --> 00:23:22.528 And while a scientist Sweet thinks
NOTE Confidence: 0.82550967

00:23:22.528 --> 00:23:24.789 mentor should be removed from cigarettes,
NOTE Confidence: 0.82550967

00:23:24.790 --> 00:23:27.350 one example of how this is these kind
NOTE Confidence: 0.82550967

00:23:27.350 --> 00:23:29.954 of concerns are coming into place is
NOTE Confidence: 0.82550967

00:23:29.954 --> 00:23:31.849 showing up in Connecticut itself.
NOTE Confidence: 0.82550967

00:23:31.850 --> 00:23:34.184 Connecticut actually had a law they
NOTE Confidence: 0.82550967

00:23:34.184 --> 00:23:36.142 were considering that they were
NOTE Confidence: 0.82550967

00:23:36.142 --> 00:23:38.170 proposing to ban menthol cigarettes and
NOTE Confidence: 0.82550967

00:23:38.170 --> 00:23:40.946 and a lot of flavors in E cigarettes.
NOTE Confidence: 0.82550967

00:23:40.950 --> 00:23:43.323 And we just saw a different version
NOTE Confidence: 0.82550967

00:23:43.323 --> 00:23:44.860 of the law there.

NOTE Confidence: 0.82550967
00:23:44.860 --> 00:23:46.356 The menthol cigarette language
NOTE Confidence: 0.82550967
00:23:46.356 --> 00:23:48.931 is actually been put aside and I
NOTE Confidence: 0.82550967
00:23:48.931 --> 00:23:50.779 think this is based on the fact
NOTE Confidence: 0.82550967
00:23:50.779 --> 00:23:53.121 that when this was presented to
NOTE Confidence: 0.82550967
00:23:53.121 --> 00:23:54.435 the Connecticut legislature,
NOTE Confidence: 0.82550967
00:23:54.440 --> 00:23:56.911 the issue of loss of revenue was
NOTE Confidence: 0.82550967
00:23:56.911 --> 00:23:59.062 front and center and was proposed
NOTE Confidence: 0.82550967
00:23:59.062 --> 00:24:01.435 to be pretty high and that may
NOTE Confidence: 0.8499932
00:24:01.507 --> 00:24:03.667 have raised a lot of concerns,
NOTE Confidence: 0.8499932
00:24:03.670 --> 00:24:06.106 but I would still say that removing
NOTE Confidence: 0.8499932
00:24:06.106 --> 00:24:07.930 mentor from cigarettes is probably,
NOTE Confidence: 0.8499932
00:24:07.930 --> 00:24:09.964 in my view a social justice
NOTE Confidence: 0.8499932
00:24:09.964 --> 00:24:11.900 issue and it should happen.
NOTE Confidence: 0.8499932
00:24:11.900 --> 00:24:13.360 And it should happen quickly.
NOTE Confidence: 0.8499932
00:24:13.360 --> 00:24:15.004 But you know there is more
NOTE Confidence: 0.8499932

00:24:15.004 --> 00:24:16.560 to come on this issue.
NOTE Confidence: 0.8174154

00:24:19.730 --> 00:24:21.254 So I've talked a lot about
NOTE Confidence: 0.8174154

00:24:21.254 --> 00:24:22.270 many flavors and cigarettes,
NOTE Confidence: 0.8174154

00:24:22.270 --> 00:24:24.052 but what about other tobacco products, right?
NOTE Confidence: 0.8174154

00:24:24.052 --> 00:24:25.886 So the cigarettes are not the only
NOTE Confidence: 0.8174154

00:24:25.886 --> 00:24:27.098 tobacco product in the market.
NOTE Confidence: 0.8174154

00:24:27.100 --> 00:24:28.522 There are a variety of others
NOTE Confidence: 0.8174154

00:24:28.522 --> 00:24:30.140 now as far as the others,
NOTE Confidence: 0.8174154

00:24:30.140 --> 00:24:31.670 the evidence is not so clear.
NOTE Confidence: 0.8174154

00:24:31.670 --> 00:24:34.130 And why is that?
NOTE Confidence: 0.8174154

00:24:34.130 --> 00:24:36.002 There is reason to be concerned
NOTE Confidence: 0.8174154

00:24:36.002 --> 00:24:38.438 about use of other about flavors and
NOTE Confidence: 0.8174154

00:24:38.438 --> 00:24:40.682 tobacco products because this is data
NOTE Confidence: 0.8174154

00:24:40.682 --> 00:24:42.998 from a study called the Path study,
NOTE Confidence: 0.8174154

00:24:43.000 --> 00:24:45.040 which the FDA and NIH grant,
NOTE Confidence: 0.8174154

00:24:45.040 --> 00:24:47.592 which is a large student study looking at

NOTE Confidence: 0.8174154

00:24:47.592 --> 00:24:50.158 tobacco use behaviors that started in 2013,

NOTE Confidence: 0.8174154

00:24:50.160 --> 00:24:52.672 and this paper shows you that one of

NOTE Confidence: 0.8174154

00:24:52.672 --> 00:24:54.997 the meeting reasons for non cigarette

NOTE Confidence: 0.8174154

00:24:54.997 --> 00:24:57.433 tobacco product to use amongst past

NOTE Confidence: 0.8174154

00:24:57.505 --> 00:24:59.521 30 day tobacco users in youth who

NOTE Confidence: 0.8174154

00:24:59.521 --> 00:25:02.484 were 12 to 17 year olds was I used

NOTE Confidence: 0.8174154

00:25:02.484 --> 00:25:04.540 the product because they come in.

NOTE Confidence: 0.8174154

00:25:04.540 --> 00:25:06.752 Flavors and this applies across the board

NOTE Confidence: 0.8174154

00:25:06.752 --> 00:25:08.729 for all different kinds of products,

NOTE Confidence: 0.8174154

00:25:08.730 --> 00:25:10.018 ranging from E cigarettes,

NOTE Confidence: 0.8174154

00:25:10.018 --> 00:25:10.669 cigars, hookahs,

NOTE Confidence: 0.8174154

00:25:10.669 --> 00:25:12.643 so these flavors are obviously a

NOTE Confidence: 0.8174154

00:25:12.643 --> 00:25:14.297 very important issue in attracting

NOTE Confidence: 0.8174154

00:25:14.297 --> 00:25:16.127 people to to use these products.

NOTE Confidence: 0.8174154

00:25:16.130 --> 00:25:18.794 Just giving an example of E cigarettes and

NOTE Confidence: 0.8174154

00:25:18.794 --> 00:25:21.610 I'm taking a little bit of a diversion here,
NOTE Confidence: 0.8174154

00:25:21.610 --> 00:25:23.941 but just focusing on that 'cause we've
NOTE Confidence: 0.8174154

00:25:23.941 --> 00:25:26.436 done a lot of work in this area.
NOTE Confidence: 0.8174154

00:25:26.440 --> 00:25:29.008 This is the flavors in E cigarettes count.
NOTE Confidence: 0.8174154

00:25:29.010 --> 00:25:30.924 There are over 15,000 flavors and
NOTE Confidence: 0.8174154

00:25:30.924 --> 00:25:32.898 they have all these very unusual
NOTE Confidence: 0.8174154

00:25:32.898 --> 00:25:34.488 names that you see here,
NOTE Confidence: 0.8174154

00:25:34.490 --> 00:25:34.811 like.
NOTE Confidence: 0.8174154

00:25:34.811 --> 00:25:36.737 Cupcake man an appletini and if
NOTE Confidence: 0.8174154

00:25:36.737 --> 00:25:38.779 they get even worse than that,
NOTE Confidence: 0.8174154

00:25:38.780 --> 00:25:40.747 Dragon's blood and so on and so
NOTE Confidence: 0.8174154

00:25:40.747 --> 00:25:42.870 forth that really bring you to using
NOTE Confidence: 0.8174154

00:25:42.870 --> 00:25:44.694 and wanting to use these products.
NOTE Confidence: 0.8174154

00:25:44.700 --> 00:25:46.410 This is data from Bonnie how
NOTE Confidence: 0.8174154

00:25:46.410 --> 00:25:48.249 confession and her group in Stamford,
NOTE Confidence: 0.8174154

00:25:48.250 --> 00:25:50.105 who showed that you truly believe that

NOTE Confidence: 0.8174154

00:25:50.105 --> 00:25:52.398 they are being targeted using these flavors,

NOTE Confidence: 0.8174154

00:25:52.400 --> 00:25:53.652 and these flavored products.

NOTE Confidence: 0.8174154

00:25:53.652 --> 00:25:55.855 They do not believe that older adults

NOTE Confidence: 0.8174154

00:25:55.855 --> 00:25:57.445 have any use for these products

NOTE Confidence: 0.8174154

00:25:57.445 --> 00:25:59.490 and you can see that very clearly

NOTE Confidence: 0.8174154

00:25:59.490 --> 00:26:01.272 in something like the cupcake man.

NOTE Confidence: 0.8174154

00:26:01.280 --> 00:26:02.770 They really believe that flavor

NOTE Confidence: 0.8174154

00:26:02.770 --> 00:26:04.530 which is called a cupcake man,

NOTE Confidence: 0.8174154

00:26:04.530 --> 00:26:06.366 is really targeted at younger age.

NOTE Confidence: 0.8174154

00:26:06.370 --> 00:26:08.410 Populations are perhaps even their age,

NOTE Confidence: 0.8174154

00:26:08.410 --> 00:26:10.110 but definitely not older populations.

NOTE Confidence: 0.8174154

00:26:10.110 --> 00:26:12.786 So you truly believe these flavors

NOTE Confidence: 0.8174154

00:26:12.786 --> 00:26:15.359 and these products are for them.

NOTE Confidence: 0.8174154

00:26:15.360 --> 00:26:18.643 This is some of our data collected

NOTE Confidence: 0.8174154

00:26:18.643 --> 00:26:21.231 in Connecticut which shows you

NOTE Confidence: 0.8174154

00:26:21.231 --> 00:26:22.869 the different flavors.
NOTE Confidence: 0.8174154

00:26:22.870 --> 00:26:24.570 And again here, this represents.
NOTE Confidence: 0.8174154

00:26:24.570 --> 00:26:26.936 As I said this over 15,000 flavors,
NOTE Confidence: 0.8174154

00:26:26.940 --> 00:26:28.974 maybe even more if you mix
NOTE Confidence: 0.8174154

00:26:28.974 --> 00:26:30.330 and match the flavors.
NOTE Confidence: 0.8174154

00:26:30.330 --> 00:26:32.250 And there are youth really love
NOTE Confidence: 0.8174154

00:26:32.250 --> 00:26:34.060 fruit flavors and candy flavors.
NOTE Confidence: 0.8174154

00:26:34.060 --> 00:26:36.088 Very few like the tobacco flavors.
NOTE Confidence: 0.8174154

00:26:36.090 --> 00:26:37.780 They actually become even smaller
NOTE Confidence: 0.8174154

00:26:37.780 --> 00:26:38.794 over the years,
NOTE Confidence: 0.8174154

00:26:38.800 --> 00:26:41.530 and they also like mint flavors and
NOTE Confidence: 0.8174154

00:26:41.530 --> 00:26:44.949 some of the other flavors listed here.
NOTE Confidence: 0.8174154

00:26:44.950 --> 00:26:45.260 Now,
NOTE Confidence: 0.8174154

00:26:45.260 --> 00:26:47.120 the experimental work that we have
NOTE Confidence: 0.8174154

00:26:47.120 --> 00:26:49.088 done in our center with Eliquis
NOTE Confidence: 0.8174154

00:26:49.088 --> 00:26:51.026 going back to the mental issues

NOTE Confidence: 0.8174154

00:26:51.026 --> 00:26:53.296 I was saying telling you earlier,

NOTE Confidence: 0.8174154

00:26:53.300 --> 00:26:55.322 has also shown that mental and

NOTE Confidence: 0.8174154

00:26:55.322 --> 00:26:56.333 illiquid significantly improves

NOTE Confidence: 0.8174154

00:26:56.333 --> 00:26:57.639 the taste of eliquids,

NOTE Confidence: 0.8174154

00:26:57.640 --> 00:26:59.752 so if you see the left hand side

NOTE Confidence: 0.8174154

00:26:59.752 --> 00:27:01.852 figure here even very low levels

NOTE Confidence: 0.8174154

00:27:01.852 --> 00:27:03.364 of menthol significantly improve

NOTE Confidence: 0.8174154

00:27:03.364 --> 00:27:05.920 the taste of eliquids and how much

NOTE Confidence: 0.8174154

00:27:05.920 --> 00:27:07.660 people like eliquids that they're

NOTE Confidence: 0.81623745

00:27:07.660 --> 00:27:10.044 vaping. And if you look at the right

NOTE Confidence: 0.81623745

00:27:10.044 --> 00:27:12.621 hand side panel here it shows you that

NOTE Confidence: 0.81623745

00:27:12.621 --> 00:27:15.259 there is actually an interaction between.

NOTE Confidence: 0.81623745

00:27:15.260 --> 00:27:17.390 The Mental Joes and nicotine dose.

NOTE Confidence: 0.81623745

00:27:17.390 --> 00:27:19.721 So if there's a high mental concentration

NOTE Confidence: 0.81623745

00:27:19.721 --> 00:27:22.856 which is very similar to what you see in

NOTE Confidence: 0.81623745

00:27:22.856 --> 00:27:24.850 commercial mental mental atede products,
NOTE Confidence: 0.81623745

00:27:24.850 --> 00:27:26.838 people are more likely to like the
NOTE Confidence: 0.81623745

00:27:26.838 --> 00:27:29.109 taste of high nicotine concentration.
NOTE Confidence: 0.81623745

00:27:29.110 --> 00:27:30.892 So essentially this is telling us
NOTE Confidence: 0.81623745

00:27:30.892 --> 00:27:32.895 that this meant or maybe interacting
NOTE Confidence: 0.81623745

00:27:32.895 --> 00:27:35.157 with nicotine to actually increase the
NOTE Confidence: 0.81623745

00:27:35.157 --> 00:27:37.628 appeal of the palatability of eliquids.
NOTE Confidence: 0.81623745

00:27:37.630 --> 00:27:39.965 And we're showing we're actually
NOTE Confidence: 0.81623745

00:27:39.965 --> 00:27:42.300 conducting similar tests like this
NOTE Confidence: 0.81623745

00:27:42.376 --> 00:27:44.470 in with other flavors as well.
NOTE Confidence: 0.81623745

00:27:44.470 --> 00:27:48.005 In the same study also showed that
NOTE Confidence: 0.81623745

00:27:48.005 --> 00:27:50.880 mental increased some of what we
NOTE Confidence: 0.81623745

00:27:50.880 --> 00:27:53.406 would consider in our field as.
NOTE Confidence: 0.81623745

00:27:53.410 --> 00:27:55.990 Issues being more important for addiction,
NOTE Confidence: 0.81623745

00:27:55.990 --> 00:27:58.438 so it increases you know liking
NOTE Confidence: 0.81623745

00:27:58.438 --> 00:28:01.047 wanting the cigarette and it also

NOTE Confidence: 0.81623745

00:28:01.047 --> 00:28:03.297 improves craving for the cigarettes.

NOTE Confidence: 0.81623745

00:28:03.300 --> 00:28:04.160 So again,

NOTE Confidence: 0.81623745

00:28:04.160 --> 00:28:07.600 say telling us that meant only be important,

NOTE Confidence: 0.81623745

00:28:07.600 --> 00:28:10.222 not just for the initial appetitive

NOTE Confidence: 0.81623745

00:28:10.222 --> 00:28:12.876 affects but also for how much

NOTE Confidence: 0.81623745

00:28:12.876 --> 00:28:15.336 people continue to like an crave.

NOTE Confidence: 0.81623745

00:28:15.340 --> 00:28:18.100 These cigarettes and how much is

NOTE Confidence: 0.81623745

00:28:18.100 --> 00:28:21.922 related to it may have an influence

NOTE Confidence: 0.81623745

00:28:21.922 --> 00:28:23.809 on predicted potential.

NOTE Confidence: 0.81623745

00:28:23.810 --> 00:28:24.224 However,

NOTE Confidence: 0.81623745

00:28:24.224 --> 00:28:27.536 this story is not so simple because again,

NOTE Confidence: 0.81623745

00:28:27.540 --> 00:28:30.347 work from RT course has shown that

NOTE Confidence: 0.81623745

00:28:30.347 --> 00:28:32.426 flavors may also be important

NOTE Confidence: 0.81623745

00:28:32.426 --> 00:28:35.184 for small for those who smoke who

NOTE Confidence: 0.81623745

00:28:35.184 --> 00:28:37.469 are trying to quit smoking,

NOTE Confidence: 0.81623745

00:28:37.470 --> 00:28:40.004 and this is data that was examined
NOTE Confidence: 0.81623745

00:28:40.004 --> 00:28:42.561 using the path launch general data
NOTE Confidence: 0.81623745

00:28:42.561 --> 00:28:45.351 that I mentioned earlier by Doctor
NOTE Confidence: 0.81623745

00:28:45.351 --> 00:28:47.893 Friedman an she shows here that
NOTE Confidence: 0.81623745

00:28:47.893 --> 00:28:49.888 wild flavors are important for,
NOTE Confidence: 0.81623745

00:28:49.890 --> 00:28:50.652 you know,
NOTE Confidence: 0.81623745

00:28:50.652 --> 00:28:53.319 used by youth and also used by
NOTE Confidence: 0.81623745

00:28:53.319 --> 00:28:55.809 emerging adults from an initiation.
NOTE Confidence: 0.81623745

00:28:55.810 --> 00:28:57.600 Respective flavors are also important
NOTE Confidence: 0.81623745

00:28:57.600 --> 00:28:59.032 from a cessation perspective.
NOTE Confidence: 0.81623745

00:28:59.040 --> 00:29:00.404 For adults who smoke,
NOTE Confidence: 0.81623745

00:29:00.404 --> 00:29:02.909 and so the question really is the
NOTE Confidence: 0.81623745

00:29:02.909 --> 00:29:04.849 question that the public health
NOTE Confidence: 0.81623745

00:29:04.849 --> 00:29:06.939 debate that's going on now is.
NOTE Confidence: 0.81623745

00:29:06.940 --> 00:29:09.271 How do you regulate use of flavors
NOTE Confidence: 0.81623745

00:29:09.271 --> 00:29:11.511 in this product where they can

NOTE Confidence: 0.81623745

00:29:11.511 --> 00:29:12.678 still be beneficial?

NOTE Confidence: 0.81623745

00:29:12.680 --> 00:29:13.075 Potentially,

NOTE Confidence: 0.81623745

00:29:13.075 --> 00:29:15.445 if they are beneficial for people

NOTE Confidence: 0.81623745

00:29:15.445 --> 00:29:18.101 who smoke who are trying to quit

NOTE Confidence: 0.81623745

00:29:18.101 --> 00:29:20.195 smoking versus how do you regulate

NOTE Confidence: 0.81623745

00:29:20.268 --> 00:29:22.375 the flavors so you keep keep it,

NOTE Confidence: 0.81623745

00:29:22.380 --> 00:29:24.092 make it less attractive,

NOTE Confidence: 0.81623745

00:29:24.092 --> 00:29:26.232 and keep it away from.

NOTE Confidence: 0.81623745

00:29:26.240 --> 00:29:28.256 So this is these are ongoing experiments

NOTE Confidence: 0.81623745

00:29:28.256 --> 00:29:30.349 that we are conducting in our centers

NOTE Confidence: 0.81623745

00:29:30.349 --> 00:29:32.783 and many centers on the FDA is very

NOTE Confidence: 0.81623745

00:29:32.783 --> 00:29:34.932 interested in the answer to this question,

NOTE Confidence: 0.81623745

00:29:34.940 --> 00:29:38.429 which we don't have yet, by the way.

NOTE Confidence: 0.81623745

00:29:38.430 --> 00:29:39.742 So the other issue,

NOTE Confidence: 0.81623745

00:29:39.742 --> 00:29:41.381 the FDA, as I said,

NOTE Confidence: 0.81623745

00:29:41.381 --> 00:29:43.016 is interested in his nicotine.

NOTE Confidence: 0.81623745

00:29:43.020 --> 00:29:44.856 Now most of you know you've

NOTE Confidence: 0.81623745

00:29:44.856 --> 00:29:46.491 probably heard from other people

NOTE Confidence: 0.81623745

00:29:46.491 --> 00:29:48.251 in the Department about nicotine

NOTE Confidence: 0.81623745

00:29:48.251 --> 00:29:50.240 and its importance in the body.

NOTE Confidence: 0.81623745

00:29:50.240 --> 00:29:51.635 It targets a nicotinic acetylcholine

NOTE Confidence: 0.81623745

00:29:51.635 --> 00:29:53.886 system and it is the primary addictive

NOTE Confidence: 0.81623745

00:29:53.886 --> 00:29:55.486 ingredient in tobacco products.

NOTE Confidence: 0.81623745

00:29:55.490 --> 00:29:57.794 And as I like to tell people when

NOTE Confidence: 0.81623745

00:29:57.794 --> 00:29:59.935 I'm talking about nicotine and I'm

NOTE Confidence: 0.81623745

00:29:59.935 --> 00:30:02.044 sure I'm preaching to the choir,

NOTE Confidence: 0.81623745

00:30:02.044 --> 00:30:04.485 here is nicotine has a lot of

NOTE Confidence: 0.81623745

00:30:04.485 --> 00:30:06.270 effects and it affects almost

NOTE Confidence: 0.81623745

00:30:06.340 --> 00:30:08.440 every organ of the human body.

NOTE Confidence: 0.81623745

00:30:08.440 --> 00:30:08.743 Now,

NOTE Confidence: 0.81623745

00:30:08.743 --> 00:30:10.864 in an early paper by Benowitz Neal

NOTE Confidence: 0.81623745

00:30:10.864 --> 00:30:12.580 Benowitz and Jack Henningfield,

NOTE Confidence: 0.81623745

00:30:12.580 --> 00:30:14.680 they had positive that there might be

NOTE Confidence: 0.81623745

00:30:14.680 --> 00:30:16.720 a threshold for nicotine addiction,

NOTE Confidence: 0.81623745

00:30:16.720 --> 00:30:18.556 which is that they might be

NOTE Confidence: 0.81623745

00:30:18.556 --> 00:30:19.780 a low level of

NOTE Confidence: 0.78020644

00:30:19.862 --> 00:30:21.555 nicotine, which could be

NOTE Confidence: 0.78020644

00:30:21.555 --> 00:30:22.590 allowed in cigarettes,

NOTE Confidence: 0.78020644

00:30:22.590 --> 00:30:24.660 which would make the product addictive.

NOTE Confidence: 0.78020644

00:30:24.660 --> 00:30:27.068 But if you went below that threshold,

NOTE Confidence: 0.78020644

00:30:27.070 --> 00:30:29.140 product might not be so addictive,

NOTE Confidence: 0.78020644

00:30:29.140 --> 00:30:31.126 so there is a lot of

NOTE Confidence: 0.78020644

00:30:31.126 --> 00:30:32.940 ongoing work in this area.

NOTE Confidence: 0.78020644

00:30:32.940 --> 00:30:34.660 Loading In at Yale here,

NOTE Confidence: 0.78020644

00:30:34.660 --> 00:30:36.730 and this is work done by

NOTE Confidence: 0.78020644

00:30:36.730 --> 00:30:38.630 men and see for glue.

NOTE Confidence: 0.78020644

00:30:38.630 --> 00:30:41.717 There he is actually using his Ivy
NOTE Confidence: 0.78020644

00:30:41.717 --> 00:30:44.871 nicotine paradigm and has a very
NOTE Confidence: 0.78020644

00:30:44.871 --> 00:30:47.203 interesting paradigm where people
NOTE Confidence: 0.78020644

00:30:47.203 --> 00:30:49.513 administer different nicotine doses
NOTE Confidence: 0.78020644

00:30:49.513 --> 00:30:52.393 and he uses that information to
NOTE Confidence: 0.78020644

00:30:52.393 --> 00:30:54.856 determine the threshold that produces
NOTE Confidence: 0.78020644

00:30:54.856 --> 00:30:56.380 consistent nicotine reinforcement.
NOTE Confidence: 0.78020644

00:30:56.380 --> 00:30:59.700 And this recent paper from his group shows
NOTE Confidence: 0.78020644

00:30:59.700 --> 00:31:03.470 that the threshold for producing continuous,
NOTE Confidence: 0.78020644

00:31:03.470 --> 00:31:04.964 consistent nicotine reinforcement,
NOTE Confidence: 0.78020644

00:31:04.964 --> 00:31:06.956 as determined by whether
NOTE Confidence: 0.78020644

00:31:06.956 --> 00:31:09.110 people favor and nicotine.
NOTE Confidence: 0.78020644

00:31:09.110 --> 00:31:09.450 However,
NOTE Confidence: 0.78020644

00:31:09.450 --> 00:31:11.490 they favor sailing was about .2
NOTE Confidence: 0.78020644

00:31:11.490 --> 00:31:13.160 milligrams for 70 kilograms,
NOTE Confidence: 0.78020644

00:31:13.160 --> 00:31:15.463 so there is evidence emerging that there

NOTE Confidence: 0.78020644

00:31:15.463 --> 00:31:18.117 might be a threshold that could be

NOTE Confidence: 0.78020644

00:31:18.117 --> 00:31:20.517 established in some of these products,

NOTE Confidence: 0.78020644

00:31:20.520 --> 00:31:24.200 and in fact work done by others in the field.

NOTE Confidence: 0.78020644

00:31:24.200 --> 00:31:24.908 Eric, Tony,

NOTE Confidence: 0.78020644

00:31:24.908 --> 00:31:27.386 and Dorothy had to call me have

NOTE Confidence: 0.78020644

00:31:27.386 --> 00:31:30.012 done clinical trials that cigarettes

NOTE Confidence: 0.78020644

00:31:30.012 --> 00:31:32.757 that have reduced nicotine content.

NOTE Confidence: 0.78020644

00:31:32.760 --> 00:31:35.147 Let's have reduced the dose to you.

NOTE Confidence: 0.78020644

00:31:35.150 --> 00:31:37.208 See some of the different doses.

NOTE Confidence: 0.78020644

00:31:37.210 --> 00:31:39.256 I'm not showing you the different

NOTE Confidence: 0.78020644

00:31:39.256 --> 00:31:40.279 doses they tried.

NOTE Confidence: 0.78020644

00:31:40.280 --> 00:31:40.637 Sorry,

NOTE Confidence: 0.78020644

00:31:40.637 --> 00:31:43.136 they tried a whole bunch of different

NOTE Confidence: 0.78020644

00:31:43.136 --> 00:31:45.869 doses and they try to see how reducing

NOTE Confidence: 0.78020644

00:31:45.869 --> 00:31:48.829 the dose of nicotine in a cigarette all turn.

NOTE Confidence: 0.78020644

00:31:48.830 --> 00:31:49.930 Use behaviors,
NOTE Confidence: 0.78020644

00:31:49.930 --> 00:31:51.030 quit attempts,
NOTE Confidence: 0.78020644

00:31:51.030 --> 00:31:52.680 whether it changed.
NOTE Confidence: 0.78020644

00:31:52.680 --> 00:31:54.816 And other people there was any
NOTE Confidence: 0.78020644

00:31:54.816 --> 00:31:57.077 compens atory smoking and they found
NOTE Confidence: 0.78020644

00:31:57.077 --> 00:31:58.987 overall that reducing the dose.
NOTE Confidence: 0.78020644

00:31:58.990 --> 00:32:01.186 2.4 milligrams per gram of tobacco
NOTE Confidence: 0.78020644

00:32:01.186 --> 00:32:03.082 actually reduced the number of
NOTE Confidence: 0.78020644

00:32:03.082 --> 00:32:04.546 cigarettes smoked by people,
NOTE Confidence: 0.78020644

00:32:04.550 --> 00:32:06.034 reduce dependence and resulted
NOTE Confidence: 0.78020644

00:32:06.034 --> 00:32:07.889 in no compens atory smoking.
NOTE Confidence: 0.78020644

00:32:07.890 --> 00:32:08.632 In fact,
NOTE Confidence: 0.78020644

00:32:08.632 --> 00:32:10.858 other groups have shown similar outcomes.
NOTE Confidence: 0.78020644

00:32:10.860 --> 00:32:12.715 With these reduced nicotine cigarettes
NOTE Confidence: 0.78020644

00:32:12.715 --> 00:32:14.199 in many vulnerable populations,
NOTE Confidence: 0.78020644

00:32:14.200 --> 00:32:15.692 including people with psychiatric

NOTE Confidence: 0.78020644

00:32:15.692 --> 00:32:17.557 conditions as well as youth

NOTE Confidence: 0.78020644

00:32:17.557 --> 00:32:19.019 and non daily smokers.

NOTE Confidence: 0.78020644

00:32:19.020 --> 00:32:22.359 So the FDA is very interested in this idea.

NOTE Confidence: 0.78020644

00:32:22.360 --> 00:32:24.300 The earlier FDA commissioner was

NOTE Confidence: 0.78020644

00:32:24.300 --> 00:32:26.240 very interested in the idea.

NOTE Confidence: 0.78020644

00:32:26.240 --> 00:32:28.844 Of moving forward with this idea of

NOTE Confidence: 0.78020644

00:32:28.844 --> 00:32:30.356 reducing nicotine concentration in

NOTE Confidence: 0.78020644

00:32:30.356 --> 00:32:32.354 tobacco and in cigarettes rather sorry.

NOTE Confidence: 0.78020644

00:32:32.360 --> 00:32:34.400 I mean be clear in cigarettes

NOTE Confidence: 0.78020644

00:32:34.400 --> 00:32:36.584 and Dorothy and Eric have also

NOTE Confidence: 0.78020644

00:32:36.584 --> 00:32:38.474 shown that the best approach,

NOTE Confidence: 0.78020644

00:32:38.480 --> 00:32:40.872 the best way to do this might be

NOTE Confidence: 0.78020644

00:32:40.872 --> 00:32:42.823 by having an immediate reduction

NOTE Confidence: 0.78020644

00:32:42.823 --> 00:32:44.958 in the level of nicotine.

NOTE Confidence: 0.78020644

00:32:44.960 --> 00:32:47.179 Instead of having one one of the

NOTE Confidence: 0.78020644

00:32:47.179 --> 00:32:49.280 things the FDA was considering,
NOTE Confidence: 0.78020644

00:32:49.280 --> 00:32:51.772 whether they should have a tapered or
NOTE Confidence: 0.78020644

00:32:51.772 --> 00:32:54.356 a gradual reduction in nicotine levels
NOTE Confidence: 0.78020644

00:32:54.356 --> 00:32:56.284 in commercially available nicotine.
NOTE Confidence: 0.78020644

00:32:56.290 --> 00:32:57.822 Levels in commercial cigarettes,
NOTE Confidence: 0.78020644

00:32:57.822 --> 00:32:59.737 but they've shown that an
NOTE Confidence: 0.78020644

00:32:59.737 --> 00:33:01.351 immediate approach might be the
NOTE Confidence: 0.78020644

00:33:01.351 --> 00:33:03.109 best way to achieve this goal,
NOTE Confidence: 0.78020644

00:33:03.110 --> 00:33:05.637 so this is something that is being
NOTE Confidence: 0.78020644

00:33:05.637 --> 00:33:07.737 considered by the FDA and they
NOTE Confidence: 0.78020644

00:33:07.737 --> 00:33:09.928 have not taken action on it yet.
NOTE Confidence: 0.78020644

00:33:09.930 --> 00:33:12.362 But it seems that they might be starting
NOTE Confidence: 0.78020644

00:33:12.362 --> 00:33:15.046 to get interested in this issue again,
NOTE Confidence: 0.78020644

00:33:15.050 --> 00:33:18.180 and so you may see more news articles or more
NOTE Confidence: 0.78020644

00:33:18.254 --> 00:33:21.110 actions being discussed about this issue.
NOTE Confidence: 0.78020644

00:33:21.110 --> 00:33:23.078 No, that does nicotine in cigarettes.

NOTE Confidence: 0.78020644

00:33:23.080 --> 00:33:24.388 Again, what about nicotine

NOTE Confidence: 0.78020644

00:33:24.388 --> 00:33:25.696 and other tobacco products?

NOTE Confidence: 0.78020644

00:33:25.700 --> 00:33:26.028 Again,

NOTE Confidence: 0.78020644

00:33:26.028 --> 00:33:27.996 here we don't have a clear.

NOTE Confidence: 0.78020644

00:33:28.000 --> 00:33:29.560 We don't have clear direction

NOTE Confidence: 0.78020644

00:33:29.560 --> 00:33:31.120 because all the work is

NOTE Confidence: 0.7976876

00:33:31.182 --> 00:33:32.887 only been done with cigarettes

NOTE Confidence: 0.7976876

00:33:32.887 --> 00:33:34.976 and cigarette as a delivery device

NOTE Confidence: 0.7976876

00:33:34.976 --> 00:33:37.202 is very different than cigar or E

NOTE Confidence: 0.7976876

00:33:37.202 --> 00:33:39.324 cigarettes as a delivery device for

NOTE Confidence: 0.7976876

00:33:39.324 --> 00:33:41.179 nicotine and this is particularly

NOTE Confidence: 0.7976876

00:33:41.179 --> 00:33:42.911 concerning because E cigarettes like

NOTE Confidence: 0.7976876

00:33:42.911 --> 00:33:45.200 the secrets that you heard about like

NOTE Confidence: 0.7976876

00:33:45.200 --> 00:33:47.125 Jewel which are on the market which

NOTE Confidence: 0.7976876

00:33:47.125 --> 00:33:49.145 are very very popular with the youth

NOTE Confidence: 0.7976876

00:33:49.145 --> 00:33:51.078 contain what is code word containing
NOTE Confidence: 0.7976876

00:33:51.078 --> 00:33:53.108 katien solves now nicotine sauce.
NOTE Confidence: 0.7976876

00:33:53.110 --> 00:33:54.960 Normally, nicotine in most cigarettes
NOTE Confidence: 0.7976876

00:33:54.960 --> 00:33:56.810 is freebase nicotine which is
NOTE Confidence: 0.7976876

00:33:56.870 --> 00:33:58.556 irritating to the throat and you
NOTE Confidence: 0.7976876

00:33:58.556 --> 00:34:00.737 know that's if any of you have smoke.
NOTE Confidence: 0.7976876

00:34:00.740 --> 00:34:02.966 That's the reason you kind of cough.
NOTE Confidence: 0.7976876

00:34:02.970 --> 00:34:04.878 Then you take your first love,
NOTE Confidence: 0.7976876

00:34:04.880 --> 00:34:06.008 but the nicotine salts,
NOTE Confidence: 0.7976876

00:34:06.008 --> 00:34:07.700 which are in many liquids like
NOTE Confidence: 0.7976876

00:34:07.754 --> 00:34:09.945 jewel and many of the newer obvious
NOTE Confidence: 0.7976876

00:34:09.945 --> 00:34:11.334 products contain assault like
NOTE Confidence: 0.7976876

00:34:11.334 --> 00:34:12.510 nicotine benzoate weight,
NOTE Confidence: 0.7976876

00:34:12.510 --> 00:34:14.729 which is what you're so shown here.
NOTE Confidence: 0.7976876

00:34:14.730 --> 00:34:17.075 Now these soles are proposed to be
NOTE Confidence: 0.7976876

00:34:17.075 --> 00:34:19.684 less harsh and they say that it makes

NOTE Confidence: 0.7976876

00:34:19.684 --> 00:34:21.627 the product a lot more palatable

NOTE Confidence: 0.7976876

00:34:21.627 --> 00:34:23.958 and a lot more easier to use.

NOTE Confidence: 0.7976876

00:34:23.960 --> 00:34:26.977 As a result, some of these products,

NOTE Confidence: 0.7976876

00:34:26.980 --> 00:34:27.842 like June,

NOTE Confidence: 0.7976876

00:34:27.842 --> 00:34:30.428 contain very high levels of nicotine.

NOTE Confidence: 0.7976876

00:34:30.430 --> 00:34:33.195 Juul goes as far as 60 milligrams

NOTE Confidence: 0.7976876

00:34:33.195 --> 00:34:36.028 of nicotine in the product itself,

NOTE Confidence: 0.7976876

00:34:36.030 --> 00:34:38.616 which is compares to almost 2

NOTE Confidence: 0.7976876

00:34:38.616 --> 00:34:39.909 packs of cigarettes,

NOTE Confidence: 0.7976876

00:34:39.910 --> 00:34:43.018 and this this shows these products are

NOTE Confidence: 0.7976876

00:34:43.018 --> 00:34:45.940 really marketed very widely and there is,

NOTE Confidence: 0.7976876

00:34:45.940 --> 00:34:48.957 as I said, you truly love them.

NOTE Confidence: 0.7976876

00:34:48.960 --> 00:34:52.075 So there is a lot of concern

NOTE Confidence: 0.7976876

00:34:52.075 --> 00:34:54.470 about what to do about.

NOTE Confidence: 0.7976876

00:34:54.470 --> 00:34:56.252 These kinds of products and there

NOTE Confidence: 0.7976876

00:34:56.252 --> 00:34:58.093 is no clear guidance and nuclear
NOTE Confidence: 0.7976876

00:34:58.093 --> 00:34:59.869 science to support this as yet,
NOTE Confidence: 0.7976876

00:34:59.870 --> 00:35:02.705 and this is a lot of the work that
NOTE Confidence: 0.7976876

00:35:02.705 --> 00:35:05.146 we're focusing on in our center.
NOTE Confidence: 0.7976876

00:35:05.150 --> 00:35:07.187 And not to confuse the issue anymore,
NOTE Confidence: 0.7976876

00:35:07.190 --> 00:35:09.022 but I just have to tell you that
NOTE Confidence: 0.7976876

00:35:09.022 --> 00:35:10.948 there is another player in the
NOTE Confidence: 0.7976876

00:35:10.948 --> 00:35:12.713 market which is synthetic nicotine.
NOTE Confidence: 0.7976876

00:35:12.720 --> 00:35:14.490 This was just introduced in
NOTE Confidence: 0.7976876

00:35:14.490 --> 00:35:15.906 the market recently and.
NOTE Confidence: 0.7976876

00:35:15.910 --> 00:35:17.071 Overall, the FDA,
NOTE Confidence: 0.7976876

00:35:17.071 --> 00:35:19.393 the family smoking tobacco prevention and
NOTE Confidence: 0.7976876

00:35:19.393 --> 00:35:21.518 Control Act that I mentioned earlier,
NOTE Confidence: 0.7976876

00:35:21.520 --> 00:35:23.390 is really directed at nicotine
NOTE Confidence: 0.7976876

00:35:23.390 --> 00:35:25.260 that comes from tobacco products,
NOTE Confidence: 0.7976876

00:35:25.260 --> 00:35:27.130 so their authority does not

NOTE Confidence: 0.7976876

00:35:27.130 --> 00:35:28.626 extend to synthetic nicotine.

NOTE Confidence: 0.7976876

00:35:28.630 --> 00:35:31.118 So it seems like some people have found

NOTE Confidence: 0.7976876

00:35:31.118 --> 00:35:34.236 out a way of creating synthetic nicotine,

NOTE Confidence: 0.7976876

00:35:34.240 --> 00:35:36.478 and now many of these products,

NOTE Confidence: 0.7976876

00:35:36.480 --> 00:35:38.345 like E cigarettes and the

NOTE Confidence: 0.7976876

00:35:38.345 --> 00:35:39.464 oral tobacco products,

NOTE Confidence: 0.7976876

00:35:39.470 --> 00:35:41.720 are using synthetic nicotine in them,

NOTE Confidence: 0.7976876

00:35:41.720 --> 00:35:43.730 and one of the questions that

NOTE Confidence: 0.7976876

00:35:43.730 --> 00:35:45.950 we have as a community.

NOTE Confidence: 0.7976876

00:35:45.950 --> 00:35:47.600 Of researchers and advocates in

NOTE Confidence: 0.7976876

00:35:47.600 --> 00:35:49.924 this area is are these even can't

NOTE Confidence: 0.7976876

00:35:49.924 --> 00:35:51.754 even be regulated by the FDA.

NOTE Confidence: 0.7976876

00:35:51.760 --> 00:35:53.960 So what I'm trying to tell you is

NOTE Confidence: 0.7976876

00:35:53.960 --> 00:35:56.091 that the industry changes and it

NOTE Confidence: 0.7976876

00:35:56.091 --> 00:35:58.365 changes depending on what laws are

NOTE Confidence: 0.7976876

00:35:58.438 --> 00:36:00.545 coming into the market and this is
NOTE Confidence: 0.7976876

00:36:00.545 --> 00:36:03.210 a battle of heavy fight on a daily
NOTE Confidence: 0.7976876

00:36:03.210 --> 00:36:04.970 basis and somebody really needs
NOTE Confidence: 0.7976876

00:36:05.040 --> 00:36:07.344 to address this issue of nicotine
NOTE Confidence: 0.7976876

00:36:07.344 --> 00:36:08.496 and other products.
NOTE Confidence: 0.7976876

00:36:08.500 --> 00:36:09.995 So that was so essentially
NOTE Confidence: 0.7976876

00:36:09.995 --> 00:36:11.490 exactly what I just said.
NOTE Confidence: 0.7976876

00:36:11.490 --> 00:36:13.289 We need a lot more scientific evidence
NOTE Confidence: 0.7976876

00:36:13.289 --> 00:36:15.144 to support both flavor and nicotine
NOTE Confidence: 0.7976876

00:36:15.144 --> 00:36:16.869 regulation issues in tobacco products.
NOTE Confidence: 0.7976876

00:36:16.870 --> 00:36:19.606 Now I'm going to move on to telling
NOTE Confidence: 0.7976876

00:36:19.606 --> 00:36:22.876 you a little bit about E cigarettes.
NOTE Confidence: 0.7976876

00:36:22.880 --> 00:36:24.336 Most of you have seen these products,
NOTE Confidence: 0.7976876

00:36:24.340 --> 00:36:25.390 I'm sure on the market,
NOTE Confidence: 0.8829405

00:36:25.390 --> 00:36:26.790 but I'm not sure if you know
NOTE Confidence: 0.8829405

00:36:26.790 --> 00:36:27.690 the history behind these.

NOTE Confidence: 0.8829405

00:36:27.690 --> 00:36:30.210 So I thought I would just tell you a

NOTE Confidence: 0.8829405

00:36:30.210 --> 00:36:32.764 little bit about why we are where we are.

NOTE Confidence: 0.8829405

00:36:32.770 --> 00:36:34.150 These products were created

NOTE Confidence: 0.8829405

00:36:34.150 --> 00:36:35.875 with a very good intention.

NOTE Confidence: 0.8829405

00:36:35.880 --> 00:36:37.950 They were created by Chinese Spanish.

NOTE Confidence: 0.8829405

00:36:37.950 --> 00:36:39.210 This pharmacist in 2003.

NOTE Confidence: 0.8829405

00:36:39.210 --> 00:36:41.896 He wanted to be able to provide those

NOTE Confidence: 0.8829405

00:36:41.896 --> 00:36:44.423 who smoke with a cleaner form of

NOTE Confidence: 0.8829405

00:36:44.423 --> 00:36:46.569 nicotine to help them quit smoking,

NOTE Confidence: 0.8829405

00:36:46.570 --> 00:36:48.640 which is a very Noble intention.

NOTE Confidence: 0.8829405

00:36:48.640 --> 00:36:50.365 The device purses are very

NOTE Confidence: 0.8829405

00:36:50.365 --> 00:36:51.745 simple devices shown here.

NOTE Confidence: 0.8829405

00:36:51.750 --> 00:36:53.470 It has a power source.

NOTE Confidence: 0.8829405

00:36:53.470 --> 00:36:55.200 It has a control button.

NOTE Confidence: 0.8829405

00:36:55.200 --> 00:36:57.391 There is a there is an illiquid

NOTE Confidence: 0.8829405

00:36:57.391 --> 00:37:00.126 or a juice which is in a container

NOTE Confidence: 0.8829405

00:37:00.126 --> 00:37:02.689 and you ignite or heat up the

NOTE Confidence: 0.8829405

00:37:02.689 --> 00:37:04.609 juice using the power source.

NOTE Confidence: 0.8829405

00:37:04.610 --> 00:37:07.426 And then it creates a vapor and you,

NOTE Confidence: 0.8829405

00:37:07.430 --> 00:37:08.200 the individual,

NOTE Confidence: 0.8829405

00:37:08.200 --> 00:37:10.125 can inhale the vapor through

NOTE Confidence: 0.8829405

00:37:10.125 --> 00:37:12.252 the mouthpiece that you see on

NOTE Confidence: 0.8829405

00:37:12.252 --> 00:37:13.757 the extreme right here today.

NOTE Confidence: 0.8829405

00:37:13.760 --> 00:37:15.872 There are over 400 E cigarette

NOTE Confidence: 0.8829405

00:37:15.872 --> 00:37:16.928 brands and many,

NOTE Confidence: 0.8829405

00:37:16.930 --> 00:37:18.690 many different kinds of devices

NOTE Confidence: 0.8829405

00:37:18.690 --> 00:37:19.746 on the market.

NOTE Confidence: 0.8829405

00:37:19.750 --> 00:37:21.710 This market has basically developed

NOTE Confidence: 0.8829405

00:37:21.710 --> 00:37:23.670 unregulated and that is the

NOTE Confidence: 0.8829405

00:37:23.733 --> 00:37:25.707 unfortunate part of the story when

NOTE Confidence: 0.8829405

00:37:25.707 --> 00:37:27.840 they first came on into the US,

NOTE Confidence: 0.8829405

00:37:27.840 --> 00:37:28.446 the US,

NOTE Confidence: 0.8829405

00:37:28.446 --> 00:37:29.052 the FTA,

NOTE Confidence: 0.8829405

00:37:29.052 --> 00:37:30.870 wanted to reject the entry of

NOTE Confidence: 0.8829405

00:37:30.943 --> 00:37:32.823 these devices and classify them

NOTE Confidence: 0.8829405

00:37:32.823 --> 00:37:35.300 as a drug delivery device because.

NOTE Confidence: 0.8829405

00:37:35.300 --> 00:37:36.580 That's essentially what they are.

NOTE Confidence: 0.8829405

00:37:36.580 --> 00:37:38.614 They deliver a drug that can

NOTE Confidence: 0.8829405

00:37:38.614 --> 00:37:40.700 be used to deliver anything.

NOTE Confidence: 0.8829405

00:37:40.700 --> 00:37:42.932 But this company called Smoking Everywhere

NOTE Confidence: 0.8829405

00:37:42.932 --> 00:37:45.288 or later changed their name to enjoy,

NOTE Confidence: 0.8829405

00:37:45.290 --> 00:37:47.408 had a lawsuit against the FDA,

NOTE Confidence: 0.8829405

00:37:47.410 --> 00:37:49.130 and they said that these

NOTE Confidence: 0.8829405

00:37:49.130 --> 00:37:50.506 electronic cigarettes are not

NOTE Confidence: 0.8829405

00:37:50.506 --> 00:37:52.350 drugs or drug delivery systems.

NOTE Confidence: 0.8829405

00:37:52.350 --> 00:37:53.475 They're tobacco products.

NOTE Confidence: 0.8829405

00:37:53.475 --> 00:37:55.350 According to the Family Smoking
NOTE Confidence: 0.8829405

00:37:55.350 --> 00:37:56.939 Tobacco Prevention and Control Act,
NOTE Confidence: 0.8829405

00:37:56.940 --> 00:37:58.216 and in December 2010,
NOTE Confidence: 0.8829405

00:37:58.216 --> 00:38:00.130 the US Court of Appeals ruled
NOTE Confidence: 0.8829405

00:38:00.200 --> 00:38:02.307 that the FDA can only regulate E
NOTE Confidence: 0.8829405

00:38:02.307 --> 00:38:04.184 cigarettes as a tobacco product
NOTE Confidence: 0.8829405

00:38:04.184 --> 00:38:06.464 unless therapeutic claims are made.
NOTE Confidence: 0.8829405

00:38:06.470 --> 00:38:07.802 This is very important,
NOTE Confidence: 0.8829405

00:38:07.802 --> 00:38:10.789 so if you look at an E cigarette.
NOTE Confidence: 0.8829405

00:38:10.790 --> 00:38:12.740 Now that you'll see they never
NOTE Confidence: 0.8829405

00:38:12.740 --> 00:38:14.415 make any therapeutic claims is
NOTE Confidence: 0.8829405

00:38:14.415 --> 00:38:15.960 they make a therapeutic claim.
NOTE Confidence: 0.8829405

00:38:15.960 --> 00:38:18.705 They have to go down the pathway in FDA
NOTE Confidence: 0.8829405

00:38:18.705 --> 00:38:21.446 that many of us are very familiar with,
NOTE Confidence: 0.8829405

00:38:21.450 --> 00:38:23.286 but they cannot do that and
NOTE Confidence: 0.8829405

00:38:23.286 --> 00:38:24.916 therefore they can only be

NOTE Confidence: 0.8829405

00:38:24.916 --> 00:38:26.616 regulated as a tobacco product.

NOTE Confidence: 0.8829405

00:38:26.620 --> 00:38:29.116 And yet they are being used by millions

NOTE Confidence: 0.8829405

00:38:29.116 --> 00:38:31.459 of people who smoke to quit smoking.

NOTE Confidence: 0.8829405

00:38:31.460 --> 00:38:32.752 So it's it's it's.

NOTE Confidence: 0.8829405

00:38:32.752 --> 00:38:34.367 It's really an interesting situation.

NOTE Confidence: 0.8829405

00:38:34.370 --> 00:38:36.456 So what this means is that E

NOTE Confidence: 0.8829405

00:38:36.456 --> 00:38:37.920 cigarettes were not covered.

NOTE Confidence: 0.8829405

00:38:37.920 --> 00:38:40.209 I said this for our tobacco product

NOTE Confidence: 0.8829405

00:38:40.209 --> 00:38:42.250 because there not a drug delivery.

NOTE Confidence: 0.8829405

00:38:42.250 --> 00:38:44.637 Got it but the family smoking provide

NOTE Confidence: 0.8829405

00:38:44.637 --> 00:38:46.569 prevent tobacco prevention and Control Act.

NOTE Confidence: 0.8829405

00:38:46.570 --> 00:38:48.887 Did not cover E cigarettes to 2016.

NOTE Confidence: 0.8829405

00:38:48.890 --> 00:38:49.260 Therefore,

NOTE Confidence: 0.8829405

00:38:49.260 --> 00:38:51.850 from 2010 to 2016 they were basically

NOTE Confidence: 0.8829405

00:38:51.850 --> 00:38:53.626 unregulated and they continue to

NOTE Confidence: 0.8829405

00:38:53.626 --> 00:38:55.246 stay unregulated because the FDA
NOTE Confidence: 0.8829405

00:38:55.246 --> 00:38:57.689 is now what the FDA did is they
NOTE Confidence: 0.8829405

00:38:57.689 --> 00:38:59.512 asked all these companies to submit
NOTE Confidence: 0.8829405

00:38:59.512 --> 00:39:01.167 applications to them called PMT?
NOTE Confidence: 0.8829405

00:39:01.170 --> 00:39:03.810 Is that they could review to see what
NOTE Confidence: 0.8829405

00:39:03.810 --> 00:39:05.819 the constituents of the products were,
NOTE Confidence: 0.8829405

00:39:05.820 --> 00:39:07.806 what they contained and they had.
NOTE Confidence: 0.8829405

00:39:07.810 --> 00:39:09.505 They wanted all these applications
NOTE Confidence: 0.8829405

00:39:09.505 --> 00:39:11.470 submitted to them by September 9th,
NOTE Confidence: 0.8829405

00:39:11.470 --> 00:39:13.969 2020 which was just last year and.
NOTE Confidence: 0.87092805

00:39:13.970 --> 00:39:15.746 What I understand they have millions
NOTE Confidence: 0.87092805

00:39:15.746 --> 00:39:17.820 of applications, so I think they will
NOTE Confidence: 0.87092805

00:39:17.820 --> 00:39:19.300 probably remain unregulated through 2022.
NOTE Confidence: 0.87092805

00:39:19.300 --> 00:39:21.604 Now this does not mean that there aren't
NOTE Confidence: 0.87092805

00:39:21.604 --> 00:39:23.737 rules about marketing and sales to you.
NOTE Confidence: 0.87092805

00:39:23.740 --> 00:39:26.108 Then all those all those law still continue,

NOTE Confidence: 0.87092805

00:39:26.110 --> 00:39:28.441 but the actual regulation of the product

NOTE Confidence: 0.87092805

00:39:28.441 --> 00:39:30.252 informing people about what's in them

NOTE Confidence: 0.87092805

00:39:30.252 --> 00:39:32.023 and whether they are safe or not.

NOTE Confidence: 0.87092805

00:39:32.030 --> 00:39:34.390 That's something that is not going to happen.

NOTE Confidence: 0.87092805

00:39:34.390 --> 00:39:36.166 May not happen for a while.

NOTE Confidence: 0.87092805

00:39:36.170 --> 00:39:36.974 In the meantime,

NOTE Confidence: 0.87092805

00:39:36.974 --> 00:39:39.430 this is a great market is just exploded.

NOTE Confidence: 0.87092805

00:39:39.430 --> 00:39:41.750 These are some of the kinds of E

NOTE Confidence: 0.87092805

00:39:41.750 --> 00:39:43.568 cigarettes you find on the market.

NOTE Confidence: 0.87092805

00:39:43.570 --> 00:39:45.175 They started out with these

NOTE Confidence: 0.87092805

00:39:45.175 --> 00:39:46.459 very cigarette like products.

NOTE Confidence: 0.87092805

00:39:46.460 --> 00:39:48.777 Moved on to things called vape pens,

NOTE Confidence: 0.87092805

00:39:48.780 --> 00:39:51.104 which basically had the E liquid in

NOTE Confidence: 0.87092805

00:39:51.110 --> 00:39:53.372 a tank like I showed you earlier.

NOTE Confidence: 0.87092805

00:39:53.372 --> 00:39:55.614 You have these box mods which are

NOTE Confidence: 0.87092805

00:39:55.614 --> 00:39:57.710 very very used a lot by people who

NOTE Confidence: 0.87092805

00:39:57.710 --> 00:40:00.086 use it in for recreational purposes

NOTE Confidence: 0.87092805

00:40:00.086 --> 00:40:01.722 like producing vape clouds,

NOTE Confidence: 0.87092805

00:40:01.730 --> 00:40:03.390 and you know participating in

NOTE Confidence: 0.87092805

00:40:03.390 --> 00:40:05.050 competitions and things like that.

NOTE Confidence: 0.87092805

00:40:05.050 --> 00:40:07.339 You can really do a good job

NOTE Confidence: 0.87092805

00:40:07.339 --> 00:40:09.369 adjusting the voltage and the device.

NOTE Confidence: 0.87092805

00:40:09.370 --> 00:40:11.030 The temperature of the device,

NOTE Confidence: 0.87092805

00:40:11.030 --> 00:40:13.766 what you put in the device so you

NOTE Confidence: 0.87092805

00:40:13.766 --> 00:40:16.265 know there are a lot of things

NOTE Confidence: 0.87092805

00:40:16.265 --> 00:40:17.649 that you can change.

NOTE Confidence: 0.87092805

00:40:17.650 --> 00:40:19.450 And then there are these newer

NOTE Confidence: 0.87092805

00:40:19.450 --> 00:40:20.650 devices called Pod devices,

NOTE Confidence: 0.87092805

00:40:20.650 --> 00:40:22.729 and these are the ones like the

NOTE Confidence: 0.87092805

00:40:22.729 --> 00:40:25.081 jewel that you see here and then on

NOTE Confidence: 0.87092805

00:40:25.081 --> 00:40:27.250 the right hand side at the bottom.

NOTE Confidence: 0.87092805

00:40:27.250 --> 00:40:29.116 Here you see these newest newest

NOTE Confidence: 0.87092805

00:40:29.116 --> 00:40:30.693 products called Puff Bars which

NOTE Confidence: 0.87092805

00:40:30.693 --> 00:40:32.349 are very similar to the jewel,

NOTE Confidence: 0.87092805

00:40:32.350 --> 00:40:34.132 but they are disposable devices that

NOTE Confidence: 0.87092805

00:40:34.132 --> 00:40:35.650 again contain the nicotine salts.

NOTE Confidence: 0.87092805

00:40:35.650 --> 00:40:38.030 Like I told you earlier and coming

NOTE Confidence: 0.87092805

00:40:38.030 --> 00:40:40.350 up variety of flavors which are

NOTE Confidence: 0.87092805

00:40:40.350 --> 00:40:42.390 very very attractive to you.

NOTE Confidence: 0.87092805

00:40:42.390 --> 00:40:44.220 This shows you sales of these

NOTE Confidence: 0.87092805

00:40:44.220 --> 00:40:46.376 products and how it has dramatically

NOTE Confidence: 0.87092805

00:40:46.376 --> 00:40:48.120 increased over the years.

NOTE Confidence: 0.87092805

00:40:48.120 --> 00:40:50.311 These are considered to be a very

NOTE Confidence: 0.87092805

00:40:50.311 --> 00:40:52.426 good product to invest in and

NOTE Confidence: 0.87092805

00:40:52.426 --> 00:40:53.906 many investors unfortunately and

NOTE Confidence: 0.87092805

00:40:53.906 --> 00:40:56.596 there is an ongoing debate in the

NOTE Confidence: 0.87092805

00:40:56.596 --> 00:40:58.858 Community about what are the benefits
NOTE Confidence: 0.87092805

00:40:58.860 --> 00:41:00.650 versus harms of these products.
NOTE Confidence: 0.87092805

00:41:00.650 --> 00:41:02.798 Now I'm just trying to present
NOTE Confidence: 0.87092805

00:41:02.798 --> 00:41:05.299 both sides of it here for you.
NOTE Confidence: 0.87092805

00:41:05.300 --> 00:41:07.687 The benefits is that if these products
NOTE Confidence: 0.87092805

00:41:07.687 --> 00:41:09.600 help smokers to quit smoking,
NOTE Confidence: 0.87092805

00:41:09.600 --> 00:41:11.630 then it would definitely be
NOTE Confidence: 0.87092805

00:41:11.630 --> 00:41:12.848 reduced disease risk.
NOTE Confidence: 0.87092805

00:41:12.850 --> 00:41:14.290 For these current smokers,
NOTE Confidence: 0.87092805

00:41:14.290 --> 00:41:16.870 if they switch to E cigarettes or
NOTE Confidence: 0.87092805

00:41:16.870 --> 00:41:18.655 reduce or quit test cigarettes,
NOTE Confidence: 0.87092805

00:41:18.660 --> 00:41:20.500 there would be reduced disease
NOTE Confidence: 0.87092805

00:41:20.500 --> 00:41:23.103 morbidity for those with heart and lung
NOTE Confidence: 0.87092805

00:41:23.103 --> 00:41:25.185 disease who switched to E cigarettes.
NOTE Confidence: 0.87092805

00:41:25.190 --> 00:41:27.890 And we can also think about it from a
NOTE Confidence: 0.87092805

00:41:27.890 --> 00:41:29.908 psychiatric population condition issue.

NOTE Confidence: 0.87092805

00:41:29.910 --> 00:41:32.087 You know there there may be changes

NOTE Confidence: 0.87092805

00:41:32.087 --> 00:41:33.944 even in their disease morbidity

NOTE Confidence: 0.87092805

00:41:33.944 --> 00:41:36.079 and risks for other diseases.

NOTE Confidence: 0.87092805

00:41:36.080 --> 00:41:38.258 But there are also harms that

NOTE Confidence: 0.87092805

00:41:38.258 --> 00:41:39.710 need to be considered,

NOTE Confidence: 0.87092805

00:41:39.710 --> 00:41:41.530 particularly with relationship to youth,

NOTE Confidence: 0.87092805

00:41:41.530 --> 00:41:42.934 because these products being.

NOTE Confidence: 0.87092805

00:41:42.934 --> 00:41:44.689 Expose them to increase concentrations

NOTE Confidence: 0.87092805

00:41:44.689 --> 00:41:46.881 of nicotine and leave to lead to

NOTE Confidence: 0.87092805

00:41:46.881 --> 00:41:48.069 nicotine addiction and greater

NOTE Confidence: 0.87092805

00:41:48.122 --> 00:41:49.566 initiation of conventional tobacco

NOTE Confidence: 0.87092805

00:41:49.566 --> 00:41:51.732 products and kind of a renormalization

NOTE Confidence: 0.87092805

00:41:51.740 --> 00:41:53.084 of tobacco use behaviors.

NOTE Confidence: 0.87092805

00:41:53.084 --> 00:41:55.380 All these years we've been telling you,

NOTE Confidence: 0.87092805

00:41:55.380 --> 00:41:56.322 cigarettes are bad.

NOTE Confidence: 0.87092805

00:41:56.322 --> 00:41:58.929 Don't use them and now you have these
NOTE Confidence: 0.87092805

00:41:58.929 --> 00:42:01.665 products out on the market which are really,
NOTE Confidence: 0.8302094

00:42:01.670 --> 00:42:03.325 you know, re normalizing this
NOTE Confidence: 0.8302094

00:42:03.325 --> 00:42:04.980 tobacco use behaviors amongst you.
NOTE Confidence: 0.8302094

00:42:04.980 --> 00:42:06.960 So this is a big concern.
NOTE Confidence: 0.8302094

00:42:06.960 --> 00:42:08.830 There's also concern among adults
NOTE Confidence: 0.8302094

00:42:08.830 --> 00:42:10.326 because many adults unfortunately
NOTE Confidence: 0.8302094

00:42:10.326 --> 00:42:11.998 are not switching completely over
NOTE Confidence: 0.8302094

00:42:11.998 --> 00:42:14.180 to E cigarettes but are using them.
NOTE Confidence: 0.8302094

00:42:14.180 --> 00:42:16.130 For what I call Julie's behavior,
NOTE Confidence: 0.8302094

00:42:16.130 --> 00:42:18.080 so they smoke when they can,
NOTE Confidence: 0.8302094

00:42:18.080 --> 00:42:20.030 and if it then they can.
NOTE Confidence: 0.8302094

00:42:20.030 --> 00:42:22.179 So the concern is is this slowing
NOTE Confidence: 0.8302094

00:42:22.179 --> 00:42:24.123 sensation by smokers or complete quitting
NOTE Confidence: 0.8302094

00:42:24.123 --> 00:42:26.356 by smokers and the other concern is
NOTE Confidence: 0.8302094

00:42:26.416 --> 00:42:28.768 is also leading to a reinitiation of

NOTE Confidence: 0.8302094

00:42:28.768 --> 00:42:30.454 nicotine addiction and former smokers.

NOTE Confidence: 0.8302094

00:42:30.454 --> 00:42:32.476 There are many people who have

NOTE Confidence: 0.8302094

00:42:32.476 --> 00:42:34.433 quit smoking who are now coming

NOTE Confidence: 0.8302094

00:42:34.433 --> 00:42:35.958 back to using these products.

NOTE Confidence: 0.8302094

00:42:35.960 --> 00:42:37.808 So you know these are a

NOTE Confidence: 0.8302094

00:42:37.808 --> 00:42:39.530 lot of concerns that exist.

NOTE Confidence: 0.8302094

00:42:39.530 --> 00:42:42.074 So let me just walk you through some

NOTE Confidence: 0.8302094

00:42:42.074 --> 00:42:44.690 of these issues until end something.

NOTE Confidence: 0.8302094

00:42:44.690 --> 00:42:46.280 Even some things to consider.

NOTE Confidence: 0.8302094

00:42:46.280 --> 00:42:48.176 So let's consider hormone toxicity now.

NOTE Confidence: 0.8302094

00:42:48.180 --> 00:42:49.760 This when you compare cigarettes

NOTE Confidence: 0.8302094

00:42:49.760 --> 00:42:50.708 to E cigarettes.

NOTE Confidence: 0.8302094

00:42:50.710 --> 00:42:52.870 If you were looking to if you wanted

NOTE Confidence: 0.8302094

00:42:52.870 --> 00:42:55.466 to do an apples to apples comparison,

NOTE Confidence: 0.8302094

00:42:55.470 --> 00:42:56.898 which it really isn't.

NOTE Confidence: 0.8302094

00:42:56.898 --> 00:42:59.626 But if you wanted to look specifically
NOTE Confidence: 0.8302094

00:42:59.626 --> 00:43:02.166 at select a massive natural.
NOTE Confidence: 0.8302094

00:43:02.170 --> 00:43:04.683 The Big the bad boys in cigarette
NOTE Confidence: 0.8302094

00:43:04.683 --> 00:43:06.988 products that cause a lot of cancers.
NOTE Confidence: 0.8302094

00:43:06.990 --> 00:43:09.118 So if you look at nitrosamine's and
NOTE Confidence: 0.8302094

00:43:09.118 --> 00:43:11.205 other toxins and you compare cigarettes
NOTE Confidence: 0.8302094

00:43:11.205 --> 00:43:13.419 to E cigarettes and absolutely without
NOTE Confidence: 0.8302094

00:43:13.419 --> 00:43:15.580 a doubt the levels of nitrosamine's
NOTE Confidence: 0.8302094

00:43:15.580 --> 00:43:18.008 is less than cigarette in E cigarettes
NOTE Confidence: 0.8302094

00:43:18.008 --> 00:43:20.102 when you compare it to cigarettes
NOTE Confidence: 0.8302094

00:43:20.102 --> 00:43:22.216 suggesting that they probably may have
NOTE Confidence: 0.8302094

00:43:22.216 --> 00:43:24.530 reduced cancer risk then E cigarettes too.
NOTE Confidence: 0.8302094

00:43:24.530 --> 00:43:25.950 Although we don't have,
NOTE Confidence: 0.8302094

00:43:25.950 --> 00:43:29.000 you know the long term studies to show that,
NOTE Confidence: 0.8302094

00:43:29.000 --> 00:43:30.372 but definitely this data
NOTE Confidence: 0.8302094

00:43:30.372 --> 00:43:31.744 suggests that they may.

NOTE Confidence: 0.8302094

00:43:31.750 --> 00:43:34.305 However there are a lot of other

NOTE Confidence: 0.8302094

00:43:34.305 --> 00:43:36.040 components introduced in a liquid.

NOTE Confidence: 0.8302094

00:43:36.040 --> 00:43:38.224 That we know very little about and

NOTE Confidence: 0.8302094

00:43:38.224 --> 00:43:40.508 this list some of those components.

NOTE Confidence: 0.8302094

00:43:40.510 --> 00:43:43.078 There are some vehicles that are used like

NOTE Confidence: 0.8302094

00:43:43.078 --> 00:43:44.978 propylene glycol and vegetable cursory.

NOTE Confidence: 0.8302094

00:43:44.980 --> 00:43:47.108 There are a number of flavors that

NOTE Confidence: 0.8302094

00:43:47.108 --> 00:43:49.110 constitute all the flavor components.

NOTE Confidence: 0.8302094

00:43:49.110 --> 00:43:51.180 There are sweeteners and there's nicotine.

NOTE Confidence: 0.8302094

00:43:51.180 --> 00:43:52.925 And then there's also metals

NOTE Confidence: 0.8302094

00:43:52.925 --> 00:43:55.074 that come from the coil heating

NOTE Confidence: 0.8302094

00:43:55.074 --> 00:43:57.370 of the coil in the E cigarette.

NOTE Confidence: 0.8302094

00:43:57.370 --> 00:44:00.714 So there are other concerns that we have.

NOTE Confidence: 0.8302094

00:44:00.720 --> 00:44:02.772 I'm going to specifically focus on

NOTE Confidence: 0.8302094

00:44:02.772 --> 00:44:05.162 flavors for a little bit because this

NOTE Confidence: 0.8302094

00:44:05.162 --> 00:44:07.381 is a great interest in our center.

NOTE Confidence: 0.8302094

00:44:07.390 --> 00:44:10.258 It was an ad.

NOTE Confidence: 0.8302094

00:44:10.260 --> 00:44:12.180 Many people may not know are

NOTE Confidence: 0.8302094

00:44:12.180 --> 00:44:13.460 not just benign chemicals,

NOTE Confidence: 0.8302094

00:44:13.460 --> 00:44:14.381 they're actually the.

NOTE Confidence: 0.8302094

00:44:14.381 --> 00:44:17.287 Each flavor is made up of a number of

NOTE Confidence: 0.8302094

00:44:17.287 --> 00:44:19.357 different chemicals and this just gives

NOTE Confidence: 0.8302094

00:44:19.357 --> 00:44:22.169 you a little bit of a flavor of some

NOTE Confidence: 0.8302094

00:44:22.169 --> 00:44:24.020 of the aldehydes that are contained

NOTE Confidence: 0.8302094

00:44:24.020 --> 00:44:26.260 in some of these flavored E liquids.

NOTE Confidence: 0.8302094

00:44:26.260 --> 00:44:28.660 And there is a lot of concern about

NOTE Confidence: 0.8302094

00:44:28.660 --> 00:44:30.992 exposure to high levels of some of

NOTE Confidence: 0.8302094

00:44:30.992 --> 00:44:33.300 these aldehydes and what they might do.

NOTE Confidence: 0.8302094

00:44:33.300 --> 00:44:35.154 Many of these inhaled flavors are

NOTE Confidence: 0.8302094

00:44:35.154 --> 00:44:37.140 known to have health effects now.

NOTE Confidence: 0.8302094

00:44:37.140 --> 00:44:39.030 These flavors are commonly used for

NOTE Confidence: 0.8302094

00:44:39.030 --> 00:44:41.130 a lot of terrible products and.

NOTE Confidence: 0.8302094

00:44:41.130 --> 00:44:43.167 So in your Cheerios or your flavored

NOTE Confidence: 0.8302094

00:44:43.167 --> 00:44:44.768 cereals and other flavored products

NOTE Confidence: 0.8302094

00:44:44.768 --> 00:44:47.113 where they are considered to be grass,

NOTE Confidence: 0.8302094

00:44:47.120 --> 00:44:48.535 which is generally recognized as

NOTE Confidence: 0.8302094

00:44:48.535 --> 00:44:50.371 safe but they are not classified

NOTE Confidence: 0.8302094

00:44:50.371 --> 00:44:51.839 as grass for inhalation.

NOTE Confidence: 0.80802727

00:44:51.840 --> 00:44:53.556 And that is how they are

NOTE Confidence: 0.80802727

00:44:53.556 --> 00:44:55.310 being used in this product.

NOTE Confidence: 0.80802727

00:44:55.310 --> 00:44:57.242 So there's a lot of inhaled health

NOTE Confidence: 0.80802727

00:44:57.242 --> 00:44:59.398 effects that we still don't understand,

NOTE Confidence: 0.80802727

00:44:59.400 --> 00:45:01.140 but there is emerging evidence

NOTE Confidence: 0.80802727

00:45:01.140 --> 00:45:03.216 that flavors can be toxic to

NOTE Confidence: 0.80802727

00:45:03.216 --> 00:45:05.064 cells as you see in this slide.

NOTE Confidence: 0.80802727

00:45:05.070 --> 00:45:06.990 These are some of the flavors

NOTE Confidence: 0.80802727

00:45:06.990 --> 00:45:09.168 listed on the bottom of the slide,
NOTE Confidence: 0.80802727

00:45:09.170 --> 00:45:11.417 and many of these flavors are comma.
NOTE Confidence: 0.80802727

00:45:11.420 --> 00:45:13.646 Are aldehydes as can be listed
NOTE Confidence: 0.80802727

00:45:13.646 --> 00:45:16.250 here and aldehydes are known to be
NOTE Confidence: 0.80802727

00:45:16.250 --> 00:45:18.350 carcinogenic and it will all depend
NOTE Confidence: 0.80802727

00:45:18.350 --> 00:45:21.010 on what the level of the flavor is,
NOTE Confidence: 0.80802727

00:45:21.010 --> 00:45:23.140 how it is being used to.
NOTE Confidence: 0.80802727

00:45:23.140 --> 00:45:25.569 People heat the product excessively so that
NOTE Confidence: 0.80802727

00:45:25.569 --> 00:45:28.109 do they inhale more of these aldehydes?
NOTE Confidence: 0.80802727

00:45:28.110 --> 00:45:29.946 All these concerns that we have
NOTE Confidence: 0.80802727

00:45:29.946 --> 00:45:32.035 and there are some examples in
NOTE Confidence: 0.80802727

00:45:32.035 --> 00:45:34.025 the literature of flavors like
NOTE Confidence: 0.80802727

00:45:34.025 --> 00:45:36.324 diacetyl that increase the risk of
NOTE Confidence: 0.80802727

00:45:36.324 --> 00:45:38.049 things like popcorn lung disease.
NOTE Confidence: 0.80802727

00:45:38.050 --> 00:45:38.426 Interestingly,
NOTE Confidence: 0.80802727

00:45:38.426 --> 00:45:41.058 this was something that was found in

NOTE Confidence: 0.80802727

00:45:41.058 --> 00:45:43.400 people who were working in buttered.

NOTE Confidence: 0.80802727

00:45:43.400 --> 00:45:45.284 In popcorn factories where they were

NOTE Confidence: 0.80802727

00:45:45.284 --> 00:45:47.218 adding butter into the popcorn and

NOTE Confidence: 0.80802727

00:45:47.218 --> 00:45:49.381 they found that many of these workers

NOTE Confidence: 0.80802727

00:45:49.381 --> 00:45:51.079 actually had popcorn lung disease,

NOTE Confidence: 0.80802727

00:45:51.080 --> 00:45:51.950 hence the name.

NOTE Confidence: 0.80802727

00:45:51.950 --> 00:45:53.400 Now this flavor diacetyl is

NOTE Confidence: 0.80802727

00:45:53.400 --> 00:45:55.100 included in many flavorings to

NOTE Confidence: 0.80802727

00:45:55.100 --> 00:45:56.516 produce that buttery flavor.

NOTE Confidence: 0.80802727

00:45:56.520 --> 00:45:56.822 Again,

NOTE Confidence: 0.80802727

00:45:56.822 --> 00:45:57.728 this is not.

NOTE Confidence: 0.80802727

00:45:57.728 --> 00:45:59.540 I'm not saying that all these

NOTE Confidence: 0.80802727

00:45:59.604 --> 00:46:01.638 things have been shown to happen,

NOTE Confidence: 0.80802727

00:46:01.640 --> 00:46:03.740 but these are the concerns which are

NOTE Confidence: 0.80802727

00:46:03.740 --> 00:46:06.410 coming up and it's going to be very

NOTE Confidence: 0.80802727

00:46:06.410 --> 00:46:07.778 concentration dependent in terms
NOTE Confidence: 0.80802727

00:46:07.778 --> 00:46:10.016 of what these effects are and these
NOTE Confidence: 0.80802727

00:46:10.016 --> 00:46:11.932 are things we need to determine.
NOTE Confidence: 0.80802727

00:46:11.932 --> 00:46:14.354 Our center is also shown that Wendy's.
NOTE Confidence: 0.80802727

00:46:14.360 --> 00:46:16.575 Unicorns are sitting on a
NOTE Confidence: 0.80802727

00:46:16.575 --> 00:46:18.347 shelf they actually produce.
NOTE Confidence: 0.80802727

00:46:18.350 --> 00:46:21.206 They actually result in some common
NOTE Confidence: 0.80802727

00:46:21.206 --> 00:46:23.666 some chemical transformations I should
NOTE Confidence: 0.80802727

00:46:23.666 --> 00:46:26.564 say and produce these acetals acetals
NOTE Confidence: 0.80802727

00:46:26.564 --> 00:46:28.442 are basically aldehydes combined
NOTE Confidence: 0.80802727

00:46:28.442 --> 00:46:30.572 with some of the the dialogues
NOTE Confidence: 0.80802727

00:46:30.572 --> 00:46:32.966 that I was talking about earlier,
NOTE Confidence: 0.80802727

00:46:32.966 --> 00:46:35.618 like propylene glycol and vegetable glycerin,
NOTE Confidence: 0.80802727

00:46:35.620 --> 00:46:37.650 and these acetals are produced
NOTE Confidence: 0.80802727

00:46:37.650 --> 00:46:39.680 in the standing illiquid even
NOTE Confidence: 0.80802727

00:46:39.754 --> 00:46:41.380 before somebody inhales.

NOTE Confidence: 0.80802727

00:46:41.380 --> 00:46:43.940 These eliquids and data from

NOTE Confidence: 0.80802727

00:46:43.940 --> 00:46:46.500 our sector also shows that.

NOTE Confidence: 0.80802727

00:46:46.500 --> 00:46:48.636 At these acetals are actually more

NOTE Confidence: 0.80802727

00:46:48.636 --> 00:46:50.710 irritating than the parent aldehydes,

NOTE Confidence: 0.80802727

00:46:50.710 --> 00:46:53.068 and therefore there is concern about

NOTE Confidence: 0.80802727

00:46:53.068 --> 00:46:55.443 what the presence of these acetals

NOTE Confidence: 0.80802727

00:46:55.443 --> 00:46:58.363 might do when humans are exposed to it.

NOTE Confidence: 0.80802727

00:46:58.370 --> 00:47:00.668 So this is again evidence that

NOTE Confidence: 0.80802727

00:47:00.668 --> 00:47:02.200 needs to be collected.

NOTE Confidence: 0.80802727

00:47:02.200 --> 00:47:04.874 So obviously we have concerns about toxicity,

NOTE Confidence: 0.80802727

00:47:04.880 --> 00:47:07.246 and there's a lot of other evidence

NOTE Confidence: 0.80802727

00:47:07.246 --> 00:47:09.228 coming out about cardiovascular risks

NOTE Confidence: 0.80802727

00:47:09.228 --> 00:47:11.922 and pulmonary risks related to eliquids

NOTE Confidence: 0.80802727

00:47:11.922 --> 00:47:14.837 that I'm not going to be talking about,

NOTE Confidence: 0.80802727

00:47:14.840 --> 00:47:15.968 but there is.

NOTE Confidence: 0.80802727

00:47:15.968 --> 00:47:17.848 Emerging evidence on this issue.
NOTE Confidence: 0.80802727

00:47:17.850 --> 00:47:19.290 So based on that,
NOTE Confidence: 0.80802727

00:47:19.290 --> 00:47:21.090 the National Academy of Science
NOTE Confidence: 0.80802727

00:47:21.090 --> 00:47:23.293 report in 2019 put out the
NOTE Confidence: 0.80802727

00:47:23.293 --> 00:47:25.063 statement which basically said that
NOTE Confidence: 0.80802727

00:47:25.132 --> 00:47:27.130 E cigarettes are not risk free.
NOTE Confidence: 0.80802727

00:47:27.130 --> 00:47:28.984 They suggest if the current evidence
NOTE Confidence: 0.80802727

00:47:28.984 --> 00:47:31.127 suggests that it's far less harmful
NOTE Confidence: 0.80802727

00:47:31.127 --> 00:47:32.835 than combustible tobacco cigarettes,
NOTE Confidence: 0.80802727

00:47:32.840 --> 00:47:35.424 but we still need a lot more data
NOTE Confidence: 0.80802727

00:47:35.424 --> 00:47:38.289 to assess risk of these products
NOTE Confidence: 0.80802727

00:47:38.289 --> 00:47:39.897 from morbidity perspective.
NOTE Confidence: 0.80802727

00:47:39.900 --> 00:47:41.628 Now coming back to this slide
NOTE Confidence: 0.80802727

00:47:41.628 --> 00:47:43.340 that I showed you earlier,
NOTE Confidence: 0.80802727

00:47:43.340 --> 00:47:44.464 as I told you,
NOTE Confidence: 0.80802727

00:47:44.464 --> 00:47:46.150 one of the biggest discussions in

NOTE Confidence: 0.80802727

00:47:46.208 --> 00:47:48.336 the field is the balance of benefits

NOTE Confidence: 0.80802727

00:47:48.336 --> 00:47:50.538 versus cons for smokers versus youth.

NOTE Confidence: 0.80802727

00:47:50.540 --> 00:47:52.654 And let me show you some of

NOTE Confidence: 0.80802727

00:47:52.654 --> 00:47:53.560 the evidence on

NOTE Confidence: 0.8119558

00:47:53.638 --> 00:47:55.854 that. Now in as the rates of these use

NOTE Confidence: 0.8119558

00:47:55.854 --> 00:47:58.315 of these products have been growing used

NOTE Confidence: 0.8119558

00:47:58.315 --> 00:48:00.250 by you testing growing dramatically,

NOTE Confidence: 0.8119558

00:48:00.250 --> 00:48:02.085 national data collected about use

NOTE Confidence: 0.8119558

00:48:02.085 --> 00:48:04.262 of E cigarettes amongst youth in

NOTE Confidence: 0.8119558

00:48:04.262 --> 00:48:06.215 the United States and this red line

NOTE Confidence: 0.8119558

00:48:06.215 --> 00:48:08.240 shows you how the rates that the

NOTE Confidence: 0.8119558

00:48:08.240 --> 00:48:09.977 cigarette use has gone up dramatically.

NOTE Confidence: 0.8119558

00:48:09.977 --> 00:48:11.999 And how they continue to rise?

NOTE Confidence: 0.8119558

00:48:12.000 --> 00:48:13.645 They experienced a little bit

NOTE Confidence: 0.8119558

00:48:13.645 --> 00:48:15.290 of a dip last year,

NOTE Confidence: 0.8119558

00:48:15.290 --> 00:48:17.600 but still they're not back down to,
NOTE Confidence: 0.8119558

00:48:17.600 --> 00:48:19.240 you know, very low levels.
NOTE Confidence: 0.8119558

00:48:19.240 --> 00:48:21.864 They're still at what was seen in 2018.
NOTE Confidence: 0.8119558

00:48:21.870 --> 00:48:23.520 There's a similar data and
NOTE Confidence: 0.8119558

00:48:23.520 --> 00:48:24.510 middle school students,
NOTE Confidence: 0.8119558

00:48:24.510 --> 00:48:26.596 and we actually get calls from even
NOTE Confidence: 0.8119558

00:48:26.596 --> 00:48:28.514 students who are younger than that
NOTE Confidence: 0.8119558

00:48:28.514 --> 00:48:30.761 from schools telling us that they have
NOTE Confidence: 0.8119558

00:48:30.822 --> 00:48:32.952 caught students with these products in
NOTE Confidence: 0.8119558

00:48:32.952 --> 00:48:36.260 their backpack or using these products.
NOTE Confidence: 0.8119558

00:48:36.260 --> 00:48:38.078 E Cigarettes are the first product
NOTE Confidence: 0.8119558

00:48:38.078 --> 00:48:40.230 tobacco product used by most youth today.
NOTE Confidence: 0.8119558

00:48:40.230 --> 00:48:42.358 This is data we collected in Connecticut.
NOTE Confidence: 0.8119558

00:48:42.360 --> 00:48:44.364 Really asked the youth what is
NOTE Confidence: 0.8119558

00:48:44.364 --> 00:48:46.298 the first tobacco product you used
NOTE Confidence: 0.8119558

00:48:46.298 --> 00:48:48.153 and you can see that almost 70%

NOTE Confidence: 0.8119558

00:48:48.160 --> 00:48:49.888 of them said the first tobacco

NOTE Confidence: 0.8119558

00:48:49.888 --> 00:48:51.819 product they used was E cigarettes.

NOTE Confidence: 0.8119558

00:48:51.820 --> 00:48:53.340 So this is very concerning.

NOTE Confidence: 0.8119558

00:48:53.340 --> 00:48:54.870 You also use multiple devices.

NOTE Confidence: 0.8119558

00:48:54.870 --> 00:48:56.809 I showed all the devices earlier that

NOTE Confidence: 0.8119558

00:48:56.809 --> 00:48:59.139 there are many different types of devices.

NOTE Confidence: 0.8119558

00:48:59.140 --> 00:49:00.958 We have found that you'd use

NOTE Confidence: 0.8119558

00:49:00.958 --> 00:49:02.490 whatever devices available to them.

NOTE Confidence: 0.8119558

00:49:02.490 --> 00:49:04.320 They may use a friends device,

NOTE Confidence: 0.8119558

00:49:04.320 --> 00:49:06.960 they use their own device but they use.

NOTE Confidence: 0.8119558

00:49:06.960 --> 00:49:08.969 Of all the devices that are available

NOTE Confidence: 0.8119558

00:49:08.969 --> 00:49:10.835 and their use behavior changes as

NOTE Confidence: 0.8119558

00:49:10.835 --> 00:49:13.040 new devices come into the market and

NOTE Confidence: 0.8119558

00:49:13.101 --> 00:49:15.264 that is something that we have really

NOTE Confidence: 0.8119558

00:49:15.264 --> 00:49:17.808 struggled to keep up with because we

NOTE Confidence: 0.8119558

00:49:17.808 --> 00:49:19.818 have to constantly keep introducing
NOTE Confidence: 0.8119558

00:49:19.818 --> 00:49:21.996 new terms and assessing the use
NOTE Confidence: 0.8119558

00:49:21.996 --> 00:49:24.475 of new devices in the surveys that
NOTE Confidence: 0.8119558

00:49:24.475 --> 00:49:26.953 we do with youth in high schools.
NOTE Confidence: 0.8119558

00:49:26.960 --> 00:49:29.060 You don't sound really like and this
NOTE Confidence: 0.8119558

00:49:29.060 --> 00:49:31.625 speaks to the addiction issue or the
NOTE Confidence: 0.8119558

00:49:31.625 --> 00:49:33.625 electric potential of these products.
NOTE Confidence: 0.8119558

00:49:33.630 --> 00:49:36.078 In a survey that we did when in
NOTE Confidence: 0.8119558

00:49:36.078 --> 00:49:37.840 Connecticut high schools students,
NOTE Confidence: 0.8119558

00:49:37.840 --> 00:49:40.536 we found that they most people among the
NOTE Confidence: 0.8119558

00:49:40.536 --> 00:49:43.106 youth who used E cigarettes or juuls.
NOTE Confidence: 0.8119558

00:49:43.110 --> 00:49:45.280 In this case they said that they
NOTE Confidence: 0.8119558

00:49:45.280 --> 00:49:48.080 really like the buzz or the kind of
NOTE Confidence: 0.8119558

00:49:48.080 --> 00:49:49.885 stimulating effect they were getting
NOTE Confidence: 0.8119558

00:49:49.958 --> 00:49:52.166 from these products and this is
NOTE Confidence: 0.8119558

00:49:52.166 --> 00:49:54.340 concerning because if you look at

NOTE Confidence: 0.8119558

00:49:54.340 --> 00:49:56.392 these two groups, the Blue Group.

NOTE Confidence: 0.8119558

00:49:56.392 --> 00:49:58.396 Are non current jewel users which

NOTE Confidence: 0.8119558

00:49:58.396 --> 00:50:00.402 means people who kids who use Juul

NOTE Confidence: 0.8119558

00:50:00.402 --> 00:50:02.580 in the past but had not currently

NOTE Confidence: 0.8119558

00:50:02.580 --> 00:50:04.662 using and these are current Julie

NOTE Confidence: 0.8119558

00:50:04.662 --> 00:50:06.795 users and there is a significant

NOTE Confidence: 0.8119558

00:50:06.795 --> 00:50:08.580 difference between the two groups

NOTE Confidence: 0.8119558

00:50:08.647 --> 00:50:10.471 and that the noncurrent Juul users

NOTE Confidence: 0.8119558

00:50:10.471 --> 00:50:12.819 say they did not like the they did

NOTE Confidence: 0.8119558

00:50:12.819 --> 00:50:15.056 not like the buzz in jewels as much

NOTE Confidence: 0.8119558

00:50:15.056 --> 00:50:16.934 as the current Juul users too.

NOTE Confidence: 0.8119558

00:50:16.940 --> 00:50:19.152 So the question really is are these

NOTE Confidence: 0.8119558

00:50:19.152 --> 00:50:20.767 this continuation of behavior that

NOTE Confidence: 0.8119558

00:50:20.767 --> 00:50:22.585 you see in the current users?

NOTE Confidence: 0.8119558

00:50:22.590 --> 00:50:24.902 Is it related to the fact that they

NOTE Confidence: 0.8119558

00:50:24.902 --> 00:50:27.238 like this plus or the stimulating

NOTE Confidence: 0.8119558

00:50:27.238 --> 00:50:28.504 effects from nicotine?

NOTE Confidence: 0.8119558

00:50:28.510 --> 00:50:30.562 And again some other things to

NOTE Confidence: 0.8119558

00:50:30.562 --> 00:50:32.490 point out on these slides.

NOTE Confidence: 0.8119558

00:50:32.490 --> 00:50:32.824 Also,

NOTE Confidence: 0.8119558

00:50:32.824 --> 00:50:34.828 is that your thoughts are really

NOTE Confidence: 0.8119558

00:50:34.828 --> 00:50:37.198 like these Juul products for flavors,

NOTE Confidence: 0.8119558

00:50:37.200 --> 00:50:39.366 and because their friends use it,

NOTE Confidence: 0.8333458

00:50:39.370 --> 00:50:42.082 these are in fact some of the top

NOTE Confidence: 0.8333458

00:50:42.082 --> 00:50:44.722 three issues that came out as why

NOTE Confidence: 0.8333458

00:50:44.722 --> 00:50:46.602 you'd like these products now.

NOTE Confidence: 0.8333458

00:50:46.610 --> 00:50:48.584 Further evidence from that same paper

NOTE Confidence: 0.8333458

00:50:48.584 --> 00:50:50.364 showed that the these pharmacological

NOTE Confidence: 0.8333458

00:50:50.364 --> 00:50:52.758 effects that I showed you earlier.

NOTE Confidence: 0.8333458

00:50:52.760 --> 00:50:54.570 Like you know, these ability

NOTE Confidence: 0.8333458

00:50:54.570 --> 00:50:56.018 changing ability to concentrate,

NOTE Confidence: 0.8333458

00:50:56.020 --> 00:50:57.232 feeling more energetic.

NOTE Confidence: 0.8333458

00:50:57.232 --> 00:50:59.656 All these effects and the product

NOTE Confidence: 0.8333458

00:50:59.656 --> 00:51:01.277 characteristics like liking the size.

NOTE Confidence: 0.8333458

00:51:01.280 --> 00:51:03.420 Making the shape these were

NOTE Confidence: 0.8333458

00:51:03.420 --> 00:51:05.560 related to frequency of Julius,

NOTE Confidence: 0.8333458

00:51:05.560 --> 00:51:09.949 so the the more they like the.

NOTE Confidence: 0.8333458

00:51:09.950 --> 00:51:11.660 Logical effects of product characteristics.

NOTE Confidence: 0.8333458

00:51:11.660 --> 00:51:13.700 The more likely they were too.

NOTE Confidence: 0.8113794

00:51:15.710 --> 00:51:16.958 Interesting Lee pure influences

NOTE Confidence: 0.8113794

00:51:16.958 --> 00:51:17.894 was negatively related,

NOTE Confidence: 0.8113794

00:51:17.900 --> 00:51:20.332 so our thinking on this is that perhaps

NOTE Confidence: 0.8113794

00:51:20.332 --> 00:51:21.947 peer influences are more important

NOTE Confidence: 0.8113794

00:51:21.947 --> 00:51:24.152 for initiation of use of this product.

NOTE Confidence: 0.8113794

00:51:24.160 --> 00:51:25.725 But once they have developed

NOTE Confidence: 0.8113794

00:51:25.725 --> 00:51:26.977 a regular use behavior,

NOTE Confidence: 0.8113794

00:51:26.980 --> 00:51:28.156 it's more the pharmacological
NOTE Confidence: 0.8113794

00:51:28.156 --> 00:51:29.626 effects and other effects which
NOTE Confidence: 0.8113794

00:51:29.626 --> 00:51:31.048 really maintain these behaviors.
NOTE Confidence: 0.8113794

00:51:31.050 --> 00:51:33.282 So again, you can see this is moving
NOTE Confidence: 0.8113794

00:51:33.282 --> 00:51:35.120 along the addiction area here,
NOTE Confidence: 0.8113794

00:51:35.120 --> 00:51:37.658 and we worry a lot about
NOTE Confidence: 0.8113794

00:51:37.658 --> 00:51:40.200 nicotine use and you because.
NOTE Confidence: 0.8113794

00:51:40.200 --> 00:51:41.805 Indian Ocean brain it's times
NOTE Confidence: 0.8113794

00:51:41.805 --> 00:51:44.167 of rain for addiction it onto a
NOTE Confidence: 0.8113794

00:51:44.167 --> 00:51:45.907 settlement of insuring it changes,
NOTE Confidence: 0.8113794

00:51:45.910 --> 00:51:47.254 learning memory and attention.
NOTE Confidence: 0.8113794

00:51:47.254 --> 00:51:47.926 In fact,
NOTE Confidence: 0.8113794

00:51:47.930 --> 00:51:49.530 the earlier surgeon General had
NOTE Confidence: 0.8113794

00:51:49.530 --> 00:51:51.620 actually labeled one of our earlier.
NOTE Confidence: 0.8113794

00:51:51.620 --> 00:51:53.244 Sorry if the Commissioners
NOTE Confidence: 0.8113794

00:51:53.244 --> 00:51:54.868 and actually labeled nicotine

NOTE Confidence: 0.8113794

00:51:54.868 --> 00:51:56.647 addiction as a pediatric disease

NOTE Confidence: 0.8113794

00:51:56.647 --> 00:51:58.747 because he said that if you get

NOTE Confidence: 0.8113794

00:51:58.813 --> 00:52:00.696 addicted prior to the age of 18,

NOTE Confidence: 0.8113794

00:52:00.700 --> 00:52:02.380 you have worse health outcomes,

NOTE Confidence: 0.8113794

00:52:02.380 --> 00:52:04.725 more dependence and a harder time quitting.

NOTE Confidence: 0.8113794

00:52:04.730 --> 00:52:07.745 So we have a lot of concerns about you.

NOTE Confidence: 0.8113794

00:52:07.750 --> 00:52:10.186 Queues of such high levels of nicotine's.

NOTE Confidence: 0.8113794

00:52:10.190 --> 00:52:12.262 What you see in jewel on these

NOTE Confidence: 0.8113794

00:52:12.262 --> 00:52:14.349 other products you are also using

NOTE Confidence: 0.8113794

00:52:14.349 --> 00:52:16.239 these products for other behaviors.

NOTE Confidence: 0.8113794

00:52:16.240 --> 00:52:18.250 They use them for vape tricks,

NOTE Confidence: 0.8113794

00:52:18.250 --> 00:52:20.236 they can easily adapt these products

NOTE Confidence: 0.8113794

00:52:20.236 --> 00:52:22.224 to do produce different vape clouds

NOTE Confidence: 0.8113794

00:52:22.224 --> 00:52:24.345 like you see here and they they

NOTE Confidence: 0.8113794

00:52:24.345 --> 00:52:25.979 participate in weight competitions.

NOTE Confidence: 0.8113794

00:52:25.980 --> 00:52:28.325 They use it for behaviors like dripping,
NOTE Confidence: 0.8113794

00:52:28.330 --> 00:52:30.150 which basically means opening up
NOTE Confidence: 0.8113794

00:52:30.150 --> 00:52:32.355 the device and dropping the liquid
NOTE Confidence: 0.8113794

00:52:32.355 --> 00:52:34.281 directly on the heated coil in
NOTE Confidence: 0.8113794

00:52:34.281 --> 00:52:36.549 inhaling it and they are now starting
NOTE Confidence: 0.8113794

00:52:36.549 --> 00:52:38.403 to use it for vaping cannabis
NOTE Confidence: 0.8113794

00:52:38.410 --> 00:52:40.324 to the cannabis story is very
NOTE Confidence: 0.8113794

00:52:40.324 --> 00:52:42.160 interesting because they use cannabis.
NOTE Confidence: 0.8113794

00:52:42.160 --> 00:52:43.972 Devices and then they also hack
NOTE Confidence: 0.8113794

00:52:43.972 --> 00:52:45.616 E cigarette devices to introduce
NOTE Confidence: 0.8113794

00:52:45.616 --> 00:52:46.747 cannabis into it.
NOTE Confidence: 0.8113794

00:52:46.750 --> 00:52:49.048 So these presence of these devices
NOTE Confidence: 0.8113794

00:52:49.048 --> 00:52:51.368 is introducing you to a variety
NOTE Confidence: 0.8113794

00:52:51.368 --> 00:52:53.504 of these other behaviors that we
NOTE Confidence: 0.8113794

00:52:53.504 --> 00:52:55.997 know very little about the risk of.
NOTE Confidence: 0.8113794

00:52:56.000 --> 00:52:57.765 And our daughter centers also

NOTE Confidence: 0.8113794

00:52:57.765 --> 00:52:59.947 shown that E cigarette use also

NOTE Confidence: 0.8113794

00:52:59.947 --> 00:53:01.359 leads to cigarette use.

NOTE Confidence: 0.8113794

00:53:01.360 --> 00:53:03.145 This is using longitudinal data

NOTE Confidence: 0.8113794

00:53:03.145 --> 00:53:04.930 that we collected in Connecticut.

NOTE Confidence: 0.8113794

00:53:04.930 --> 00:53:07.870 We showed that youth who started with

NOTE Confidence: 0.8113794

00:53:07.870 --> 00:53:10.432 the cigarettes were more likely to

NOTE Confidence: 0.8113794

00:53:10.432 --> 00:53:12.886 move onto cigarettes in the future.

NOTE Confidence: 0.8113794

00:53:12.890 --> 00:53:14.745 So we have a lot of concerns

NOTE Confidence: 0.8113794

00:53:14.745 --> 00:53:16.260 that I highlighted very quickly

NOTE Confidence: 0.8113794

00:53:16.260 --> 00:53:17.576 for you amongst youth.

NOTE Confidence: 0.8113794

00:53:17.580 --> 00:53:18.832 What about smoking cessation?

NOTE Confidence: 0.8113794

00:53:18.832 --> 00:53:21.090 You know the other aspect of it is,

NOTE Confidence: 0.8113794

00:53:21.090 --> 00:53:23.670 is there evidence on whether these

NOTE Confidence: 0.8113794

00:53:23.670 --> 00:53:25.390 products or smoking cessation?

NOTE Confidence: 0.8113794

00:53:25.390 --> 00:53:28.909 So 2016 contribution.

NOTE Confidence: 0.8113794

00:53:28.910 --> 00:53:29.987 By that time,
NOTE Confidence: 0.8113794

00:53:29.987 --> 00:53:32.500 a very small sentence with limited samples.
NOTE Confidence: 0.8113794

00:53:32.500 --> 00:53:34.342 And you basically said that they
NOTE Confidence: 0.8113794

00:53:34.342 --> 00:53:35.973 probably help people smoking stop
NOTE Confidence: 0.8113794

00:53:35.973 --> 00:53:37.688 smoking and they probably work
NOTE Confidence: 0.8113794

00:53:37.688 --> 00:53:39.060 better than nicotine replacement
NOTE Confidence: 0.8113794

00:53:39.112 --> 00:53:40.977 therapy and nicotine free cigarettes.
NOTE Confidence: 0.8113794

00:53:40.980 --> 00:53:43.740 But you see that use the word probably
NOTE Confidence: 0.8113794

00:53:43.740 --> 00:53:46.739 in May a lot in this in this review,
NOTE Confidence: 0.8113794

00:53:46.740 --> 00:53:48.092 essentially suggesting that more
NOTE Confidence: 0.8113794

00:53:48.092 --> 00:53:49.444 reliable evidence was needed.
NOTE Confidence: 0.8113794

00:53:49.450 --> 00:53:51.478 But if you talk to smokers,
NOTE Confidence: 0.8113794

00:53:51.480 --> 00:53:53.092 there are multiple observation.
NOTE Confidence: 0.8113794

00:53:53.092 --> 00:53:55.864 ULL studies in which people will tell
NOTE Confidence: 0.8113794

00:53:55.864 --> 00:53:57.887 you that I quit using 60 cigarettes
NOTE Confidence: 0.8113794

00:53:57.887 --> 00:54:00.300 and I have no doubt that they did.

NOTE Confidence: 0.8113794

00:54:00.300 --> 00:54:02.125 But the clinical trial evidence

NOTE Confidence: 0.8113794

00:54:02.125 --> 00:54:04.400 is still emerging on this issue.

NOTE Confidence: 0.8113794

00:54:04.400 --> 00:54:05.142 In fact,

NOTE Confidence: 0.8113794

00:54:05.142 --> 00:54:07.368 they were trying to bring some

NOTE Confidence: 0.8113794

00:54:07.368 --> 00:54:09.129 clinical trials that came out,

NOTE Confidence: 0.8113794

00:54:09.130 --> 00:54:11.104 one by teacher hike which looked

NOTE Confidence: 0.8113794

00:54:11.104 --> 00:54:12.420 at which look very

NOTE Confidence: 0.80320656

00:54:12.493 --> 00:54:14.820 promising. This one compared E

NOTE Confidence: 0.80320656

00:54:14.820 --> 00:54:16.500 cigarettes to nicotine replacement

NOTE Confidence: 0.80320656

00:54:16.500 --> 00:54:18.888 therapy and found that people who

NOTE Confidence: 0.80320656

00:54:18.888 --> 00:54:20.733 use E cigarettes actually did

NOTE Confidence: 0.80320656

00:54:20.733 --> 00:54:22.960 better than those who got in RT at.

NOTE Confidence: 0.80320656

00:54:22.960 --> 00:54:24.420 Interestingly, he also found

NOTE Confidence: 0.80320656

00:54:24.420 --> 00:54:25.880 that the respiratory symptoms,

NOTE Confidence: 0.80320656

00:54:25.880 --> 00:54:27.695 relative risk of respiratory symptoms

NOTE Confidence: 0.80320656

00:54:27.695 --> 00:54:29.547 like shortness of breath, wheezing,
NOTE Confidence: 0.80320656

00:54:29.547 --> 00:54:32.723 caused all that was reduced in people who
NOTE Confidence: 0.80320656

00:54:32.723 --> 00:54:35.945 use E cigarettes versus those who use NRT.
NOTE Confidence: 0.80320656

00:54:35.950 --> 00:54:38.734 And this is a movie flyer by Natalie
NOTE Confidence: 0.80320656

00:54:38.734 --> 00:54:41.335 Walker from New Zealand that again
NOTE Confidence: 0.80320656

00:54:41.335 --> 00:54:43.163 compared combining nicotine Patch
NOTE Confidence: 0.80320656

00:54:43.163 --> 00:54:46.125 with E cigarettes that either contain
NOTE Confidence: 0.80320656

00:54:46.125 --> 00:54:49.083 nicotine or did not contain nicotine.
NOTE Confidence: 0.80320656

00:54:49.090 --> 00:54:51.382 And she found that combining these
NOTE Confidence: 0.80320656

00:54:51.382 --> 00:54:53.463 nicotine Patch with the cigarettes
NOTE Confidence: 0.80320656

00:54:53.463 --> 00:54:55.411 that contain nicotine actually
NOTE Confidence: 0.80320656

00:54:55.411 --> 00:54:57.846 had greater benefits and repent.
NOTE Confidence: 0.80320656

00:54:57.850 --> 00:55:00.110 Increased produced better quit rates
NOTE Confidence: 0.80320656

00:55:00.110 --> 00:55:02.852 during follow up then having the
NOTE Confidence: 0.80320656

00:55:02.852 --> 00:55:05.294 circus that did not contain nicotine.
NOTE Confidence: 0.80320656

00:55:05.300 --> 00:55:08.276 So just to summarize very briefly.

NOTE Confidence: 0.80320656

00:55:08.280 --> 00:55:10.960 There is a concern about impact on you.

NOTE Confidence: 0.80320656

00:55:10.960 --> 00:55:12.705 That huge concern because youth

NOTE Confidence: 0.80320656

00:55:12.705 --> 00:55:15.200 and young adults and this is a

NOTE Confidence: 0.80320656

00:55:15.200 --> 00:55:17.258 summary from the National Academy of

NOTE Confidence: 0.80320656

00:55:17.258 --> 00:55:19.207 Science report that youth and young

NOTE Confidence: 0.80320656

00:55:19.207 --> 00:55:21.345 adults may be more likely to use

NOTE Confidence: 0.80320656

00:55:21.345 --> 00:55:23.020 these products and try cigarettes.

NOTE Confidence: 0.80320656

00:55:23.020 --> 00:55:25.030 And there is a big concern

NOTE Confidence: 0.80320656

00:55:25.030 --> 00:55:26.035 about nicotine exposure.

NOTE Confidence: 0.80320656

00:55:26.040 --> 00:55:28.301 There is emerging limited evidence that E

NOTE Confidence: 0.80320656

00:55:28.301 --> 00:55:30.388 cigarettes may help people stop smoking,

NOTE Confidence: 0.80320656

00:55:30.390 --> 00:55:32.441 but and you know really the goal

NOTE Confidence: 0.80320656

00:55:32.441 --> 00:55:34.604 should be for complete switching from

NOTE Confidence: 0.80320656

00:55:34.604 --> 00:55:37.453 cigarettes to E cigarettes and that goal

NOTE Confidence: 0.80320656

00:55:37.523 --> 00:55:39.875 is if you can achieve that goal then.

NOTE Confidence: 0.80320656

00:55:39.880 --> 00:55:41.810 You can definitely reduce exposure
NOTE Confidence: 0.80320656

00:55:41.810 --> 00:55:44.852 to a number of toxic toxin toxicants
NOTE Confidence: 0.80320656

00:55:44.852 --> 00:55:47.457 and carcinogens found in cigarettes.
NOTE Confidence: 0.80320656

00:55:47.460 --> 00:55:49.615 There are some moves considering
NOTE Confidence: 0.80320656

00:55:49.615 --> 00:55:52.302 which are considering how to regulate
NOTE Confidence: 0.80320656

00:55:52.302 --> 00:55:55.020 E cigarettes so they can remain
NOTE Confidence: 0.80320656

00:55:55.020 --> 00:55:56.379 beneficial for smokers,
NOTE Confidence: 0.80320656

00:55:56.380 --> 00:55:58.605 smokers and yet reduce attractiveness
NOTE Confidence: 0.80320656

00:55:58.605 --> 00:55:59.495 for you.
NOTE Confidence: 0.80320656

00:55:59.500 --> 00:56:02.128 Then some of these being considered
NOTE Confidence: 0.80320656

00:56:02.128 --> 00:56:04.410 things like regulating nicotine levels.
NOTE Confidence: 0.80320656

00:56:04.410 --> 00:56:08.281 The EU for example only allows 20
NOTE Confidence: 0.80320656

00:56:08.281 --> 00:56:10.929 milligrams of nicotine in there.
NOTE Confidence: 0.80320656

00:56:10.930 --> 00:56:12.580 Products as I told you,
NOTE Confidence: 0.80320656

00:56:12.580 --> 00:56:14.852 Juul contains up to 60 but the concern
NOTE Confidence: 0.80320656

00:56:14.852 --> 00:56:17.218 is that maybe smokers may need higher

NOTE Confidence: 0.80320656

00:56:17.218 --> 00:56:19.510 levels of nicotine to quit smoking.

NOTE Confidence: 0.80320656

00:56:19.510 --> 00:56:21.532 There is some consideration of removing

NOTE Confidence: 0.80320656

00:56:21.532 --> 00:56:23.800 all flavors in eliquids like Canada has,

NOTE Confidence: 0.80320656

00:56:23.800 --> 00:56:25.780 but then there is a concern.

NOTE Confidence: 0.80320656

00:56:25.780 --> 00:56:28.279 Like I told you that smokers may

NOTE Confidence: 0.80320656

00:56:28.279 --> 00:56:30.399 need flavors to quit smoking.

NOTE Confidence: 0.80320656

00:56:30.400 --> 00:56:32.325 And there is some move towards regulating

NOTE Confidence: 0.80320656

00:56:32.325 --> 00:56:34.119 the kinds of devices available.

NOTE Confidence: 0.80320656

00:56:34.120 --> 00:56:36.815 So these are all things that we're

NOTE Confidence: 0.80320656

00:56:36.815 --> 00:56:38.604 generating scientific evidence for in

NOTE Confidence: 0.80320656

00:56:38.604 --> 00:56:40.585 our center and in the other centers.

NOTE Confidence: 0.80320656

00:56:40.590 --> 00:56:40.921 Well,

NOTE Confidence: 0.80320656

00:56:40.921 --> 00:56:43.238 there are a lot of ongoing regulations

NOTE Confidence: 0.80320656

00:56:43.238 --> 00:56:45.378 and these are my last few slides.

NOTE Confidence: 0.80320656

00:56:45.380 --> 00:56:47.796 I promise there are a lot of regulations

NOTE Confidence: 0.80320656

00:56:47.796 --> 00:56:49.969 that have been applied to these

NOTE Confidence: 0.80320656

00:56:49.969 --> 00:56:51.844 products to potentially reduce their

NOTE Confidence: 0.80320656

00:56:51.844 --> 00:56:54.679 use by youth and we are doing a lot of

NOTE Confidence: 0.80320656

00:56:54.679 --> 00:56:56.540 education of students, parents and teachers.

NOTE Confidence: 0.80320656

00:56:56.540 --> 00:56:57.612 I think we have.

NOTE Confidence: 0.80320656

00:56:57.612 --> 00:56:59.220 My group has gone to over

NOTE Confidence: 0.80320656

00:56:59.286 --> 00:57:01.010 100 schools in Connecticut,

NOTE Confidence: 0.80320656

00:57:01.010 --> 00:57:01.736 educating students,

NOTE Confidence: 0.80320656

00:57:01.736 --> 00:57:03.551 parents and teachers and Trisha

NOTE Confidence: 0.80320656

00:57:03.551 --> 00:57:05.771 Doll whom many of you know very

NOTE Confidence: 0.80320656

00:57:05.771 --> 00:57:07.385 well is very closely involved in

NOTE Confidence: 0.80320656

00:57:07.445 --> 00:57:09.636 these efforts to make sure that they

NOTE Confidence: 0.80320656

00:57:09.636 --> 00:57:11.615 understand the risks of these products.

NOTE Confidence: 0.80320656

00:57:11.615 --> 00:57:13.685 And we're also through this American

NOTE Confidence: 0.80320656

00:57:13.685 --> 00:57:14.990 Heart Association funded center,

NOTE Confidence: 0.80320656

00:57:14.990 --> 00:57:16.270 developing both prevention and

NOTE Confidence: 0.80320656

00:57:16.270 --> 00:57:17.230 individual cessation programs,

NOTE Confidence: 0.80320656

00:57:17.230 --> 00:57:19.456 which I don't have time to tell

NOTE Confidence: 0.80320656

00:57:19.456 --> 00:57:20.410 you about right

NOTE Confidence: 0.83444136

00:57:20.479 --> 00:57:22.990 now, but hopefully at some point in the

NOTE Confidence: 0.83444136

00:57:22.990 --> 00:57:24.910 future, once we have more evidence,

NOTE Confidence: 0.83444136

00:57:24.910 --> 00:57:27.614 I'll be telling you more able to tell

NOTE Confidence: 0.83444136

00:57:27.614 --> 00:57:30.725 you more about how these efforts pan out.

NOTE Confidence: 0.83444136

00:57:30.730 --> 00:57:32.716 Now my very last slide is.

NOTE Confidence: 0.83444136

00:57:32.720 --> 00:57:33.784 What can you do?

NOTE Confidence: 0.83444136

00:57:33.784 --> 00:57:36.202 You heard me talk a lot about all

NOTE Confidence: 0.83444136

00:57:36.202 --> 00:57:38.440 these products and present some of

NOTE Confidence: 0.83444136

00:57:38.440 --> 00:57:40.659 the nuances and conflicts to you.

NOTE Confidence: 0.83444136

00:57:40.660 --> 00:57:43.244 I would say as clinicians you should continue

NOTE Confidence: 0.83444136

00:57:43.244 --> 00:57:45.630 to encourage your patients to quit smoking.

NOTE Confidence: 0.83444136

00:57:45.630 --> 00:57:48.080 Quitting combustible cigarettes use is

NOTE Confidence: 0.83444136

00:57:48.080 --> 00:57:51.099 probably the best thing anybody can do.
NOTE Confidence: 0.83444136

00:57:51.100 --> 00:57:52.780 Or to improve their help,
NOTE Confidence: 0.83444136

00:57:52.780 --> 00:57:54.245 encourage them to use treatments
NOTE Confidence: 0.83444136

00:57:54.245 --> 00:57:56.420 that have been shown to work that
NOTE Confidence: 0.83444136

00:57:56.420 --> 00:57:58.045 that is good scientific evidence
NOTE Confidence: 0.83444136

00:57:58.045 --> 00:57:59.810 for like behavioral interventions,
NOTE Confidence: 0.83444136

00:57:59.810 --> 00:58:00.815 like pharmacological interventions
NOTE Confidence: 0.83444136

00:58:00.815 --> 00:58:01.820 that are available,
NOTE Confidence: 0.83444136

00:58:01.820 --> 00:58:04.165 like NRT and appropriate on an Chantix.
NOTE Confidence: 0.83444136

00:58:04.170 --> 00:58:06.284 But if nothing else works on your
NOTE Confidence: 0.83444136

00:58:06.284 --> 00:58:08.520 patient wants to use these cigarettes,
NOTE Confidence: 0.83444136

00:58:08.520 --> 00:58:10.200 then I would support them.
NOTE Confidence: 0.83444136

00:58:10.200 --> 00:58:11.109 But you know,
NOTE Confidence: 0.83444136

00:58:11.109 --> 00:58:14.219 warn them not to over use the E cigarettes,
NOTE Confidence: 0.83444136

00:58:14.220 --> 00:58:16.558 use it as they would their cigarettes.
NOTE Confidence: 0.83444136

00:58:16.560 --> 00:58:18.570 Encourage them to put cigarettes completely,

NOTE Confidence: 0.83444136
00:58:18.570 --> 00:58:18.938 none.
NOTE Confidence: 0.83444136
00:58:18.938 --> 00:58:21.146 None of this dual use behavior
NOTE Confidence: 0.83444136
00:58:21.146 --> 00:58:22.710 because that's going to be.
NOTE Confidence: 0.83444136
00:58:22.710 --> 00:58:23.354 You know,
NOTE Confidence: 0.83444136
00:58:23.354 --> 00:58:25.286 even could get them exposed to
NOTE Confidence: 0.83444136
00:58:25.286 --> 00:58:27.230 even more nicotine than they.
NOTE Confidence: 0.83444136
00:58:27.230 --> 00:58:29.673 Then they are normally used to being
NOTE Confidence: 0.83444136
00:58:29.673 --> 00:58:32.022 exposed to and encourage them to come
NOTE Confidence: 0.83444136
00:58:32.022 --> 00:58:35.238 up with a plan to quit cigarettes as well.
NOTE Confidence: 0.83444136
00:58:35.240 --> 00:58:36.975 I would also encourage you
NOTE Confidence: 0.83444136
00:58:36.975 --> 00:58:38.363 to educate your patients,
NOTE Confidence: 0.83444136
00:58:38.370 --> 00:58:40.110 educate communities and local schools,
NOTE Confidence: 0.83444136
00:58:40.110 --> 00:58:41.220 other community organizations,
NOTE Confidence: 0.83444136
00:58:41.220 --> 00:58:43.070 and Lastly help us collect
NOTE Confidence: 0.83444136
00:58:43.070 --> 00:58:44.629 scientific evidence on E cigarettes.
NOTE Confidence: 0.83444136

00:58:44.630 --> 00:58:45.749 The we needed.
NOTE Confidence: 0.83444136

00:58:45.749 --> 00:58:48.360 The FDA needs it to really regulate
NOTE Confidence: 0.83444136

00:58:48.437 --> 00:58:49.928 these products well.
NOTE Confidence: 0.83444136

00:58:49.930 --> 00:58:52.026 And I will stop there and I have.
NOTE Confidence: 0.83444136

00:58:52.030 --> 00:58:53.864 I know I presented a lot of
NOTE Confidence: 0.83444136

00:58:53.864 --> 00:58:54.650 information to you,
NOTE Confidence: 0.83444136

00:58:54.650 --> 00:58:56.198 but I'm happy to answer any
NOTE Confidence: 0.83444136

00:58:56.198 --> 00:58:57.530 questions that you might have.
NOTE Confidence: 0.90690047

00:59:10.520 --> 00:59:13.278 So people can either put their questions
NOTE Confidence: 0.90690047

00:59:13.278 --> 00:59:16.857 in chat or you can just ask her out loud.
NOTE Confidence: 0.8454836

00:59:19.300 --> 00:59:21.160 Do you want me to just look at the chat?
NOTE Confidence: 0.8454836

00:59:21.160 --> 00:59:24.626 Trisha? No question there yet but
NOTE Confidence: 0.8454836

00:59:24.626 --> 00:59:27.050 chat yet, but but certainly I'm happy
NOTE Confidence: 0.85015756

00:59:27.050 --> 00:59:28.790 to help moderate as well.
NOTE Confidence: 0.85015756

00:59:28.790 --> 00:59:31.184 If you need an eye on the chat while
NOTE Confidence: 0.85015756

00:59:31.184 --> 00:59:33.494 you're asking while you're answering

NOTE Confidence: 0.85015756

00:59:33.494 --> 00:59:36.369 questions, thank you, Marina.

NOTE Confidence: 0.85015756

00:59:36.370 --> 00:59:39.268 I did have a quick question Suchitra

NOTE Confidence: 0.85015756

00:59:39.268 --> 00:59:42.296 and that was around tobacco flavor and

NOTE Confidence: 0.85015756

00:59:42.296 --> 00:59:45.987 I know that early on you did a study

NOTE Confidence: 0.85015756

00:59:45.987 --> 00:59:48.720 where you showed that youth with Berry

NOTE Confidence: 0.85015756

00:59:48.720 --> 00:59:51.485 that you showed that you really don't

NOTE Confidence: 0.85015756

00:59:51.485 --> 00:59:53.832 like tobacco flavored E cigarettes.

NOTE Confidence: 0.85015756

00:59:53.832 --> 00:59:57.476 And if I remember from that study,

NOTE Confidence: 0.85015756

00:59:57.476 --> 00:59:59.603 independent smokers didn't mind it.

NOTE Confidence: 0.85015756

00:59:59.603 --> 01:00:03.015 And I wondered if you could comment on

NOTE Confidence: 0.85015756

01:00:03.015 --> 01:00:05.270 whether tobacco flavored E cigarettes

NOTE Confidence: 0.85015756

01:00:05.270 --> 01:00:07.872 might be a good compromise between

NOTE Confidence: 0.85015756

01:00:07.872 --> 01:00:09.464 the smoking cessation advantages

NOTE Confidence: 0.85015756

01:00:09.464 --> 01:00:12.136 and the likelihood of youth uptake.

NOTE Confidence: 0.85015756

01:00:12.136 --> 01:00:13.508 So the

NOTE Confidence: 0.8264471

01:00:13.510 --> 01:00:15.953 thing I would say about that is
NOTE Confidence: 0.8264471

01:00:15.953 --> 01:00:18.824 honestly the the in the in some of
NOTE Confidence: 0.8264471

01:00:18.824 --> 01:00:20.940 the studies initial studies we did.
NOTE Confidence: 0.8264471

01:00:20.940 --> 01:00:23.028 We did nobody like tobacco flavored
NOTE Confidence: 0.8264471

01:00:23.028 --> 01:00:25.184 E cigarettes and the reason being
NOTE Confidence: 0.8264471

01:00:25.184 --> 01:00:27.620 that they all said that the tobacco
NOTE Confidence: 0.8264471

01:00:27.620 --> 01:00:29.444 flavors was nothing like the
NOTE Confidence: 0.8264471

01:00:29.444 --> 01:00:31.204 flavor they get in cigarettes.
NOTE Confidence: 0.8264471

01:00:31.210 --> 01:00:33.376 But this this is become quite
NOTE Confidence: 0.8264471

01:00:33.376 --> 01:00:35.221 sophisticated overtime and we haven't
NOTE Confidence: 0.8264471

01:00:35.221 --> 01:00:37.573 looked at some of the newer flavors,
NOTE Confidence: 0.8264471

01:00:37.580 --> 01:00:40.060 but there are now flavors which say they
NOTE Confidence: 0.8264471

01:00:40.060 --> 01:00:42.179 match exactly with Marlboro cigarettes.
NOTE Confidence: 0.8264471

01:00:42.180 --> 01:00:44.508 So they match exactly with certain.
NOTE Confidence: 0.8264471

01:00:44.510 --> 01:00:46.846 Flavors that you get because as you know,
NOTE Confidence: 0.8264471

01:00:46.850 --> 01:00:49.034 most of these tobacco products vary a lot

NOTE Confidence: 0.8264471

01:00:49.034 --> 01:00:51.477 in flavor of the tobacco because of how

NOTE Confidence: 0.8264471

01:00:51.477 --> 01:00:53.559 they're processed and where they come from.

NOTE Confidence: 0.8264471

01:00:53.560 --> 01:00:56.188 I got, I talked to a tobacco farmer once,

NOTE Confidence: 0.8264471

01:00:56.190 --> 01:00:58.526 who gave me a whole history of Burling,

NOTE Confidence: 0.8264471

01:00:58.530 --> 01:00:59.990 tobacco, and how it's processed

NOTE Confidence: 0.8264471

01:00:59.990 --> 01:01:01.450 and where it comes from,

NOTE Confidence: 0.8264471

01:01:01.450 --> 01:01:02.266 which was fascinating.

NOTE Confidence: 0.8264471

01:01:02.266 --> 01:01:04.170 So I think they're doing a better

NOTE Confidence: 0.8264471

01:01:04.224 --> 01:01:05.829 effort of matching these flavors,

NOTE Confidence: 0.8264471

01:01:05.830 --> 01:01:07.895 and I can't answer that question today

NOTE Confidence: 0.8264471

01:01:07.895 --> 01:01:10.253 like I don't know how it would be

NOTE Confidence: 0.8264471

01:01:10.253 --> 01:01:12.540 approached today or how they would like it,

NOTE Confidence: 0.8264471

01:01:12.540 --> 01:01:14.556 but you definitely don't like them.

NOTE Confidence: 0.8264471

01:01:14.560 --> 01:01:15.316 That's for sure.

NOTE Confidence: 0.8264471

01:01:15.316 --> 01:01:17.080 I don't know about the adult smokers.

NOTE Confidence: 0.8242475

01:01:18.900 --> 01:01:21.820 There is a question in the chat from
NOTE Confidence: 0.8242475

01:01:21.820 --> 01:01:24.323 Schuber Rodriguez who says is anyone
NOTE Confidence: 0.8242475

01:01:24.323 --> 01:01:26.453 studying evidence for decreased lung
NOTE Confidence: 0.8242475

01:01:26.453 --> 01:01:28.839 disease morbidity with E cigarettes?
NOTE Confidence: 0.8242475

01:01:28.840 --> 01:01:31.120 Yes, there are many many center
NOTE Confidence: 0.8242475

01:01:31.120 --> 01:01:34.055 studying is that in fact we're doing
NOTE Confidence: 0.8242475

01:01:34.055 --> 01:01:36.290 some studies along those lines.
NOTE Confidence: 0.8242475

01:01:36.290 --> 01:01:38.803 Also to try to look at some
NOTE Confidence: 0.8242475

01:01:38.803 --> 01:01:40.451 biomarkers which might potentially
NOTE Confidence: 0.8242475

01:01:40.451 --> 01:01:42.906 be reflective of lung health.
NOTE Confidence: 0.8242475

01:01:42.910 --> 01:01:44.562 There are other centers
NOTE Confidence: 0.8242475

01:01:44.562 --> 01:01:46.214 doing studies of biomarkers,
NOTE Confidence: 0.8242475

01:01:46.220 --> 01:01:48.938 reflective of of cardiovascular health also.
NOTE Confidence: 0.8242475

01:01:48.940 --> 01:01:50.745 That I'm trying to understand
NOTE Confidence: 0.8242475

01:01:50.745 --> 01:01:52.550 both in people in smokers.
NOTE Confidence: 0.8242475

01:01:52.550 --> 01:01:55.315 What happens when they explain their they

NOTE Confidence: 0.8242475

01:01:55.315 --> 01:01:57.489 completely change over to E cigarettes

NOTE Confidence: 0.8242475

01:01:57.489 --> 01:01:59.645 and then also what happens to some

NOTE Confidence: 0.8242475

01:01:59.716 --> 01:02:01.936 of these biomarkers when you finish,

NOTE Confidence: 0.8242475

01:02:01.940 --> 01:02:04.481 she ate so there's both kinds of

NOTE Confidence: 0.8242475

01:02:04.481 --> 01:02:06.269 studies ongoing and there is.

NOTE Confidence: 0.8242475

01:02:06.270 --> 01:02:08.406 There are some studies which suggest

NOTE Confidence: 0.8242475

01:02:08.406 --> 01:02:10.874 there is there are long changes both

NOTE Confidence: 0.8242475

01:02:10.874 --> 01:02:13.142 in terms of pathology as well as

NOTE Confidence: 0.8242475

01:02:13.209 --> 01:02:15.154 some of the inflammatory pathways

NOTE Confidence: 0.8242475

01:02:15.154 --> 01:02:17.470 which are activated in the line.

NOTE Confidence: 0.8242475

01:02:17.470 --> 01:02:19.320 And there are other studies

NOTE Confidence: 0.8242475

01:02:19.320 --> 01:02:20.430 which suggest that.

NOTE Confidence: 0.8242475

01:02:20.430 --> 01:02:22.240 That is not the case,

NOTE Confidence: 0.8242475

01:02:22.240 --> 01:02:22.960 so again,

NOTE Confidence: 0.8242475

01:02:22.960 --> 01:02:23.680 emerging story.

NOTE Confidence: 0.7660385

01:02:25.340 --> 01:02:28.056 Lots of questions in the chat now.
NOTE Confidence: 0.7660385

01:02:28.060 --> 01:02:30.769 I'll keep going for for our chatters.
NOTE Confidence: 0.7660385

01:02:30.770 --> 01:02:33.031 Zach Carbonek asks what are your thoughts
NOTE Confidence: 0.7660385

01:02:33.031 --> 01:02:34.492 on the potential cardiorespiratory
NOTE Confidence: 0.7660385

01:02:34.492 --> 01:02:37.066 downsides of higher dose nicotine via
NOTE Confidence: 0.7660385

01:02:37.066 --> 01:02:39.309 eproducts compared to the carcinogens?
NOTE Confidence: 0.7660385

01:02:39.310 --> 01:02:41.250 Plus nicotine with traditional cigarettes?
NOTE Confidence: 0.7660385

01:02:41.250 --> 01:02:43.959 So there's a lot of concern about
NOTE Confidence: 0.7660385

01:02:43.960 --> 01:02:47.064 that. One of the T cores that is,
NOTE Confidence: 0.7660385

01:02:47.070 --> 01:02:49.338 that is our sister T course is
NOTE Confidence: 0.7660385

01:02:49.338 --> 01:02:51.344 the Americas that equals from
NOTE Confidence: 0.7660385

01:02:51.344 --> 01:02:53.276 the American Heart Association.
NOTE Confidence: 0.7660385

01:02:53.280 --> 01:02:55.890 And they're actually looking at.
NOTE Confidence: 0.7660385

01:02:55.890 --> 01:02:57.334 Markers like endothelial dysfunction,
NOTE Confidence: 0.7660385

01:02:57.334 --> 01:02:58.770 which is, you know,
NOTE Confidence: 0.7660385

01:02:58.770 --> 01:03:00.900 something that is can be changed

NOTE Confidence: 0.7660385

01:03:00.900 --> 01:03:02.753 with immediate exposure as well

NOTE Confidence: 0.7660385

01:03:02.753 --> 01:03:04.543 as changes in blood pressure.

NOTE Confidence: 0.7660385

01:03:04.550 --> 01:03:06.832 And they showed you that figure that

NOTE Confidence: 0.7660385

01:03:06.832 --> 01:03:08.967 nicotine alters a variety of organ

NOTE Confidence: 0.7660385

01:03:08.967 --> 01:03:11.145 systems and there is evidence emerging

NOTE Confidence: 0.7660385

01:03:11.145 --> 01:03:13.473 that things like endothelial function is

NOTE Confidence: 0.7660385

01:03:13.473 --> 01:03:16.102 altered by exposure to high nicotine levels.

NOTE Confidence: 0.7660385

01:03:16.102 --> 01:03:17.546 Again, as I said,

NOTE Confidence: 0.7660385

01:03:17.550 --> 01:03:19.716 it all depends on how much

NOTE Confidence: 0.7660385

01:03:19.716 --> 01:03:21.160 nicotine you're exposed to.

NOTE Confidence: 0.7660385

01:03:21.160 --> 01:03:24.088 That is why they are considering reducing the

NOTE Confidence: 0.7660385

01:03:24.088 --> 01:03:26.642 nicotine levels in products like Juul, which.

NOTE Confidence: 0.7660385

01:03:26.642 --> 01:03:29.234 In my mind contain an unbelievable

NOTE Confidence: 0.7660385

01:03:29.234 --> 01:03:31.759 amount of nicotine to lower levels,

NOTE Confidence: 0.7660385

01:03:31.760 --> 01:03:35.016 so maybe that effect might also be less.

NOTE Confidence: 0.75021225

01:03:42.990 --> 01:03:44.319 I think Marina
NOTE Confidence: 0.75021225

01:03:44.320 --> 01:03:47.288 froze. I think social Doctor Tech wants
NOTE Confidence: 0.75021225

01:03:47.288 --> 01:03:50.088 some more information about nicotine salts.
NOTE Confidence: 0.7638254

01:03:51.670 --> 01:03:52.843 Nicotine salts check.
NOTE Confidence: 0.7638254

01:03:52.843 --> 01:03:56.040 I'm happy to talk to you about this,
NOTE Confidence: 0.7638254

01:03:56.040 --> 01:03:58.220 but nicotine salts are very
NOTE Confidence: 0.7638254

01:03:58.220 --> 01:04:00.400 interesting and there are probably
NOTE Confidence: 0.7638254

01:04:00.480 --> 01:04:02.944 other people in our center were better
NOTE Confidence: 0.7638254

01:04:02.944 --> 01:04:05.622 at this who can give you better
NOTE Confidence: 0.7638254

01:04:05.622 --> 01:04:07.944 information like I know and sairam,
NOTE Confidence: 0.7638254

01:04:07.950 --> 01:04:10.752 but the nicotine salts toxicity is
NOTE Confidence: 0.7638254

01:04:10.752 --> 01:04:13.137 something that is still emerging
NOTE Confidence: 0.7638254

01:04:13.137 --> 01:04:16.182 and we know that Nick people who
NOTE Confidence: 0.7638254

01:04:16.182 --> 01:04:19.182 use nicotine salts say it's a lot
NOTE Confidence: 0.7638254

01:04:19.182 --> 01:04:21.232 less irritating to the throat.
NOTE Confidence: 0.7638254

01:04:21.240 --> 01:04:23.346 And therefore it makes use of

NOTE Confidence: 0.7638254

01:04:23.346 --> 01:04:25.295 these high levels of nicotine

NOTE Confidence: 0.7638254

01:04:25.295 --> 01:04:27.635 products like Juul much easier.

NOTE Confidence: 0.7638254

01:04:27.640 --> 01:04:29.250 That's really all the information

NOTE Confidence: 0.7638254

01:04:29.250 --> 01:04:30.538 I have right now,

NOTE Confidence: 0.7638254

01:04:30.540 --> 01:04:32.724 but I can connect with you later

NOTE Confidence: 0.7638254

01:04:32.724 --> 01:04:35.027 and maybe give you direct you to

NOTE Confidence: 0.7638254

01:04:35.027 --> 01:04:36.977 some more papers on this issue.

NOTE Confidence: 0.8499974

01:04:38.620 --> 01:04:41.322 Doctor Berger wants to know with low

NOTE Confidence: 0.8499974

01:04:41.322 --> 01:04:43.636 smoking rates, any comments on effects

NOTE Confidence: 0.8499974

01:04:43.636 --> 01:04:46.360 of taxation and the politics of this.

NOTE Confidence: 0.7938798

01:04:47.640 --> 01:04:49.548 Specifically related related to

NOTE Confidence: 0.7938798

01:04:49.548 --> 01:04:51.933 smoking or related to vaping.

NOTE Confidence: 0.82075405

01:04:55.190 --> 01:04:56.590 If you could clarify

NOTE Confidence: 0.82075405

01:04:56.590 --> 01:04:57.994 Doctor Berger, you can

NOTE Confidence: 0.82075405

01:04:57.994 --> 01:04:59.749 unmute yeah on either one

NOTE Confidence: 0.82075405

01:04:59.750 --> 01:05:02.927 so taxation has been used a lot in in
NOTE Confidence: 0.82075405

01:05:02.927 --> 01:05:05.675 smoking as you know to really and in
NOTE Confidence: 0.82075405

01:05:05.675 --> 01:05:08.509 fact that was one of the issues that
NOTE Confidence: 0.82075405

01:05:08.509 --> 01:05:10.884 came up in the menthol cigarette issue
NOTE Confidence: 0.82075405

01:05:10.884 --> 01:05:12.998 I was explaining to you earlier that
NOTE Confidence: 0.82075405

01:05:12.998 --> 01:05:14.611 Connecticut was considering potentially
NOTE Confidence: 0.82075405

01:05:14.611 --> 01:05:16.711 regulating menthol cigarettes and removing
NOTE Confidence: 0.82075405

01:05:16.711 --> 01:05:18.360 menthol cigarettes from the market.
NOTE Confidence: 0.82075405

01:05:18.360 --> 01:05:20.992 I understand one of the big issues that
NOTE Confidence: 0.82075405

01:05:20.992 --> 01:05:23.984 came up in the debate at that point was
NOTE Confidence: 0.82075405

01:05:23.984 --> 01:05:26.959 that the state gets an amazing amount of
NOTE Confidence: 0.82075405

01:05:26.959 --> 01:05:29.235 income from taxation of these products.
NOTE Confidence: 0.82075405

01:05:29.235 --> 01:05:30.615 Millions of dollars and
NOTE Confidence: 0.82075405

01:05:30.615 --> 01:05:31.995 the question really was,
NOTE Confidence: 0.82075405

01:05:32.000 --> 01:05:35.042 can we do this at this point or not?
NOTE Confidence: 0.82075405

01:05:35.050 --> 01:05:37.213 Can we afford to take the financial

NOTE Confidence: 0.82075405

01:05:37.213 --> 01:05:39.161 burden of removing these products on

NOTE Confidence: 0.82075405

01:05:39.161 --> 01:05:41.081 the market so it's a conversation

NOTE Confidence: 0.82075405

01:05:41.081 --> 01:05:43.326 that continues and taxation has a

NOTE Confidence: 0.82075405

01:05:43.326 --> 01:05:45.186 huge influence on that conversation?

NOTE Confidence: 0.82075405

01:05:45.190 --> 01:05:46.966 Taxation also has had has been

NOTE Confidence: 0.82075405

01:05:46.966 --> 01:05:49.382 shown to have a huge influence on

NOTE Confidence: 0.82075405

01:05:49.382 --> 01:05:50.930 youth use of cigarettes,

NOTE Confidence: 0.82075405

01:05:50.930 --> 01:05:52.620 so you the very sensitive

NOTE Confidence: 0.82075405

01:05:52.620 --> 01:05:53.634 very price sensitive.

NOTE Confidence: 0.82075405

01:05:53.640 --> 01:05:55.572 So if the prices of cigarettes

NOTE Confidence: 0.82075405

01:05:55.572 --> 01:05:57.690 go up you QS goes down.

NOTE Confidence: 0.82075405

01:05:57.690 --> 01:05:59.820 Now that model could be applied

NOTE Confidence: 0.82075405

01:05:59.820 --> 01:06:01.929 to E cigarettes also but that.

NOTE Confidence: 0.82075405

01:06:01.930 --> 01:06:03.838 That move has not happened because

NOTE Confidence: 0.82075405

01:06:03.838 --> 01:06:05.808 the concern is again of being

NOTE Confidence: 0.82075405

01:06:05.808 --> 01:06:07.716 able to provide these products for
NOTE Confidence: 0.82075405

01:06:07.716 --> 01:06:09.630 smokers who want to quit smoking,
NOTE Confidence: 0.82075405

01:06:09.630 --> 01:06:11.990 but so the concern is if you start
NOTE Confidence: 0.82075405

01:06:11.990 --> 01:06:13.675 taxing those products too much
NOTE Confidence: 0.82075405

01:06:13.675 --> 01:06:15.727 then smokers will not use them.
NOTE Confidence: 0.82075405

01:06:15.730 --> 01:06:18.298 So you know this debate is ongoing there.
NOTE Confidence: 0.82075405

01:06:18.300 --> 01:06:21.528 I hope that answered your question.
NOTE Confidence: 0.82075405

01:06:21.530 --> 01:06:22.780 It helps, thank you.
NOTE Confidence: 0.7395547

01:06:28.560 --> 01:06:30.140 Anything else, sorry I can
NOTE Confidence: 0.7395547

01:06:30.140 --> 01:06:31.760 see. I'm going West into Trisha
NOTE Confidence: 0.7395547

01:06:31.760 --> 01:06:33.920 'cause all my my chats disappeared.
NOTE Confidence: 0.7395547

01:06:33.920 --> 01:06:36.540 OK, it's all good.
NOTE Confidence: 0.7395547

01:06:36.540 --> 01:06:38.412 Prior to Covid, there were a
NOTE Confidence: 0.7395547

01:06:38.412 --> 01:06:40.193 number of young adults suffering
NOTE Confidence: 0.7395547

01:06:40.193 --> 01:06:42.538 respiratory failure and lung damage,
NOTE Confidence: 0.7395547

01:06:42.540 --> 01:06:44.990 which appeared to be caused from an

NOTE Confidence: 0.7395547

01:06:44.990 --> 01:06:47.040 ingredient in the vape capsules.

NOTE Confidence: 0.7395547

01:06:47.040 --> 01:06:49.290 Has there been any follow up

NOTE Confidence: 0.83631575

01:06:49.290 --> 01:06:50.481 studies on this?

NOTE Confidence: 0.83631575

01:06:50.481 --> 01:06:52.863 Yes, you're referring to a Valley

NOTE Confidence: 0.83631575

01:06:52.863 --> 01:06:54.724 which was can never remember

NOTE Confidence: 0.83631575

01:06:54.724 --> 01:06:57.170 the full what it they give you.

NOTE Confidence: 0.83631575

01:06:57.170 --> 01:06:58.618 These acronyms for everything?

NOTE Confidence: 0.83631575

01:06:58.618 --> 01:07:01.557 If Allie was was seen in the US

NOTE Confidence: 0.83631575

01:07:01.557 --> 01:07:04.000 population primarily at I mean at least

NOTE Confidence: 0.83631575

01:07:04.000 --> 01:07:06.260 wasn't reported from anywhere else.

NOTE Confidence: 0.83631575

01:07:06.260 --> 01:07:07.772 Besides primarily in youth

NOTE Confidence: 0.83631575

01:07:07.772 --> 01:07:10.040 and young adults in the US,

NOTE Confidence: 0.83631575

01:07:10.040 --> 01:07:12.686 and it was the CDC's last word.

NOTE Confidence: 0.83631575

01:07:12.690 --> 01:07:15.280 On this has been that it is

NOTE Confidence: 0.83631575

01:07:15.280 --> 01:07:17.599 potentially related to the use of

NOTE Confidence: 0.83631575

01:07:17.599 --> 01:07:19.867 a product called vitamin E acetate,
NOTE Confidence: 0.83631575

01:07:19.870 --> 01:07:23.263 which is a solvent that is used in in,
NOTE Confidence: 0.83631575

01:07:23.270 --> 01:07:24.401 not commercial supposedly,
NOTE Confidence: 0.83631575

01:07:24.401 --> 01:07:26.286 but black market cannabis products.
NOTE Confidence: 0.83631575

01:07:26.290 --> 01:07:28.936 So the so, as I told you,
NOTE Confidence: 0.83631575

01:07:28.940 --> 01:07:31.397 there is a lot of intersection between
NOTE Confidence: 0.83631575

01:07:31.397 --> 01:07:33.479 cannabis vaping and nicotine vaping,
NOTE Confidence: 0.83631575

01:07:33.480 --> 01:07:35.430 and supposedly there was a
NOTE Confidence: 0.83631575

01:07:35.430 --> 01:07:37.380 solvent called vitamin E acetate.
NOTE Confidence: 0.83631575

01:07:37.380 --> 01:07:39.240 In black market cannabis products,
NOTE Confidence: 0.83631575

01:07:39.240 --> 01:07:41.496 which has been identified as being
NOTE Confidence: 0.83631575

01:07:41.496 --> 01:07:43.689 responsible for the value that said,
NOTE Confidence: 0.83631575

01:07:43.690 --> 01:07:46.266 I don't think the book is closed
NOTE Confidence: 0.83631575

01:07:46.266 --> 01:07:47.770 on that issue yet.
NOTE Confidence: 0.83631575

01:07:47.770 --> 01:07:49.575 Covid just has changed the
NOTE Confidence: 0.83631575

01:07:49.575 --> 01:07:51.850 attention from the Valley to Covid.

NOTE Confidence: 0.83631575

01:07:51.850 --> 01:07:54.447 I understand from a lot of investigators.

NOTE Confidence: 0.83631575

01:07:54.450 --> 01:07:57.040 In fact there is in our group,

NOTE Confidence: 0.83631575

01:07:57.040 --> 01:07:59.266 Steve Baldassarre is doing this work,

NOTE Confidence: 0.83631575

01:07:59.270 --> 01:08:01.615 continuing to examine cases of

NOTE Confidence: 0.83631575

01:08:01.615 --> 01:08:04.723 Valley and how it relates to E

NOTE Confidence: 0.83631575

01:08:04.723 --> 01:08:07.403 cigarette use in the ER at Yale so.

NOTE Confidence: 0.83631575

01:08:07.410 --> 01:08:09.923 There is concern about this and it

NOTE Confidence: 0.83631575

01:08:09.923 --> 01:08:12.760 just has dropped off the CDC's radar

NOTE Confidence: 0.83631575

01:08:12.760 --> 01:08:15.580 because coding became the and rightfully so.

NOTE Confidence: 0.83631575

01:08:15.580 --> 01:08:16.750 An important issue.

NOTE Confidence: 0.87342083

01:08:18.720 --> 01:08:20.766 Alright, Kristen would like to know

NOTE Confidence: 0.87342083

01:08:20.770 --> 01:08:23.340 what would you say in response to the

NOTE Confidence: 0.87342083

01:08:23.340 --> 01:08:25.294 concerns about loss of revenue that

NOTE Confidence: 0.87342083

01:08:25.294 --> 01:08:27.364 might be causing hesitation or pushback

NOTE Confidence: 0.87342083

01:08:27.364 --> 01:08:29.630 on the menthol cigarette ban issue,

NOTE Confidence: 0.87342083

01:08:29.630 --> 01:08:32.332 and what can we do as scientists
NOTE Confidence: 0.87342083

01:08:32.332 --> 01:08:35.010 to advance and support this. So
NOTE Confidence: 0.83343005

01:08:35.010 --> 01:08:37.207 these are all hypothetical situations, right?
NOTE Confidence: 0.83343005

01:08:37.207 --> 01:08:40.143 So there is mental was banned in Canada.
NOTE Confidence: 0.83343005

01:08:40.150 --> 01:08:42.774 I think we need to look at the
NOTE Confidence: 0.83343005

01:08:42.774 --> 01:08:44.919 science and see what happened.
NOTE Confidence: 0.83343005

01:08:44.920 --> 01:08:46.384 There are instances where
NOTE Confidence: 0.83343005

01:08:46.384 --> 01:08:47.848 mental has been banned.
NOTE Confidence: 0.83343005

01:08:47.850 --> 01:08:50.786 We can learn from those what happened there.
NOTE Confidence: 0.83343005

01:08:50.790 --> 01:08:53.030 I think there is no just showing
NOTE Confidence: 0.83343005

01:08:53.030 --> 01:08:55.448 that the impact of a mental balance
NOTE Confidence: 0.83343005

01:08:55.448 --> 01:08:57.530 cigarettes is not as enormous as
NOTE Confidence: 0.83343005

01:08:57.598 --> 01:08:59.598 most people are contemplating.
NOTE Confidence: 0.83343005

01:08:59.600 --> 01:09:02.344 That is going to be there is a
NOTE Confidence: 0.83343005

01:09:02.344 --> 01:09:04.671 recent paper that just came out
NOTE Confidence: 0.83343005

01:09:04.671 --> 01:09:07.011 in 2021 where they model this.

NOTE Confidence: 0.83343005

01:09:07.020 --> 01:09:09.908 Issue and I forget what data they used,

NOTE Confidence: 0.83343005

01:09:09.910 --> 01:09:12.150 but it was based on data that

NOTE Confidence: 0.83343005

01:09:12.150 --> 01:09:13.880 was collected in Minnesota.

NOTE Confidence: 0.83343005

01:09:13.880 --> 01:09:16.302 I think in one County and there's

NOTE Confidence: 0.83343005

01:09:16.302 --> 01:09:18.829 also data from the Canada ban showing

NOTE Confidence: 0.83343005

01:09:18.829 --> 01:09:21.460 that this is not really an issue.

NOTE Confidence: 0.83343005

01:09:21.460 --> 01:09:24.204 I really feel as a scientist that banning

NOTE Confidence: 0.83343005

01:09:24.204 --> 01:09:26.878 menthol in cigarettes as I said earlier,

NOTE Confidence: 0.83343005

01:09:26.880 --> 01:09:28.410 is a social justice issue

NOTE Confidence: 0.83343005

01:09:28.410 --> 01:09:29.940 and it should happen because

NOTE Confidence: 0.83343005

01:09:30.001 --> 01:09:31.929 particular communities like Youth,

NOTE Confidence: 0.83343005

01:09:31.930 --> 01:09:33.765 an African Americans were targeted

NOTE Confidence: 0.83343005

01:09:33.765 --> 01:09:36.011 with these products and there was

NOTE Confidence: 0.83343005

01:09:36.011 --> 01:09:37.776 increasing use of these products.

NOTE Confidence: 0.83343005

01:09:37.780 --> 01:09:40.090 Among those communities and we need

NOTE Confidence: 0.83343005

01:09:40.090 --> 01:09:42.122 to remove mental from cigarettes
NOTE Confidence: 0.83343005

01:09:42.122 --> 01:09:44.666 so we can help these communities.
NOTE Confidence: 0.8686794

01:09:46.740 --> 01:09:50.385 We have great cover on an he says the
NOTE Confidence: 0.8686794

01:09:50.390 --> 01:09:52.828 purchase age was recently increased 21
NOTE Confidence: 0.8686794

01:09:52.828 --> 01:09:55.264 years old in Connecticut and nationally.
NOTE Confidence: 0.8686794

01:09:55.270 --> 01:09:58.105 What effect is this having on initiation?
NOTE Confidence: 0.84890693

01:09:59.390 --> 01:10:00.814 Good question. Unfortunately I
NOTE Confidence: 0.84890693

01:10:00.814 --> 01:10:02.594 can't answer that right now.
NOTE Confidence: 0.84890693

01:10:02.600 --> 01:10:04.840 The reason being that all our our
NOTE Confidence: 0.84890693

01:10:04.840 --> 01:10:06.882 abilities to do surveys and collect
NOTE Confidence: 0.84890693

01:10:06.882 --> 01:10:09.255 all this data over the past year
NOTE Confidence: 0.84890693

01:10:09.326 --> 01:10:12.112 after the Tobacco 21 law passed was
NOTE Confidence: 0.84890693

01:10:12.112 --> 01:10:13.667 significantly affected by covid.
NOTE Confidence: 0.84890693

01:10:13.667 --> 01:10:15.809 So both national surveys and local
NOTE Confidence: 0.84890693

01:10:15.809 --> 01:10:17.566 surveys have been, you know,
NOTE Confidence: 0.84890693

01:10:17.566 --> 01:10:19.967 have had really have been stopped because

NOTE Confidence: 0.84890693

01:10:19.967 --> 01:10:22.594 we haven't been able to collect the

NOTE Confidence: 0.84890693

01:10:22.594 --> 01:10:25.089 data because schools were not in session.

NOTE Confidence: 0.84890693

01:10:25.090 --> 01:10:27.946 You know, how do you collect the data?

NOTE Confidence: 0.84890693

01:10:27.950 --> 01:10:29.594 I'm sure there's somebody

NOTE Confidence: 0.84890693

01:10:29.594 --> 01:10:31.238 collecting data on this.

NOTE Confidence: 0.84890693

01:10:31.240 --> 01:10:32.738 And we will see that pretty soon,

NOTE Confidence: 0.84890693

01:10:32.740 --> 01:10:34.880 but I don't have an answer for you right now.

NOTE Confidence: 0.84890693

01:10:34.880 --> 01:10:35.519 But you know,

NOTE Confidence: 0.84890693

01:10:35.519 --> 01:10:36.797 keep your eyes on the literature.

NOTE Confidence: 0.84890693

01:10:36.800 --> 01:10:37.870 I'm sure there will be

NOTE Confidence: 0.84890693

01:10:37.870 --> 01:10:38.726 something that come out.

NOTE Confidence: 0.88550246

01:10:42.160 --> 01:10:44.309 That is all in chat and less

NOTE Confidence: 0.88550246

01:10:44.309 --> 01:10:46.278 somebody else has a question that

NOTE Confidence: 0.88550246

01:10:46.278 --> 01:10:48.234 they'd like to ask out loud.

NOTE Confidence: 0.8508811

01:10:52.870 --> 01:10:55.367 Hi, can I ask a question course?

NOTE Confidence: 0.8508811

01:10:55.367 --> 01:10:58.230 I think so. Hey, this is Andrew Weinstein.

NOTE Confidence: 0.8508811

01:10:58.230 --> 01:11:00.630 I'm I'm calling via phone as I walk

NOTE Confidence: 0.8508811

01:11:00.630 --> 01:11:02.804 an amazing presentation. Thank you.

NOTE Confidence: 0.8508811

01:11:02.804 --> 01:11:05.093 I was wondering and I joined a

NOTE Confidence: 0.8508811

01:11:05.093 --> 01:11:07.593 little bit early so you might have a

NOTE Confidence: 0.8508811

01:11:07.593 --> 01:11:10.278 justice are is there any increase in

NOTE Confidence: 0.8508811

01:11:10.278 --> 01:11:11.994 gastrointestinal problems as related

NOTE Confidence: 0.8508811

01:11:11.994 --> 01:11:15.032 to E cigarettes and then also are we

NOTE Confidence: 0.8508811

01:11:15.032 --> 01:11:18.252 seeing or is it too early yet to see?

NOTE Confidence: 0.8508811

01:11:18.252 --> 01:11:21.388 Are there other sorts of cancers that are?

NOTE Confidence: 0.8508811

01:11:21.390 --> 01:11:24.240 Typically associated with smoking tobacco

NOTE Confidence: 0.8508811

01:11:24.240 --> 01:11:28.050 that we're seeing with E cigarette.

NOTE Confidence: 0.8508811

01:11:28.050 --> 01:11:28.400 So

NOTE Confidence: 0.83645785

01:11:28.400 --> 01:11:29.435 gastrointestinal issues I

NOTE Confidence: 0.83645785

01:11:29.435 --> 01:11:30.814 cannot answer that, Andrew.

NOTE Confidence: 0.83645785

01:11:30.814 --> 01:11:32.878 I'm sure there's data on this,

NOTE Confidence: 0.83645785

01:11:32.880 --> 01:11:34.950 but I'm not familiar with it.

NOTE Confidence: 0.83645785

01:11:34.950 --> 01:11:35.640 My apologies.

NOTE Confidence: 0.83645785

01:11:35.640 --> 01:11:37.710 I know nicotine has GI effects,

NOTE Confidence: 0.83645785

01:11:37.710 --> 01:11:40.190 so I don't know if there is anything

NOTE Confidence: 0.83645785

01:11:40.190 --> 01:11:42.014 that has been shown directly

NOTE Confidence: 0.83645785

01:11:42.014 --> 01:11:44.270 about that as far as cancers.

NOTE Confidence: 0.83645785

01:11:44.270 --> 01:11:46.870 I think it's going to take a little

NOTE Confidence: 0.83645785

01:11:46.870 --> 01:11:48.748 while longer because you know,

NOTE Confidence: 0.83645785

01:11:48.750 --> 01:11:51.270 I'll remind you that there is an actual

NOTE Confidence: 0.83645785

01:11:51.270 --> 01:11:53.248 graph that shows that lung cancer

NOTE Confidence: 0.83645785

01:11:53.248 --> 01:11:55.655 rates in the US followed the cigarette

NOTE Confidence: 0.83645785

01:11:55.655 --> 01:11:58.139 epidemic or the rise and cigarettes.

NOTE Confidence: 0.83645785

01:11:58.140 --> 01:11:59.770 Used by about 10 years.

NOTE Confidence: 0.83645785

01:11:59.770 --> 01:12:01.594 I'm hoping we you know that

NOTE Confidence: 0.83645785

01:12:01.594 --> 01:12:03.670 we don't get to that point,

NOTE Confidence: 0.83645785

01:12:03.670 --> 01:12:06.374 but you know it takes awhile for cancer
NOTE Confidence: 0.83645785

01:12:06.374 --> 01:12:08.868 change effects to actually show up with it.
NOTE Confidence: 0.83645785

01:12:08.870 --> 01:12:11.470 So it will take awhile with E cigarettes.
NOTE Confidence: 0.83645785

01:12:11.470 --> 01:12:12.120 That said,
NOTE Confidence: 0.83645785

01:12:12.120 --> 01:12:14.720 at my Marina can correct me on this.
NOTE Confidence: 0.83645785

01:12:14.720 --> 01:12:17.033 I don't think there is so I don't know
NOTE Confidence: 0.83645785

01:12:17.033 --> 01:12:19.813 if how much evidence there is on direct
NOTE Confidence: 0.83645785

01:12:19.813 --> 01:12:22.189 effects of nicotine on cancer processes.
NOTE Confidence: 0.83645785

01:12:22.190 --> 01:12:24.050 I think that is literature that
NOTE Confidence: 0.83645785

01:12:24.050 --> 01:12:25.994 is still very small and still
NOTE Confidence: 0.83645785

01:12:25.994 --> 01:12:27.896 emerging and I'm not sure there's
NOTE Confidence: 0.83645785

01:12:27.896 --> 01:12:29.750 any good direction there so.
NOTE Confidence: 0.83645785

01:12:29.750 --> 01:12:30.974 Nicotine person causing cancer
NOTE Confidence: 0.83645785

01:12:30.974 --> 01:12:32.810 is something that I don't know
NOTE Confidence: 0.83645785

01:12:32.863 --> 01:12:34.369 that we know enough about yet.
NOTE Confidence: 0.83645785

01:12:34.370 --> 01:12:34.910 So sorry,

NOTE Confidence: 0.83645785

01:12:34.910 --> 01:12:36.530 that's I think we'll have to

NOTE Confidence: 0.83645785

01:12:36.530 --> 01:12:38.605 wait a couple of years to see

NOTE Confidence: 0.83645785

01:12:38.605 --> 01:12:40.440 what the evidence shows on that.

NOTE Confidence: 0.8378791

01:12:41.380 --> 01:12:42.656 Thank you Ann. Actually,

NOTE Confidence: 0.8378791

01:12:42.656 --> 01:12:44.570 in terms of the gastrointestinal piece,

NOTE Confidence: 0.8378791

01:12:44.570 --> 01:12:46.418 I was wondering if there's a

NOTE Confidence: 0.8378791

01:12:46.418 --> 01:12:47.650 difference for disposable devices

NOTE Confidence: 0.8378791

01:12:47.704 --> 01:12:49.360 versus devices that are reused.

NOTE Confidence: 0.8378791

01:12:49.360 --> 01:12:51.328 Because I'm thinking if they're reused

NOTE Confidence: 0.8378791

01:12:51.328 --> 01:12:53.180 and they're not cleaned up, what?

NOTE Confidence: 0.8378791

01:12:53.180 --> 01:12:55.420 What sort of bacteria is going on?

NOTE Confidence: 0.8378791

01:12:55.420 --> 01:12:57.328 You may not have the answer,

NOTE Confidence: 0.8378791

01:12:57.330 --> 01:12:58.930 but I was curious about

NOTE Confidence: 0.8378791

01:12:58.930 --> 01:13:00.838 that. Yeah, I don't have the

NOTE Confidence: 0.8378791

01:13:00.838 --> 01:13:02.360 answer for that. I'm sorry.

NOTE Confidence: 0.8378791

01:13:02.360 --> 01:13:04.600 I do know that devices that are shared
NOTE Confidence: 0.8378791

01:13:04.665 --> 01:13:06.759 like devices like hookers that are
NOTE Confidence: 0.8378791

01:13:06.759 --> 01:13:08.848 shared are associated with greater rates
NOTE Confidence: 0.8378791

01:13:08.848 --> 01:13:11.053 of infections and I would assume if
NOTE Confidence: 0.8378791

01:13:11.053 --> 01:13:13.090 these devices are shared across people.
NOTE Confidence: 0.8378791

01:13:13.090 --> 01:13:14.350 That same issue would apply,
NOTE Confidence: 0.8378791

01:13:14.350 --> 01:13:16.366 but I don't have direct evidence of that.
NOTE Confidence: 0.86567324

01:13:23.350 --> 01:13:24.570 Can I think we are?
NOTE Confidence: 0.86567324

01:13:24.570 --> 01:13:26.016 I don't see any other questions.
NOTE Confidence: 0.83336544

01:13:28.510 --> 01:13:29.120 Good.
NOTE Confidence: 0.8426829

01:13:30.700 --> 01:13:32.700 Wonderful presentation and discussion. Toxic
NOTE Confidence: 0.8426829

01:13:32.700 --> 01:13:35.100 chitrik. Thank you so much. Thank
NOTE Confidence: 0.8426829

01:13:35.100 --> 01:13:37.332 you, thank you for inviting me
NOTE Confidence: 0.8426829

01:13:37.332 --> 01:13:39.680 and for the great questions.