

0:00:04.180,0:00:09.860  
hello and welcome to the NABC a webinar

0:00:07.430,0:00:12.470  
changing alcohol use in emergency room

0:00:09.860,0:00:13.700  
visits before I introduce our speaker

0:00:12.470,0:00:14.990  
dr. Erin white

0:00:13.700,0:00:19.940  
I wanted to address a few housekeeping

0:00:14.990,0:00:22.850  
notes the webinar is one of a series of

0:00:19.940,0:00:25.010  
several plan through 2019 another

0:00:22.850,0:00:26.840  
webinar a webinar addressing the federal

0:00:25.010,0:00:28.730  
trade practice rules and regulations

0:00:26.840,0:00:31.820  
relevant to the brewing industry is

0:00:28.730,0:00:34.909  
planned for September with the alcohol

0:00:31.820,0:00:37.489  
and tobacco tax and trade Bureau now

0:00:34.909,0:00:39.829  
back to today's webinar it will be about

0:00:37.489,0:00:41.629  
one hour if you have a question please

0:00:39.829,0:00:44.269  
type it in the chat window in the lower

0:00:41.629,0:00:46.129  
right hand corner of the screen at the

0:00:44.269,0:00:48.469  
end of the presentation I will come back

0:00:46.129,0:00:52.039

and ask the question on behalf of dr.

0:00:48.469,0:00:53.870  
white to address them the presentation

0:00:52.039,0:00:57.559  
is being recorded and will be available

0:00:53.870,0:01:00.079  
through the NABC a.org website within

0:00:57.559,0:01:04.729  
seven to ten business days you will find

0:01:00.079,0:01:06.940  
it under the resources tab I now would

0:01:04.729,0:01:09.350  
like to introduce dr. Erin white

0:01:06.940,0:01:11.450  
dr. white is the senior scientific

0:01:09.350,0:01:13.040  
advisor to the director at the National

0:01:11.450,0:01:13.810  
Institute on Alcohol Abuse and

0:01:13.040,0:01:16.370  
Alcoholism

0:01:13.810,0:01:18.200  
his areas of scientific expertise

0:01:16.370,0:01:20.020  
include the impact of alcohol and other

0:01:18.200,0:01:22.660  
drugs on brain function and behavior

0:01:20.020,0:01:24.650  
alcohol induced memory blackouts

0:01:22.660,0:01:27.530  
epidemiology of alcohol and other drugs

0:01:24.650,0:01:29.200  
and prevention strategies dr. white

0:01:27.530,0:01:32.000  
received his PhD in biological

0:01:29.200,0:01:35.570  
psychology from Miami University in Ohio

0:01:32.000,0:01:37.670  
in 1999 his graduate research focused on

0:01:35.570,0:01:40.760  
the brain mechanisms underlying alcohol

0:01:37.670,0:01:42.710  
induced memory blackouts he completed a

0:01:40.760,0:01:44.210  
two-year post doctoral fellowship in the

0:01:42.710,0:01:46.310  
Department of Psychiatry at Duke

0:01:44.210,0:01:48.080  
University Medical Center in 2001 and

0:01:46.310,0:01:50.210  
then served as a research assistant

0:01:48.080,0:01:52.640  
professor in the department until 2008

0:01:50.210,0:01:55.159  
he co-wrote the online alcohol

0:01:52.640,0:01:56.990  
prevention course alcohol edu which has

0:01:55.159,0:01:59.630  
been completed by several million high

0:01:56.990,0:02:02.600  
school and college students to date he

0:01:59.630,0:02:04.729  
joined an AI Triple A in 2008 and served

0:02:02.600,0:02:05.960  
as the program director for underage and

0:02:04.729,0:02:07.970  
college drinking research in the

0:02:05.960,0:02:12.170  
division division of Epidemiology and

0:02:07.970,0:02:13.579  
Prevention Research until 22 2015 since

0:02:12.170,0:02:15.250  
then he has served as a senior

0:02:13.579,0:02:17.950  
scientific adviser to the director

0:02:15.250,0:02:19.930  
dr. Jorge coupe dr. white is an author

0:02:17.950,0:02:22.210  
of more than 60 manuscripts and book

0:02:19.930,0:02:23.770  
chapters as well as three books two of

0:02:22.210,0:02:25.450  
which are about adolescent development

0:02:23.770,0:02:27.190  
and has delivered hundreds of

0:02:25.450,0:02:29.950  
presentations about alcohol in the brain

0:02:27.190,0:02:40.300  
to diverse audiences dr. white I now

0:02:29.950,0:02:42.430  
turn the webinar over to you okay thank

0:02:40.300,0:02:45.160  
you Cassie hey everybody this is Erin

0:02:42.430,0:02:47.950  
white at ni triple a so glad that you're

0:02:45.160,0:02:49.390  
all joining us today I have about an

0:02:47.950,0:02:51.760  
hour of your time I'd like to spend

0:02:49.390,0:02:54.370  
about 40 minutes giving you an update

0:02:51.760,0:02:57.850  
about all things alcohol and then leave

0:02:54.370,0:03:00.310

time for questions so what I'd like to

0:02:57.850,0:03:02.530  
accomplish today is to basically give

0:03:00.310,0:03:05.230  
you an overview of where things stand

0:03:02.530,0:03:07.750  
regarding the epidemiology of alcohol

0:03:05.230,0:03:09.400  
use how many people are drinking how

0:03:07.750,0:03:11.380  
much they're drinking how many people

0:03:09.400,0:03:13.690  
have alcohol use disorders I want to

0:03:11.380,0:03:17.290  
talk about some very interesting trends

0:03:13.690,0:03:19.480  
with regard to alcohol particularly with

0:03:17.290,0:03:21.160  
regard to alcohol and women we're

0:03:19.480,0:03:23.410  
learning a lot about alcohol women's

0:03:21.160,0:03:24.610  
health and I want to talk about some of

0:03:23.410,0:03:27.940  
the interesting things that are

0:03:24.610,0:03:29.950  
happening in that domain and then of

0:03:27.940,0:03:31.810  
course I'll talk a little bit about how

0:03:29.950,0:03:34.950  
alcohol interacts with opioids I think

0:03:31.810,0:03:39.040  
it's important to understand just how

0:03:34.950,0:03:41.620  
common alcohol plays a role in opioid

0:03:39.040,0:03:43.690  
overdose deaths and why that occurs so

0:03:41.620,0:03:46.209  
you'll see in the slides that that I'll

0:03:43.690,0:03:48.250  
show you there's tons of data I'm not

0:03:46.209,0:03:50.350  
going to go through all of the

0:03:48.250,0:03:52.840  
statistics but because you'll have these

0:03:50.350,0:03:54.730  
slides I wanted you to have all of the

0:03:52.840,0:04:00.150  
stats in case you ever want to go back

0:03:54.730,0:04:00.150  
and use them as a reference so briefly

0:04:03.570,0:04:11.350  
briefly there we go so here's a snapshot

0:04:09.220,0:04:15.820  
from the National Survey on drug use and

0:04:11.350,0:04:18.220  
health from 2017 to give you a sense of

0:04:15.820,0:04:21.310  
just how much people are drinking in the

0:04:18.220,0:04:23.680  
u.s. about 52% of the population 12 and

0:04:21.310,0:04:25.570  
older drinks each month and about half

0:04:23.680,0:04:28.030  
of those people engage in binge drinking

0:04:25.570,0:04:29.350  
which as you know is defined as having a

0:04:28.030,0:04:31.840  
for more drinks on tonight if you're a

0:04:29.350,0:04:34.660  
woman or five or more drinks of the

0:04:31.840,0:04:35.980  
night if you're a man and so you know

0:04:34.660,0:04:37.540  
about half the population twelve or

0:04:35.980,0:04:40.690  
older drinks and half of them binge

0:04:37.540,0:04:43.240  
interestingly if you look at drinkers

0:04:40.690,0:04:46.630  
and you ask the question what percentage

0:04:43.240,0:04:48.130  
of drinkers drink you know what

0:04:46.630,0:04:50.740  
percentage of alcohol it turns out about

0:04:48.130,0:04:53.919  
10% of drinkers drinking the majority of

0:04:50.740,0:04:56.550  
the alcohol over 60% and about 10% of

0:04:53.919,0:04:58.960  
drinkers account for the majority of

0:04:56.550,0:05:02.760  
alcohol use disorder cases you know

0:04:58.960,0:05:05.380  
again about about 60% and so it's it's a

0:05:02.760,0:05:07.990  
lots of people drink in the u.s. the

0:05:05.380,0:05:09.910  
problems are generally concentrated in a

0:05:07.990,0:05:13.300  
relatively small percentage of those

0:05:09.910,0:05:14.770  
people who do drink again more numbers

0:05:13.300,0:05:17.410

about fourteen and a half million people

0:05:14.770,0:05:20.160  
in the US have an alcohol use disorder

0:05:17.410,0:05:22.720  
and really an alcohol use disorder

0:05:20.160,0:05:25.180  
essentially means that you're drinking

0:05:22.720,0:05:27.280  
in a way that it's causing problems in

0:05:25.180,0:05:28.900  
your life but you continue to drink and

0:05:27.280,0:05:30.610  
you have difficulty cutting down or

0:05:28.900,0:05:32.560  
stopping and more or less you're stuck

0:05:30.610,0:05:34.660  
in a cycle where you drink to

0:05:32.560,0:05:36.580  
intoxication it wears off and you feel

0:05:34.660,0:05:38.410  
bad and then you start thinking about

0:05:36.580,0:05:41.080  
when you can drink again and then you

0:05:38.410,0:05:44.850  
just repeat the cycle that's about 1 in

0:05:41.080,0:05:47.530  
20 people in the u.s. aged 12 and older

0:05:44.850,0:05:50.260  
as I'll show you in a minute emergency

0:05:47.530,0:05:52.390  
department visits related to alcohol are

0:05:50.260,0:05:54.550  
increasing and you've got about 5

0:05:52.390,0:05:56.669  
million cases a year where somebody



0:05:54.550,0:05:59.080  
shows up at an emergency department and

0:05:56.669,0:06:01.390  
the reason they're there involves

0:05:59.080,0:06:02.830  
alcohol might not be dude alcohol it

0:06:01.390,0:06:05.169  
could be that your leg is broken

0:06:02.830,0:06:06.640  
but you also were drinking and you fell

0:06:05.169,0:06:09.550  
because you were drinking so the alcohol

0:06:06.640,0:06:11.590  
contributes the number of deaths in the

0:06:09.550,0:06:13.060  
u.s. is an interesting statistic we

0:06:11.590,0:06:15.310  
don't really know how many people died

0:06:13.060,0:06:16.390  
from alcohol in the US the most common

0:06:15.310,0:06:17.800  
number you'll hear is eighty eight

0:06:16.390,0:06:20.140  
thousand four hundred and twenty-four

0:06:17.800,0:06:22.840  
and that comes from an analysis done by

0:06:20.140,0:06:25.570  
the CDC using data from death

0:06:22.840,0:06:27.820  
certificates between 2006 and 2010 and

0:06:25.570,0:06:29.410  
then they make assumptions about the

0:06:27.820,0:06:32.140  
contribution of alcohol to deaths from

0:06:29.410,0:06:33.940  
other things and add those in for

0:06:32.140,0:06:35.890  
instance I think 15 percent of deaths

0:06:33.940,0:06:38.260  
from epilepsy are considered to be

0:06:35.890,0:06:40.419  
alcohol involved if you look at death

0:06:38.260,0:06:41.830  
certificates only it's about seventy

0:06:40.419,0:06:43.720  
thousand deaths a year

0:06:41.830,0:06:46.150  
but we really just don't have a handle

0:06:43.720,0:06:49.990  
on how many deaths alcohol contributes

0:06:46.150,0:06:52.150  
due it's at least 70,000 probably much

0:06:49.990,0:06:54.220  
more than that

0:06:52.150,0:06:55.810  
similarly with the cost I mean we can we

0:06:54.220,0:06:58.510  
can estimate the cost but we don't know

0:06:55.810,0:06:59.980  
for sure but the CDC estimates the cost

0:06:58.510,0:07:02.320  
at about two hundred and forty-nine

0:06:59.980,0:07:04.170  
billion dollars a year and and the

0:07:02.320,0:07:08.620  
majority of that I think it's like 75%

0:07:04.170,0:07:11.410  
is due to workplace related things lost

0:07:08.620,0:07:13.330

productivity in particular so a lot of

0:07:11.410,0:07:16.270  
people drink we've got a lot of people

0:07:13.330,0:07:18.400  
who struggle with their drinking quite a

0:07:16.270,0:07:23.770  
few people die every year and it's

0:07:18.400,0:07:27.010  
expensive for the country so alcohol use

0:07:23.770,0:07:30.940  
is increasing in the US if if we look at

0:07:27.010,0:07:33.340  
data from several surveys this is a

0:07:30.940,0:07:36.490  
study these these data are from a study

0:07:33.340,0:07:38.410  
in which the authors included data from

0:07:36.490,0:07:40.690  
six national surveys and just threw it

0:07:38.410,0:07:42.400  
all in two analyses and and came out

0:07:40.690,0:07:44.860  
with an estimate that included all of

0:07:42.400,0:07:46.960  
those data sets and this is a very busy

0:07:44.860,0:07:48.400  
slide but I want to highlight I want to

0:07:46.960,0:07:49.780  
highlight something for you if I can do

0:07:48.400,0:07:52.390  
that with this fancy technology there we

0:07:49.780,0:07:54.490  
go so what you'll see is this line right

0:07:52.390,0:07:56.830  
here this is the percentage of people in

0:07:54.490,0:07:59.290  
the US that drink in a given year and

0:07:56.830,0:08:02.320  
you can see that it is increasing but

0:07:59.290,0:08:03.910  
it's not really changing for men most of

0:08:02.320,0:08:06.190  
the increase in alcohol use in the US

0:08:03.910,0:08:08.110  
has been driven by women similarly

0:08:06.190,0:08:10.900  
similarly if you look at binge drinking

0:08:08.110,0:08:12.430  
in the past year there's an increase in

0:08:10.900,0:08:15.850  
you know among adults in the u.s.

0:08:12.430,0:08:19.090  
between 2000 and 2015 is roughly the

0:08:15.850,0:08:21.160  
eighth the the year time range but again

0:08:19.090,0:08:24.910  
it's really not increasing for men most

0:08:21.160,0:08:26.590  
of it is an increase and for women the

0:08:24.910,0:08:29.160  
biggest increase is in drinking in the

0:08:26.590,0:08:31.240  
last 15 years have been among women

0:08:29.160,0:08:34.419  
older people particularly the baby

0:08:31.240,0:08:37.060  
boomer generation and African American

0:08:34.419,0:08:40.719  
men and you can see that over here in

0:08:37.060,0:08:43.830  
this table so that's sort of that sort

0:08:40.719,0:08:46.870  
of sets the stage to tell you you know

0:08:43.830,0:08:50.010  
the prevalence of drinking and sort of

0:08:46.870,0:08:50.010  
where things are moving

0:08:52.829,0:09:00.910  
okay so this slide shows again changes

0:08:58.570,0:09:02.680  
in alcohol use in women relative demand

0:09:00.910,0:09:04.630  
and I like this slide because I think it

0:09:02.680,0:09:07.149  
captures the phenomenon nicely what's

0:09:04.630,0:09:09.519  
happening is as you'll see on the left

0:09:07.149,0:09:12.970  
there that's alcohol use in the past 30

0:09:09.519,0:09:15.790  
days and the top line is males and the

0:09:12.970,0:09:17.470  
bottom line is females and basically

0:09:15.790,0:09:19.630  
what you see is that alcohol use among

0:09:17.470,0:09:22.779  
males has declined just a little bit in

0:09:19.630,0:09:24.940  
the past you know 30 day 30 days in this

0:09:22.779,0:09:26.620  
time period but it increases for women

0:09:24.940,0:09:29.800  
and if you look at the number of days

0:09:26.620,0:09:31.209

per month that people drink it's coming  
0:09:29.800,0:09:33.430  
down a little bit for men and it's  
0:09:31.209,0:09:35.740  
increasing for women and so all of this  
0:09:33.430,0:09:38.800  
combined is leading to what is being  
0:09:35.740,0:09:42.100  
referred to as narrowing gender gaps and  
0:09:38.800,0:09:44.199  
alcohol use essentially men are  
0:09:42.100,0:09:48.220  
decreasing a little bit and women are  
0:09:44.199,0:09:49.660  
increasing this is for adults and and  
0:09:48.220,0:09:52.300  
this is troubling and I'll tell you why  
0:09:49.660,0:09:53.560  
it's troubling in a moment but but  
0:09:52.300,0:09:55.329  
that's what's happening there's really  
0:09:53.560,0:09:58.230  
been a real increase now call use for  
0:09:55.329,0:10:00.130  
women and a decline you know a  
0:09:58.230,0:10:07.810  
relatively flat line  
0:10:00.130,0:10:09.850  
for males okay this slide let me explain  
0:10:07.810,0:10:11.440  
this to you I really wanted to include  
0:10:09.850,0:10:13.959  
this even though it's very busy but this  
0:10:11.440,0:10:16.000  
is a neat slide what the World Health

0:10:13.959,0:10:21.339  
Organization did was they plotted in

0:10:16.000,0:10:23.560  
this graph the ratio of alcohol use for

0:10:21.339,0:10:26.589  
women and men in various countries

0:10:23.560,0:10:30.339  
across the planet and what you see where

0:10:26.589,0:10:36.970  
that arrow is pointing to the US it is

0:10:30.339,0:10:39.490  
close to get my pointer back here this

0:10:36.970,0:10:41.740  
line here means there's an equal

0:10:39.490,0:10:43.750  
distribution of alcohol use for men and

0:10:41.740,0:10:45.819  
women so when a country is close to this

0:10:43.750,0:10:48.819  
line it means that men and women are

0:10:45.819,0:10:51.250  
roughly similar in their alcohol use and

0:10:48.819,0:10:53.740  
the United States is getting closer and

0:10:51.250,0:10:55.120  
closer to this line and it seems that

0:10:53.740,0:10:58.300  
it's only a matter of time before we end

0:10:55.120,0:11:01.060  
up on that line and we have a equal

0:10:58.300,0:11:03.190  
level of use between men and women the

0:11:01.060,0:11:05.889  
way we're going and this is a new

0:11:03.190,0:11:09.249  
development for us because historically

0:11:05.889,0:11:11.499  
going back to Prohibition time men drank

0:11:09.249,0:11:14.259  
way more than women and most of the

0:11:11.499,0:11:16.779  
problems associated with alcohol came

0:11:14.259,0:11:19.629  
from drinking by men and over the last

0:11:16.779,0:11:23.410  
century in the US and across the world

0:11:19.629,0:11:25.299  
actually those drinking patterns have

0:11:23.410,0:11:27.669  
narrowed and now men and women are are

0:11:25.299,0:11:32.559  
much more similar than they ever have

0:11:27.669,0:11:34.929  
been and with that comes an increase in

0:11:32.559,0:11:39.160  
consequences for women and so this slide

0:11:34.929,0:11:41.290  
is shows data regarding not the number

0:11:39.160,0:11:43.869  
of visits to an emergency room each year

0:11:41.290,0:11:46.809  
that are alcohol-related between 2006

0:11:43.869,0:11:48.339  
and 2014 and it just you know without

0:11:46.809,0:11:50.230  
without going through each of those

0:11:48.339,0:11:52.179  
lines basically it's gone up it's been

0:11:50.230,0:11:54.759



about a 62 percent increase in the  
0:11:52.179,0:11:58.419  
number of alcohol-related edie visits  
0:11:54.759,0:12:00.699  
between 2006 and 2014 and that ends up  
0:11:58.419,0:12:03.519  
being about a like a 50% increase in the  
0:12:00.699,0:12:05.529  
rate of those visits the rate of the the  
0:12:03.519,0:12:08.829  
visits are increasing faster for women  
0:12:05.529,0:12:10.749  
and for older drinkers including people  
0:12:08.829,0:12:12.699  
in the baby boomer generation so the  
0:12:10.749,0:12:15.459  
increases in drinking that we're seeing  
0:12:12.699,0:12:20.739  
are mapping on to the increases in harms  
0:12:15.459,0:12:22.809  
that we're seeing there is some good  
0:12:20.739,0:12:24.819  
news in all of this and and that and  
0:12:22.809,0:12:28.269  
that is that alcohol use by teens is  
0:12:24.819,0:12:30.790  
coming down alcohol use in the under age  
0:12:28.269,0:12:33.369  
category 12 to 20 overall is coming down  
0:12:30.790,0:12:34.929  
this shows you a tenth and twelfth  
0:12:33.369,0:12:36.790  
graders from the monitoring the future  
0:12:34.929,0:12:38.290  
study and what you can see is in this

0:12:36.790,0:12:40.269  
age range and I'm sorry this is this

0:12:38.290,0:12:43.779  
range of time a ten-year period between

0:12:40.269,0:12:46.899  
2008 and 2018 there was about a about a

0:12:43.779,0:12:50.860  
third decline in about a 33 percent

0:12:46.899,0:12:54.369  
decline in an alcohol use among among

0:12:50.860,0:12:57.009  
our students which is great news now

0:12:54.369,0:12:59.559  
interestingly just like with adults

0:12:57.009,0:13:01.629  
there's narrowing gender gaps but it's a

0:12:59.559,0:13:04.179  
different pattern whereas with adults

0:13:01.629,0:13:06.669  
drinking is coming down among males and

0:13:04.179,0:13:08.850  
going up among women among our

0:13:06.669,0:13:11.139  
adolescents drinking is coming down

0:13:08.850,0:13:13.839  
among both males and females but it's

0:13:11.139,0:13:16.059  
not coming down near as fast among women

0:13:13.839,0:13:19.070  
as among girls as it is among young

0:13:16.059,0:13:22.160  
males and so as you can see here

0:13:19.070,0:13:24.440  
you know if we use this over here is the

0:13:22.160,0:13:26.870  
percent of 12th graders who engaged in

0:13:24.440,0:13:29.630  
binge drinking and in the last two weeks

0:13:26.870,0:13:31.190  
you can see that starting in 1975 there

0:13:29.630,0:13:34.300  
was a about a you know males are about

0:13:31.190,0:13:36.980  
twice as likely to do that and now in

0:13:34.300,0:13:39.319  
2016 here males and females are just

0:13:36.980,0:13:41.269  
about even and the same thing with

0:13:39.319,0:13:44.240  
drinking on a daily basis

0:13:41.269,0:13:45.589  
males have really plummeted and females

0:13:44.240,0:13:48.380  
have just not really they've gone down

0:13:45.589,0:13:51.079  
but just not nearly as much and so again

0:13:48.380,0:13:52.519  
for both adults and for adolescents

0:13:51.079,0:13:55.880  
there are these narrowing gender gaps

0:13:52.519,0:13:59.300  
but for slightly different reasons I'll

0:13:55.880,0:14:01.790  
tell you this the it is good news but

0:13:59.300,0:14:04.430  
it's not the best possible news because

0:14:01.790,0:14:06.860  
as I'll show you while the drinking is

0:14:04.430,0:14:09.199

declining among our kids there might be

0:14:06.860,0:14:11.240  
some psychosocial reasons for that that

0:14:09.199,0:14:13.370  
are not particularly healthy our kids

0:14:11.240,0:14:15.290  
are isolating more they're not spending

0:14:13.370,0:14:17.269  
as much time socializing or being around

0:14:15.290,0:14:20.600  
other people and that means they have

0:14:17.269,0:14:21.980  
less fewer opportunities to drink but it

0:14:20.600,0:14:24.680  
also means that they're they're not

0:14:21.980,0:14:27.560  
getting their needs met and healthy ways

0:14:24.680,0:14:29.660  
through socializing and with that is

0:14:27.560,0:14:31.610  
coming an increase and adil and anxiety

0:14:29.660,0:14:34.490  
and depression among these kids so the

0:14:31.610,0:14:36.290  
decline in drinking is good news but

0:14:34.490,0:14:38.750  
it's not necessarily because they're all

0:14:36.290,0:14:40.579  
so happy and healthy that they just have

0:14:38.750,0:14:45.949  
chosen not to drink there are other

0:14:40.579,0:14:47.269  
things going on here so there's one of

0:14:45.949,0:14:49.760  
the one of the reasons that this is so

0:14:47.269,0:14:54.079  
concerning to us these changes in an

0:14:49.760,0:14:56.630  
alcohol use by by young by women adult

0:14:54.079,0:15:00.620  
women and adolescent females is that

0:14:56.630,0:15:02.870  
we're simultaneously learning about some

0:15:00.620,0:15:05.480  
of the negative effects that alcohol has

0:15:02.870,0:15:07.850  
on women that are different than men

0:15:05.480,0:15:10.579  
women just seem to be for some reason

0:15:07.850,0:15:13.459  
that we just don't know more likely to

0:15:10.579,0:15:17.000  
manifest a variety of alcohol-related

0:15:13.459,0:15:20.569  
problems than males now as you all know

0:15:17.000,0:15:22.009  
the male and female body is is different

0:15:20.569,0:15:25.069  
in important ways that affect how

0:15:22.009,0:15:26.829  
alcohol impacts the body if you take a

0:15:25.069,0:15:29.689  
male and a female of the same weight

0:15:26.829,0:15:31.399  
females tend to have less water in the

0:15:29.689,0:15:32.870  
body they tend to store more fat and

0:15:31.399,0:15:34.940  
have less free flow

0:15:32.870,0:15:37.640  
water and that means with every drink

0:15:34.940,0:15:40.279  
you have even if you if a woman weighs

0:15:37.640,0:15:41.960  
the same as a man every drink she has is

0:15:40.279,0:15:43.820  
going to produce a slightly higher blood

0:15:41.960,0:15:45.650  
alcohol level than in the male that

0:15:43.820,0:15:47.990  
means even if you drink the same amount

0:15:45.650,0:15:50.089  
and weigh the same you're bathing your

0:15:47.990,0:15:52.190  
body tissues and more alcohol so that

0:15:50.089,0:15:54.350  
might contribute to and probably does

0:15:52.190,0:15:57.020  
contribute to some of these negative

0:15:54.350,0:15:59.029  
outcomes but I can't explain you know

0:15:57.020,0:16:01.400  
many of them for instance for whatever

0:15:59.029,0:16:03.800  
reason females tend to be more

0:16:01.400,0:16:05.660  
susceptible to hangovers and this even

0:16:03.800,0:16:08.300  
happens if you do lab studies where you

0:16:05.660,0:16:11.390  
put the alcohol into the veins so you're

0:16:08.300,0:16:12.560  
giving exactly the same you know you're

0:16:11.390,0:16:13.850

arriving at exactly the same

0:16:12.560,0:16:16.670  
blood-alcohol level in the male and

0:16:13.850,0:16:18.529  
female the female the next day has worse

0:16:16.670,0:16:20.990  
hangover symptoms females are more

0:16:18.529,0:16:23.870  
likely to blackout you know memory

0:16:20.990,0:16:25.810  
blackouts liver disease progresses more

0:16:23.870,0:16:27.860  
quickly in women brain atrophy

0:16:25.810,0:16:30.800  
progresses more quickly cognitive

0:16:27.860,0:16:33.140  
deficits the cardiovascular effects of

0:16:30.800,0:16:35.420  
alcohol progressed more quickly in women

0:16:33.140,0:16:36.770  
AUD progresses more quickly in women

0:16:35.420,0:16:38.660  
this is these are all phenomenon that

0:16:36.770,0:16:41.150  
fall under the category of what's been

0:16:38.660,0:16:43.610  
called telescoping where women just once

0:16:41.150,0:16:45.709  
a problem develops it develops more

0:16:43.610,0:16:48.589  
quickly and then certain cancers you've

0:16:45.709,0:16:50.630  
all heard the the news the research over

0:16:48.589,0:16:53.180  
the last couple of years suggesting that

0:16:50.630,0:16:55.670  
you know women might be at elevated risk

0:16:53.180,0:16:57.680  
of breast cancer even with a you know a

0:16:55.670,0:17:01.190  
glass of wine a day and of course all of

0:16:57.680,0:17:03.069  
that research is still ongoing and and

0:17:01.190,0:17:05.780  
the jury is still out about exactly

0:17:03.069,0:17:11.360  
where the risk begins and how big the

0:17:05.780,0:17:13.189  
risk is but it is concerning to us so I

0:17:11.360,0:17:15.559  
want to I want to explore something with

0:17:13.189,0:17:17.480  
you that I think you'll appreciate once

0:17:15.559,0:17:20.059  
we get through it and that is I want to

0:17:17.480,0:17:22.429  
talk about why it is that people drink

0:17:20.059,0:17:25.100  
alcohol and then come back to these

0:17:22.429,0:17:27.020  
these sex differences but what why is it

0:17:25.100,0:17:30.200  
that we drink alcohol you know why is it

0:17:27.020,0:17:32.870  
the people do any recreational drug well

0:17:30.200,0:17:35.360  
there's two basic reasons one is to

0:17:32.870,0:17:37.910  
produce a positive state because it



0:17:35.360,0:17:40.250  
feels good basically and that's referred

0:17:37.910,0:17:42.080  
to as positive reinforcement and that's

0:17:40.250,0:17:44.330  
generally what we think about when we

0:17:42.080,0:17:46.220  
think about people using alcohol and

0:17:44.330,0:17:48.409  
other drugs we tend to think

0:17:46.220,0:17:50.450  
do drugs because they want to feel good

0:17:48.409,0:17:53.030  
they want to they want to get high they

0:17:50.450,0:17:56.179  
want to you know have euphoria and some

0:17:53.030,0:17:58.250  
people do and I've got some ads in here

0:17:56.179,0:18:00.799  
just to sort of capture the motivation

0:17:58.250,0:18:02.450  
that people have to drink to do

0:18:00.799,0:18:04.580  
substances so experiments and pleasure

0:18:02.450,0:18:08.539  
you know many people drink or do other

0:18:04.580,0:18:10.370  
drugs to feel pleasure some people or

0:18:08.539,0:18:10.880  
maybe the same person at a different

0:18:10.370,0:18:14.000  
time

0:18:10.880,0:18:17.270  
does substances to fix a negative state

0:18:14.000,0:18:20.780

to basically feel better not to add

0:18:17.270,0:18:25.760  
euphoria add to your pleasure but to fix

0:18:20.780,0:18:27.980  
feeling bad now it turns out that your

0:18:25.760,0:18:30.860  
motivation for drinking or doing other

0:18:27.980,0:18:32.539  
drugs whether it's for positive

0:18:30.860,0:18:34.789  
reinforcement or negative reinforcement

0:18:32.539,0:18:37.130  
is prognostic it tells us something

0:18:34.789,0:18:39.460  
about where your relationship with this

0:18:37.130,0:18:43.490  
drug may go in the future and

0:18:39.460,0:18:46.250  
specifically people who who drink or do

0:18:43.490,0:18:49.130  
other drugs to cope or for negative

0:18:46.250,0:18:52.640  
reinforcement are much more likely to

0:18:49.130,0:18:54.710  
develop problems with a substance and so

0:18:52.640,0:18:57.530  
you know people who who drink to enhance

0:18:54.710,0:18:59.780  
or to for positive reinforcement you

0:18:57.530,0:19:01.940  
know they they might drink more heavily

0:18:59.780,0:19:03.890  
when they drink but they tend to drink

0:19:01.940,0:19:06.320  
less often whereas people who drink to

0:19:03.890,0:19:08.200  
cope tend to drink less heavily but more

0:19:06.320,0:19:10.730  
often and it's sort of a slow grind

0:19:08.200,0:19:13.280  
toward an alcohol use disorder as they

0:19:10.730,0:19:15.559  
try to cope with their problems with

0:19:13.280,0:19:17.090  
alcohol and tolerance develops to the

0:19:15.559,0:19:19.490  
alcohol so they have to drink more and

0:19:17.090,0:19:22.730  
they end up locked in a cycle where if

0:19:19.490,0:19:24.890  
they stop drinking they feel much worse

0:19:22.730,0:19:27.380  
than when they started and so they keep

0:19:24.890,0:19:28.909  
coming back and and so that you know

0:19:27.380,0:19:32.720  
that if they're these motives are

0:19:28.909,0:19:35.630  
important for predicting the likelihood

0:19:32.720,0:19:42.169  
of certain kinds of alcohol related

0:19:35.630,0:19:43.820  
harms and it turns out that several

0:19:42.169,0:19:46.370  
studies in the last few years including

0:19:43.820,0:19:49.460  
this one that just came out suggest that

0:19:46.370,0:19:52.400  
females beginning in adolescents are

0:19:49.460,0:19:55.070  
more likely to be drawn to alcohol for

0:19:52.400,0:19:59.059  
the negative reinforcement so to cope

0:19:55.070,0:20:00.680  
with social anxiety or stress to

0:19:59.059,0:20:03.350  
basically

0:20:00.680,0:20:05.780  
to for coping motives whereas young

0:20:03.350,0:20:09.170  
males are more likely to to engage in

0:20:05.780,0:20:10.490  
this sort of stereotypical alcohol use

0:20:09.170,0:20:12.680  
that we think of when we think of young

0:20:10.490,0:20:14.960  
people they go out and party they drink

0:20:12.680,0:20:17.260  
a lot in an evening and certainly they

0:20:14.960,0:20:20.360  
can suffer all kinds of harms from that

0:20:17.260,0:20:23.260  
but drinking for negative reinforcement

0:20:20.360,0:20:25.520  
increases the likelihood that over time

0:20:23.260,0:20:27.680  
somebody will develop a serious problem

0:20:25.520,0:20:29.750  
with alcohol and so we're learning a lot

0:20:27.680,0:20:32.030  
about how when you enter adolescence at

0:20:29.750,0:20:35.930  
age 10 your brains are basically the

0:20:32.030,0:20:37.310

same very similar but when we leave the  
0:20:35.930,0:20:38.750  
end of adolescence you know we come out  
0:20:37.310,0:20:42.140  
of the second decade of life our brains  
0:20:38.750,0:20:44.060  
are wired in in important ways that are  
0:20:42.140,0:20:47.660  
different between males and females and  
0:20:44.060,0:20:50.990  
for some reason the female brain sort of  
0:20:47.660,0:20:52.700  
creates a scenario where negative  
0:20:50.990,0:20:55.490  
reinforcement from alcohol or other  
0:20:52.700,0:20:57.440  
drugs is highly is more valued than it  
0:20:55.490,0:21:00.080  
is in males this is a statistical  
0:20:57.440,0:21:02.660  
phenomenon it's not every woman or man  
0:21:00.080,0:21:04.040  
it's you know it's it's a statistical  
0:21:02.660,0:21:06.350  
phenomenon but women are just more  
0:21:04.040,0:21:08.710  
likely to be drawn to alcohol for those  
0:21:06.350,0:21:12.110  
coping motives and that is concerning  
0:21:08.710,0:21:15.620  
given what we know about what those  
0:21:12.110,0:21:17.810  
coping motives predict and it's also  
0:21:15.620,0:21:20.990  
concerning given that if we if we go

0:21:17.810,0:21:23.090  
back to our adolescent sample it turns

0:21:20.990,0:21:25.810  
out that over the last you know 10 years

0:21:23.090,0:21:29.560  
or so there's been a very big increase

0:21:25.810,0:21:32.480  
and-and-and-and caught an emotional

0:21:29.560,0:21:34.580  
distress among our kids for instance

0:21:32.480,0:21:37.970  
these data show a 37 percent increase in

0:21:34.580,0:21:39.560  
in kids who report who had a major

0:21:37.970,0:21:41.480  
depressive episode in the past year and

0:21:39.560,0:21:44.750  
as you can see in the graph the increase

0:21:41.480,0:21:46.490  
has been bigger much bigger for for

0:21:44.750,0:21:48.620  
females than males and females already

0:21:46.490,0:21:50.510  
have a higher likelihood of having

0:21:48.620,0:21:54.950  
issues with anxiety and depression in

0:21:50.510,0:21:56.660  
males so this concerns us because while

0:21:54.950,0:21:58.910  
we're seeing declines in drinking among

0:21:56.660,0:22:01.910  
teens the declines are much bigger for

0:21:58.910,0:22:03.680  
boys than for girls and we know that

0:22:01.910,0:22:06.080  
there's been this increase in anxiety

0:22:03.680,0:22:10.670  
and depression among kids particularly

0:22:06.080,0:22:12.500  
among females relative to boys and we

0:22:10.670,0:22:16.280  
know that all of that can set our

0:22:12.500,0:22:17.600  
young girls up for for drinking for

0:22:16.280,0:22:21.500  
negative reinforcement and then

0:22:17.600,0:22:23.420  
developing problems as a result so we

0:22:21.500,0:22:26.330  
could end up in a situation where fewer

0:22:23.420,0:22:29.300  
young women are drinking but more of

0:22:26.330,0:22:31.970  
them end up developing problems as a

0:22:29.300,0:22:34.310  
result of the increases and and in

0:22:31.970,0:22:37.030  
depression and anxiety which would give

0:22:34.310,0:22:42.380  
rise to drinking motives that are

0:22:37.030,0:22:45.800  
designed to help cope so and this has

0:22:42.380,0:22:49.550  
already been shown with marijuana this

0:22:45.800,0:22:53.000  
is a study that came out just this year

0:22:49.550,0:22:55.760  
looking at reasons why teens give for

0:22:53.000,0:22:59.020

smoking marijuana and what you see is

0:22:55.760,0:23:02.060  
that in this very busy slide is that the

0:22:59.020,0:23:04.100  
percentage of teens who say they smoke

0:23:02.060,0:23:07.700  
marijuana to cope has gone up

0:23:04.100,0:23:10.790  
significantly over time and so again if

0:23:07.700,0:23:13.760  
this if this happens with alcohol we may

0:23:10.790,0:23:15.680  
end up seeing an increase in the

0:23:13.760,0:23:18.500  
prevalence of alcohol use disorder among

0:23:15.680,0:23:22.400  
young people even as the percentage of

0:23:18.500,0:23:24.350  
teens who drink comes down okay we

0:23:22.400,0:23:28.340  
switch gears a little bit here and talk

0:23:24.350,0:23:30.830  
for a few minutes about alcohol and an

0:23:28.340,0:23:32.510  
overdose I mean there's you know so I've

0:23:30.830,0:23:33.680  
been focused a lot more on alcohol and

0:23:32.510,0:23:34.940  
chronic drinking and developing an

0:23:33.680,0:23:37.220  
alcohol use disorder I want to talk

0:23:34.940,0:23:40.340  
about acute intoxication with alcohol

0:23:37.220,0:23:42.050  
the dangers that it poses and in essence



0:23:40.340,0:23:44.600  
alcohol has an arrow what we call

0:23:42.050,0:23:48.170  
therapeutic index the therapeutic index

0:23:44.600,0:23:51.830  
is a ratio of the toxic dose of a drug

0:23:48.170,0:23:53.630  
for half of people over the effective

0:23:51.830,0:23:55.220  
dose for about half of people and you

0:23:53.630,0:23:57.470  
want that to be a big number you want

0:23:55.220,0:23:59.750  
your toxic dose to be way higher than

0:23:57.470,0:24:03.980  
your effective dose you want to go into

0:23:59.750,0:24:06.770  
CVS buy aspirin go to your car take

0:24:03.980,0:24:09.590  
three and and know that you're probably

0:24:06.770,0:24:11.180  
not gonna die you want that toxic dose

0:24:09.590,0:24:13.880  
to be so much higher than the effective

0:24:11.180,0:24:15.650  
dose that you have a safe window for

0:24:13.880,0:24:18.320  
error and it turns out that with alcohol

0:24:15.650,0:24:20.360  
and and opioids as we'll see

0:24:18.320,0:24:22.520  
the therapeutic index is fairly small

0:24:20.360,0:24:24.200  
the toxic dose is not that much bigger

0:24:22.520,0:24:26.310  
than the effective dose so if we

0:24:24.200,0:24:29.730  
consider that a point oh

0:24:26.310,0:24:32.790  
five BAC would be sort of an effective

0:24:29.730,0:24:34.740  
dose if people are looking for you know

0:24:32.790,0:24:36.510  
relaxation or that's--it's that's what

0:24:34.740,0:24:39.360  
that's about what moderate consumption

0:24:36.510,0:24:42.390  
would produce for a for a male at two

0:24:39.360,0:24:44.400  
drinks the the toxic dose for humans

0:24:42.390,0:24:47.580  
where about half of people would die

0:24:44.400,0:24:49.320  
seems to be around 0.35 and as you can

0:24:47.580,0:24:50.760  
see on the right side there are lots of

0:24:49.320,0:24:52.920  
these are all young people college

0:24:50.760,0:24:55.800  
students who died and you can see the

0:24:52.920,0:24:58.380  
range of their estimated BAC s at the

0:24:55.800,0:25:01.200  
time of death and so you've got a

0:24:58.380,0:25:03.810  
therapist index of about seven which

0:25:01.200,0:25:05.910  
means that if you accidentally drank

0:25:03.810,0:25:08.070

seven times more than the dose that you

0:25:05.910,0:25:10.670  
normally drink to get the the effect you

0:25:08.070,0:25:13.770  
want you could die that's frightening

0:25:10.670,0:25:16.770  
because it is it is possible to do that

0:25:13.770,0:25:18.270  
and it does happen I mean if you're if

0:25:16.770,0:25:22.380  
you're drinking out of a big red cup

0:25:18.270,0:25:24.960  
that somebody's pouring spirits into you

0:25:22.380,0:25:27.150  
could very easily you know get close to

0:25:24.960,0:25:29.610  
that level or beyond so so the alcohol

0:25:27.150,0:25:33.780  
can do that and the way that alcohol

0:25:29.610,0:25:35.670  
does it is by shutting down these what

0:25:33.780,0:25:37.740  
we call vital reflex centers in the

0:25:35.670,0:25:38.160  
brain stem let me show you that in a

0:25:37.740,0:25:41.100  
minute

0:25:38.160,0:25:43.170  
so obviously opioids have narrow safety

0:25:41.100,0:25:46.290  
margins too particularly with the new

0:25:43.170,0:25:49.710  
synthetics that are coming out fentanyl

0:25:46.290,0:25:51.660  
you know you those jars show you the

0:25:49.710,0:25:53.820  
amount of a particular of the drug that

0:25:51.660,0:25:55.410  
would it would take to kill you and you

0:25:53.820,0:25:57.420  
can see in the fentanyl container I mean

0:25:55.410,0:25:59.190  
you're looking at a couple specks well

0:25:57.420,0:26:00.950  
there's something that's a foul you know

0:25:59.190,0:26:03.750  
whatever it is five hundred times

0:26:00.950,0:26:06.660  
stronger than that that has been

0:26:03.750,0:26:08.880  
synthesized and so it doesn't take much

0:26:06.660,0:26:10.740  
of this to kill you so this the

0:26:08.880,0:26:12.960  
therapeutic index is going to be very

0:26:10.740,0:26:15.810  
small with these drugs so alcohol

0:26:12.960,0:26:18.000  
combined with these drugs is going to

0:26:15.810,0:26:20.220  
shrink the safety margin even further

0:26:18.000,0:26:22.890  
and it doesn't take a lot of alcohol as

0:26:20.220,0:26:24.630  
I'll show you this is just a slide

0:26:22.890,0:26:26.910  
showing you the sort of evolution of the

0:26:24.630,0:26:28.350  
opioid crisis and I want to point out to

0:26:26.910,0:26:29.760  
you that an estimated three hundred

0:26:28.350,0:26:32.490  
ninety nine thousand people died from

0:26:29.760,0:26:34.380  
opioid overdoses in this 18 year period

0:26:32.490,0:26:37.590  
and about a million people died from

0:26:34.380,0:26:40.650  
alcohol at least and so yes this is a

0:26:37.590,0:26:43.230  
major crisis but let's

0:26:40.650,0:26:44.970  
remember alcohol itself can kill and

0:26:43.230,0:26:46.980  
does kill lots of people in the United

0:26:44.970,0:26:49.890  
States the combination of the two is

0:26:46.980,0:26:51.900  
particularly deadly and so what this

0:26:49.890,0:26:57.830  
slide shows you is on the right hand

0:26:51.900,0:27:00.840  
side you see some brain stuff and and

0:26:57.830,0:27:03.360  
and what this is here is the brain stem

0:27:00.840,0:27:04.710  
the very base of the brain you can see

0:27:03.360,0:27:06.660  
it here and it's blown up that's the

0:27:04.710,0:27:08.610  
base of your brain right near the bottom

0:27:06.660,0:27:10.380  
of your skull this is about where the

0:27:08.610,0:27:12.300

bottom of your skull would be and then

0:27:10.380,0:27:14.460  
the rest of spinal cord well these are

0:27:12.300,0:27:16.440  
very primitive areas and what these

0:27:14.460,0:27:18.120  
brain areas do is they keep you alive

0:27:16.440,0:27:19.380  
you know something's got to keep your

0:27:18.120,0:27:21.510  
heart beating something's got to keep

0:27:19.380,0:27:24.120  
you breathing something's got to make

0:27:21.510,0:27:26.220  
sure that you clear your airway if

0:27:24.120,0:27:28.470  
something is blocking it these are the

0:27:26.220,0:27:30.840  
same sorts of circuits that that also

0:27:28.470,0:27:34.170  
help you sneeze and cough they're just

0:27:30.840,0:27:36.420  
vital to our lives vital reflex centers

0:27:34.170,0:27:38.880  
well alcohol can shut them off and

0:27:36.420,0:27:40.710  
opioids shut them off and the

0:27:38.880,0:27:44.220  
combination of the two shut them off

0:27:40.710,0:27:45.720  
even easier and so you know you have too

0:27:44.220,0:27:47.970  
much of the drug and suddenly you stop

0:27:45.720,0:27:51.150  
breathing or you can't clear the airway

0:27:47.970,0:27:52.680  
when you when something blocks it you

0:27:51.150,0:27:54.600  
know that's what these drugs can do at

0:27:52.680,0:27:56.670  
high enough levels and I want to show

0:27:54.600,0:27:58.620  
you some the outcome of a fascinating

0:27:56.670,0:28:00.450  
study that used fairly low doses of

0:27:58.620,0:28:05.160  
these two to show that you don't need

0:28:00.450,0:28:10.340  
much this is frightening all right let

0:28:05.160,0:28:12.110  
me find my there we go okay so

0:28:10.340,0:28:16.350  
researchers did a study where they took

0:28:12.110,0:28:19.830  
it took a dozen young adults a dozen

0:28:16.350,0:28:21.960  
elderly people and they gave them 20

0:28:19.830,0:28:24.690  
milligrams of oxycodone which is you

0:28:21.960,0:28:27.630  
know a pretty good dose of oxycodone ob4

0:28:24.690,0:28:32.460  
I would imagine moderate pain monitors

0:28:27.630,0:28:34.020  
to severe pain and and they measured

0:28:32.460,0:28:35.610  
their ventilation you know their

0:28:34.020,0:28:38.280  
breathing and then they gave them

0:28:35.610,0:28:40.860  
alcohol the equivalent of basically like

0:28:38.280,0:28:44.250  
a drink or two you know in their veins

0:28:40.860,0:28:47.370  
over an hour and just that amount of

0:28:44.250,0:28:50.240  
alcohol just a drink or two combined

0:28:47.370,0:28:54.490  
with that 20 milligrams of oxycodone

0:28:50.240,0:28:58.170  
caused a significant depression

0:28:54.490,0:29:01.660  
in in in in breathing and respiration

0:28:58.170,0:29:04.510  
all told it's almost a 50% decline and

0:29:01.660,0:29:07.330  
the rate of breathing of exchanging the

0:29:04.510,0:29:10.600  
gases in your lungs so the opioid

0:29:07.330,0:29:13.510  
reduced by 28% alcohol added another 19%

0:29:10.600,0:29:16.060  
that is frightening people in the study

0:29:13.510,0:29:18.400  
had I think it's I'm gonna pronounce it

0:29:16.060,0:29:19.540  
wrong ethnic events they had events

0:29:18.400,0:29:21.010  
where they literally stopped breathing

0:29:19.540,0:29:23.290  
and had to catch themselves and start

0:29:21.010,0:29:27.430  
breathing it just doesn't take much so

0:29:23.290,0:29:29.110



we think that the estimate for for how

0:29:27.430,0:29:32.370  
often alcohol contributes to opioid

0:29:29.110,0:29:35.500  
overdose deaths is is is way

0:29:32.370,0:29:37.810  
underestimated you know the death

0:29:35.500,0:29:41.020  
certificates list alcohol and about 20%

0:29:37.810,0:29:42.670  
of opioid overdose deaths but given that

0:29:41.020,0:29:46.960  
we know that it doesn't take a lot of

0:29:42.670,0:29:49.060  
alcohol to compound the problem with

0:29:46.960,0:29:51.960  
brain stem suppression you know we

0:29:49.060,0:29:54.730  
suspect that that alcohol is far more

0:29:51.960,0:29:59.230  
commonly involved in these these

0:29:54.730,0:30:00.940  
overdose deaths okay one of the one of

0:29:59.230,0:30:03.310  
the things that we're working on here at

0:30:00.940,0:30:05.650  
the Institute is finding better ways to

0:30:03.310,0:30:07.210  
connect people to treatment because you

0:30:05.650,0:30:09.640  
know one of the major barriers to

0:30:07.210,0:30:10.750  
getting help is that people just don't

0:30:09.640,0:30:14.650  
know what to do they don't know where to

0:30:10.750,0:30:16.450  
go and so we created a something called

0:30:14.650,0:30:21.160  
the treatment navigator which is now

0:30:16.450,0:30:24.700  
online that helps people evaluate what

0:30:21.160,0:30:26.710  
the treatment options are and and figure

0:30:24.700,0:30:30.280  
out what to do and where to go we have

0:30:26.710,0:30:32.650  
another resource called the rethinking

0:30:30.280,0:30:34.840  
yeah called rethinking drinking which

0:30:32.650,0:30:37.030  
basically helps people evaluate their

0:30:34.840,0:30:38.650  
drinking and decide if they need help so

0:30:37.030,0:30:41.760  
the combination of rethinking drinking

0:30:38.650,0:30:44.830  
and this new treatment navigator we hope

0:30:41.760,0:30:47.710  
will help people first evaluate whether

0:30:44.830,0:30:50.530  
they need help and and then how to get

0:30:47.710,0:30:53.710  
help or you could work on this with a

0:30:50.530,0:30:55.180  
loved one or for a loved one but you

0:30:53.710,0:30:57.190  
know very few people get treatment of

0:30:55.180,0:30:59.200  
that 15 million people a year with an

0:30:57.190,0:31:01.360  
alcohol use disorder fewer than one in

0:30:59.200,0:31:05.620  
ten people get any kind of treatment at

0:31:01.360,0:31:07.600  
all in a year and so you know I think we

0:31:05.620,0:31:09.580  
think that we can improve that by

0:31:07.600,0:31:11.679  
just working harder at connecting people

0:31:09.580,0:31:14.470  
with the treatment they need if we do

0:31:11.679,0:31:16.780  
that and we can catch alcohol use

0:31:14.470,0:31:19.360  
disorders earlier and get people help

0:31:16.780,0:31:22.080  
earlier we can minimize a lot of the

0:31:19.360,0:31:25.570  
harm that occurs in their lives and also

0:31:22.080,0:31:28.210  
reduce the burden to society of alcohol

0:31:25.570,0:31:29.830  
use disorder so that's that's one of the

0:31:28.210,0:31:30.640  
things we're really focused on here

0:31:29.830,0:31:33.760  
let's see

0:31:30.640,0:31:35.980  
so to summarize alcohol use including

0:31:33.760,0:31:37.500  
binge drinking and alcohol-related IDI

0:31:35.980,0:31:40.809  
visits are increasing in the u.s.

0:31:37.500,0:31:43.960

particularly among women and older

0:31:40.809,0:31:46.929  
drinkers and by the way as the baby

0:31:43.960,0:31:49.360  
boomer generation ages even if the

0:31:46.929,0:31:51.820  
percentage of people in that age group

0:31:49.360,0:31:53.820  
who have an alcohol use disorder doesn't

0:31:51.820,0:31:56.710  
go up let's say it just stays the same

0:31:53.820,0:31:58.740  
because that age group the size of is

0:31:56.710,0:32:02.500  
about to double in the next thirty years

0:31:58.740,0:32:03.280  
we're gonna have a much bigger burden on

0:32:02.500,0:32:05.200  
society

0:32:03.280,0:32:07.659  
from alcohol use and that age group

0:32:05.200,0:32:10.169  
simply because of the sheer increase in

0:32:07.659,0:32:13.210  
size of that age group again even if the

0:32:10.169,0:32:15.640  
prevalence of drinking and alcohol use

0:32:13.210,0:32:17.740  
disorder doesn't change underage

0:32:15.640,0:32:19.240  
drinking is declining but it's it's

0:32:17.740,0:32:22.270  
declining much more for males and

0:32:19.240,0:32:26.799  
females by the way it's declining at

0:32:22.270,0:32:28.570  
college too and but and I don't know if

0:32:26.799,0:32:32.590  
now it's statistically declining among

0:32:28.570,0:32:34.960  
college-age young adults but College

0:32:32.590,0:32:38.440  
used to be a place where students drank

0:32:34.960,0:32:40.720  
a lot more than people outside of the

0:32:38.440,0:32:43.840  
college environment and that that is

0:32:40.720,0:32:46.600  
going away young adults are just in

0:32:43.840,0:32:50.169  
general sort of merging in terms of

0:32:46.600,0:32:52.120  
their drinking which is interesting so

0:32:50.169,0:32:53.440  
women are more likely to oh yeah

0:32:52.120,0:32:55.179  
underage drinking is declined even more

0:32:53.440,0:32:58.299  
for males and females and I want to come

0:32:55.179,0:33:00.070  
back to the the point that there's

0:32:58.299,0:33:01.840  
something going on with kids where

0:33:00.070,0:33:04.870  
anxiety and depression is increasing

0:33:01.840,0:33:07.630  
isolation is increasing socializing is

0:33:04.870,0:33:11.950  
decreasing and alcohol use is decreasing

0:33:07.630,0:33:13.780  
and our concern is that among those kids

0:33:11.950,0:33:15.429  
who do drink more of them will be

0:33:13.780,0:33:18.070  
drinking for negative reinforcement and

0:33:15.429,0:33:20.710  
that that could lead to an actual

0:33:18.070,0:33:21.440  
increase in alcohol use disorder at the

0:33:20.710,0:33:23.690  
same time that

0:33:21.440,0:33:25.009  
drinking is coming down women are more

0:33:23.690,0:33:26.919  
likely to experience a variety of

0:33:25.009,0:33:29.779  
alcohol related health effects and

0:33:26.919,0:33:32.929  
research suggests that males are again

0:33:29.779,0:33:35.990  
statistically more likely to drink for

0:33:32.929,0:33:37.549  
positive reinforcement while females are

0:33:35.990,0:33:40.120  
statistically more likely to be

0:33:37.549,0:33:42.649  
motivated by negative reinforcement and

0:33:40.120,0:33:45.139  
drinking to cope or for that negative

0:33:42.649,0:33:47.750  
reinforcement doesn't bode well because

0:33:45.139,0:33:50.090  
it sets up a cycle where the alcohol

0:33:47.750,0:33:52.070

temporarily fixes the problem but when  
0:33:50.090,0:33:53.990  
it wears off you feel worse so you drink  
0:33:52.070,0:33:57.230  
again and it temporarily fixes the  
0:33:53.990,0:33:59.450  
problem and at the end of a year your  
0:33:57.230,0:34:02.659  
problem is worse for instance in a study  
0:33:59.450,0:34:05.210  
of college students female college  
0:34:02.659,0:34:09.050  
students who say they drink for anxiety  
0:34:05.210,0:34:11.329  
reduction if they do daily Diaries over  
0:34:09.050,0:34:13.339  
a year you find out that at the end of  
0:34:11.329,0:34:16.280  
the year they're drinking escalated and  
0:34:13.339,0:34:19.720  
their anxiety got worse it just isn't a  
0:34:16.280,0:34:22.159  
solution it's it's a it's more of a trap  
0:34:19.720,0:34:24.470  
and we know that alcohol and opioids are  
0:34:22.159,0:34:27.470  
a deadly combination and and we're  
0:34:24.470,0:34:29.329  
pretty certain that the number of opioid  
0:34:27.470,0:34:31.040  
overdose cases that involve alcohol is  
0:34:29.329,0:34:33.109  
probably much higher than the statistics  
0:34:31.040,0:34:35.780  
suggest simply because you don't need a

0:34:33.109,0:34:38.750  
lot of alcohol to to compound the

0:34:35.780,0:34:42.470  
problem that opioids produce in terms of

0:34:38.750,0:34:45.230  
brain stem function okay I think I just

0:34:42.470,0:34:47.950  
got through that in record time so

0:34:45.230,0:34:50.510  
that's my contact information you are

0:34:47.950,0:34:53.329  
totally absolutely welcome to call me

0:34:50.510,0:34:56.240  
email me if you have any questions I'll

0:34:53.329,0:35:00.250  
provide any resources I can point you in

0:34:56.240,0:35:02.960  
the right direction if I can't thanks

0:35:00.250,0:35:05.089  
thank you dr. white and I can vouch

0:35:02.960,0:35:06.800  
personally having reached out to dr.

0:35:05.089,0:35:08.599  
white on numerous occasions he's very

0:35:06.800,0:35:11.060  
prompt in his response so I do encourage

0:35:08.599,0:35:12.530  
you to take him up on that offer so with

0:35:11.060,0:35:14.420  
that we're going to turn it over to the

0:35:12.530,0:35:17.390  
questions that have populated throughout

0:35:14.420,0:35:20.630  
the presentation the first one is from



0:35:17.390,0:35:22.910  
Pamela the question is has anyone done

0:35:20.630,0:35:25.609  
an analysis of how alcohol costs

0:35:22.910,0:35:27.079  
impacted individual citizens such as how

0:35:25.609,0:35:29.000  
they contribute to increased health

0:35:27.079,0:35:32.810  
insurance or local taxes for law

0:35:29.000,0:35:34.940  
enforcement oh yeah I'm sure that that

0:35:32.810,0:35:38.569  
has been done I mean their estimates

0:35:34.940,0:35:40.220  
the yeah I don't know those numbers off

0:35:38.569,0:35:42.530  
the top my head but I think the CDC has

0:35:40.220,0:35:45.680  
done that and they provide estimates for

0:35:42.530,0:35:47.450  
the cost to a given individual and if

0:35:45.680,0:35:49.250  
not that's something that you know I can

0:35:47.450,0:35:51.289  
do the math and just given what I

0:35:49.250,0:35:53.390  
already have and tell you those answer

0:35:51.289,0:35:54.829  
so I I would ask the the person that

0:35:53.390,0:35:58.280  
asked that question if you would please

0:35:54.829,0:36:04.250  
reach out to me when we're offline and I

0:35:58.280,0:36:06.920

will provide more than you we have a

0:36:04.250,0:36:12.710  
question for clarification I believe it

0:36:06.920,0:36:16.039  
was on slide number three which is just

0:36:12.710,0:36:18.289  
noting on the last slide I believe that

0:36:16.039,0:36:22.869  
there was a total cost and millions not

0:36:18.289,0:36:25.730  
billions so just to clarify that point

0:36:22.869,0:36:28.010  
that's just me not knowing how to do

0:36:25.730,0:36:30.440  
yeah basic math I guess yeah you're

0:36:28.010,0:36:32.359  
right that is those are billions spent

0:36:30.440,0:36:34.940  
millions I'm gonna fix that

0:36:32.359,0:36:38.630  
excellent okay thank you thank you

0:36:34.940,0:36:41.960  
pointing that out another question comes

0:36:38.630,0:36:43.910  
from Elizabeth did you mean the jury is

0:36:41.960,0:36:45.829  
still out about the extent of the

0:36:43.910,0:36:46.520  
connection between alcohol use and

0:36:45.829,0:36:48.859  
cancer

0:36:46.520,0:36:50.690  
I thought we knew from years of research

0:36:48.859,0:36:53.630  
that there is a clear connection between

0:36:50.690,0:36:58.010  
alcohol use and cancer and then notes a

0:36:53.630,0:36:59.960  
citation from CDC cancer alcohol oh yeah

0:36:58.010,0:37:02.510  
no I think I think that's that's very

0:36:59.960,0:37:05.779  
clear I mean we've known for years that

0:37:02.510,0:37:07.640  
that alcohol is a causal agent in cancer

0:37:05.779,0:37:10.160  
it's considered a carcinogen by the

0:37:07.640,0:37:10.700  
government it is there's no question

0:37:10.160,0:37:13.250  
about it

0:37:10.700,0:37:16.789  
what what the jury is out about is just

0:37:13.250,0:37:17.029  
the the amount of alcohol required to do

0:37:16.789,0:37:20.630  
that

0:37:17.029,0:37:23.119  
and for whom and why you know we don't

0:37:20.630,0:37:25.220  
we know that that it happens we know

0:37:23.119,0:37:27.140  
that from epidemiological research that

0:37:25.220,0:37:29.569  
the increase seems to occur with for

0:37:27.140,0:37:31.579  
women at even less than one drink the

0:37:29.569,0:37:33.650  
increase in risk for breast cancer

0:37:31.579,0:37:36.079  
but you know with epidemiological

0:37:33.650,0:37:39.200  
studies you're always estimating based

0:37:36.079,0:37:41.690  
on self-report and records and so you

0:37:39.200,0:37:43.730  
know that you know it's just I don't

0:37:41.690,0:37:47.390  
think we know for certain where the

0:37:43.730,0:37:48.589  
thresholds are and why and for whom but

0:37:47.390,0:37:48.770  
we do know that I don't think there's

0:37:48.589,0:37:50.540  
any

0:37:48.770,0:37:54.650  
question at all that alcohol is a

0:37:50.540,0:37:56.990  
cancer-causing agent including breast

0:37:54.650,0:37:59.570  
cancer and primarily cancers of the head

0:37:56.990,0:38:01.010  
and neck and throat but also breast

0:37:59.570,0:38:03.020  
cancer and you know

0:38:01.010,0:38:07.160  
Safa Geel cancer and stomach cancer I

0:38:03.020,0:38:09.620  
mean it is a cancer-causing agent thank

0:38:07.160,0:38:11.900  
you for clarifying that the next

0:38:09.620,0:38:13.760  
question comes from Claire do you think

0:38:11.900,0:38:16.460

that there could potentially be a stigma

0:38:13.760,0:38:18.770  
for males to admit to a major depressive

0:38:16.460,0:38:21.140  
episode and this could possibly go

0:38:18.770,0:38:23.240  
undiagnosed could this potentially skew

0:38:21.140,0:38:26.750  
the data even in regards to the reasons

0:38:23.240,0:38:29.030  
for drinking differences between gender

0:38:26.750,0:38:30.680  
oh that's a great question

0:38:29.030,0:38:32.960  
yeah I mean there's always that

0:38:30.680,0:38:35.270  
possibility I mean even with something

0:38:32.960,0:38:38.680  
like hangovers maybe it may be females

0:38:35.270,0:38:40.580  
women are just more likely to you know

0:38:38.680,0:38:42.830  
acknowledge that they don't feel well

0:38:40.580,0:38:45.560  
I mean who knows so that is certainly

0:38:42.830,0:38:47.680  
possible and but I have to assume that

0:38:45.560,0:38:51.740  
the people that do that kind of research

0:38:47.680,0:38:53.380  
take that into consideration somehow and

0:38:51.740,0:38:57.680  
you know when it comes to

0:38:53.380,0:38:59.900  
epidemiological data we again it's we

0:38:57.680,0:39:02.390  
only have what we have to go on we only

0:38:59.900,0:39:04.370  
have self-report and and records and

0:39:02.390,0:39:06.050  
there's always confounds there's always

0:39:04.370,0:39:09.170  
things that contribute to the variance

0:39:06.050,0:39:12.290  
whether that's sufficient to explain

0:39:09.170,0:39:14.990  
away the differences between males and

0:39:12.290,0:39:18.020  
females and you know the increases in

0:39:14.990,0:39:21.310  
anxiety depression among females and the

0:39:18.020,0:39:23.060  
increased likelihood of a co-occurring

0:39:21.310,0:39:25.820  
disorder you know mental health disorder

0:39:23.060,0:39:28.130  
Atwell depression or anxiety disorder

0:39:25.820,0:39:30.050  
and alcohol use disorder in females you

0:39:28.130,0:39:34.780  
know weather weather differences in and

0:39:30.050,0:39:36.860  
how males and females what they tell us

0:39:34.780,0:39:39.440  
whether that can explain away the

0:39:36.860,0:39:40.700  
difference I doubt it but you know again

0:39:39.440,0:39:43.340  
what a good question because I think

0:39:40.700,0:39:46.420  
that is always that that's sort of a

0:39:43.340,0:39:49.100  
problem is always lurking in the data

0:39:46.420,0:39:51.980  
all right the next question is from

0:39:49.100,0:39:53.960  
Rebecca have you noted any significant

0:39:51.980,0:39:57.040  
changes in the alkyl industry or their

0:39:53.960,0:39:57.040  
marketing tactics

0:39:58.630,0:40:11.289  
i whoops I'm so sorry I am a lot I'm

0:40:09.819,0:40:14.289  
having some technological difficulties

0:40:11.289,0:40:17.049  
here no problem take your time yes so I

0:40:14.289,0:40:20.499  
you know that I don't know how to answer

0:40:17.049,0:40:24.009  
that I don't study it and I don't track

0:40:20.499,0:40:27.430  
it I mean I think one obvious change

0:40:24.009,0:40:29.979  
which is just a change that has occurred

0:40:27.430,0:40:33.160  
in all marketing is just the move

0:40:29.979,0:40:36.849  
towards social media more online you

0:40:33.160,0:40:39.339  
know digital marketing so other than

0:40:36.849,0:40:41.890  
that I don't you mean yeah in terms of

0:40:39.339,0:40:43.479

like I assume she's the person is asking

0:40:41.890,0:40:45.009  
about like marketing strategies or

0:40:43.479,0:40:46.269  
Content ID you know I haven't

0:40:45.009,0:40:48.459  
I don't really track that I mean there

0:40:46.269,0:40:51.579  
are people in the field that dude the do

0:40:48.459,0:40:53.799  
study that I mean David Jernigan who's

0:40:51.579,0:40:55.119  
now at I believe Boston University is an

0:40:53.799,0:40:57.430  
expert on that there are true experts

0:40:55.119,0:40:59.559  
and alcohol and marketing I'm just not

0:40:57.430,0:41:02.650  
one of them so I can't I really can't

0:40:59.559,0:41:05.819  
tell you perhaps that's another webinar

0:41:02.650,0:41:08.559  
for us in the future I'll watch that one

0:41:05.819,0:41:12.130  
the next question comes from tomorrow

0:41:08.559,0:41:14.170  
and the question is could it be surmised

0:41:12.130,0:41:16.390  
that the decline in youth drinking is

0:41:14.170,0:41:18.939  
due to prevention programs and education

0:41:16.390,0:41:20.890  
if so this would be impetus to continue

0:41:18.939,0:41:22.569  
programs we don't eliminate vaccines



0:41:20.890,0:41:27.939  
because vaccines have eliminated a

0:41:22.569,0:41:29.559  
disease right I think well first of all

0:41:27.939,0:41:31.869  
I don't think we're anywhere near done

0:41:29.559,0:41:33.819  
addressing this problem and we need to

0:41:31.869,0:41:34.869  
get the numbers down much lower than

0:41:33.819,0:41:36.880  
they are I mean even though they're

0:41:34.869,0:41:38.979  
coming down it's you know if we look at

0:41:36.880,0:41:40.900  
the stats regarding how much young

0:41:38.979,0:41:42.969  
people drink it's still way too high and

0:41:40.900,0:41:45.489  
they're still way too much harm involved

0:41:42.969,0:41:46.749  
and we know that the earlier drinking

0:41:45.489,0:41:48.819  
starts the greater the likelihood of

0:41:46.749,0:41:51.189  
developing an AUD so in order to

0:41:48.819,0:41:53.199  
minimize the minimize alcohol related

0:41:51.189,0:41:57.549  
harm among adults of the population in

0:41:53.199,0:41:59.949  
the workforce and we have to continue to

0:41:57.549,0:42:02.019  
work very hard in addressing alcohol use

0:41:59.949,0:42:04.949  
during the adolescent years it would be

0:42:02.019,0:42:07.119  
nice to be able to say that these

0:42:04.949,0:42:10.300  
decreases were directly tied to specific

0:42:07.119,0:42:12.810  
things that we've done I suspect

0:42:10.300,0:42:14.950  
and and other people have asserted that

0:42:12.810,0:42:18.460  
alcohol-related policies like the

0:42:14.950,0:42:20.020  
minimum legal drinking age and per se

0:42:18.460,0:42:23.890  
limits for driving and zero tolerance

0:42:20.020,0:42:26.920  
for driving for teens and policies that

0:42:23.890,0:42:29.020  
minimize drinking among adults then

0:42:26.920,0:42:31.420  
trickle down to minimize drinking among

0:42:29.020,0:42:33.250  
kids so I think there are lots of things

0:42:31.420,0:42:35.530  
that we can point out and say that

0:42:33.250,0:42:37.210  
probably contributed but we'll never

0:42:35.530,0:42:38.950  
we'll never know

0:42:37.210,0:42:43.300  
we just have to keep plugging away and

0:42:38.950,0:42:46.000  
working at it the next question comes

0:42:43.300,0:42:47.890

from Pamela do you know the relationship

0:42:46.000,0:42:51.300  
between eating disorders and substance

0:42:47.890,0:42:55.240  
abuse oh just that there is a

0:42:51.300,0:42:57.820  
relationship but that's really all I can

0:42:55.240,0:42:59.530  
say I mean yeah they're clearly having

0:42:57.820,0:43:01.119  
an eating disorder increases your

0:42:59.530,0:43:05.080  
likelihood of developing an alcohol or

0:43:01.119,0:43:08.200  
other drug use disorder why that is I

0:43:05.080,0:43:09.970  
don't know but in general any condition

0:43:08.200,0:43:14.170  
that somebody has that causes them to

0:43:09.970,0:43:18.730  
stress it causes them anxiety shame

0:43:14.170,0:43:21.010  
depression you know anhedonia

0:43:18.730,0:43:24.520  
you know whatever happens we anything

0:43:21.010,0:43:27.700  
that causes people to feel distress sets

0:43:24.520,0:43:30.369  
them up for negative reinforcement from

0:43:27.700,0:43:31.750  
a drug and liking the negative

0:43:30.369,0:43:35.140  
reinforcement from a drug in other words

0:43:31.750,0:43:38.320  
doing the drug and feeling better sets

0:43:35.140,0:43:40.510  
you up for developing a problem because

0:43:38.320,0:43:42.570  
the brain is wired in a way that when we

0:43:40.510,0:43:45.550  
find something that makes us feel good

0:43:42.570,0:43:48.369  
or makes us feel better we want to

0:43:45.550,0:43:50.619  
repeat it that's how we learn the same

0:43:48.369,0:43:52.560  
circuits that drive substance use are

0:43:50.619,0:43:56.350  
the circuits to drive eating and

0:43:52.560,0:43:58.750  
drinking and bonding

0:43:56.350,0:44:01.420  
you know substances tap into these

0:43:58.750,0:44:03.730  
pathways and essentially trick us into

0:44:01.420,0:44:06.190  
thinking that we just did something that

0:44:03.730,0:44:08.140  
makes us feel better and it's natural

0:44:06.190,0:44:10.210  
and healthy so we want to go back it's

0:44:08.140,0:44:12.340  
just a very natural response to that

0:44:10.210,0:44:14.050  
reinforcement and so I think any

0:44:12.340,0:44:16.420  
condition you know if you look across

0:44:14.050,0:44:18.369  
all you know mental health conditions

0:44:16.420,0:44:19.869  
there there's a there's not one where

0:44:18.369,0:44:22.330  
there's a decrease that I know of where

0:44:19.869,0:44:24.100  
there's a decreased likelihood of AUD

0:44:22.330,0:44:27.040  
wherever there's misery and

0:44:24.100,0:44:30.070  
and discomfort and suffering you're at

0:44:27.040,0:44:32.800  
greater risk of being falling into the

0:44:30.070,0:44:34.870  
trap of drinking or using other drugs to

0:44:32.800,0:44:36.580  
feel better so that that's really as far

0:44:34.870,0:44:38.350  
as I can go I you know maybe somebody

0:44:36.580,0:44:41.380  
else has explored this in much more

0:44:38.350,0:44:42.910  
detail and has better a better sense of

0:44:41.380,0:44:44.710  
the mechanisms but I think that those

0:44:42.910,0:44:50.200  
are the general mechanisms people want

0:44:44.710,0:44:52.630  
to feel better and yeah okay the next

0:44:50.200,0:44:54.940  
question is from Elizabeth do you have

0:44:52.630,0:44:58.030  
an explanation for why there has been an

0:44:54.940,0:45:02.980  
increase in alcohol use by women you

0:44:58.030,0:45:05.470

know that is a that is such an important

0:45:02.980,0:45:06.940  
question and there are people in the

0:45:05.470,0:45:09.690  
field who have wrestled with that

0:45:06.940,0:45:12.010  
there's a woman named Katherine Keyes

0:45:09.690,0:45:13.780  
who I forgotten where she is she's one

0:45:12.010,0:45:16.030  
of our leading experts on alcohol and

0:45:13.780,0:45:17.910  
women's drinking Sharon will snack who's

0:45:16.030,0:45:19.900  
been doing this for you know 30 years

0:45:17.910,0:45:23.110  
looking at women's drinking around the

0:45:19.900,0:45:28.570  
world and I can tell you that a small

0:45:23.110,0:45:32.440  
part of it is the the slow march toward

0:45:28.570,0:45:36.000  
equality which sometimes seems

0:45:32.440,0:45:40.450  
imperceptible but we are moving toward

0:45:36.000,0:45:42.580  
you know more similar roles in society

0:45:40.450,0:45:43.690  
and similar opportunities again I'm not

0:45:42.580,0:45:45.400  
suggesting we're there but I'm

0:45:43.690,0:45:47.980  
suggesting we're moving toward that and

0:45:45.400,0:45:54.910  
so some speculation is that the increase

0:45:47.980,0:45:56.230  
in income among women has given them the

0:45:54.910,0:45:58.660  
chance to drink more I mean if you have

0:45:56.230,0:45:59.950  
money you can drink that's a one simple

0:45:58.660,0:46:02.260  
thing but I would also assert that

0:45:59.950,0:46:05.770  
stress among women because you know it's

0:46:02.260,0:46:08.500  
like 60 percent of households are headed

0:46:05.770,0:46:10.360  
by women and women still even if they're

0:46:08.500,0:46:14.160  
in a two-family a two-parent household

0:46:10.360,0:46:16.810  
do more of the the the domestic

0:46:14.160,0:46:18.220  
responsibilities I think I think stress

0:46:16.810,0:46:20.500  
among women we're seeing this among

0:46:18.220,0:46:23.790  
teens but I think among adult women

0:46:20.500,0:46:27.100  
stress has to be increasing

0:46:23.790,0:46:29.650  
astronomically as well and so because as

0:46:27.100,0:46:32.260  
women yeah so I think I think it's it's

0:46:29.650,0:46:33.820  
those are just two examples I don't

0:46:32.260,0:46:36.410  
think anybody knows for sure but I think

0:46:33.820,0:46:37.730  
it's yeah I don't

0:46:36.410,0:46:40.160  
as far as I can go I don't really know

0:46:37.730,0:46:42.620  
no more but I think it's complicated and

0:46:40.160,0:46:47.510  
I think it's a maybe it's a combination

0:46:42.620,0:46:49.100  
of opportunity and stress okay we have a

0:46:47.510,0:46:52.370  
question specific to fetal alcohol

0:46:49.100,0:46:56.270  
spectrum disorders and to the extent

0:46:52.370,0:46:57.890  
that you have any information on you

0:46:56.270,0:47:01.580  
know how the increase in women's

0:46:57.890,0:47:03.520  
consumption impacts that issue yep I

0:47:01.580,0:47:06.350  
think we're still waiting to see that

0:47:03.520,0:47:08.450  
the I have a whole bunch of stats that

0:47:06.350,0:47:11.780  
I'd be happy to send about the

0:47:08.450,0:47:16.430  
prevalence of drinking during pregnancy

0:47:11.780,0:47:18.260  
and and FASD but off the top of my head

0:47:16.430,0:47:21.320  
you know I don't know if there are any

0:47:18.260,0:47:23.410  
data yet that have tied these increases

0:47:21.320,0:47:26.120



in women's drinking to an increase in

0:47:23.410,0:47:30.080  
exposure to the exposure to alcohol in

0:47:26.120,0:47:33.920  
the womb but again if that person would

0:47:30.080,0:47:36.380  
like to contact me offline I would be

0:47:33.920,0:47:38.060  
more than happy to send everything I

0:47:36.380,0:47:40.160  
have okay

0:47:38.060,0:47:44.150  
and there are a couple questions that

0:47:40.160,0:47:46.610  
are about what you might deduce are the

0:47:44.150,0:47:47.630  
drivers for this increase in alcohol use

0:47:46.610,0:47:49.970  
among females

0:47:47.630,0:47:52.700  
some are asking about product offerings

0:47:49.970,0:47:55.460  
flavors strengths and mixed beverages

0:47:52.700,0:47:58.400  
energy drinks and others are looking to

0:47:55.460,0:48:00.310  
get more information about perhaps if

0:47:58.400,0:48:03.950  
marketing and advertising are

0:48:00.310,0:48:06.710  
contributing to that issue so anything

0:48:03.950,0:48:08.210  
that you can speak to to that end you

0:48:06.710,0:48:09.830  
know I think again the the people that

0:48:08.210,0:48:12.230  
actually study that in the field would

0:48:09.830,0:48:16.370  
be the best to go to but it's tricky

0:48:12.230,0:48:18.110  
because sometimes you know marketing can

0:48:16.370,0:48:20.810  
be a driver and sometimes marketing can

0:48:18.110,0:48:25.670  
follow changes in consumer behavior and

0:48:20.810,0:48:27.260  
so is it that that woman's drinking has

0:48:25.670,0:48:29.540  
you know so the nature of the

0:48:27.260,0:48:30.860  
relationship between the the marketing

0:48:29.540,0:48:35.330  
and the drinking is complicated to

0:48:30.860,0:48:37.670  
deduce and again I just don't I don't

0:48:35.330,0:48:39.620  
really follow the the changes in

0:48:37.670,0:48:43.310  
advertising so I I would highly

0:48:39.620,0:48:44.900  
recommend reaching out to - to somebody

0:48:43.310,0:48:48.829  
and if you want to contact me I can send

0:48:44.900,0:48:51.319  
you some contact information okay

0:48:48.829,0:48:53.299  
and ELISA has a question we educate

0:48:51.319,0:48:56.180  
youth a lot regarding substance abuse

0:48:53.299,0:48:58.190  
disorders and and alcohol however in

0:48:56.180,0:48:59.839  
your experience have you seen ways to

0:48:58.190,0:49:02.239  
reach adults regarding outreach and

0:48:59.839,0:49:04.339  
prevention yeah that's that's very

0:49:02.239,0:49:06.380  
tricky you know I think the the most

0:49:04.339,0:49:08.950  
important thing to remember with any of

0:49:06.380,0:49:11.930  
this outreach and prevention work is

0:49:08.950,0:49:13.700  
relevance when something is relevant to

0:49:11.930,0:49:16.219  
people it tends to have more of an

0:49:13.700,0:49:18.289  
impact and so you know for years I

0:49:16.219,0:49:20.539  
remember hearing when I first started

0:49:18.289,0:49:21.829  
doing prevention work years ago people

0:49:20.539,0:49:23.989  
saying well you know information

0:49:21.829,0:49:25.549  
information doesn't change behavior

0:49:23.989,0:49:27.920  
information doesn't change behavior and

0:49:25.549,0:49:29.749  
so in a meeting once I raised my hand

0:49:27.920,0:49:31.910  
and I asked the guy who was who had said

0:49:29.749,0:49:33.650

that I said if I if I told you your  
0:49:31.910,0:49:35.569  
flight was canceled this afternoon would  
0:49:33.650,0:49:36.979  
you still go to the airport and he said  
0:49:35.569,0:49:38.719  
well of course not and I said well I  
0:49:36.979,0:49:40.819  
guess that information can change your  
0:49:38.719,0:49:42.920  
behavior it just has to be relevant so I  
0:49:40.819,0:49:44.660  
think we have to keep working at finding  
0:49:42.920,0:49:47.150  
ways to connect with adults and make  
0:49:44.660,0:49:49.309  
this information relevant to them and  
0:49:47.150,0:49:51.799  
one of them is one way to do that is to  
0:49:49.309,0:49:54.229  
talk about kids if they have kids that  
0:49:51.799,0:49:57.459  
modeling healthy behavior plays a direct  
0:49:54.229,0:50:00.499  
role and and how how kids end up  
0:49:57.459,0:50:04.459  
relating to alcohol and those sorts of  
0:50:00.499,0:50:07.249  
things so I think we we tend to reach  
0:50:04.459,0:50:09.440  
adults more through policies that's the  
0:50:07.249,0:50:11.900  
that's my sense of it we just sort of  
0:50:09.440,0:50:13.190  
established boundaries and you know

0:50:11.900,0:50:16.249  
adults have to function within those

0:50:13.190,0:50:19.279  
hours of operation taxes things like

0:50:16.249,0:50:21.410  
that and we I think we tend to do more

0:50:19.279,0:50:24.229  
education and outreach for kids because

0:50:21.410,0:50:28.009  
we can reach them there in schools

0:50:24.229,0:50:30.709  
so I don't know of any I'm trying to

0:50:28.009,0:50:34.099  
think of a prevention program am just at

0:50:30.709,0:50:35.869  
adults that that has worked the way that

0:50:34.099,0:50:38.359  
some of the programs with kids do oh

0:50:35.869,0:50:40.309  
well I can tell you programs that

0:50:38.359,0:50:41.779  
include both parents and kids will end

0:50:40.309,0:50:43.279  
up working for both the parents and the

0:50:41.779,0:50:45.109  
kids so you look at something like the

0:50:43.279,0:50:46.670  
what's now called the strengthening

0:50:45.109,0:50:48.499  
Families program it used to be called

0:50:46.670,0:50:52.390  
the Iowa strengthen each family program

0:50:48.499,0:50:55.789  
this is a program where parents and kids

0:50:52.390,0:50:58.579  
go to a weekly group meeting for I don't

0:50:55.789,0:51:01.459  
know ten weeks or so and and learn all

0:50:58.579,0:51:02.690  
kinds of stuff and and that ends up

0:51:01.459,0:51:03.320  
reducing

0:51:02.690,0:51:04.910  
and they learn things about

0:51:03.320,0:51:06.830  
communication between the parents and

0:51:04.910,0:51:09.770  
the kids that ends up reducing alcohol

0:51:06.830,0:51:12.080  
use among the kids and the parents so

0:51:09.770,0:51:13.370  
other than that I don't have any I'm

0:51:12.080,0:51:14.530  
probably missing something but that's

0:51:13.370,0:51:18.830  
that's all I can think of

0:51:14.530,0:51:20.990  
okay so Pamela has a question since

0:51:18.830,0:51:22.880  
opioids are prescribed by doctors do

0:51:20.990,0:51:26.300  
they routinely warn about using alcohol

0:51:22.880,0:51:29.780  
at the same time I suspect they they do

0:51:26.300,0:51:32.450  
now more I don't know of any data on how

0:51:29.780,0:51:35.330  
prevalent that actually is or was I mean

0:51:32.450,0:51:37.010

it's it's on the container but how often

0:51:35.330,0:51:39.020

people pay attention

0:51:37.010,0:51:40.760

pharmacists also are in a position to

0:51:39.020,0:51:44.690

tell patients how often that happens I

0:51:40.760,0:51:47.600

don't know so it's something we we we

0:51:44.690,0:51:51.530

really need to make sure people know and

0:51:47.600,0:51:54.350

and it might be good to think of ways to

0:51:51.530,0:51:57.440

reach more physicians about that to

0:51:54.350,0:51:58.880

ensure that they tell their parents you

0:51:57.440,0:51:59.990

know we do some things here to draw

0:51:58.880,0:52:01.430

attention to stuff like that we've

0:51:59.990,0:52:03.290

published a few papers over the last few

0:52:01.430,0:52:05.450

years about alcohol and medication

0:52:03.290,0:52:08.300

interactions and how many adults take

0:52:05.450,0:52:10.430

medications that could interact and but

0:52:08.300,0:52:13.370

if that whether that's had an impact on

0:52:10.430,0:52:15.590

consumer knowledge and physician

0:52:13.370,0:52:18.230

behavior you know I really don't know

0:52:15.590,0:52:20.390  
but it's absolutely imperative that

0:52:18.230,0:52:23.240  
people understand you do not need much

0:52:20.390,0:52:25.430  
alcohol you know give you know another

0:52:23.240,0:52:27.320  
example benzodiazepines there's been an

0:52:25.430,0:52:29.990  
increase in deaths from benzodiazepine

0:52:27.320,0:52:33.440  
overdoses like valium and related drugs

0:52:29.990,0:52:36.410  
like xanax it's very hard to die from an

0:52:33.440,0:52:38.690  
overdose on a benzodiazepine but not if

0:52:36.410,0:52:42.380  
you have a little alcohol and so you

0:52:38.690,0:52:45.110  
know again you know these drugs combined

0:52:42.380,0:52:47.930  
with alcohol are very dangerous and so I

0:52:45.110,0:52:51.140  
don't know how many positions do talk to

0:52:47.930,0:52:52.910  
their patients about it but it's it's

0:52:51.140,0:52:56.210  
obviously something that is very very

0:52:52.910,0:52:58.790  
important not to do and I would just add

0:52:56.210,0:53:01.040  
that I believe CDC has developed some

0:52:58.790,0:53:02.600  
resources to encourage you know



0:53:01.040,0:53:04.240  
coalition's and others who might be

0:53:02.600,0:53:06.170  
interacting with physicians and

0:53:04.240,0:53:07.610  
pharmacists to encourage that

0:53:06.170,0:53:09.200  
conversation to happen so there are

0:53:07.610,0:53:10.970  
resources out there to help if you're

0:53:09.200,0:53:12.570  
looking to implement that in your

0:53:10.970,0:53:16.320  
community and

0:53:12.570,0:53:18.720  
this will be our final question that do

0:53:16.320,0:53:21.390  
you know if CBD has an effect on the

0:53:18.720,0:53:26.910  
alcohol on the elf alcohol effects of

0:53:21.390,0:53:28.590  
the body I'm I'm still a CBD skeptic so

0:53:26.910,0:53:31.770  
I don't I don't I don't know if anything

0:53:28.590,0:53:35.310  
about anything around alcohol and CBD

0:53:31.770,0:53:37.320  
interactions you know I know that I know

0:53:35.310,0:53:39.150  
that CB you know I've seen published

0:53:37.320,0:53:40.740  
evidence that CBD is valuable for some

0:53:39.150,0:53:43.010  
things obviously childhood epilepsy

0:53:40.740,0:53:45.720

because that's been approved by the FDA

0:53:43.010,0:53:47.880  
and and it does seem to work for some

0:53:45.720,0:53:50.400  
people for certain things I haven't seen

0:53:47.880,0:53:52.830  
anything about its interactions with

0:53:50.400,0:53:55.800  
alcohol you know it's yeah I'm taking a

0:53:52.830,0:53:57.690  
wait-and-see approach and hopefully

0:53:55.800,0:54:00.630  
maybe maybe somebody will figure out

0:53:57.690,0:54:04.740  
that it is the best cure for alcohol use

0:54:00.630,0:54:08.370  
disorder then I'll be a believer to be

0:54:04.740,0:54:11.700  
determined right yes so that will

0:54:08.370,0:54:14.220  
conclude this webinar I do want to

0:54:11.700,0:54:16.380  
address one housekeeping question that

0:54:14.220,0:54:19.110  
was asked at dr. white are people able

0:54:16.380,0:54:22.310  
to utilize your PowerPoint information

0:54:19.110,0:54:24.510  
without any copyright infringement

0:54:22.310,0:54:27.030  
absolutely as long as it's not for

0:54:24.510,0:54:29.550  
profit so if it's for an organization or

0:54:27.030,0:54:34.470  
your own presentations or educate people

0:54:29.550,0:54:36.210  
in fact I I will happily send you a

0:54:34.470,0:54:37.950  
hundred more slides I mean I'd be

0:54:36.210,0:54:40.020  
grateful if you use them I mean there's

0:54:37.950,0:54:42.030  
you know we're doing this we do this

0:54:40.020,0:54:45.450  
kind of work just to help people

0:54:42.030,0:54:48.030  
understand alcohol and it's and it's

0:54:45.450,0:54:50.820  
it's potential health impacts and so I'd

0:54:48.030,0:54:54.030  
be delighted if you used it so yes

0:54:50.820,0:54:56.850  
please well and we will also have this

0:54:54.030,0:54:58.680  
webinar available on our website under

0:54:56.850,0:55:00.330  
the resources tab in the next seven to

0:54:58.680,0:55:02.430  
ten business days as we mentioned at the

0:55:00.330,0:55:05.490  
front end of the webinar so with that

0:55:02.430,0:55:07.170  
I'm gonna just thank you dr. white for

0:55:05.490,0:55:08.640  
your time and for sharing your valuable

0:55:07.170,0:55:11.400  
knowledge with us and thank you all for

0:55:08.640,0:55:13.170  
joining napkin on this webinar if anyone

0:55:11.400,0:55:14.880  
has questions that we did not address or

0:55:13.170,0:55:18.980  
think something afterwards feel free to

0:55:14.880,0:55:21.750  
email communications at NAB CA dot o-r-g

0:55:18.980,0:55:24.570  
also please visit the napkin website at

0:55:21.750,0:55:25.260  
nab CA org for various resources

0:55:24.570,0:55:27.270  
including

0:55:25.260,0:55:29.730  
white papers previous webinars and other

0:55:27.270,0:55:31.110  
materials we would like to like your

0:55:29.730,0:55:32.550  
feedback about this session and will

0:55:31.110,0:55:34.650  
soon be sending you a quick survey to

0:55:32.550,0:55:37.080  
complete and also let me know if you

0:55:34.650,0:55:39.180  
have any suggestions for future webinars

0:55:37.080,0:55:40.890  
and it is our goal to give you the

0:55:39.180,0:55:43.050  
education and tools you need to perform

0:55:40.890,0:55:45.210  
your function effectively wishing

0:55:43.050,0:55:49.100  
everyone a great day and thank you have

0:55:45.210,0:55:49.100  
a great one the bye thanks everybody