WEBVTT

 $00:00:00.000 \longrightarrow 00:00:03.276$ Support for Yale Cancer Answers comes from

NOTE Confidence: 0.853254973888397

 $00:00:03.276 \longrightarrow 00:00:05.720$ AstraZeneca, committed to researching

NOTE Confidence: 0.853254973888397

 $00:00:05.720 \longrightarrow 00:00:07.648$ innovative treatments to address

NOTE Confidence: 0.853254973888397

 $00:00:07.648 \longrightarrow 00:00:10.809$ unmet needs in head and neck cancer.

NOTE Confidence: 0.853254973888397

00:00:10.810 --> 00:00:14.450 Learn more at astrazeneca-us.com.

NOTE Confidence: 0.853254973888397

 $00:00:14.450 \longrightarrow 00:00:15.818$ Welcome to Yale Cancer

NOTE Confidence: 0.853254973888397

00:00:15.818 --> 00:00:17.186 Answers with your host

NOTE Confidence: 0.853254973888397

 $00:00:17.190 \longrightarrow 00:00:18.910$ Doctor Anees Chappar.

NOTE Confidence: 0.853254973888397

 $00{:}00{:}18.910 \dashrightarrow 00{:}00{:}20.740$ Yale Cancer Answers features the

NOTE Confidence: 0.853254973888397

 $00:00:20.740 \longrightarrow 00:00:22.988$ latest information on cancer care by

NOTE Confidence: 0.853254973888397

 $00{:}00{:}22.988 \to 00{:}00{:}24.428$ welcoming on cologists and specialists

NOTE Confidence: 0.853254973888397

 $00:00:24.428 \longrightarrow 00:00:26.844$ who are on the forefront of the

NOTE Confidence: 0.853254973888397

 $00{:}00{:}26.844 \dashrightarrow 00{:}00{:}28.506$ battle to fight cancer. This week

NOTE Confidence: 0.853254973888397

 $00{:}00{:}28.510 \dashrightarrow 00{:}00{:}30.743$ it's a conversation about head and neck

NOTE Confidence: 0.853254973888397

 $00:00:30.743 \longrightarrow 00:00:32.629$ cancers with Doctor Benjamin Judson.

 $00:00:32.630 \longrightarrow 00:00:34.736$ Doctor Judson is a professor of

NOTE Confidence: 0.853254973888397

 $00{:}00{:}34.736 \dashrightarrow 00{:}00{:}36.833$ surgery in Otolaryngology and the chief

NOTE Confidence: 0.853254973888397

00:00:36.833 --> 00:00:38.413 of the division of Otolaryngology

NOTE Confidence: 0.853254973888397

00:00:38.413 --> 00:00:40.518 at the Yale School of Medicine,

NOTE Confidence: 0.853254973888397

 $00:00:40.520 \longrightarrow 00:00:43.244$ where doctor Chagpar is a

NOTE Confidence: 0.853254973888397

 $00{:}00{:}43.244 \dashrightarrow 00{:}00{:}45.060$ professor of surgical oncology.

 $00{:}00{:}46.800 \to 00{:}00{:}49.245$ I always think about head

NOTE Confidence: 0.900502741336823

 $00:00:49.245 \longrightarrow 00:00:51.690$ and neck cancers as this

NOTE Confidence: 0.900502741336823

 $00{:}00{:}51.690 --> 00{:}00{:}53.640 \ \mathrm{very\ large\ bucket}$

NOTE Confidence: 0.900502741336823

 $00:00:53.640 \longrightarrow 00:00:54.810$ of heterogeneous diseases.

NOTE Confidence: 0.900502741336823

00:00:54.810 --> 00:00:57.096 Can you talk a little bit

NOTE Confidence: 0.900502741336823

00:00:57.096 --> 00:00:59.100 about how you classify them,

NOTE Confidence: 0.900502741336823

 $00:00:59.100 \longrightarrow 00:01:01.050$ how you think about them?

 $00:01:02.220 \longrightarrow 00:01:04.950$ Well your impression is actually on target. Head

NOTE Confidence: 0.851486086845398

 $00:01:04.950 \longrightarrow 00:01:08.070$ and neck cancers make up about four to

NOTE Confidence: 0.851486086845398

00:01:08.070 --> 00:01:10.800 5% of cancers in the United States,

NOTE Confidence: 0.851486086845398

 $00:01:10.800 \longrightarrow 00:01:13.920$ but when you really zone in on them,

 $00:01:13.920 \longrightarrow 00:01:16.650$ they are not common,

NOTE Confidence: 0.851486086845398

 $00:01:16.650 \longrightarrow 00:01:18.600$ but they're not rare either.

NOTE Confidence: 0.851486086845398

 $00:01:18.600 \longrightarrow 00:01:20.940$ And then when you really begin

NOTE Confidence: 0.851486086845398

 $00:01:20.940 \longrightarrow 00:01:22.990$ to look more closely, they

NOTE Confidence: 0.851486086845398

 $00{:}01{:}22.990 \dashrightarrow 00{:}01{:}25.426$ are made up of a lot of different

NOTE Confidence: 0.851486086845398

 $00:01:25.426 \longrightarrow 00:01:27.868$ cancers in the mouth throat area.

NOTE Confidence: 0.851486086845398

 $00:01:27.870 \longrightarrow 00:01:29.966$ One of the phrases we use to describe

NOTE Confidence: 0.851486086845398

 $00:01:29.966 \longrightarrow 00:01:32.049$ it in the medical lingo is it's

NOTE Confidence: 0.851486086845398

 $00{:}01{:}32.049 \dashrightarrow 00{:}01{:}34.291$ between the dura and the pleura, so

NOTE Confidence: 0.851486086845398

 $00:01:34.291 \longrightarrow 00:01:36.349$ any cancer that's not brain cancer,

NOTE Confidence: 0.851486086845398

 $00:01:36.350 \longrightarrow 00:01:38.168$ but it's above the lung

 $00:01:39.380 \longrightarrow 00:01:42.107$ falls into that bucket of being a head and neck

cancer.

 $00:01:44.296 \longrightarrow 00:01:46.116$ Are there things that

NOTE Confidence: 0.859275043010712

 $00:01:46.116 \longrightarrow 00:01:48.090$ kind of make these similar?

NOTE Confidence: 0.859275043010712

 $00{:}01{:}48.090 \dashrightarrow 00{:}01{:}50.810$ So when we think about risk factors for

NOTE Confidence: 0.859275043010712

 $00:01:50.810 \longrightarrow 00:01:53.339$ example of getting head neck cancers,

 $00:01:53.340 \longrightarrow 00:01:55.590$ granted that all of these cancers

NOTE Confidence: 0.859275043010712

 $00:01:55.590 \longrightarrow 00:01:57.530$ are a little bit different,

NOTE Confidence: 0.859275043010712

 $00:01:57.530 \longrightarrow 00:02:00.085$ but do they share some of

NOTE Confidence: 0.863167836115911

 $00:02:00.090 \longrightarrow 00:02:01.454$ the same risk factors?

NOTE Confidence: 0.863167836115911

 $00:02:01.454 \longrightarrow 00:02:04.570$ Some of them do and some of them don't.

NOTE Confidence: 0.863167836115911

 $00:02:04.570 \longrightarrow 00:02:07.099$ Some of the cancers we see in this area

NOTE Confidence: 0.863167836115911

00:02:07.099 --> 00:02:09.810 just don't have strong risk factors,

 $00:02:11.114 \longrightarrow 00:02:12.744$ They are uncommon,

NOTE Confidence: 0.863167836115911

 $00:02:12.750 \longrightarrow 00:02:15.358$ but they they can happen out of the

NOTE Confidence: 0.863167836115911

 $00:02:15.358 \longrightarrow 00:02:17.510$ blue without any sort of exposure.

NOTE Confidence: 0.863167836115911

00:02:17.510 --> 00:02:18.826 That's probably a minority

NOTE Confidence: 0.863167836115911

 $00:02:18.826 \longrightarrow 00:02:20.800$ of the cancers in this area.

NOTE Confidence: 0.863167836115911 00:02:20.800 --> 00:02:21.128 Historically,

NOTE Confidence: 0.863167836115911

00:02:21.128 --> 00:02:23.424 the biggest risk factor has been smoking,

NOTE Confidence: 0.863167836115911

00:02:23.430 --> 00:02:24.309 and you know,

NOTE Confidence: 0.863167836115911

 $00:02:24.309 \longrightarrow 00:02:26.067$ with the decrease in smoking rates

 $00{:}02{:}26.067 \dashrightarrow 00{:}02{:}28.319$ in the United States since World War

NOTE Confidence: 0.863167836115911

 $00{:}02{:}28.319 \dashrightarrow 00{:}02{:}30.769$ Two we're beginning to see some slight

NOTE Confidence: 0.863167836115911

 $00{:}02{:}30.769 \dashrightarrow 00{:}02{:}32.639$ decrease in smoking related cancers.

NOTE Confidence: 0.863167836115911

 $00:02:32.640 \longrightarrow 00:02:35.056$ But the big sort of change or

NOTE Confidence: 0.863167836115911

 $00:02:35.056 \longrightarrow 00:02:37.508$ the big story in this area

NOTE Confidence: 0.863167836115911

 $00:02:37.508 \longrightarrow 00:02:40.260$ is the rise of cancers in the throat

NOTE Confidence: 0.863167836115911

 $00:02:40.260 \longrightarrow 00:02:42.504$ that are a result of infection

NOTE Confidence: 0.863167836115911

 $00{:}02{:}42.510 \dashrightarrow 00{:}02{:}44.160$ with the human papilloma virus.

NOTE Confidence: 0.865224421024323

 $00{:}02{:}45.150 \dashrightarrow 00{:}02{:}49.090$ I want to dig into HPV in a minute,

NOTE Confidence: 0.865224421024323

 $00{:}02{:}49.090 \dashrightarrow 00{:}02{:}51.130$ but I want to talk about

NOTE Confidence: 0.865224421024323

 $00:02:51.130 \longrightarrow 00:02:54.676$ a couple of other things before we get there.

NOTE Confidence: 0.865224421024323

 $00{:}02{:}54.680 \dashrightarrow 00{:}02{:}57.824$ One is a little bit about alcohol.

NOTE Confidence: 0.865224421024323

 $00{:}02{:}57.830 \dashrightarrow 00{:}03{:}00.822$ Is alcohol a major risk factor

NOTE Confidence: 0.865224421024323

 $00:03:00.822 \longrightarrow 00:03:04.018$ for head and neck cancers, and if so,

NOTE Confidence: 0.865224421024323

00:03:04.018 --> 00:03:07.280 is there a quote safe amount of alcohol?

 $00:03:07.950 \longrightarrow 00:03:10.164$ It's a great question and I'm

NOTE Confidence: 0.870549499988556

 $00{:}03{:}10.164 \dashrightarrow 00{:}03{:}12.918$ saying a little because we don't

NOTE Confidence: 0.870549499988556

 $00:03:12.920 \longrightarrow 00:03:15.838$ know some of this,

NOTE Confidence: 0.870549499988556

 $00:03:15.838 \longrightarrow 00:03:18.612$ but what we do know about

NOTE Confidence: 0.870549499988556

 $00{:}03{:}18.612 \dashrightarrow 00{:}03{:}21.636$ the role of alcohol is that it has a

NOTE Confidence: 0.870549499988556

 $00:03:21.722 \longrightarrow 00:03:24.458$ synergistic role with tobacco so that

NOTE Confidence: 0.870549499988556

 $00:03:24.458 \longrightarrow 00:03:27.754$ if alcohol is a risk factor,

NOTE Confidence: 0.870549499988556

00:03:27.754 --> 00:03:29.950 a low risk factor for developing

NOTE Confidence: 0.870549499988556

 $00:03:30.028 \longrightarrow 00:03:31.249$ head neck cancer,

NOTE Confidence: 0.870549499988556

 $00:03:31.250 \longrightarrow 00:03:34.306$ smoking is a larger risk factor,

NOTE Confidence: 0.870549499988556

 $00{:}03{:}34.310 \dashrightarrow 00{:}03{:}36.494$ but if someone smokes and drinks

NOTE Confidence: 0.870549499988556

 $00:03:36.494 \longrightarrow 00:03:38.510$ it isn't an additive effect,

NOTE Confidence: 0.870549499988556

 $00:03:38.510 \longrightarrow 00:03:39.970$ it's a multiplicative effect.

00:03:42.552 --> 00:03:44.157 So if you smoke and drink,

NOTE Confidence: 0.870549499988556

 $00{:}03{:}44.160 \dashrightarrow 00{:}03{:}45.870$ your risk is significantly higher.

NOTE Confidence: 0.870549499988556

 $00:03:45.870 \longrightarrow 00:03:48.182$ So I guess the biggest role of alcohol

00:03:48.182 --> 00:03:50.770 is in people who smoke because it

NOTE Confidence: 0.870549499988556

 $00:03:50.770 \longrightarrow 00:03:52.710$ amplifies that risk of smoking.

 $00:03:53.446 \longrightarrow 00:03:56.022$ I think that although we say that

NOTE Confidence: 0.870549499988556

 $00:03:56.022 \longrightarrow 00:03:58.311$ alcohol is a risk factor for

NOTE Confidence: 0.870549499988556

00:03:58.311 --> 00:04:00.151 developing a head neck cancer

NOTE Confidence: 0.870549499988556

 $00:04:00.160 \longrightarrow 00:04:02.090$ A low level of alcohol.

NOTE Confidence: 0.870549499988556

 $00:04:02.090 \longrightarrow 00:04:04.020$ The risk of developing head

NOTE Confidence: 0.870549499988556

 $00:04:04.020 \longrightarrow 00:04:05.560$ neck cancer with that

NOTE Confidence: 0.864732623100281

 $00:04:05.560 \longrightarrow 00:04:08.648$ is quite low. OK, an my next question.

NOTE Confidence: 0.864732623100281

 $00:04:08.650 \longrightarrow 00:04:11.738$ It has to do with race and ethnicity.

NOTE Confidence: 0.864732623100281

00:04:11.740 --> 00:04:13.745 Are there particular racial and

NOTE Confidence: 0.864732623100281

00:04:13.745 --> 00:04:16.369 ethnic groups that are more at risk?

NOTE Confidence: 0.864732623100281

 $00:04:16.370 \longrightarrow 00:04:21.250$ I know that I have sent you in the last year.

NOTE Confidence: 0.864732623100281

 $00{:}04{:}21.250 \dashrightarrow 00{:}04{:}24.242$ At least a number of people that I

NOTE Confidence: 0.864732623100281

 $00{:}04{:}24.242 \dashrightarrow 00{:}04{:}27.217$ can think of off the top of my head

NOTE Confidence: 0.864732623100281

00:04:27.217 --> 00:04:29.918 who are of South Asian descent,

 $00:04:29.920 \longrightarrow 00:04:33.097$ which is which is a racial and ethnic group

NOTE Confidence: 0.864732623100281

 $00{:}04{:}33.097 \dashrightarrow 00{:}04{:}36.330$ that we rarely think about in this country.

NOTE Confidence: 0.864732623100281

 $00:04:36.330 \longrightarrow 00:04:38.592$ We usually think about race in

NOTE Confidence: 0.864732623100281

00:04:38.592 --> 00:04:40.100 terms of African Americans,

NOTE Confidence: 0.864732623100281

 $00:04:40.100 \longrightarrow 00:04:41.985$ and we think about ethnicity

NOTE Confidence: 0.864732623100281

00:04:41.985 --> 00:04:43.870 in terms of Hispanic people,

NOTE Confidence: 0.864732623100281

 $00:04:43.870 \longrightarrow 00:04:45.760$ but if we think globally,

NOTE Confidence: 0.864732623100281

 $00:04:45.760 \longrightarrow 00:04:47.720$ are there particular racial and

NOTE Confidence: 0.864732623100281

 $00:04:47.720 \longrightarrow 00:04:50.280$ ethnic groups that are more at risk?

NOTE Confidence: 0.853480458259583

00:05:03.350 --> 00:05:05.300 Head and neck cancer is significantly

NOTE Confidence: 0.853480458259583

 $00{:}05{:}05.300 \dashrightarrow 00{:}05{:}08.169$ more common in the rest of the world,

NOTE Confidence: 0.853480458259583

 $00:05:08.170 \longrightarrow 00:05:10.396$ and that probably has to do

NOTE Confidence: 0.853480458259583

 $00:05:10.396 \longrightarrow 00:05:11.880$ with to bacco and alcohol

NOTE Confidence: 0.853480458259583

 $00:05:11.880 \longrightarrow 00:05:13.364$ and betel nut exposure,

NOTE Confidence: 0.853480458259583

 $00:05:13.364 \longrightarrow 00:05:14.848$ which are higher elsewhere,

NOTE Confidence: 0.853480458259583

00:05:14.850 --> 00:05:15.966 especially in Asia.

 $00:05:15.966 \longrightarrow 00:05:18.198$ The other thing that's at play

NOTE Confidence: 0.853480458259583

 $00:05:18.198 \longrightarrow 00:05:20.465$ is that there is a particular

NOTE Confidence: 0.853480458259583

 $00:05:20.465 \longrightarrow 00:05:22.290$ type of head neck cancer

NOTE Confidence: 0.853480458259583

 $00:05:22.290 \longrightarrow 00:05:23.854$ called nasopharyngeal cancer that

NOTE Confidence: 0.853480458259583

 $00:05:23.854 \longrightarrow 00:05:26.602$ is much more prevalent in parts of

NOTE Confidence: 0.853480458259583

 $00:05:26.602 \longrightarrow 00:05:28.624$ Asia and it's related to Epstein

NOTE Confidence: 0.853480458259583

 $00:05:28.624 \longrightarrow 00:05:30.480$ Barr virus infection and

NOTE Confidence: 0.853480458259583

 $00{:}05{:}30.480 \dashrightarrow 00{:}05{:}32.888$ we see when individuals from that part

NOTE Confidence: 0.853480458259583

00:05:32.888 --> 00:05:35.820 of the world move to the United States,

NOTE Confidence: 0.853480458259583

 $00:05:35.820 \longrightarrow 00:05:37.595$ their risk of developing those

NOTE Confidence: 0.853480458259583

00:05:37.595 --> 00:05:39.015 cancers goes down significantly,

NOTE Confidence: 0.853480458259583

 $00:05:39.020 \longrightarrow 00:05:41.156$ but not to the same level,

NOTE Confidence: 0.853480458259583

 $00{:}05{:}41.160 \dashrightarrow 00{:}05{:}44.355$ and so we're sort of figuring out why that is.

NOTE Confidence: 0.853480458259583

 $00:05:44.360 \longrightarrow 00:05:46.140$ It is unclear exactly how

NOTE Confidence: 0.853480458259583

 $00:05:46.140 \longrightarrow 00:05:47.564$ the risk factors work,

00:05:47.570 --> 00:05:49.901 but we do see different types of

NOTE Confidence: 0.853480458259583

00:05:49.901 --> 00:05:51.722 head neck cancer more frequently

NOTE Confidence: 0.853480458259583

 $00:05:51.722 \longrightarrow 00:05:53.966$ in other parts of the world, like in

NOTE Confidence: 0.876791735490163 00:05:54.690 --> 00:05:57.014 Asia.

NOTE Confidence: 0.876791735490163

 $00:05:57.014 \longrightarrow 00:05:59.320$ And that brings me to this whole virus phe-

nomenon,

NOTE Confidence: 0.876791735490163

00:05:59.320 --> 00:06:01.636 because now you've mentioned two viruses,

NOTE Confidence: 0.876791735490163

 $00:06:01.640 \longrightarrow 00:06:04.188$ both of which are risk factors for

NOTE Confidence: 0.876791735490163

 $00:06:04.188 \longrightarrow 00:06:06.280$ various head and neck cancers.

NOTE Confidence: 0.876791735490163

 $00:06:06.280 \longrightarrow 00:06:08.602$ One being HPV and one

NOTE Confidence: 0.876791735490163

00:06:08.602 --> 00:06:10.150 being Epstein Barr virus,

NOTE Confidence: 0.876791735490163

 $00{:}06{:}10.150 \dashrightarrow 00{:}06{:}12.478$ and certainly right now,

NOTE Confidence: 0.876791735490163

 $00:06:12.480 \longrightarrow 00:06:15.175$ in the midst of a global pandemic,

NOTE Confidence: 0.876791735490163

 $00{:}06{:}15.180 \dashrightarrow 00{:}06{:}19.090$ a lot of us have got viruses on the brain.

NOTE Confidence: 0.876791735490163

 $00:06:19.090 \longrightarrow 00:06:23.661$ Talk a little bit about the differences

NOTE Confidence: 0.876791735490163

 $00:06:23.661 \longrightarrow 00:06:26.833$ between different viruses and

 $00:06:26.833 \longrightarrow 00:06:29.598$ how exactly these viruses cause

NOTE Confidence: 0.876791735490163

 $00:06:29.598 \longrightarrow 00:06:33.269$ cancer and what we can do about it.

 $00:06:35.560 \longrightarrow 00:06:38.280$ I think what we're seeing the

NOTE Confidence: 0.881141185760498

 $00:06:38.280 \longrightarrow 00:06:40.929$ most in the United States by far

NOTE Confidence: 0.881141185760498

 $00:06:40.930 \longrightarrow 00:06:42.856$ is the rise in throat cancers

NOTE Confidence: 0.881141185760498

 $00:06:42.856 \longrightarrow 00:06:44.620$ that are caused by exposure

NOTE Confidence: 0.881141185760498

 $00:06:44.620 \longrightarrow 00:06:46.655$ to the human papilloma virus,

NOTE Confidence: 0.881141185760498

 $00:06:46.660 \longrightarrow 00:06:49.341$ and it's been happening

NOTE Confidence: 0.881141185760498

 $00:06:49.341 \longrightarrow 00:06:51.669$ over the last 15 or 20 years,

NOTE Confidence: 0.881141185760498

 $00:06:51.670 \longrightarrow 00:06:53.818$ and it's still an emerging story.

NOTE Confidence: 0.881141185760498

 $00:06:53.820 \longrightarrow 00:06:56.466$ We're still learning more about

NOTE Confidence: 0.881141185760498

00:06:56.466 --> 00:06:58.829 what's happening and how this works,

NOTE Confidence: 0.881141185760498

 $00:06:58.830 \longrightarrow 00:07:00.978$ but we certainly know a lot,

NOTE Confidence: 0.881141185760498

 $00{:}07{:}00.980 \dashrightarrow 00{:}07{:}02.858$ and one of the key takeaways

NOTE Confidence: 0.881141185760498

 $00:07:02.858 \longrightarrow 00:07:05.000$ is that these are preventable

NOTE Confidence: 0.881141185760498

00:07:05.000 --> 00:07:06.420 cancers, and they're preventable

 $00:07:06.420 \longrightarrow 00:07:08.910$ if an individual is vaccinated against the

NOTE Confidence: 0.881141185760498

 $00:07:08.910 \longrightarrow 00:07:11.024$ human papilloma virus when they were younger.

NOTE Confidence: 0.881141185760498

 $00:07:11.030 \longrightarrow 00:07:13.550$ It's going to take 10

NOTE Confidence: 0.881141185760498

 $00:07:13.550 \longrightarrow 00:07:16.386$ to 20 years for that to play out.

NOTE Confidence: 0.881141185760498

 $00:07:16.390 \longrightarrow 00:07:18.394$ Teens today are

NOTE Confidence: 0.881141185760498

 $00:07:18.394 \dashrightarrow 00:07:20.080$ getting vaccinated many of them,

NOTE Confidence: 0.881141185760498

 $00:07:20.080 \longrightarrow 00:07:22.173$ but not probably as many as we'd

NOTE Confidence: 0.881141185760498

00:07:22.173 --> 00:07:24.100 like in the United States,

NOTE Confidence: 0.881141185760498

 $00{:}07{:}24.100 \dashrightarrow 00{:}07{:}26.110$ and that's going to prevent these

NOTE Confidence: 0.881141185760498

 $00:07:26.110 \longrightarrow 00:07:27.450$ cancers in those individuals

NOTE Confidence: 0.881141185760498

 $00:07:27.450 \longrightarrow 00:07:30.714$ 15-20-30 years down the road.

 $00:07:31.190 \longrightarrow 00:07:35.305$ When we think about HPV,

NOTE Confidence: 0.861326634883881

 $00:07:35.305 \longrightarrow 00:07:38.465$ I think that many of our listeners may

NOTE Confidence: 0.861326634883881

 $00:07:38.465 \longrightarrow 00:07:42.297$ think about HPV and think about it being

NOTE Confidence: 0.861326634883881

 $00:07:42.297 \longrightarrow 00:07:45.056$ really primarily for women for cervical

NOTE Confidence: 0.861326634883881

 $00:07:45.056 \longrightarrow 00:07:47.500$ cancer being sexually transmitted.

 $00:07:47.500 \longrightarrow 00:07:50.755$ They don't think about it as much or

NOTE Confidence: 0.861326634883881

 $00{:}07{:}50.760 \dashrightarrow 00{:}07{:}53.556$ perhaps at all for people of both

NOTE Confidence: 0.861326634883881

 $00:07:53.556 \longrightarrow 00:07:55.420$ genders in throat cancer.

NOTE Confidence: 0.861326634883881

 $00:07:55.420 \longrightarrow 00:07:58.675$ Talk a little bit about that.

NOTE Confidence: 0.861326634883881

 $00:07:58.680 \longrightarrow 00:08:01.935$ I mean, is this the same virus?

NOTE Confidence: 0.861326634883881

 $00:08:01.940 \longrightarrow 00:08:04.290$ Is it a different virus?

NOTE Confidence: 0.861326634883881

 $00:08:04.290 \longrightarrow 00:08:06.725$ Is it spread through sexual

NOTE Confidence: 0.861326634883881

 $00:08:06.725 \longrightarrow 00:08:09.160$ means or other means?

NOTE Confidence: 0.861326634883881

 $00:08:09.160 \longrightarrow 00:08:12.736$ And what do you say to the people

NOTE Confidence: 0.861326634883881

00:08:12.736 --> 00:08:16.877 who say, my child won't

NOTE Confidence: 0.861326634883881

 $00{:}08{:}16.877 \dashrightarrow 00{:}08{:}20.018$ engage in oral sex and therefore

NOTE Confidence: 0.861326634883881

 $00:08:20.018 \longrightarrow 00:08:24.257$ will not be at risk of HPV in their

NOTE Confidence: 0.861326634883881

00:08:24.257 --> 00:08:27.179 throat and therefore if not female,

NOTE Confidence: 0.861326634883881

 $00:08:27.180 \longrightarrow 00:08:29.610$ does not need to be

NOTE Confidence: 0.883082032203674 00:08:29.610 --> 00:08:32.065 vaccinated? NOTE Confidence: 0.883082032203674

 $00:08:32.065 \longrightarrow 00:08:34.990$ That is a question that people ask for sure

 $00:08:34.990 \longrightarrow 00:08:37.594$ and what we know is

NOTE Confidence: 0.883082032203674

00:08:37.594 --> 00:08:39.330 that human papilloma virus,

NOTE Confidence: 0.883082032203674

00:08:39.330 --> 00:08:42.706 the type of HPV that causes

NOTE Confidence: 0.883082032203674

 $00:08:42.706 \longrightarrow 00:08:45.998$ throat cancer is the same type that

NOTE Confidence: 0.883082032203674

 $00{:}08{:}45.998 \dashrightarrow 00{:}08{:}49.010$ can cause cervical cancer in women.

NOTE Confidence: 0.883082032203674

 $00:08:49.010 \longrightarrow 00:08:50.626$ And in the throat

NOTE Confidence: 0.883082032203674

 $00:08:50.626 \longrightarrow 00:08:53.050$ it predominantly causes cancer in men

NOTE Confidence: 0.883082032203674

 $00{:}08{:}53.127 \dashrightarrow 00{:}08{:}55.919$ and we don't know why that's the case.

NOTE Confidence: 0.883082032203674

 $00:08:55.920 \longrightarrow 00:08:58.326$ What we've learned is that the

NOTE Confidence: 0.883082032203674

00:08:58.326 --> 00:09:00.362 vast majority of Americans are

NOTE Confidence: 0.883082032203674

 $00:09:00.362 \longrightarrow 00:09:02.826$ exposed to this virus at some point.

NOTE Confidence: 0.883082032203674

 $00:09:02.830 \longrightarrow 00:09:06.276$ Estimates put it in the 80 to 90% range.

NOTE Confidence: 0.883082032203674

 $00{:}09{:}06.276 \longrightarrow 00{:}09{:}08.838$ So almost all of us get exposed

NOTE Confidence: 0.883082032203674

 $00:09:08.838 \longrightarrow 00:09:11.277$ to the virus at some point.

NOTE Confidence: 0.883082032203674

 $00:09:11.280 \longrightarrow 00:09:13.968$ Usually our bodies clear the virus.

 $00:09:13.970 \longrightarrow 00:09:15.122$ For some people,

NOTE Confidence: 0.883082032203674

 $00:09:15.122 \longrightarrow 00:09:17.426$ the virus hides out in the

NOTE Confidence: 0.883082032203674

 $00:09:17.426 \longrightarrow 00:09:19.020$ back of the throat.

NOTE Confidence: 0.883082032203674

00:09:19.020 --> 00:09:20.436 And it's it's there,

NOTE Confidence: 0.883082032203674

 $00:09:20.436 \longrightarrow 00:09:22.206$ sort of evading our immune

NOTE Confidence: 0.883082032203674

 $00:09:22.206 \longrightarrow 00:09:23.420$ system for decades.

NOTE Confidence: 0.883082032203674

 $00:09:23.420 \longrightarrow 00:09:25.460$ And it's that exposure of sitting

NOTE Confidence: 0.883082032203674

00:09:25.460 --> 00:09:28.072 there that is a risk factor for

NOTE Confidence: 0.883082032203674

 $00{:}09{:}28.072 \dashrightarrow 00{:}09{:}30.027$ developing a cancer later on.

 $00:09:32.600 \longrightarrow 00:09:34.742$ There is some evidence that suggests

NOTE Confidence: 0.883082032203674

 $00:09:34.742 \longrightarrow 00:09:36.999$ that people who are more active,

NOTE Confidence: 0.883082032203674

00:09:37.000 --> 00:09:39.106 more sexually active are at higher

NOTE Confidence: 0.883082032203674

 $00:09:39.106 \longrightarrow 00:09:41.040$ risk for developing these cancers.

NOTE Confidence: 0.883082032203674

 $00{:}09{:}41.040 \dashrightarrow 00{:}09{:}43.976$ But I think anyone just the vast majority,

NOTE Confidence: 0.883082032203674

 $00:09:43.980 \longrightarrow 00:09:45.444$ almost all Americans are

NOTE Confidence: 0.883082032203674

00:09:45.444 --> 00:09:46.908 exposed at some point,

 $00:09:46.910 \longrightarrow 00:09:49.846$ and so we do see these cancers in

NOTE Confidence: 0.883082032203674 00:09:49.850 --> 00:09:50.480 everyone. NOTE Confidence: 0.870448231697083

 $00:09:51.400 \longrightarrow 00:09:54.949$ And so this opens the

NOTE Confidence: 0.870448231697083

 $00{:}09{:}54.949 \dashrightarrow 00{:}09{:}57.759$ question of vaccination and as

NOTE Confidence: 0.870448231697083

 $00:09:57.760 \longrightarrow 00:10:02.152$ we sit here in 2020,

NOTE Confidence: 0.870448231697083

 $00:10:02.160 \longrightarrow 00:10:05.576$ the remarkable year that it has been,

NOTE Confidence: 0.870448231697083

 $00:10:05.580 \longrightarrow 00:10:08.514$ it really does bring to light

NOTE Confidence: 0.870448231697083

 $00:10:08.514 \longrightarrow 00:10:10.470$ the question of vaccination.

NOTE Confidence: 0.870448231697083

 $00{:}10{:}10{:}10{.}470 \dashrightarrow 00{:}10{:}14{.}152$ And historically there have been

NOTE Confidence: 0.870448231697083

00:10:14.152 --> 00:10:18.177 people in this country who have been what

NOTE Confidence: 0.870448231697083

 $00{:}10{:}18.177 \dashrightarrow 00{:}10{:}21.810$ have been called anti-vaxers who have

NOTE Confidence: 0.870448231697083

 $00:10:21.810 \longrightarrow 00:10:24.967$ concerns about autism due to vaccination and

NOTE Confidence: 0.870448231697083

 $00:10:24.970 \longrightarrow 00:10:28.106$ perhaps there are more people who worry

NOTE Confidence: 0.870448231697083

00:10:28.106 --> 00:10:30.871 about how vaccines actually get approved

NOTE Confidence: 0.870448231697083

 $00:10:30.871 \longrightarrow 00:10:34.470$ in this country and whether they are safe.

NOTE Confidence: 0.870448231697083

00:10:37.180 --> 00:10:40.246 Can you speak to that and really

00:10:40.246 --> 00:10:42.150 allay our listeners fears?

NOTE Confidence: 0.870448231697083

 $00{:}10{:}42.150 \mathrel{--}{>} 00{:}10{:}44.904$ Because right now people might have

NOTE Confidence: 0.870448231697083

 $00:10:44.904 \longrightarrow 00:10:47.690$ all kinds of concerns with regards

NOTE Confidence: 0.870448231697083

00:10:47.690 --> 00:10:50.288 to not just the Covid vaccine,

NOTE Confidence: 0.870448231697083

 $00:10:50.290 \longrightarrow 00:10:52.058$ but vaccines in general.

NOTE Confidence: 0.87556397914886500:10:52.500 --> 00:10:54.894 I think with

NOTE Confidence: 0.875563979148865

 $00:10:54.894 \longrightarrow 00:10:58.174$ HPV we have the benefit of this

NOTE Confidence: 0.875563979148865

 $00:10:58.174 \longrightarrow 00:11:00.970$ not being a new vaccine.

NOTE Confidence: 0.875563979148865

 $00:11:00.970 \longrightarrow 00:11:03.358$ Over 120 million doses have been

NOTE Confidence: 0.875563979148865

 $00{:}11{:}03.358 \dashrightarrow 00{:}11{:}06.180$ given in the United States and I

NOTE Confidence: 0.875563979148865

 $00:11:06.180 \longrightarrow 00:11:08.861$ think it's now over 300 million doses

NOTE Confidence: 0.875563979148865

 $00{:}11{:}08.938 \dashrightarrow 00{:}11{:}11.850$ across the world over the last decade.

NOTE Confidence: 0.875563979148865

 $00{:}11{:}11.850 \dashrightarrow 00{:}11{:}15.468$ and this is a safe vaccine.

NOTE Confidence: 0.875563979148865

 $00:11:15.470 \longrightarrow 00:11:17.888$ It also is an effective vaccine.

NOTE Confidence: 0.875563979148865

 $00:11:17.890 \longrightarrow 00:11:20.704$ It eliminates 90 to 100%

 $00:11:20.710 \longrightarrow 00:11:22.750$ of the infections and cancers

NOTE Confidence: 0.875563979148865

 $00:11:22.750 \longrightarrow 00:11:24.790$ that this virus can cause down the road.

NOTE Confidence: 0.875563979148865 NOTE Confidence: 0.875563979148865 00:11:33.880 --> 00:11:36.010 It's safe and NOTE Confidence: 0.875563979148865

00:11:36.010 --> 00:11:37.890 it's effective and you know,

NOTE Confidence: 0.875563979148865

 $00:11:37.890 \longrightarrow 00:11:40.032$ in the past the rationale for

NOTE Confidence: 0.875563979148865

00:11:40.032 --> 00:11:42.269 getting the vaccine was sometimes

NOTE Confidence: 0.875563979148865

 $00:11:42.269 \longrightarrow 00:11:44.489$ it was described as to avoid

NOTE Confidence: 0.875563979148865

00:11:44.489 --> 00:11:46.650 genital warts or things like that,

NOTE Confidence: 0.875563979148865

 $00:11:46.650 \longrightarrow 00:11:49.476$ and I think that there's not as great a

NOTE Confidence: 0.875563979148865

 $00:11:49.476 \longrightarrow 00:11:51.495$ perception or understanding that this

NOTE Confidence: 0.875563979148865

00:11:51.495 --> 00:11:53.949 is really a cancer prevention vaccine,

NOTE Confidence: 0.875563979148865

 $00:11:53.950 \longrightarrow 00:11:56.032$ and so there's new survey

NOTE Confidence: 0.875563979148865

 $00{:}11{:}56.032 \dashrightarrow 00{:}11{:}58.251$ data and studies going on that

NOTE Confidence: 0.875563979148865

 $00:11:58.251 \longrightarrow 00:12:00.531$ really shows that if more

NOTE Confidence: 0.875563979148865

00:12:00.531 --> 00:12:02.408 people appreciate that this

 $00:12:02.410 \longrightarrow 00:12:04.594$ vaccine has the potential

NOTE Confidence: 0.875563979148865

 $00:12:04.594 \longrightarrow 00:12:07.199$ and the ability to prevent cancers,

NOTE Confidence: 0.875563979148865

 $00:12:07.200 \longrightarrow 00:12:09.594$ those people are more likely to

NOTE Confidence: 0.875563979148865

00:12:09.594 --> 00:12:11.190 have their children vaccinated,

NOTE Confidence: 0.875563979148865

 $00:12:11.190 \longrightarrow 00:12:13.703$ so I think that there is some

NOTE Confidence: 0.875563979148865

 $00:12:13.703 \longrightarrow 00:12:17.055$ work to do in this area to explain

NOTE Confidence: 0.875563979148865

 $00:12:17.055 \longrightarrow 00:12:18.366$ the benefits of

NOTE Confidence: 0.862221479415894 00:12:18.370 --> 00:12:21.156 the vaccine.

NOTE Confidence: 0.862221479415894

 $00:12:21.160 \longrightarrow 00:12:23.995$ The other point that comes up is

NOTE Confidence: 0.862221479415894

 $00:12:24.000 \longrightarrow 00:12:26.562$ the fact that this cancer

NOTE Confidence: 0.862221479415894

00:12:26.562 --> 00:12:28.270 is not terribly common.

NOTE Confidence: 0.862221479415894

 $00{:}12{:}28.270 \dashrightarrow 00{:}12{:}31.259$ As you said, it's not terribly rare,

NOTE Confidence: 0.862221479415894

00:12:31.260 --> 00:12:33.390 but it's not terribly common,

NOTE Confidence: 0.862221479415894

00:12:33.390 --> 00:12:36.162 and so I'm playing Devil's advocate

NOTE Confidence: 0.862221479415894

00:12:36.162 --> 00:12:39.368 here for the benefit of our listeners,

NOTE Confidence: 0.862221479415894

 $00{:}12{:}39.370 \dashrightarrow 00{:}12{:}41.510$ who may have similar concerns.

00:12:41.510 --> 00:12:44.604 To really think about the risks of

NOTE Confidence: 0.862221479415894

 $00{:}12{:}44.604 \dashrightarrow 00{:}12{:}47.290$ the vaccine versus the benefit in

NOTE Confidence: 0.862221479415894

00:12:47.290 --> 00:12:49.415 preventing a cancer that occurs

NOTE Confidence: 0.862221479415894

00:12:49.415 --> 00:12:51.952 in 4 to 5\% of the population,

NOTE Confidence: 0.862221479415894

 $00:12:51.952 \longrightarrow 00:12:54.316$ can you speak to the data

NOTE Confidence: 0.862221479415894

 $00:12:54.316 \longrightarrow 00:12:56.248$ with regards to autism,

NOTE Confidence: 0.862221479415894

 $00:12:56.250 \longrightarrow 00:12:58.560$ which is something that

NOTE Confidence: 0.862221479415894

00:12:58.560 --> 00:13:00.578 Jenny McCarthy and other

NOTE Confidence: 0.862221479415894

 $00:13:00.578 \longrightarrow 00:13:02.972$ figures active in the anti vax

NOTE Confidence: 0.862221479415894

 $00:13:02.972 \longrightarrow 00:13:05.090$ movement have really promulgated.

NOTE Confidence: 0.862221479415894

 $00:13:05.090 \longrightarrow 00:13:07.610$ Is there any truth to that?

NOTE Confidence: 0.851973116397858

 $00:13:07.610 \longrightarrow 00:13:10.978$ I know certainly not with the HPV vaccine.

NOTE Confidence: 0.851973116397858

00:13:10.980 --> 00:13:13.578 There's really been no

NOTE Confidence: 0.851973116397858

 $00{:}13{:}13.580 \dashrightarrow 00{:}13{:}15.295$ signs what soever over hundreds

NOTE Confidence: 0.851973116397858

 $00:13:15.295 \longrightarrow 00:13:17.398$ of millions of people that

00:13:17.398 --> 00:13:19.360 there is any association like that.

NOTE Confidence: 0.851973116397858

 $00:13:19.360 \longrightarrow 00:13:21.624$ The data that

NOTE Confidence: 0.851973116397858

 $00:13:21.624 \longrightarrow 00:13:24.082$ led to some of those claims has

NOTE Confidence: 0.851973116397858

 $00:13:24.082 \longrightarrow 00:13:26.341$ really been debunked as false data

NOTE Confidence: 0.851973116397858

 $00:13:26.341 \longrightarrow 00:13:28.537$ at this point for other vaccines.

NOTE Confidence: 0.851973116397858

 $00:13:28.540 \longrightarrow 00:13:30.871$ So I think that that's

NOTE Confidence: 0.851973116397858

 $00:13:30.871 \longrightarrow 00:13:32.625$ not really\ up-to-date

NOTE Confidence: 0.851973116397858

 $00:13:32.625 \longrightarrow 00:13:34.998$ with where we are in terms of

NOTE Confidence: 0.867987513542175

 $00{:}13{:}35.000 \dashrightarrow 00{:}13{:}36.360$ understanding the side effects.

 $00{:}13{:}38.028 \dashrightarrow 00{:}13{:}40.423$ I think that given its safety and

NOTE Confidence: 0.867987513542175

 $00:13:40.423 \longrightarrow 00:13:42.698$ the fact that it's been around for

NOTE Confidence: 0.867987513542175

 $00{:}13{:}42.698 {\:{\mbox{--}}\!>}\ 00{:}13{:}45.228$ a long time and seems to almost

NOTE Confidence: 0.867987513542175

00:13:45.230 --> 00:13:46.427 completely eliminate cancer,

NOTE Confidence: 0.867987513542175

 $00{:}13{:}46.427 \dashrightarrow 00{:}13{:}48.023$ whether it's cervical cancer

NOTE Confidence: 0.867987513542175

 $00{:}13{:}48.023 \dashrightarrow 00{:}13{:}50.219$ for girls, head and neck cancers

NOTE Confidence: 0.867987513542175

 $00:13:50.220 \longrightarrow 00:13:52.824$ for both genders, it reduces the risk.

 $00:13:52.824 \longrightarrow 00:13:55.209$ general towards for what that's worth.

NOTE Confidence: 0.867987513542175

00:13:58.285 --> 00:14:00.210 Vaccine is really important.

NOTE Confidence: 0.867987513542175

 $00:14:00.210 \longrightarrow 00:14:02.370$ We're going to take a short

NOTE Confidence: 0.867987513542175

 $00:14:02.370 \longrightarrow 00:14:04.430$ break for a medical minute,

NOTE Confidence: 0.867987513542175

 $00:14:04.430 \longrightarrow 00:14:05.958$ and when we return,

NOTE Confidence: 0.867987513542175

00:14:05.958 --> 00:14:07.868 we'll talk more about treatment

NOTE Confidence: 0.867987513542175

 $00{:}14{:}07.868 \dashrightarrow 00{:}14{:}10.266$ and diagnosis for head and neck

NOTE Confidence: 0.867987513542175

 $00:14:10.266 \longrightarrow 00:14:12.490$ cancers with my guest doctor Ben

NOTE Confidence: 0.83858060836792 00:14:12.490 --> 00:14:14.450 Judson. NOTE Confidence: 0.83858060836792

00:14:14.450 --> 00:14:16.018 Support for Yale Cancer Answers comes from

AstraZeneca,

NOTE Confidence: 0.83858060836792

00:14:16.020 --> 00:14:17.553 a biopharmaceutical business

NOTE Confidence: 0.83858060836792

 $00{:}14{:}17.553 \dashrightarrow 00{:}14{:}20.619$ with a deep rooted heritage in

NOTE Confidence: 0.83858060836792

 $00{:}14{:}20.619 \dashrightarrow 00{:}14{:}24.180$ on cology and a commitment to

NOTE Confidence: 0.83858060836792

 $00:14:24.180 \longrightarrow 00:14:27.152$ developing cancer medicines for

NOTE Confidence: 0.83858060836792

 $00{:}14{:}27.152 \dashrightarrow 00{:}14{:}27.895$ patients. Learn more at a strazeneca-us.com.

 $00:14:29.990 \longrightarrow 00:14:33.749$ This is a medical minute about survivorship.

NOTE Confidence: 0.912232518196106

00:14:33.750 --> 00:14:35.438 Completing treatment for cancer

NOTE Confidence: 0.912232518196106

 $00:14:35.438 \longrightarrow 00:14:37.548$ is a very exciting milestone,

NOTE Confidence: 0.912232518196106

 $00:14:37.550 \longrightarrow 00:14:40.772$ but cancer and its treatment can be a life

NOTE Confidence: 0.912232518196106

 $00:14:40.772 \longrightarrow 00:14:43.457$ changing experience for cancer survivors.

NOTE Confidence: 0.912232518196106

00:14:43.460 --> 00:14:45.992 The return to normal activities and

NOTE Confidence: 0.912232518196106

 $00:14:45.992 \longrightarrow 00:14:48.138$ relationships can be difficult and

NOTE Confidence: 0.912232518196106

00:14:48.138 --> 00:14:50.478 some survivors face long term side

NOTE Confidence: 0.912232518196106

 $00{:}14{:}50.478 \dashrightarrow 00{:}14{:}52.740$ effects resulting from their treatment,

NOTE Confidence: 0.912232518196106

 $00:14:52.740 \longrightarrow 00:14:54.003$ including heart problems,

NOTE Confidence: 0.912232518196106

 $00:14:54.003 \longrightarrow 00:14:55.266$ osteoporosis, fertility issues,

NOTE Confidence: 0.912232518196106

 $00:14:55.270 \longrightarrow 00:14:58.224$ and an increased risk of 2nd cancers.

NOTE Confidence: 0.912232518196106

 $00:14:58.230 \longrightarrow 00:15:00.420$ Resources are available to help

NOTE Confidence: 0.912232518196106

 $00:15:00.420 \longrightarrow 00:15:02.172$ keep cancer survivors well and

NOTE Confidence: 0.912232518196106

00:15:02.172 --> 00:15:03.858 focused on healthy living.

NOTE Confidence: 0.912232518196106

 $00{:}15{:}03.860 \dashrightarrow 00{:}15{:}05.940$ More information is available

 $00:15:05.940 \longrightarrow 00:15:06.980$ at yalecancercenter.org.

NOTE Confidence: 0.912232518196106

 $00:15:06.980 \longrightarrow 00:15:10.100$ You're listening to Connecticut public radio.

NOTE Confidence: 0.849637746810913

 $00:15:11.210 \longrightarrow 00:15:13.370$ Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.849637746810913

 $00:15:13.370 \longrightarrow 00:15:16.420$ This is doctor Anees Chappar and I am

NOTE Confidence: 0.849637746810913

 $00:15:16.498 \longrightarrow 00:15:19.850$ joined tonight by my guest doctor Ben Judson.

NOTE Confidence: 0.849637746810913

00:15:19.850 --> 00:15:21.855 We're talking about patients with

NOTE Confidence: 0.849637746810913

 $00:15:21.855 \longrightarrow 00:15:24.667$ head and neck cancer and right before

NOTE Confidence: 0.849637746810913

 $00{:}15{:}24.667 \dashrightarrow 00{:}15{:}27.229$ the break we were talking about the

NOTE Confidence: 0.849637746810913

00:15:27.229 --> 00:15:29.752 fact that HPV is actually

NOTE Confidence: 0.849637746810913

 $00:15:29.752 \longrightarrow 00:15:31.846$ causing a lot of throat cancers

NOTE Confidence: 0.849637746810913

 $00:15:31.846 \longrightarrow 00:15:34.147$ that we see and this is entirely

NOTE Confidence: 0.849637746810913

 $00:15:34.147 \longrightarrow 00:15:36.769$ preventable with the HPV vaccine now.

NOTE Confidence: 0.849637746810913

 $00{:}15{:}36.770 \dashrightarrow 00{:}15{:}39.486$ We talked a little bit about risks

NOTE Confidence: 0.849637746810913

 $00:15:39.486 \longrightarrow 00:15:42.248$ and benefits and it seems to me that

NOTE Confidence: 0.849637746810913

 $00:15:42.250 \longrightarrow 00:15:44.974$ with millions and millions

00:15:44.974 --> 00:15:47.660 of doses being given over many,

NOTE Confidence: 0.849637746810913

 $00{:}15{:}47.660 \dashrightarrow 00{:}15{:}50.228$ many years, we really do have

NOTE Confidence: 0.849637746810913

 $00:15:50.228 \longrightarrow 00:15:52.973$ the data that suggests that this

NOTE Confidence: 0.849637746810913

 $00:15:52.973 \longrightarrow 00:15:55.328$ vaccine is safe and effective.

NOTE Confidence: 0.849637746810913

 $00:15:55.330 \longrightarrow 00:15:58.874$ But I wanted to

NOTE Confidence: 0.849637746810913

 $00:15:58.874 \longrightarrow 00:16:02.087$ ask who should be

NOTE Confidence: 0.860365962982178

 $00:16:02.090 \longrightarrow 00:16:03.398$ vaccinated and when?

NOTE Confidence: 0.860365962982178

 $00:16:03.398 \longrightarrow 00:16:05.542$ Terrific question, so the guidelines

NOTE Confidence: 0.860365962982178

00:16:05.542 --> 00:16:08.985 now for males and females who are

NOTE Confidence: 0.860365962982178

 $00:16:08.985 \longrightarrow 00:16:12.073$ under the age of 26 to be vaccinated.

NOTE Confidence: 0.860365962982178

 $00{:}16{:}12.080 \dashrightarrow 00{:}16{:}13.796$ Usually the recommendation is

NOTE Confidence: 0.860365962982178

 $00:16:13.796 \longrightarrow 00:16:16.832$ for the first dose to be given

NOTE Confidence: 0.860365962982178

 $00:16:16.832 \longrightarrow 00:16:19.450$ when someone is around 11 or 12

NOTE Confidence: 0.860365962982178

 $00:16:19.450 \longrightarrow 00:16:21.950$ years old with one second dose.

NOTE Confidence: 0.860365962982178

 $00:16:21.950 \longrightarrow 00:16:24.452$ And the thought for that timing is that

NOTE Confidence: 0.860365962982178

 $00:16:24.452 \longrightarrow 00:16:26.567$ the vaccination then has

00:16:26.567 --> 00:16:28.811 time to work before

NOTE Confidence: 0.860365962982178

 $00:16:28.811 \longrightarrow 00:16:30.580$ they are potentially exposed,

NOTE Confidence: 0.860365962982178

 $00:16:30.580 \longrightarrow 00:16:32.630$ likely years down the road.

NOTE Confidence: 0.860365962982178

 $00:16:32.630 \longrightarrow 00:16:35.144$ The change in this area has

NOTE Confidence: 0.860365962982178

 $00:16:35.144 \longrightarrow 00:16:36.820$ been that the CDC

NOTE Confidence: 0.860365962982178

 $00:16:36.820 \longrightarrow 00:16:38.197$ broadened the recommendation

NOTE Confidence: 0.860365962982178

 $00:16:38.197 \longrightarrow 00:16:40.033$ to consider vaccination for

NOTE Confidence: 0.860365962982178

 $00:16:40.033 \longrightarrow 00:16:42.370$ anyone up to 45 years old.

NOTE Confidence: 0.905379414558411

00:16:43.130 --> 00:16:46.226 I think that that's so important,

NOTE Confidence: 0.905379414558411

 $00:16:46.230 \longrightarrow 00:16:48.778$ but one of the

NOTE Confidence: 0.905379414558411

00:16:48.778 --> 00:16:51.279 issues that I always ask is,

NOTE Confidence: 0.905379414558411

 $00:16:51.280 \longrightarrow 00:16:53.566$ many of our listeners

NOTE Confidence: 0.905379414558411

 $00{:}16{:}53.566 \dashrightarrow 00{:}16{:}55.930$ who may be hearing this show,

NOTE Confidence: 0.905379414558411

 $00:16:55.930 \longrightarrow 00:16:58.646$ may be saying, I'm 47,

NOTE Confidence: 0.905379414558411

00:16:58.646 --> 00:17:00.198 I'm 48, I'm 52.

00:17:00.200 --> 00:17:01.844 I'm outside that window,

NOTE Confidence: 0.905379414558411

 $00:17:01.844 \longrightarrow 00:17:04.550$ but I really want to

NOTE Confidence: 0.905379414558411

00:17:04.550 --> 00:17:06.430 get vaccinated because I'm not

NOTE Confidence: 0.905379414558411

 $00:17:06.505 \longrightarrow 00:17:09.160$ particularly keen on getting cancer.

NOTE Confidence: 0.905379414558411

00:17:09.160 --> 00:17:12.624 What do you do in that older population?

00:17:15.120 --> 00:17:17.367 We don't know for sure the benefit,

NOTE Confidence: 0.855477571487427

 $00:17:19.630 \longrightarrow 00:17:21.912$ I mean the benefit is

NOTE Confidence: 0.855477571487427

 $00:17:21.912 \longrightarrow 00:17:23.876$ overwhelming for those that are under

NOTE Confidence: 0.855477571487427

 $00:17:23.876 \longrightarrow 00:17:26.025$ 26 in terms of preventing

NOTE Confidence: 0.855477571487427

 $00:17:26.091 \longrightarrow 00:17:28.324$ cancers and the issues

NOTE Confidence: 0.855477571487427

 $00:17:28.324 \longrightarrow 00:17:30.220$ or side effects from

NOTE Confidence: 0.855477571487427

00:17:30.220 --> 00:17:32.830 treatment as well as the risk of death.

NOTE Confidence: 0.855477571487427

 $00:17:32.830 \longrightarrow 00:17:34.440$ So that is for sure.

NOTE Confidence: 0.855477571487427

 $00:17:34.440 \longrightarrow 00:17:37.660$ I think in that group that are 27 to 45,

NOTE Confidence: 0.855477571487427

 $00:17:37.660 \longrightarrow 00:17:39.532$ there is a suggestion that

NOTE Confidence: 0.855477571487427

 $00:17:39.532 \longrightarrow 00:17:41.200$ there's a real benefit there.

 $00:17:41.200 \longrightarrow 00:17:43.048$ That's where we have this

NOTE Confidence: 0.855477571487427

 $00:17:43.048 \longrightarrow 00:17:44.780$ sort of soft recommendation

NOTE Confidence: 0.855477571487427

 $00:17:44.780 \longrightarrow 00:17:46.890$ to consider vaccination in that

NOTE Confidence: 0.855477571487427

 $00:17:46.890 \longrightarrow 00:17:49.969$ age group and we just don't know

NOTE Confidence: 0.855477571487427

 $00:17:49.969 \longrightarrow 00:17:52.184$ beyond that whether the size

NOTE Confidence: 0.866093695163727

 $00:17:52.190 \longrightarrow 00:17:54.854$ of the benefit to getting vaccination

NOTE Confidence: 0.866093695163727

00:17:54.854 --> 00:17:58.487 and is the reason why we've kind of

NOTE Confidence: 0.866093695163727

 $00:17:58.487 \longrightarrow 00:18:01.151$ looked at those particular age ranges

NOTE Confidence: 0.866093695163727

 $00:18:01.233 \longrightarrow 00:18:04.054$ as being the age ranges

NOTE Confidence: 0.866093695163727

 $00:18:04.054 \longrightarrow 00:18:06.578$ where people are most likely to

NOTE Confidence: 0.866093695163727

 $00:18:06.578 \longrightarrow 00:18:09.630$ be sexually active.

NOTE Confidence: 0.866093695163727

 $00:18:09.630 \longrightarrow 00:18:12.138$ So you would imagine that people

NOTE Confidence: 0.866093695163727

 $00:18:12.138 \longrightarrow 00:18:15.246$ who are in their 50s may have

NOTE Confidence: 0.866093695163727

00:18:15.246 --> 00:18:17.486 already come in contact with

NOTE Confidence: 0.866093695163727

 $00:18:17.490 \longrightarrow 00:18:18.790$ the virus and therefore

NOTE Confidence: 0.866093695163727

 $00:18:18.790 \longrightarrow 00:18:20.415$ vaccination may be less effective.

 $00:18:20.420 \longrightarrow 00:18:21.389$ That is absolutely

NOTE Confidence: 0.871430814266205

 $00:18:21.390 \longrightarrow 00:18:23.328$ right. The idea is to vaccinate

NOTE Confidence: 0.871430814266205

 $00:18:23.328 \longrightarrow 00:18:25.000$ people before they could possibly

NOTE Confidence: 0.871430814266205

 $00:18:25.000 \longrightarrow 00:18:26.585$ be exposed to the virus.

NOTE Confidence: 0.871430814266205

 $00:18:26.590 \longrightarrow 00:18:29.026$ That's why it's as young as the

NOTE Confidence: 0.871430814266205

00:18:29.026 --> 00:18:31.146 recommendations are

NOTE Confidence: 0.871430814266205

 $00:18:31.146 \longrightarrow 00:18:33.156$ for the initial vaccination and

NOTE Confidence: 0.871430814266205

00:18:33.156 --> 00:18:35.780 it's less known as we get

NOTE Confidence: 0.871430814266205

 $00:18:35.780 \longrightarrow 00:18:37.970$ older and we're more likely,

NOTE Confidence: 0.871430814266205

 $00:18:37.970 \longrightarrow 00:18:40.570$ as I mentioned, 80 to 90% of us

NOTE Confidence: 0.871430814266205

 $00:18:40.570 \longrightarrow 00:18:42.520$ have been exposed to the virus.

NOTE Confidence: 0.871430814266205

 $00:18:42.520 \longrightarrow 00:18:44.145$ The potential benefit of the

NOTE Confidence: 0.871430814266205

 $00:18:44.145 \longrightarrow 00:18:45.770$ vaccination later on is less

NOTE Confidence: 0.871430814266205

 $00:18:45.770 \longrightarrow 00:18:47.720$ understood or less known.

00:18:49.232 --> 00:18:52.801 I mean if you have people who have

NOTE Confidence: 0.876361548900604

00:18:52.801 --> 00:18:55.797 not been sexually active until their 50s

 $00:18:55.800 \longrightarrow 00:18:58.621$ for example, maybe they were

NOTE Confidence: 0.876361548900604

 $00{:}18{:}58.621 \dashrightarrow 00{:}19{:}00.967$ for religious reasons or other reasons

NOTE Confidence: 0.876361548900604

 $00{:}19{:}00.967 \dashrightarrow 00{:}19{:}03.452$ really did not engage but wanted to

NOTE Confidence: 0.876361548900604

 $00:19:03.526 \longrightarrow 00:19:05.846$ be vaccinated before they started.

NOTE Confidence: 0.876361548900604

 $00:19:05.850 \longrightarrow 00:19:07.860$ Whether that's something to consider.

NOTE Confidence: 0.876361548900604

 $00:19:07.860 \longrightarrow 00:19:10.723$ But it sounds like we're not there

NOTE Confidence: 0.876361548900604

 $00:19:10.723 \longrightarrow 00:19:13.490$ yet in terms of the data,

NOTE Confidence: 0.876361548900604

 $00:19:13.490 \longrightarrow 00:19:15.098$ it sounds very reasonable,

NOTE Confidence: 0.876361548900604

00:19:15.098 --> 00:19:17.510 but we just don't know yet

NOTE Confidence: 0.876361548900604

 $00:19:17.510 \longrightarrow 00:19:19.118$ based on the data.

NOTE Confidence: 0.894154727458954

 $00{:}19{:}24.356 {\:{\mbox{--}}}{>} 00{:}19{:}26.346$ Let's suppose you weren't vaccinated.

NOTE Confidence: 0.894154727458954

 $00:19:26.350 \longrightarrow 00:19:28.834$ What are the signs and symptoms

NOTE Confidence: 0.894154727458954

 $00{:}19{:}28.834 \dashrightarrow 00{:}19{:}31.695$ that you should look out for in

NOTE Confidence: 0.894154727458954

 $00:19:31.695 \longrightarrow 00:19:33.927$ terms of head and neck cancers?

NOTE Confidence: 0.894154727458954

 $00:19:33.930 \longrightarrow 00:19:36.981$ And I mean we talked at the

 $00:19:36.981 \longrightarrow 00:19:39.937$ top of the show about this being

NOTE Confidence: 0.894154727458954

 $00{:}19{:}39.937 \dashrightarrow 00{:}19{:}42.960$ a basket of really heterogeneous

NOTE Confidence: 0.894154727458954

 $00:19:42.960 \longrightarrow 00:19:45.520$ diseases right?

NOTE Confidence: 0.894154727458954 00:19:45.520 --> 00:19:49.498 I would NOTE Confidence: 0.894154727458954

 $00:19:49.498 \longrightarrow 00:19:52.886$ imagine that there are so many

NOTE Confidence: 0.894154727458954

 $00:19:52.886 \longrightarrow 00:19:55.726$ varied symptoms that could

NOTE Confidence: 0.894154727458954

 $00{:}19{:}55.836 \dashrightarrow 00{:}19{:}59.308$ be signs of head and neck cancer.

NOTE Confidence: 0.919163703918457

 $00:19:59.840 \longrightarrow 00:20:01.124$ I think that's right.

 $00:20:03.930 \longrightarrow 00:20:05.262$ In some ways,

NOTE Confidence: 0.919163703918457

 $00:20:05.262 \longrightarrow 00:20:07.260$ one of the pitfalls that we've

NOTE Confidence: 0.919163703918457

 $00{:}20{:}07.338 \dashrightarrow 00{:}20{:}09.588$ seen is that with HPV related

NOTE Confidence: 0.919163703918457

00:20:09.588 --> 00:20:11.663 cancers these cancers are arising

NOTE Confidence: 0.919163703918457

00:20:11.663 --> 00:20:14.163 in younger otherwise very healthy

NOTE Confidence: 0.919163703918457

 $00:20:14.163 \longrightarrow 00:20:16.540$ individuals without real risk factors.

NOTE Confidence: 0.919163703918457

00:20:16.540 --> 00:20:18.390 The vast majority of patients

NOTE Confidence: 0.919163703918457

 $00:20:18.390 \longrightarrow 00:20:20.839$ with an HPV related cancer

00:20:20.839 --> 00:20:23.509 present with a painless neck mass,

NOTE Confidence: 0.919163703918457

 $00{:}20{:}23.510 \dashrightarrow 00{:}20{:}26.813$ a physical lump in the neck that they can

NOTE Confidence: 0.919163703918457

 $00:20:26.813 \longrightarrow 00:20:30.444$ see and feel and they otherwise feel fine,

NOTE Confidence: 0.919163703918457

 $00:20:30.450 \longrightarrow 00:20:34.570$ and so there's a little bit of a tendency to

NOTE Confidence: 0.919163703918457

 $00:20:34.570 \longrightarrow 00:20:35.970$ put that off like

NOTE Confidence: 0.919163703918457

 $00:20:35.970 \longrightarrow 00:20:37.930$ I feel fine and

NOTE Confidence: 0.919163703918457

 $00:20:41.010 \longrightarrow 00:20:42.618$ living my life and

NOTE Confidence: 0.919163703918457

 $00:20:42.618 \longrightarrow 00:20:44.369$ so they might not seek

NOTE Confidence: 0.919163703918457

 $00:20:45.490 \longrightarrow 00:20:46.890$ medical care early,

NOTE Confidence: 0.919163703918457

 $00:20:46.890 \longrightarrow 00:20:48.773$ but that is the

NOTE Confidence: 0.919163703918457

 $00{:}20{:}48.773 \dashrightarrow 00{:}20{:}50.249$ leading presentation of this cancer.

NOTE Confidence: 0.919163703918457

 $00:20:50.250 \longrightarrow 00:20:52.482$ And so one of the

NOTE Confidence: 0.919163703918457

 $00{:}20{:}52.482 \rightarrow 00{:}20{:}54.356$ recommendations is that

NOTE Confidence: 0.919163703918457

 $00:20:54.356 \longrightarrow 00:20:56.689$ someone who has a mass in the neck,

NOTE Confidence: 0.919163703918457

00:20:56.690 --> 00:20:58.226 even if you otherwise feel great

NOTE Confidence: 0.919163703918457

 $00:20:58.226 \longrightarrow 00:20:59.770$ and have no other symptoms,

00:20:59.770 --> 00:21:02.290 and if it's there for more than four weeks,

NOTE Confidence: 0.919163703918457

 $00:21:02.290 \longrightarrow 00:21:04.006$ you should see your

NOTE Confidence: 0.919163703918457

 $00:21:04.006 \longrightarrow 00:21:05.370$ physician about it.

NOTE Confidence: 0.919163703918457

 $00:21:05.370 \longrightarrow 00:21:06.490$ See someone about it.

NOTE Confidence: 0.862156450748444

 $00:21:06.600 \longrightarrow 00:21:09.400$ And what's the age range that

NOTE Confidence: 0.862156450748444

 $00:21:09.400 \longrightarrow 00:21:11.638$ we typically see these cancers in?

NOTE Confidence: 0.862156450748444

00:21:11.640 --> 00:21:14.280 You mentioned if you're

NOTE Confidence: 0.862156450748444

 $00:21:14.280 \longrightarrow 00:21:16.318$ an otherwise healthy young person,

NOTE Confidence: 0.862156450748444

 $00:21:16.320 \longrightarrow 00:21:18.120$ are young people really the

NOTE Confidence: 0.862156450748444

 $00:21:18.120 \longrightarrow 00:21:19.560$ ones getting this disease,

NOTE Confidence: 0.862156450748444

 $00:21:19.560 \longrightarrow 00:21:21.864$ or are they at lower risk and this

NOTE Confidence: 0.862156450748444

00:21:21.864 --> 00:21:23.833 is really something that people

NOTE Confidence: 0.862156450748444

 $00{:}21{:}23.833 \dashrightarrow 00{:}21{:}26.043$ should worry about when they're

NOTE Confidence: 0.862156450748444

00:21:26.043 --> 00:21:28.560 pushing into their 70s and 80s?

NOTE Confidence: 0.862156450748444

 $00:21:28.560 \longrightarrow 00:21:30.660$ I think that the smoking drinking

 $00:21:30.660 \longrightarrow 00:21:32.489$ related head neck cancers that

NOTE Confidence: 0.862156450748444

 $00:21:32.489 \longrightarrow 00:21:34.319$ we saee happen most frequently

NOTE Confidence: 0.862156450748444

 $00:21:34.320 \longrightarrow 00:21:37.520$ in people who are in their 60s,

NOTE Confidence: 0.862156450748444

 $00:21:37.520 \longrightarrow 00:21:39.220$ somewhat later in life,

NOTE Confidence: 0.862156450748444

 $00:21:41.830 \longrightarrow 00:21:43.684$ having a longer time

NOTE Confidence: 0.862156450748444

 $00:21:43.684 \longrightarrow 00:21:46.193$ of exposure to

NOTE Confidence: 0.862156450748444

 $00:21:46.193 \longrightarrow 00:21:48.005$ the risky effects of tobacco

NOTE Confidence: 0.862156450748444

00:21:48.077 --> 00:21:50.548 and alcohol. With HPV we're seeing

NOTE Confidence: 0.862156450748444

 $00{:}21{:}50.548 \dashrightarrow 00{:}21{:}52.278$ these cancers younger and younger,

NOTE Confidence: 0.862156450748444

00:21:52.278 --> 00:21:55.330 and so the peak age of these cancers is

NOTE Confidence: 0.862156450748444

 $00{:}21{:}55.330 \dashrightarrow 00{:}21{:}58.096$ actually in their 40s and we see it

NOTE Confidence: 0.862156450748444

00:21:58.096 --> 00:22:01.060 at all ages we can see younger and older,

NOTE Confidence: 0.862156450748444

 $00:22:01.060 \longrightarrow 00:22:02.364$ but it definitely isn't

NOTE Confidence: 0.862156450748444

 $00{:}22{:}02.364 \dashrightarrow 00{:}22{:}03.668$ happening in younger patients,

NOTE Confidence: 0.863884091377258

 $00:22:03.670 \longrightarrow 00:22:05.974$ and I think that that's so critical for

NOTE Confidence: 0.863884091377258

 $00:22:05.974 \longrightarrow 00:22:08.150$ people to really understand because,

00:22:08.150 --> 00:22:11.813 being in my 40s, I can tell you that

NOTE Confidence: 0.863884091377258

00:22:11.813 --> 00:22:15.520 you do kind of feel invincible, right?

NOTE Confidence: 0.863884091377258

 $00:22:15.520 \longrightarrow 00:22:17.320$ You're healthy, you don't

NOTE Confidence: 0.863884091377258

 $00:22:17.320 \longrightarrow 00:22:20.600$ really need to go to the doctor.

NOTE Confidence: 0.863884091377258

 $00:22:20.600 \longrightarrow 00:22:21.575$ Everything is good.

NOTE Confidence: 0.863884091377258

00:22:21.575 --> 00:22:23.525 And you certainly don't think you're

NOTE Confidence: 0.863884091377258

 $00:22:23.525 \longrightarrow 00:22:25.602$ gonna get cancer, but it can occur.

NOTE Confidence: 0.863884091377258

 $00:22:25.602 \longrightarrow 00:22:26.436$ That's so true.

NOTE Confidence: 0.863884091377258

00:22:26.440 --> 00:22:28.400 And so often peoples in their

NOTE Confidence: 0.867117881774902

 $00:22:28.400 \longrightarrow 00:22:30.068$ 40s are busy with life.

NOTE Confidence: 0.867117881774902

00:22:30.070 --> 00:22:32.572 You know they've got jobs and whatever it is,

NOTE Confidence: 0.867117881774902

 $00:22:32.580 \longrightarrow 00:22:34.260$ and so their time for cancer,

NOTE Confidence: 0.867117881774902

 $00:22:34.260 \longrightarrow 00:22:36.464$ they don't have time for this and

NOTE Confidence: 0.867117881774902

 $00{:}22{:}36.464 {\: -->\:} 00{:}22{:}38.496$ they are less likely to go get it

NOTE Confidence: 0.867117881774902

 $00:22:38.496 \longrightarrow 00:22:40.300$ checked out 'cause they're just too busy.

 $00{:}22{:}47.140 \dashrightarrow 00{:}22{:}49.162$ What are the other other symptoms

00:22:49.162 --> 00:22:50.810 that people should look for?

NOTE Confidence: 0.883634328842163

 $00{:}22{:}50.810 \dashrightarrow 00{:}22{:}53.322$ I mean a painless lump in the neck

NOTE Confidence: 0.883634328842163

 $00:22:53.322 \longrightarrow 00:22:55.057$ is certainly something that

NOTE Confidence: 0.883634328842163

 $00:22:55.057 \longrightarrow 00:22:57.486$ should be a red flag for people,

NOTE Confidence: 0.883634328842163

 $00:22:57.490 \longrightarrow 00:22:58.878$ even though it's painless,

NOTE Confidence: 0.883634328842163

 $00:22:58.878 \longrightarrow 00:23:00.960$ and I think that's the other

NOTE Confidence: 0.883634328842163

 $00:23:01.024 \longrightarrow 00:23:03.166$ thing is that people say

NOTE Confidence: 0.883634328842163

00:23:03.170 --> 00:23:05.180 if it's not causing me pain,

NOTE Confidence: 0.883634328842163

 $00:23:05.180 \longrightarrow 00:23:06.328$ it can't be bad,

NOTE Confidence: 0.883634328842163

 $00:23:06.328 \longrightarrow 00:23:08.512$ but we know that with so many

NOTE Confidence: 0.883634328842163

 $00:23:08.512 \longrightarrow 00:23:10.846$ cancers that simply is not the case.

NOTE Confidence: 0.769684433937073

 $00:23:11.390 \longrightarrow 00:23:13.700$ That's right, and

00:23:21.960 --> 00:23:23.886 one of the symptoms, potential

NOTE Confidence: 0.769684433937073

 $00:23:23.886 \longrightarrow 00:23:26.456$ symptoms, is a sore throat or pain

NOTE Confidence: 0.769684433937073

 $00:23:26.456 \longrightarrow 00:23:28.076$ or difficulty with swallowing.

NOTE Confidence: 0.769684433937073

 $00:23:28.080 \longrightarrow 00:23:30.390$ Obviously this happens to

 $00:23:30.390 \longrightarrow 00:23:33.723$ all of us as a result of an infection

NOTE Confidence: 0.769684433937073

00:23:33.723 --> 00:23:35.999 or tonsillitis or something like that,

NOTE Confidence: 0.769684433937073

 $00{:}23{:}36.000 \dashrightarrow 00{:}23{:}38.070$ but if that persists for more

NOTE Confidence: 0.769684433937073

 $00:23:38.070 \longrightarrow 00:23:39.960$ than three to four weeks,

NOTE Confidence: 0.769684433937073

 $00:23:39.960 \longrightarrow 00:23:42.480$ that is another reason to

NOTE Confidence: 0.769684433937073

 $00:23:42.480 \longrightarrow 00:23:44.280$ seek medical attention.

NOTE Confidence: 0.769684433937073

00:23:44.280 --> 00:23:46.080 Similarly, hoarseness of voice again,

NOTE Confidence: 0.769684433937073

 $00:23:46.080 \longrightarrow 00:23:47.115$ usually not cancer.

NOTE Confidence: 0.769684433937073

 $00:23:47.115 \longrightarrow 00:23:50.400$ We all get that at one point or another,

NOTE Confidence: 0.769684433937073

 $00:23:50.400 \longrightarrow 00:23:53.712$ but if it persists for more than four weeks

NOTE Confidence: 0.769684433937073

 $00:23:53.720 \longrightarrow 00:23:55.574$ that probably makes sense to seek

NOTE Confidence: 0.769684433937073

 $00:23:55.574 \longrightarrow 00:23:57.279$ medical attention for that as well.

NOTE Confidence: 0.769684433937073

 $00{:}23{:}57.280 --> 00{:}23{:}58.180$ Yeah, it seems

NOTE Confidence: 0.895612299442291

 $00{:}23{:}58.180 \dashrightarrow 00{:}24{:}00.364$ like that four week mark is really

NOTE Confidence: 0.895612299442291

 $00:24:00.364 \longrightarrow 00:24:02.039$ when people should start saying,

 $00:24:02.040 \longrightarrow 00:24:03.810$ you know, something

NOTE Confidence: 0.895612299442291

 $00:24:03.810 \longrightarrow 00:24:06.211$ that you get out of the blue if

NOTE Confidence: 0.895612299442291

00:24:06.211 --> 00:24:07.682 it's been persistent, it's really

NOTE Confidence: 0.895612299442291

 $00:24:07.682 \longrightarrow 00:24:09.754$ something that you need to look for.

00:24:16.000 --> 00:24:19.073 I had a NOTE Confidence: 0.87310004234314

00:24:19.073 --> 00:24:21.860 friend who had a nosebleed,

NOTE Confidence: 0.87310004234314

 $00:24:21.860 \longrightarrow 00:24:24.788$ really young guy, 20-22 years old.

NOTE Confidence: 0.87310004234314

00:24:24.790 --> 00:24:28.686 I think you may have heard about him

NOTE Confidence: 0.87310004234314

 $00{:}24{:}28.690 \dashrightarrow 00{:}24{:}32.322$ because I sent him to you who

NOTE Confidence: 0.87310004234314

 $00:24:32.322 \longrightarrow 00:24:34.550$ presented with a nosebleed.

NOTE Confidence: 0.87310004234314

 $00:24:34.550 \longrightarrow 00:24:37.478$ So simple things like that,

NOTE Confidence: 0.87310004234314 00:24:37.480 --> 00:24:39.930 you think NOTE Confidence: 0.87310004234314

 $00:24:39.930 \longrightarrow 00:24:42.380$ it's a nosebleed but

NOTE Confidence: 0.87310004234314

 $00:24:42.380 \longrightarrow 00:24:44.730$ things like that can happen.

 $00:24:47.240 \longrightarrow 00:24:48.914$ It goes back to what we

NOTE Confidence: 0.879721224308014

 $00:24:48.914 \longrightarrow 00:24:50.030$ were talking about before.

NOTE Confidence: 0.879721224308014

 $00:24:50.030 \longrightarrow 00:24:51.997$ It's the patients who are

00:24:51.997 --> 00:24:53.660 young and healthy and feel fine.

NOTE Confidence: 0.879721224308014

 $00:24:53.660 \longrightarrow 00:24:55.055$ They're more likely to

NOTE Confidence: 0.879721224308014

 $00:24:55.055 \longrightarrow 00:24:56.450$ blow off these things.

NOTE Confidence: 0.879721224308014

 $00:24:56.450 \longrightarrow 00:24:58.396$ And most likely

 $00:24:59.520 \longrightarrow 00:25:01.192$ 99% of the time,

NOTE Confidence: 0.879721224308014 00:25:01.192 --> 00:25:01.748 it's nothing.

00:25:03.418 --> 00:25:04.252 But sometimes it's something,

NOTE Confidence: 0.879721224308014

 $00:25:04.260 \longrightarrow 00:25:06.220$ and so it is just a reminder,

NOTE Confidence: 0.879721224308014

 $00:25:06.220 \longrightarrow 00:25:07.615$ if something is not going

NOTE Confidence: 0.879721224308014

00:25:07.615 --> 00:25:09.010 away or not getting better,

NOTE Confidence: 0.879721224308014

 $00:25:09.568 \longrightarrow 00:25:10.405$ it's ertainly worth

NOTE Confidence: 0.879721224308014

 $00:25:10.405 \longrightarrow 00:25:11.800$ having someone take a look.

NOTE Confidence: 0.879721224308014

 $00:25:11.800 \longrightarrow 00:25:12.350$ And sometimes

NOTE Confidence: 0.879721224308014

 $00{:}25{:}12.350 \dashrightarrow 00{:}25{:}14.030$ there's some things that are really bad

NOTE Confidence: 0.879721224308014

 $00:25:14.030 \longrightarrow 00:25:15.460$ like what happened

NOTE Confidence: 0.879721224308014

 $00:25:15.460 \longrightarrow 00:25:17.140$ to my friend. so can you talk

 $00:25:17.140 \longrightarrow 00:25:19.894$ a little bit about the

NOTE Confidence: 0.879721224308014

00:25:19.894 --> 00:25:23.020 prognosis for head and neck cancers,

NOTE Confidence: 0.879721224308014

 $00:25:23.020 \longrightarrow 00:25:26.219$ and I realized that again it's a

NOTE Confidence: 0.879721224308014

 $00:25:26.219 \longrightarrow 00:25:28.410$ heterogeneous bucket of diseases,

NOTE Confidence: 0.879721224308014

 $00:25:28.410 \longrightarrow 00:25:30.370$ but in general, how

NOTE Confidence: 0.864123046398163

 $00:25:30.370 \longrightarrow 00:25:31.462$ do people fair?

NOTE Confidence: 0.864123046398163

 $00:25:31.462 \longrightarrow 00:25:32.918$ You mentioned it varies.

NOTE Confidence: 0.864123046398163

00:25:32.920 --> 00:25:34.796 You know it varies on the type,

NOTE Confidence: 0.864123046398163

 $00{:}25{:}34.800 \dashrightarrow 00{:}25{:}36.140$ the specific type and the

NOTE Confidence: 0.864123046398163

 $00:25:36.140 \longrightarrow 00:25:37.480$ stage at which they present.

NOTE Confidence: 0.864123046398163

 $00{:}25{:}37.480 \dashrightarrow 00{:}25{:}39.622$ So all the more reason to come in

NOTE Confidence: 0.864123046398163

 $00:25:39.622 \longrightarrow 00:25:42.026$ and get it checked out and found earlier.

NOTE Confidence: 0.864123046398163

 $00{:}25{:}43.680 --> 00{:}25{:}44.470 \; \mathrm{Interestingly}$

NOTE Confidence: 0.864123046398163

00:25:44.470 --> 00:25:47.235 the prognosis with HPV related cancers

NOTE Confidence: 0.864123046398163

 $00:25:47.235 \longrightarrow 00:25:49.679$ is much better than with the other

NOTE Confidence: 0.864123046398163

 $00:25:49.679 \longrightarrow 00:25:52.390$ types of head neck cancers that we see.

 $00:25:52.390 \longrightarrow 00:25:53.479$ Like for example,

NOTE Confidence: 0.864123046398163

 $00:25:53.479 \longrightarrow 00:25:55.294$ the smoking drinking related cancer.

NOTE Confidence: 0.864123046398163

 $00:25:55.300 \longrightarrow 00:25:57.484$ So the vast majority of patients

NOTE Confidence: 0.864123046398163

 $00{:}25{:}57.484 \dashrightarrow 00{:}25{:}59.650$ with HPV related cancers are cured.

NOTE Confidence: 0.864123046398163

 $00:25:59.650 \longrightarrow 00:26:02.938$ Cure rates are in the 70 to 90% range.

NOTE Confidence: 0.864123046398163

 $00:26:02.938 \longrightarrow 00:26:04.450$ There are certainly side

NOTE Confidence: 0.864123046398163

 $00:26:04.450 \longrightarrow 00:26:06.340$ effects from treatment and so

NOTE Confidence: 0.864123046398163

 $00:26:06.406 \longrightarrow 00:26:08.356$ our goal is really

NOTE Confidence: 0.864123046398163

 $00:26:08.360 \longrightarrow 00:26:10.180$ to maximize that cure,

NOTE Confidence: 0.864123046398163

 $00:26:10.180 \longrightarrow 00:26:12.478$ but also try to

NOTE Confidence: 0.864123046398163

 $00:26:12.478 \longrightarrow 00:26:14.539$ minimize the side effects of any

NOTE Confidence: 0.837356792046474 00:26:14.540 --> 00:26:17.543 treatment.

NOTE Confidence: 0.837356792046474

00:26:17.543 --> 00:26:21.280 And the prognosis can be

NOTE Confidence: 0.837356792046474

 $00:26:21.280 \longrightarrow 00:26:24.430$ across the board, it can be varied.

NOTE Confidence: 0.837356792046474

 $00:26:24.430 \longrightarrow 00:26:26.680$ It can be very good.

 $00:26:26.680 \longrightarrow 00:26:29.632$ It can be not so good.

NOTE Confidence: 0.837356792046474

 $00{:}26{:}29.632 \dashrightarrow 00{:}26{:}32.079$ Talk a little bit about treatments.

NOTE Confidence: 0.837356792046474

 $00:26:32.080 \longrightarrow 00:26:34.590$ Now, granted, treatments are going

NOTE Confidence: 0.837356792046474

 $00:26:34.590 \longrightarrow 00:26:37.960$ to vary based on whether this is

NOTE Confidence: 0.837356792046474

 $00:26:37.960 \longrightarrow 00:26:40.641$ found at an early stage or whether

NOTE Confidence: 0.837356792046474

 $00:26:40.641 \longrightarrow 00:26:43.329$ it is spread and metastatic.

NOTE Confidence: 0.837356792046474

 $00:26:43.330 \longrightarrow 00:26:46.970$ But on this show we frequently talk about

NOTE Confidence: 0.837356792046474

 $00{:}26{:}46.970 \dashrightarrow 00{:}26{:}48.742$ personalized medicine about a

NOTE Confidence: 0.837356792046474

 $00{:}26{:}48.742 \dashrightarrow 00{:}26{:}50.071$ multidisciplinary approach about

NOTE Confidence: 0.837356792046474

 $00:26:50.071 \longrightarrow 00:26:52.626$ all of the things that have

NOTE Confidence: 0.837356792046474

 $00:26:52.626 \longrightarrow 00:26:54.566$ evolved overtime that can improve

NOTE Confidence: 0.837356792046474

 $00:26:54.566 \longrightarrow 00:26:56.499$ treatment and patients outlooks.

NOTE Confidence: 0.837356792046474

00:26:56.500 --> 00:26:58.954 So how do you approach patients

NOTE Confidence: 0.837356792046474

 $00:26:58.954 \longrightarrow 00:27:01.260$ who have had neck cancer?

NOTE Confidence: 0.837356792046474

 $00:27:01.260 \longrightarrow 00:27:03.420$ Well, one part of this

NOTE Confidence: 0.876211166381836

 $00:27:03.420 \longrightarrow 00:27:06.472$ that I'm just passionate about is that

 $00:27:06.472 \longrightarrow 00:27:10.000$ it's so apparent to me working in this

NOTE Confidence: 0.876211166381836

 $00:27:10.000 \longrightarrow 00:27:12.636$ field that how patients do

NOTE Confidence: 0.876211166381836

 $00:27:12.636 \longrightarrow 00:27:15.548$ depends on the team that surround them.

NOTE Confidence: 0.876211166381836

00:27:15.550 --> 00:27:19.014 And so you know, I'm a surgeon and

NOTE Confidence: 0.876211166381836

 $00:27:19.020 \longrightarrow 00:27:21.610$ that's one potential treatment for a patient.

NOTE Confidence: 0.876211166381836

 $00:27:21.610 \longrightarrow 00:27:23.090$ Other treatments are chemotherapy

NOTE Confidence: 0.876211166381836

 $00:27:23.090 \longrightarrow 00:27:24.476$ or immunotherapy, or radiation.

NOTE Confidence: 0.876211166381836

 $00:27:24.476 \longrightarrow 00:27:26.091$ But it's critical

NOTE Confidence: 0.876211166381836

 $00:27:26.091 \longrightarrow 00:27:27.900$ to have a nutritionist, a

NOTE Confidence: 0.876211166381836

00:27:27.900 --> 00:27:29.380 speech language pathologist,

NOTE Confidence: 0.876211166381836

 $00{:}27{:}29.380 --{>} 00{:}27{:}30.490 \ \mathrm{physical} \ \mathrm{therapists},$

NOTE Confidence: 0.876211166381836

 $00:27:30.490 \longrightarrow 00:27:32.340$ a social worker,

NOTE Confidence: 0.876211166381836

 $00{:}27{:}32.340 \dashrightarrow 00{:}27{:}34.900$ all part of the team and really

NOTE Confidence: 0.876211166381836

 $00:27:34.900 \longrightarrow 00:27:37.629$ how people do depends on

NOTE Confidence: 0.876211166381836

 $00:27:37.629 \longrightarrow 00:27:40.091$ having that whole team around the

 $00:27:40.091 \longrightarrow 00:27:42.695$ patient to help get them through it and

 $00:27:44.204 \longrightarrow 00:27:47.878$ having the team is key and then as you said,

NOTE Confidence: 0.876211166381836

 $00:27:47.880 \longrightarrow 00:27:48.825$ just carefully tailoring

NOTE Confidence: 0.876211166381836

 $00:27:48.825 \longrightarrow 00:27:50.715$ treatments for each patient

NOTE Confidence: 0.876211166381836

 $00:27:50.720 \longrightarrow 00:27:52.912$ based on the specifics of what's going on

NOTE Confidence: 0.876211166381836

 $00:27:52.912 \longrightarrow 00:27:55.188$ with them in their situation is just key.

NOTE Confidence: 0.841029345989227

 $00:27:55.870 \longrightarrow 00:27:58.894$ Talk a little bit about that.

NOTE Confidence: 0.841029345989227

 $00:27:58.900 \longrightarrow 00:28:01.356$ I mean we talk on this show

NOTE Confidence: 0.841029345989227

 $00:28:01.356 \longrightarrow 00:28:04.272$ a lot about how there have been

NOTE Confidence: 0.841029345989227

 $00:28:04.272 \longrightarrow 00:28:06.497$ advances in various tumor types.

 $00:28:08.620 \longrightarrow 00:28:10.740$ So in some cancers you

NOTE Confidence: 0.841029345989227

 $00{:}28{:}10.740 --> 00{:}28{:}12.860$ know they they look at,

NOTE Confidence: 0.841029345989227

 $00:28:12.860 \longrightarrow 00:28:15.17$ panels of hundreds of

NOTE Confidence: 0.841029345989227

00:28:15.170 --> 00:28:17.520 of genetic and genomic mutations,

NOTE Confidence: 0.841029345989227

 $00:28:17.520 \longrightarrow 00:28:19.640$ and have targeted therapies

NOTE Confidence: 0.841029345989227

 $00:28:19.640 \longrightarrow 00:28:21.336$ for each of these.

NOTE Confidence: 0.841029345989227

 $00:28:21.340 \longrightarrow 00:28:23.818$ In others it's not quite so advanced

 $00:28:23.818 \longrightarrow 00:28:26.429$ in terms of tailoring therapies.

NOTE Confidence: 0.841029345989227

 $00:28:26.430 \longrightarrow 00:28:28.838$ The idea of course being that you

NOTE Confidence: 0.841029345989227

 $00:28:28.838 \longrightarrow 00:28:31.328$ know with a more targeted therapy

NOTE Confidence: 0.841029345989227

00:28:31.328 --> 00:28:33.623 you can potentially reduce some

NOTE Confidence: 0.841029345989227

 $00:28:33.623 \longrightarrow 00:28:36.608$ of the side effects of treatment.

NOTE Confidence: 0.841029345989227

00:28:36.610 --> 00:28:39.067 So given what you had said earlier

NOTE Confidence: 0.841029345989227

 $00:28:39.067 \longrightarrow 00:28:41.559$ about the side effects of therapy,

NOTE Confidence: 0.841029345989227

00:28:41.560 --> 00:28:44.199 where are we in terms of personalized

NOTE Confidence: 0.841029345989227

00:28:44.199 --> 00:28:46.518 medicine in head and neck cancer?

NOTE Confidence: 0.855066001415253

 $00:28:47.110 \longrightarrow 00:28:48.960$ It's so interesting

NOTE Confidence: 0.855066001415253

 $00:28:48.960 \longrightarrow 00:28:51.550$ and one of the areas where personalized

NOTE Confidence: 0.855066001415253

 $00:28:51.550 \longrightarrow 00:28:53.105$ medicine, really

NOTE Confidence: 0.855066001415253

 $00{:}28{:}53.105 \dashrightarrow 00{:}28{:}55.475$ is common day-to-day in treating patients

NOTE Confidence: 0.855066001415253

 $00:28:55.475 \longrightarrow 00:28:57.990$ in this area is that patients with head

NOTE Confidence: 0.855066001415253

 $00:28:57.990 \longrightarrow 00:29:00.977$ with HPV related cancers are now being

 $00:29:00.977 \longrightarrow 00:29:03.412$ treated differently than the other cancers.

NOTE Confidence: 0.855066001415253

 $00{:}29{:}03.412 \dashrightarrow 00{:}29{:}05.764$ We know that their responses and

NOTE Confidence: 0.855066001415253

 $00:29:05.764 \longrightarrow 00:29:07.666$ the prognosis is different and

NOTE Confidence: 0.855066001415253 00:29:07.666 --> 00:29:09.306 so now the NOTE Confidence: 0.855066001415253

 $00:29:09.310 \longrightarrow 00:29:11.530$ treatments are different as well.

NOTE Confidence: 0.855066001415253

00:29:11.530 --> 00:29:14.074 And like so much in

NOTE Confidence: 0.855066001415253

 $00:29:14.074 \longrightarrow 00:29:16.339$ medicine there are constant advances.

NOTE Confidence: 0.855066001415253

 $00:29:16.340 \longrightarrow 00:29:18.220$ We're doing transoral

NOTE Confidence: 0.855066001415253

 $00:29:18.220 \longrightarrow 00:29:20.100$ robotic surgery and now patients

NOTE Confidence: 0.855066001415253

00:29:20.100 --> 00:29:22.278 have the potential to get immunotherapy,

NOTE Confidence: 0.855066001415253

 $00{:}29{:}22.280 \dashrightarrow 00{:}29{:}24.470$ potentially as part of their treatment,

NOTE Confidence: 0.855066001415253

 $00:29:24.470 \longrightarrow 00:29:25.922$ and so there's

NOTE Confidence: 0.855066001415253

 $00:29:27.378 \longrightarrow 00:29:29.198$ more targeted radiation treatment,

NOTE Confidence: 0.855066001415253

 $00:29:29.200 \longrightarrow 00:29:31.120$ so it's constantly evolving

NOTE Confidence: 0.855066001415253

 $00:29:31.120 \longrightarrow 00:29:33.311$ and we're seeing

NOTE Confidence: 0.855066001415253

 $00:29:33.311 \longrightarrow 00:29:35.015$ an overall gradual improvement.

00:29:35.384 --> 00:29:37.568 Slow, but gradual improvement in prognosis,

NOTE Confidence: 0.855066001415253

 $00:29:37.570 \longrightarrow 00:29:39.551$ and I think it's a result of

NOTE Confidence: 0.855066001415253

 $00:29:39.551 \longrightarrow 00:29:41.017$ all these little incremental

NOTE Confidence: 0.855066001415253

 $00:29:41.017 \longrightarrow 00:29:42.670$ steps and improvements.

00:29:43.760 --> 00:29:45.944 Dr. Benjamin Judson is a professor

NOTE Confidence: 0.875325620174408

00:29:45.944 --> 00:29:47.400 of surgery in Otolaryngology,

NOTE Confidence: 0.875325620174408

 $00:29:47.400 \longrightarrow 00:29:49.560$ and the chief of the division

NOTE Confidence: 0.875325620174408

 $00:29:49.560 \longrightarrow 00:29:51.000$ of otolaryngology at the

NOTE Confidence: 0.875325620174408

00:29:51.069 --> 00:29:52.669 Yale School of Medicine.

NOTE Confidence: 0.875325620174408

 $00:29:52.670 \longrightarrow 00:29:54.202$ If you have questions,

NOTE Confidence: 0.875325620174408

 $00{:}29{:}54.202 \dashrightarrow 00{:}29{:}55.734$ the address is canceranswers@yale.edu

NOTE Confidence: 0.875325620174408

 $00:29:55.734 \longrightarrow 00:29:57.852$ and past editions of the program

NOTE Confidence: 0.875325620174408

 $00{:}29{:}57.852 \rightarrow 00{:}29{:}59.784$ are available in audio and written

NOTE Confidence: 0.875325620174408

 $00{:}29{:}59.847 \dashrightarrow 00{:}30{:}01.458$ form at Yale cancercenter.org.

NOTE Confidence: 0.875325620174408

 $00:30:01.460 \dashrightarrow 00:30:04.020$ We hope you'll join us next week to

NOTE Confidence: 0.875325620174408

 $00:30:04.020 \longrightarrow 00:30:06.500$ learn more about the fight against

 $00:30:06.500 \dashrightarrow 00:30:09.120$ cancer here on Connecticut public radio.