Dr. Bill Dahut
But overall, in this country, you know, somewhere between 40 and 42 percent of cancers are preventable by modifiable behaviors. My guess is that the number for cancer deaths prevented is going to be higher than that, because the cancers that we're likely to prevent are often the ones that have the greatest chance of leading to loss of life. I think tobacco still is a major part of that, maybe up to half of that, but things such as moderate exercise, healthy weight, and moderate to no alcohol significantly decreases one's cancer risk and maybe in even a greater way could decrease the chance of one dying from cancer.

Ellen Kelsay
That's Dr. Bill Dahut, the chief scientific officer for the American Cancer Society, or ACS for short. Dr. Dahut guides efforts to enhance and focus the American Cancer Society's research program. He is also a practicing physician and a professor of medicine at Uniformed Services University of the Health Sciences. Prior to joining ACS, he held leading roles at the National Cancer Institute, including serving as scientific director for Clinical Research at the NCI's Center for Cancer Research.

I'm Ellen Kelsey, and this is a Business Group on Health podcast, conversations with experts on the most relevant health and well-being issues facing employers.

Today, Dr. Dahut and I discuss the findings from *Cancer Facts and Figures*, the American Cancer Society's annual report that projects a number of new cancer cases and deaths expected each year. He shares the good news and bad news, the possible reasons why, and the implications for employers and employees alike.

Dr. Dahut, welcome to the podcast. We're thrilled to have you.

Dr. Bill Dahut
Oh, thanks for having me on today.

Ellen Kelsay
All right. Well, we've got a lot to talk about and I want to start off first with asking you, just for a little bit of a background, about the American Cancer Society's annual report, which is called *Cancer Facts and Figures*. Tell us, how long have you all been doing that report and just a high-level overview of what does that report look at.

Dr. Bill Dahut
Well, the American Cancer Society's annual *Facts and Figures* is probably the most important statistical report of the year as far as cancer information. You know, it's been going on since the 1950s or so. I think at some point it was probably just a couple of mimeograph pages, but it winds up being the most highly cited publication in all of science. I know when I was a PI doing my own research, every single year I would go ahead and use that information for my manuscripts as well as to talk to patients. And it's really a way for us to see where we are in the fight against cancer. You know, really looking at the number of cancer cases, looking at cancer trends, and looking at lives lost due to cancer.

Ellen Kelsay
All right. So unbelievably comprehensive, and we want to dive into some of the findings from your most recent 2024 report. Let's start with the good news.

Dr. Bill Dahut
I think one of the really great pieces of news is that we continue to see a fall in cancer mortality. Now, cancer mortality is the number of cancer deaths corrected for the size of the population. If we look back to the 1990s, that was really the high watermark for cancer mortality. At that point, looking to today, we've had about a 33 to 34 percent decrease in overall cancer mortality. If we looked at what would have been predicted based on sort of changes in cancer rate at the time, that's 4.1 million fewer deaths than we would have thought based on cancer rates back then. I think that's really incredibly exciting news. We've also seen dramatic decreases in the number of cervical cancer cases, particularly in the population who would receive the HPV vaccination. So again, another really exciting piece of information as far as decrease in really a horrendous cancer.

Ellen Kelsay
You mentioned one potential contributor for the good results and you said that was increase in HPV vaccinations. What are some of the other contributors to these positive outcomes?

Dr. Bill Dahut
Well, I think when you think about improvements of cancer outcomes, I think there are really three things driving them. Number one, and we have to talk about it, is a decrease in tobacco use. Tobacco still contributes to about nearly half of the preventable cancers in this country, but tobacco use has fallen dramatically since the peak watermark of 1964. You know, at that point, about 43 to 40 percent of the adult population were regular smokers, and now we're down to about 11 percent. So I think decreased tobacco use is really an important part. The second thing, you know, is cancer screening, where people are having cancers diagnosed where it's much easier to treat. If you look at whether it's mammography with breast cancer or the multiple ways we can screen with colorectal cancer, lung cancer screening, looking at prostate cancer, based on folks undergoing screening, certainly we see a decrease of people dying from cancer. Then finally, there's been a lot of exciting things going on in cancer treatments. Cancer therapies are much more precision-based, much more aligned to the individual type of cancer you have, notably in cancers such as melanoma, kidney cancer, and lung cancer. I think lung cancer, it's really particularly striking, decreased tobacco use, cancer screening, as well as better therapies have all led to a decrease in the number of folks in this country dying from cancer.

Ellen Kelsay
Let's shift gears and talk about on the other end of that spectrum, what were some of the outcomes that weren't quite as positive?

Dr. Bill Dahut
Well, for the first time ever, we anticipate that we'll have 2 million people that will hear for the first time the fact that they have a cancer diagnosis. Some of that is probably due to the fact that we have an aging population overall. Cancer continues to be a diagnosis more likely to determine as one gets older, you have more in the way of cancer mutations. But 2 million is really a new value we've never seen before. And also, we're seeing some trends in cancer that we think are particularly concerning. We talked about earlier on the decrease in tobacco use and how we think that has led to decreased cancer deaths, but at the same time, it's no surprise, we're seeing increase in other behaviors that also significantly can change cancer incidence and mortality. What we think we're seeing is that as some reflection on that, and we're talking about decreased exercise, obesity, diet, and other factors like that, increase in the number of relative cancer cases in a younger population. Most notably, we've seen this in colorectal cancer. In the 1990s, looking at people under the age of 50, colorectal cancer was the fourth leading cause of death in both men and women. And just over the last 25 years or so, colorectal cancer is now the number one leading cause of cancer death in men under the age of 50, and number two for women. And seeing trends in other cancers, you know, breast cancers, some of the other GI cancers, again, the risk is still much lower than in older patients, but this is particularly concerning because we're seeing this sort of decade over decade, where now it's actually pushing up the numbers, so they're of greater significance.

Ellen Kelsay
One thing that I found so fascinating when you and I spoke in preparation for the conversation today, you were talking specifically about the colorectal cancers and that they are manifesting themselves differently in the younger population. So share with the audience, what are you seeing there.

Dr. Bill Dahut
Yes, I think it really is striking. This is one of these things that I think that you heard physicians who specialize in colorectal cancers talk about. When I was going through training, it was a rarity if you had somebody with a colorectal cancer in their 40s. What we're seeing now is people presenting with colorectal cancer at an earlier age and presenting with more advanced disease at diagnosis. Anatomically, they tend to be on, on what we say the right side of the colon, sort of closer to the rectum. So it's multiple things, it's age, it's stage of diagnosis, so the more aggressive and this sort of quirky difference in anatomic location, and we don't really have a clear reason why. We have lots of things we think about, we talk about, you know, diet, exercise, more obesity, there's not a particular pathway or one thing to do or not to do that we think is leading to really this generational change in colorectal presentation, as well as diagnosis.

Ellen Kelsay
It's puzzling and concerning and definitely something to keep an eye on for sure. One other thing I know that you report on quite extensively is about the disparities in cancer. Share with the audience what you see there.

Dr. Bill Dahut
Yes, I think it's really important. We look at cancer health disparities, we look at every facet of that, we look at changes in economics, we change urban versus rural, and then where we have the best data is really on looking at differences in racial ethnic minority groups. If you think about breast cancer, if we went back to around 1970, and 1970 was before we had much in the way of mammography, and more before we really had drugs such as tamoxifen, drugs that are targeted against the estrogen receptor, outcomes were really the same for black and white women. What we've seen over time is we actually are seeing a slightly greater incidence diagnosis in white women for breast cancer, but a much higher mortality rate for black women with breast cancer. This difference in mortality rate is particularly great in younger women. So, the mortality rate differences, again, breast cancer is very unusual in younger women, but it's about three to four times greater mortality rate, depending on where you live in the country, in black versus white women. When you go over the women over the age of 70, the numbers come closer together. We see black women present often with breast cancers that are what we call triple negative breast cancer, so none of our targeted therapies are ones that can be used, and these are talking about hormonal treatments, as well as something called HER2, which is a particular driver of cancer. The cancers are a little different biologically, but there are also real concerns. Some of this may be due to access really to equitable care and we do hear some data about women of color not having follow up as quickly after mammography, potentially not having the same quality mammography available to them. If we think about what's driving it, certainly there is a component of biology, but there are also societal aspects that are part of it too.

Ellen Kelsay
You also saw some disparities for Native American individuals.

Dr. Bill Dahut
Yes, particularly looking at the Native American population in Alaska, the rates of colorectal cancer are unfathomably high. That's really an area that I think needs particular research, and I think drives home the fact that not all folks, not all patients, should really be screened at the same way. And clearly, if you're in a population such as the Alaska Natives and the Native American population in that area, where colorectal cancer rates are so much higher than the rest of the country, you certainly can't to default to, you know, average screening parameters of age 45. I think that's the important thing that's going to continue to come out as we become more sensitive to these differences in risk, that we need to have a way to screen

patients in different ways and then have thoughtful prevention strategies to decrease either their likelihood of developing cancer or if they develop cancer that can be treated in a much easier way.

Ellen Kelsay
This is the Business Group on Health podcast. I've been speaking with Dr. Dehut and we'll be right back.

Ellen Kelsay
I did want to shift gears and there are a few areas in particular I wanted to dig a little bit more deeply on. The first was your data on mammograms and what they tell you about risks of dying of breast cancer based on when and how often you get screened. What did you see there?

Dr. Bill Dahut
Yes, so this is some data from a different publication. I think what was actually quite interesting and some of this was data that came from Europe, but when we looked at women who missed their scheduled mammograms over a five-year period, for each mammogram that was missed, that increased their risk of dying from breast cancer. Now, obviously, one would think if someone who makes all their mammograms over five years versus someone else who doesn't make any, there probably are other factors related to cancer incidents and cancer outcomes that are probably present beyond simply a screening mammogram. Particularly when you look at women in the premenopausal space, where we know cancers can grow relatively rapidly, missing a mammogram can certainly lead to a cancer presenting at a much later stage, and this could, I think it does, lead to folks actually dying from their breast cancer. It's sometimes hard to keep track of these things. Our recommendation is that when women start their mammographies, and we say certainly at age 40 you should have discussions with everyone by age 45, we strongly feel that women before the age of 55 should have a mammogram every year, because the benefit of having those mammograms outweighs potential risk. Once someone is postmenopausal, post age 55, then I think whether you do it once every year, every other two years, I think is a reasonable discussion. We actually recommend women consider having mammograms until their life expectancy is sort of under 10 years. We do know there are women in their 70s who have excellent health with expected long survival where a mammography is still a reasonable thing to do. Thinking about that is important and also thinking about potentially other imaging beyond mammography can often be very useful in finding a cancer. Women that have dense breasts, have breast cancer that is not as easily imaged, which makes it much more difficult to find breast cancer, putting them at higher risk for presenting with more advanced disease. If mammography reports will report breast density, oftentimes one will need additional imaging, whether that's an ultrasound or MRI, I think it's important for folks to know that mammogram alone may not be enough.

Ellen Kelsay
I know you all at the American Cancer Society have guidelines, which are in large part designed for those who are at average risk. I'm curious, many also in the industry follow guidelines that have been established by the U.S. Preventive Services Task Force. Can you speak to those guidelines, how they're the same, where there might be some differences?

Dr. Bill Dahut
Yes, I think overall, there's a lot of concordance between our guidelines and those that come out from the U.S. Preventive Task Force. We tend to make changes in our guidelines a little bit earlier. I think we probably have a little bit more flexibility how we do things. In fact, we're trying to actually update our guidelines in a way that's much more rapid. We're moving to a what we call a living guidelines method. We used to sort of redo our guidelines from beginning to end every 5 or 10 years, whether they needed to or not. Now we're modifying them when there's new information available and I think those will make them much more useful for patients and much more current. Often when you look at guidelines where there are differences, and again, probably differences we've had with the task force tends to be at ages when one would stop undergoing screening, we tend to favor in the pre-menopausal women or women under the age of 55 to be having mammography every year, while the task force recommends every other year. We have sort of opted on the side of detecting a cancer sooner with the knowledge that that will potentially lead to more women that have an abnormal mammography and a biopsy that won't find cancer. So it's sort of the sensitivity of a test, finding it when you do it more frequently, but you are going to wind up with less in the way of specificity because you're going to wind up with more folks that have a test that's abnormal, but it may not lead to a cancer. So overall, there are probably more consistencies than there are differences. We both talk about mammography starting at age 40 and some differences there and how long we do them and then how frequently we do it under the age of 55.

Ellen Kelsay
That's super helpful, thank you. I do want to ask you because there's been an unbelievable amount of innovation in cancer and oncology overall, but certainly in the screening arena, and so a few things I wanted to ask you about here. First, let's start with precision-based screening. How should individuals, how should employers, how should health plans be thinking about precision-based screening? Let's start with defining what is precision-based screening.

Dr. Bill Dahut
I'm so happy you brought that up because this is a topic that was never even discussed, I think, five years ago. We've talked a lot about precision-based medicine, sometimes called personalized medicine, but ultimately that is to come up with a therapy for your cancer that is really specific for a particular abnormality in your cancer, a cancer mutation or something that's overexpressed. And that has led to patients who have had much better outcomes when we're looking at melanoma and kidney cancer and lung cancer than if they had sort of the much more blunt chemotherapy tool. But to have a major impact on cancer incidence, and more importantly on number of people dying from cancer, it's probably important to find cancers earlier on when they're smaller, can be easily treated, and that will not impact how long people live. First of all, the vast majority of cancers right now do not have screening tests and it's not particularly practical to think about a way where we did screening tests for every particular kind of cancer, I think that's every week you would be going in for another test, which would be a little bit complicated. So first of all, let's think about for the cancers that we can screen for, it would be obviously better if screening recommendations were not based on average risk, because if someone's risk for cancer is higher than that, then someone needs to be screened in a different way and hopefully one could then also devise a strategy to whether it's therapeutic or whether it's behavioral changes to modify one's risk. That's likely to be a combination of some things that are fairly simple when we look at risk, such as family history, age, other factors, and then some things that may be more complicated, such as inherited genetic risk, and there are scores looking at alterations in normal genes called polygenic risk scores, that also may be important in identifying the risk. Then having a way that this is easy for primary care doctors or practices to have access to and easy for patients to own and to think less about having sort of a perfect model, but begin to develop sort of this intellectual framework where people start thinking about their own personal risk. We talk about it a little bit already. We tell people that if you have a family member who had early cancer, for a screenable cancer, you should begin to think about screening about 10 years before the earliest cancer in your family. I think that's not a bad rule of thumb, but that may not be the right screening strategy for some, and of course, that's all not really, really codified anyway. I think finding ways that people understand their own risk, so their screening is much more precision-based, could lead to earlier screening and potentially for less frequent screening for people, too. You know, based on if your risk is low and your first screening test shows that you have either a normal colonoscopy or a very low PSA or

mammogram, potentially we could even think about screening some people less frequently. I think it's where we need to get to. We're not quite there yet, though.

Ellen Kelsay
We've also seen a lot of developments that make screening easier - screening in the home, for example, self-collection kit for HPV. Speak a little bit maybe about what you're seeing there and I know you've got some partnerships there.

Dr. Bill Dahut
Yes, so I think that's a great point. I think, by and large, people understand the importance of screening. A lot of things are complicated, and the more you can make this easier for people, I think will begin to increase the population of people that are screened. We've been fortunate to have a partnership with Color Genomics to look at a way to make cancer screening easier, particularly for those working through their employers. This includes, you know, home-based tests. These home-based tests are obviously approved for colorectal cancer. We've seen some commercials on TV. There's also a FIT test, and these tests can tell which folks then need to undergo a colonoscopy. They're not designed for people who've had prior polyps or have a strong family history, but for the average person, to be able to do a home-based test is obviously significantly easier than finding the time, finding a gastroenterologist, scheduling the colonoscopy, taking the prep. Working with Color, though, we have made that aspect when one does need a more invasive test to really facilitate that and take away all the friction points. We're very interested in making this easier for other cancers. The FDA has recently approved HPV self-collections, which are done at a health center, so I think that's step one. At first glance, you might be like, why is that important? I think that'll increase collections for HPV testing. Again, this is for cervical cancer, primary care doctors or maybe potentially even for pediatric offices, so places where this would not be routinely done, as opposed to when you go to get a urine specimen, certainly a self-collection could be done and our hope is that this could in the future be done in people's homes. Clearly, there are technologies and testing available where that can be done, although they're not FDA-approved yet, and the same thing with a PSA as prostate cancer, which, you know, after discussion with your physician about the benefits of that and potential downsides, to be able to do that in your home would obviously make it easier, so we are interested on the research side, also to fund cancer research in that space, to look at screening a larger number of people for tests that are easy, and then driving those to the tests that are more intensive, whether they're CT scans, mammography, or visual examinations of the cervix or prostate for those that have had a sort of an abnormal first screening test.

Ellen Kelsay
Those are really promising examples. We've talked about screening and I know when you and I, again, were talking in advance of this conversation, we're talking about whether or not cancer can be prevented, and I was stunned at the degree to which or the percentage of cancers you thought actually could be prevented.

Dr. Bill Dahut
It's pretty remarkable numbers in which we think changes in behavior could actually prevent cancer. I'm a medical oncologist by training. I never would have imagined that the numbers were as great as this, with the exception of tobacco. We knew about tobacco, but overall, in this country somewhere between 40 and 42 percent of cancers are preventable by modifiable behaviors. My guess is that the number for cancer deaths prevented is going to be higher than that, because the cancers that we're likely to prevent are often the ones that have the greatest chance of leading to loss of life, and I think tobacco still is a major part of that, maybe up to half of that, but things such as moderate exercise, healthy weight, and moderate to no alcohol significantly decreases one's cancer risk, in maybe even a greater way, could decrease the chance of one dying from cancer. Some of the things that, you know, your mom or your grandmother told you when you were little - go out, eat your vegetables, get some exercise, get your vaccination from your doctor, don't smoke, don't drink too much - actually can prevent cancer, that's not necessarily part of the psyche of the American worker or the American population who tends to think of obesity and lack of exercise much more, you know, in the cardiovascular or the diabetes risk, which are real, but the fact that

there's actually a very strong link to cancer is something that I think is not really that as well known as it should be.

Ellen Kelsay
The other thing that mom used to tell us is wear your sunscreen, right?

Dr. Bill Dahut
Wear your sunscreen, by all means, and we definitely are seeing lots of skin cancers. Obviously, many can be treated easily, but skin cancers, particularly more aggressive squamous cancers and obviously melanoma, are ones that can be prevented by sunscreen and can actually have significant health morbidity and actually mortality complications.

Ellen Kelsay
All right, Dr. Dahut, I'm curious, is there anything else you'd like to share about cancer prevention or treatment that the audience might not be aware of or should be thinking about if they're not already?

Dr. Bill Dahut
Well, I don't think anyone can talk about anything without talking about AI, so I think that's going to be important for cancer screening and cancer prevention potentially, but let's focus a little bit on cancer screening. We do know right now when you have a cancer screening test, you are dependent on the skill of the person who is reading the scan and on the strength of the equipment you're using. So increasingly what we're going to see is integration of AI to help physicians actually read mammography. We actually have these very large cohort studies at the American Cancer Society. We just launched our newest one, *Voices in Black Women*, which will study 100,000 black women ages 25 to 55 prior to a cancer diagnosis, and looking at our other cohorts, we really have the ability to, when you look at large number of patients, to use AI to really improve the ability for people to read mammography. We also think it's going to be helpful for colonoscopies. You know, colonoscopies are almost never looked at by anybody else. Mammography is easy, but there is now technology available where individual polyps will essentially light up while one's doing a colonoscopy to make it easier for the gastroenterologist to see areas that need to be biopsied, so that's important. Then once one has a biopsy done, again, you're traditionally dependent on the skill of the pathologist at your local institution. And using digital pathology, using AI potentially, you'll have the ability to have that pathology looked at by others, but also using computer-engineered information and experience, and have come up with a way to improve the ability to find cancer and likely predict your outcomes better and likely also help guide therapy. So, I think looking at AI in cancer diagnosis and screening and the ability to really improve outcomes in multiple populations.

Ellen Kelsay
No doubt. I mean, the technological advancements are just happening with leaps and bounds and this space in particular is right for some of those interventions and leveraging of technology. I'm so glad you mentioned AI in this example. Okay. We are rounding in on my final couple of questions here. I would like to ask you this question. If you could name one or two things that you would want employers and other listeners to take away from this conversation, what one or two things would you cite?

Dr. Bill Dahut
Number one for employers would be to normalize the discussion of cancer screening. Make it part of what your employees think about, make it easy for your employees, because finding a cancer early on when it's small and easily treatable will really increase the likelihood of the employee getting back to work and being productive. So where it's not something sort of buried on some flyer somewhere, you know, to be something that is part of regular communications and making it easier for your employees, whether it's home-based testing, partnering with somebody, as we've done with Color or other ways, to have screening part of what they do. Particularly for employers that have very mobile employees, whether it's truck drivers or otherwise, think of creative ways that screening can be done, particularly places that might do it off hours or different things. I think that's number one. The second thing is that because we're seeing increased cancer rates in younger patients, that the other communication strategy needs to be that if folks do have medical issues or medical concerns, that we must be able to advocate for them to ensure that

they don't have a serious illness. Again, a young man or young woman with abdominal pain shouldn't just be given two Advils and sent home when this is persistent, particularly if there's other symptoms with it. So empower your employees that if they are not feeling well, that they have someone who can advocate for them, particularly our concerns about cancer in younger patients. Then finally, let's be optimistic about the future. I think we're going to come up with ways to find cancer earlier on and technologies will be able to hopefully treat it easier. Ultimately our goal obviously is to end cancer for everyone as we know it. We can't eliminate cancer from being there, it's part of mutations, but if it's wound up being something that was not nearly as terrifying, I think we would be certainly all be better off.

Ellen Kelsay
Wonderful. Well, my last question was going to be what gives you hope for the future and you just closed with a sense of optimism.

Dr. Bill Dahut
When you treat cancer patients for a while, I think you have to be optimistic about what you're doing and we've made such incredible progress from where we were using very blunt tools just 20 years or so ago.

Ellen Kelsay
Dr. Dahut, we really appreciate your time and expertise and are grateful for you sharing it with us in the audience. Thank you.

Dr. Bill Dahut
Thanks so much for having me on today.

Ellen Kelsay
I've been speaking with Dr. Bill Dahut, the chief scientific officer for the American Cancer Society about their annual report, *Cancer Facts and Figures 2024*. You can find this report and more on the American Cancer Society's website.

I'm Ellen Kelsay, and this podcast is produced by Business Group on Health, with Connected Social Media. If you liked this episode, please rate us and consider leaving a review.