Episode 15: Cannabis Testing, Featuring Jeff Nemeth

Speakers: Aleece Burgio, host, and guest Jeff Nemeth,
ACT Laboratories founder and CEO of business and sales

[Aleece Burgio] Hey, everyone, this is a Barclay Damon Live broadcast. You're listening to the Cannabis Counselor, and I'm your, host, Aleece Burgio. Let's get into it.

[AB] What's up, everybody? This is Episode 15 of The Cannabis Counselor. I'm your host, Aleece Burgio. And today we're going to be talking with Jeff Nemeth. He is the co-founder of ACT Laboratories, which is a multi-state laboratory operation in the US. They also are one of the few labs that are up and running in New York State to test for medical marijuana. Jeff is going to be giving us an education on what's happening with labs across the state, what they're testing for, and what we can anticipate in New York as adult use comes into play ... Tune in. Jeff, thank you so much for joining the Cannabis Counselor. We're so excited to have you. How are you today?

[Jeff Nemeth] Good. Thanks for having me. I really appreciate it.

[AB] Now, Jeff, you are the co-founder of ACT Laboratories. Can you tell us a little bit more about your company?

[JN] Sure. ACT Laboratories was founded on a napkin in 2010. Since 2010, we opened up in Illinois, then went to Pennsylvania, and then our corporate office is in Michigan. Michigan just took a little bit of time to get going because of the wild west of Michigan laws and regulations. Then we also are set up in Ohio. And then we came to New York. We were one of the first labs in New York—outside of Wadsworth, as an independent. We also have a build-out in California and Massachusetts going on currently.

[AB] And so you currently test for marijuana and hemp? Or just marijuana?

[JN] We do test ... We have our license to test hemp also in Illinois, so all our hemp products would get shipped to Illinois. But we mostly focus on cannabis itself, medical marijuana and recreational adult use.

[AB] And so how did you get into this space? What did you do kind of prior to joining the labs?

[JN] Well, that's a good question. I was an opiate user for a brachial plexus nerve injury and was prescribed opiates for several years. And a friend of mine came—that I saw from college—and said, "Why don't you smoke cannabis?" And I was like, well, why switch one high with another? And not to mention my job, would always have urine tests, so I would fail. And they said, "Well, why don't you try medical marijuana, try CBDs?" Tried it, thought it was better for me, felt better … recovery. And within 30 days, I quit cold turkey and never touched another opiate since. So that gave the drive to start something, because I saw a need for the industry for a quality, reliable, repeatability testing lab. And really kind of find out that … where is the CBD? What is actually in the plant? And we started a testing lab.

[AB] What's so interesting is, you know, the fact that when you talk about how your company was testing your urine and they would fire you for marijuana, but you could be on opioids. You know what I mean? It's just such a comical … because they have a prescription for it. But it was such a wonky kind of backwards… Thankfully, New York has kind of changed that significantly where you can't test for that anymore. But, for so long, there's just such a big misconception of the effects of marijuana and just its balance between that for treating pain versus an opioid.

[JN] Right.

[AB] So tell us a little bit about kind of what you've seen in the industry for labs, the kind of problems that have happened for states who are starting up a significant cannabis program. So New York has now passed their legalization for adult use. We've only had you and Wadsworth and maybe another lab being able to test. What are you guys planning for the massive influx of businesses that are going to need some type of lab testing?

[JN] Correct. And that's one thing that we only are using currently half our facility, so, we have plans for a massive build-out. We're waiting for the rules to change in the testing guidelines and working right with the state making our recommendations. What should the rules look like, what should be tested for and how fast we can test. Then we'll build the lab to fit those rules. Currently, the state of New York is a heavy micro-state. We do a lot of micro-testing, and most states are looking at the analytical side testing.

[AB] So, let's back up a quick second. Can you explain to everybody what micro-testing is?

[JN] That's looking at all the microbes—from yeast and mold to different bacterias, E. Coli—and making sure the plant is clean on the microbial side. And there are several different methods, from PCR to traditional plating, and different ways of doing that testing. And … from incubations, that take a long time, to a rapid yeast and mold plate, that takes three days. So, depending on where the state goes—currently it's really in-depth, like species and everything else that we're looking at. So that takes, like, 12 to 14 days if there's no hit. If there's a hit, that can add a couple extra weeks. So, a lot of time our normal states, not our "normal states," but other states that we have, we're seeing a three-day turnaround or if it's PCR within 24 hours.

[AB] Okay. So let's back that up for a quick second, because I think it's really important to digest for everybody who's listening in. So, New York, because they're having such strict regulations basically have a baseline of a minimum of 12 days for you to turn around a sample because of all of the detailed, microbe testing that you'll have to do for each of the samples. Other states are as little as maybe 24 hours if it's a PCR test or regularly, about three days. And so, you know, that type of turnaround—12 days—is fairly slow … We're talking about only three labs right now. Have you talked with the state about having more labs kind of coming into play or just a very quick turnaround time for you guys to be able to actually, effectively get these samples back in real time period?

[JN] Yeah. We are talking with the state. First and foremost, it's about patient safety and the limits. And how do we create the very best program when we recommend at ACT Laboratories for patient safety. And are we covering the patient for the microbes that we're looking to test for? Does it make sense? What are we worried about? Aspergillus is one of those. We want to make sure there's no Aspergillus.

[AB] So … What is Aspergillus? I'm asking questions that I definitely don't know.

[JN] Well, I'm going to be honest, too. I'm not a scientist, so I can't get out into that…

[AB] You're just saying Asper….that word, I'm not even going to say the word right!!

[JN] You know, that's a great conversation. If we really want to dig down, I would love to have Bob Miller meet with you, he's our COO of laboratories, and he can dial down to the species and all that kind of stuff.

[AB] Totally!

[JN] Aspergillus is some nasty stuff.

[AB] Okay.

[JN] Basically. And we don't want that in our cannabis. And the way to test for it is PCR.

[JN] Okay

[AB] It's fast. So it's a rapid testing that's required …

[JN] It's rapid testing. So, we feel that by using PCR and looking at those microbes, we can get a more accurate and more reliable … because we're going to add the data from the DNA, and we can speciate from the DNA. That's what PCR comes down to doing. So, we want to make sure that it's faster, but it's also safer for the patient. And does the testing make sense? Are we looking at other states? California has limited all plates and went strict PCR.

[AB] Okay. California is just PCR. So there's just 24-hour testing, and you get it right back.

[JN] Well, it's 24 hours in the testing. You get in another 24 hours, but there's other tests, so their normal turnaround would be three days.

[AB] Theirs is still three days. Okay!

[JN] Because you got other things to test. You're still looking at metals, you're still looking at pesticides, potency, residual solvents. So all these tests take some time and different prep methods and different analysis has to be done on the machine.

[AB] Okay, cool. So your base was Michigan. Does Michigan have similar to California or a little bit closer to New York?

[JN] Michigan is a split state.

[AB] Okay. Tell me about that.

[JN] They do both PCR for certain microbes, and we still do traditional plating. On yeast and mold, that's where you have to do still traditional plating, because we're looking at colony counts. But there's a lot of new research to develop what we call probes for PCR in the yeast and mold so you can get a quantified test. So this is the "rush," what I would say in the lab business: who can get that yeast and mold in the PCR so we can do the full bank of testing in PCR.

[AB] So you were part of the start of the Michigan adult use program. And then you also saw Illinois get into an adult use space. Did you see any kind of bottle-necking at the lab component or even outside of it when the transition from medical to adult use happened? I'll just mention because in New York we're very concerned, is operators and those facilitating operators that we only have 10 registered organizations, Wadsworth and ACT, and possibly the other lab will suffice right now for those 10 labs, 10 ROs but when we start getting into this massive bulk licensing that anticipated between micro-businesses all the way up to large tier producers, a concern, and then this happened in Oregon, is that there won't be enough labs to supply the massive influx of operators. So did anything like that happened in other states that you can tell us about?

[JN] In Illinois, there is two labs, and now there's three currently up and running, and a fourth coming on. But at that first transition from medical to rec, we were able to handle the flow of tests coming through between the two labs.

[AB] That's awesome.

[JN] I think it's how the regulations are set and how the lab is prepared. Growing with that medical market, we're having in-depth conversations with the MSOs. What are their growing plans? Where are they hiring? How are they growing—that we can also do and mimic them? So I know if they're growing their doubles. So I'm going to add staff in, in a timely matter. Do I have to add duplicity in equipment at that time? So by having those open conversations and having their plan, we also can build our facility out that match their throughput. And it really depends, like I said, on the limits and what tests are going to happen and how big is a bundle? Like how big is a harvest? Currently, there's three different sizes in New York, and we feel that we'll be able to handle pretty much everything that they can throw at us.

[AB] Tell us a little bit more about the three sizes, so what do you mean by that?

[JN] Well, it depends on their production size, like if it's 1–5,000, 5,000–7, and 10,000 above. When you have whole flower, you have a 10-pound batch. So that means a lot of testing. Every 10 pounds has to be tested. Michigan just expanded that to a 50-pound batch. So there's going to be less flower testing. So that's where the regulations have to be smoothed out and gone through, to know exactly what has to be tested, what size of a bundle has to be tested. And then you can measure the market to answer, well, hey, we're geared up to do a thousand tests a week. That's all we can do. That's our capacity, what could we have to change that? The other labs you might want to be, until we have those numbers and understand the market then we can give you solid answers where we feel that we can fit in or, hey, there's room for 10 more labs.

[AB] Right.

[JN] But when we bring more labs in … The state needs to also have some regulations on those labs. we believe round-robin testing, blind proficiency testing to make sure the labs are all aligned. And it creates not lab shopping, but lab harmony and quality testing for it.

[AB] So it's not like you're like, "Oh, I'm not going to go to ACT because I'm going to go to Wadsworth." It's like you're going to get the same thing wherever you're going, because we're this unit who have the same methods and same procedures, you know, obviously one with a little quicker turnaround time, but it might not happen, right? You might not be able to have a quicker turnaround time if you're testing for hundred … thousands of different organisms and things. So let me ask you this. There's this disconnect right now. I think … I know for purposes of our clients, there's confusion on hemp labs versus marijuana labs, versus being federally DEA-certified and being part of a state. Can you tell us a little bit about how you're operating your Michigan lab—is it your Michigan that has hemp, or is your Illinois?

[JN] Illinois has hemp…

[AB] Okay. So your Illinois lab has hemp, your other ones don't … what type of different certifications you need for either to test?

[JN] Well, currently in Illinois, you had to apply for a hemp license, just like we applied for our medical marijuana and rec license. You get approved, we had to show a valid methods. And I have an ISO certification, 17025. That was the only thing that was required for Illinois. With the federal government coming into play and taking more of a look of what it takes to be a federal hemp license, they're saying you have to have a Schedule I exempt license. There are certain methods that you have to do as far as your procedures, bringing it down to a point, zero moisture, doing the decarb on the THCA to make sure there's not under the .3 for THC.

[AB] Yeah. So just to explain that a little bit, right? We're talking about a total THC situation where now… and this is in New York as well, total THC is the Delta 9 concentration times a percentage of the THC acid to make sure it's still under that .3% of THC in order to not be considered marijuana. That is what qualifies it as hemp.

[JN] Correct.

[AB] Which for those who are like lay people, they're probably like, what are we talking about here… But that is an important distinction for definition purposes, both at the federal and state level.

[JN] Yeah. If you look at raw flower, it's all THCA. As soon as you put a spark to it, and heat it, the "A" falls off and it turns into THC.

[AB] Right. That then gets you...which we are seeing a lot of people kind of circumvent the problem by having super-high THCA, very little Delta 9. And then they're having a really high THC content for their hemp after it's been heated up.

[JN] Correct. So the state stepped in and put new regulations in, last year. And there's some new regulations coming effective October the end of this year, October 30, that's saying you might have to have a Schedule I exempt license. Schedule I exempt license secures that lab. So you're able to mail it, the hemp through the mail. And if you think about it, they're sending an unknown product through the mail. It could have THC in it or not. They're testing.

[AB] Or it's like in a really warm facility. Right. Say it's like you're all of a sudden, you're like, "Oh, well we sent it" ... The certificate of analysis says this, and then you retest it after it's being mailed, or that's not what it is, you know.

[JN] Correct. So that's where that Schedule I kind of gives us a safeguard as a testing lab. But the disconnect is that's a federal license. We all, that test medical marijuana or adult use cannabis, are under a state license; the federal government doesn't recognize our license. So if we were to get a license, a Schedule I exempt license and go through the inspection, we're actually breaking federal law. Because you're testing marijuana, because we're testing marijuana. So it's kind of a catch-22 here. And hopefully they'll figure something out because we do test a lot of hemp also. Right.

[AB] Right! No, absolutely. So we're wrapping up here. We only have maybe one more question. But if there was something that you could kind of say to New York regulators about how, you know, labs should be regulating the new adult use space, what would you kind of give as advice, just as an operator who's been in the space for some time, and you want to see this roll out in the right way.

[JN] I would ask them to look at the other states. How are the other states regulating? Look at the top-notch states: California, Michigan, those programs and really say, why are they testing this way? And does that make sense for New York? And currently, I would think they would see that, not to put the bottleneck, not to put the stranglehold on labs, but also to think about how we can make that testing market better, safer, reliable for the patients and the people who use adult use before they can have the confidence what's on the package is in the package.

[AB] Totally. Okay. Awesome. Thanks, Jeff, so much for jumping on for the Cannabis Counselor. We have loved having you. And for those who are curious about lab regulations, what's going on in New York, where you could send both your hemp and your marijuana when New York is up and running for operations, please look at Jeff and ACT Labs. And we will talk to you I'm sure again, once the space gets up and running and we can see if this still going as smoothly as your other states have been in the rollout. So thank you so much, Jeff. And we'll talk to you soon.

[JN] Thank you, too. Thank you very much.

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