# Sawbones 394: Tis the Season for Weird Medical Questions

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**Clint:** Sawbones is a show about medical history, and nothing the hosts say should be taken as medical advice or opinion. It's for fun. Can't you just have fun for an hour and not try to diagnose your mystery boil? We think you've earned it. Just sit back, relax and enjoy a moment of distraction from that weird growth. You're worth it.

[theme music plays]

**Justin:** Hello everybody, and welcome to *Sawbones*: a marital tour of misguided medicine. I'm your co-host, Justin McElroy.

Sydnee: And I'm Sydnee McElroy.

**Justin:** And uh... You know, throughout the week, throughout the years, we try cover all bevy of topics, but we can't get 'em all. And sometimes you're left with... lingering questions.

**Sydnee:** That's right. We get a lot of questions here, even, I mean, thankfully when we ask for them. Thank you, whenever we request you are all wonderful and send us your questions, but just generally we get questions, and so every once in a while we try to gather up a bunch of these questions and... do an episode.

Justin: Yeah.

**Sydnee:** You know, on sort of so— those kind of, uh, little things you wonder about that aren't necessarily a whole episode. Or maybe even you don't wanna ask, you don't wanna ask somebody privately.

Justin: Yeah.

**Sydnee:** But you do want us to... read your question.

**Justin:** You do wanna ask— You don't wanna ask privately, you do wanna ask publicly.

Sydnee: Right.

Justin: It's too personal to ask privately.

Sydnee: I can only be asked in public.

Justin: [wheezes]

Sydnee: On a podcast. [laughs]

**Justin:** These are usually emailed— Hey, we're not, you know, well we could— If you want to send it to PO Box 54, Huntington West Virginia 25706.

Sydnee: Sure.

Justin: One day we'll do an all paper— [wheezes]

Sydnee: All paper.

**Justin:** All postcard correspondence.

**Sydnee:** [laughs] Only send us your weird medical questions on postcards.

Justin: Yeah.

**Sydnee:** That will inform the question somehow. The postcard has to loosely, like the image has to loosely relate.

Justin: The PO Box will just be, like.

**Sydnee:** I like that challenge. I like creativity with borders.

**Justin:** Mainly what we get now are wedding invitations and, uh, high school graduation announcements, which I love.

Sydnee: Oh, I love those.

Justin: I love those.

**Sydnee:** Yes, we love seeing those. Um, but yeah, so we're gonna answer your questions as best we can. Again, as we always say, these aren't really— These aren't advice. This is more—

**Justin:** These aren't advice!

**Sydnee:** No. These are just stuff you wanna know about.

**Justin:** You want advice, go listen to *My Brother, My Brother & Me*. That's, that's helpful.

**Sydnee:** Well, no. It is advice. I don't think the word "advice" necessarily means good or bad or intrinsically... how helpful it is.

Justin: Hmm. I like that. Yeah.

Sydnee: Yeah. Just means something somebody tells you.

Justin: Someone's... talkin' out of their butt.

Sydnee: [laughs]

**Justin:** About your life. Someone's telling you how to live your life. Listen.

Sydnee: What's our first question?

**Justin:** We've spun our wheels enough. Uh, we're ready to answer your queries. "Hi Sydnee and Justin. I recently heard on a podcast." [pause] Wait a minute.

Sydnee: Not ours.

Justin: You listen to... other podcasts?

Sydnee: [laughs]

**Justin:** Wow. You got a lot of brass, admitting that here.

**Sydnee:** I wondered if it was one of your other podcasts. Did you say this on one of your other podcasts, maybe?

**Justin:** That is... possible. It is possible I did that. Yes.

**Sydnee:** Okay. What did— Well go ahead, finish the question.

**Justin:** "I recently heard on a podcast that if you cut off a limb/extremity, you should put or rinse it in milk before promptly taking yourself to the ER. That sounds bad and fake, and when I tried to Google it, I don't get anything from reputable sources. Love the podcast! Thanks for taking the time to read this, and for making such great content. Have a nice day." That's from Artie, they/them. Artie, I'm hurt, 'cause I don't recognize that advice. But, uh...

**Sydnee:** I've heard this before.

Justin: Have you heard this? This is a thing?

**Sydnee:** Yeah, this is not, Artie you are not the first person to bring us not us, I should say, to ask this question. Um, I've had patients ask me, I've heard this sort of like folk wisdom that you're supposed to— Specifically, what I had always heard was tooth. If a tooth is knocked out.

# Justin: Okay.

**Sydnee:** Not like your baby teeth. Charlie just lost her first tooth, by the way. It was adorable. It looks so cute.

Justin: Aww, it's so cute! She looks so grown up. Yeah.

**Sydnee:** Uh, anyway, if like one of your grown-up teeth are knocked out or pulled out or removed for some reason, that you're supposed to put it in milk until you get to the ER. This is actually not true, but it is very common. I don't know if people think that 'cause of the calcium?

Justin: Mmm...

**Sydnee:** I don't know where that comes from, and I've cert— I haven't heard limb. But either way, um, no.

**Justin:** [chuckles]

**Sydnee:** That is not, that is not recommended. Uh, if it is a limb, and I mean... I'm assuming we're talking like a finger or a toe, probably not a whole arm or leg in this case.

Justin: Yeah.

**Sydnee:** 'Cause you've got bigger issues than what do you do with the arm or the leg. You're bleeding.

Justin: I feel like job one has to be "let's get to the hospital".

Sydnee: Well, that's- so-

**Justin:** If you're nearby a friend that can get the arm, and isn't like "Ew ew ew ew !" Like I... might be.

Sydnee: Yes. Get to the hospital.

**Justin:** Get to the hospital.

**Sydnee:** Put— So here's what you wanna do. First of all, stop the bleeding. Whatever is bleeding you need to apply direct pressure, take whatever measures necessary to stop the— That's, that is like number one. Obviously, you're hopefully already on the phone with 911. You know, calling for help. Um, take— let's say it's like a finger. That's probably the most common thing, right? You might do that in your workshop. Please don't.

Justin: Yeah. I won't. Ever.

Sydnee: Please don't.

**Justin:** What? Why would you put that evil on me?!

**Sydnee:** [laughs] I'm not! I'm just saying like, you can see a lot of circumstances where someone might accidentally cut off a finger.

Justin: You said "you"!

Sydnee: [laughs quietly]

Justin: You looked me at me in the eyes and said "you"!

Sydnee: I just meant that you do woodworking!

Justin: Don't act like you were using like, the general you!

**Sydnee:** Anyway. You want to, um, if you want to rinse the extremity briefly in water, and maybe this is where the milk comes in. If it's a tooth, if you feel a need to rinse it in milk, I guess you could rinse it in milk. Water is just fine. Don't scrub it. Don't do anything like that, you'll damage the tissues. Um, rinse it. And then if it's a finger or a toe or whatever, you want to keep it cold. Don't put it directly on ice, so like don't put it in a bag with ice cubes.

Justin: Mm-hmm.

**Sydnee:** 'Cause you don't want the, the... extremity to come into contact with the ice. Like, put in something and then put it— and then seal that. Like put it in a bag, seal that, and then put that in a bag of ice.

**Justin:** 'Cause the ice is dirty.

**Sydnee:** Well, no it's that the ice could damage the blood vessels and the tissues.

Justin: Okay, got it.

**Sydnee:** With direct content, so— Uh, direct contact.

Justin: Got it.

**Sydnee:** So, uh, you— if you have some like gauze or something to wrap it in, that's probably a good idea. Put it in a bag, put it on ice. The bag on ice. Take it with you. Keep it with you. Don't give it to your friend. Because you guys might get separated in an ambulance, whatever. Keep it on your person.

#### **Justin:** Pin it, pin it to your shirt.

**Sydnee:** [laughs] So keep the extremity. If it's a tooth, you could rinse it and actually put it back in the socket. Is a good place to store it until you get to the ER. Um, or even, this sounds like a choking hazard to me, but I've heard some dentists recommend like put it between your gum and your cheek. Like... keep it there, like a gumball.

Justin: I don't like that. I don't like that! Oh god, that sucks!

Sydnee: And you wanna get there as soon as possible. If you're, uh-

**Justin:** No kidding!

**Sydnee:** If your eye pops out of its socket, which it wouldn't like completely come out 'cause it's attached, but like if your eyelid is behind your eyeball because of some sort of injury, don't poke it back in. Just go to the ER. Um, and it always helps, if it's like— [laughs] If it's an eye— I mean obviously if it's an extremity, you're not gonna call ahead and be like "Hey, we're on our way to the ER. I've cut my arm off." Um, you're just gonna get there. But if it's something like your tooth or your eye, it might help to call and say "I'm on my way and this is the issue", so they can get the appropriate consultants on call, like there.

Justin: Got it.

**Sydnee:** But milk does not need to be part of the equation.

[pause]

Justin: [chuckles] So gross.

Sydnee: That was a long one.

**Justin:** "Hi Sydnee and Justin! I'm Laura, from Brazil, and every time you guys do one of these Q&As, I remember something that happened to me back in 2017. Out of the blue one day, after I showered, I noticed my chest and back were covered in red spots that didn't even itch. I went to a dermatologist and they told me it was..."

Sydnee: You wanna try it?

Justin: [pause] Pi-tee-ry-sis rosacea?

Sydnee: Close.

Justin: Piteerysis rosacea?

## Sydnee: Pityriasis rosacea.

Justin: "Pityriasis rosacea."

# Sydnee: Yeah.

**Justin:** "And that I'd just have to live with it for a few months and it would go away. So I wanted to ask, what's up with that? Why does it happen? Why'd it take so long for my body to decide I wasn't actually a dalmatian?"

**Sydnee:** That's a, it's a good question because this rash is actually somewhat common. Completely benign. I had a friend who got it in med school, a friend in med school who got it while we were in med school and, um, she thought it was incredibly cool, except hers itched. [chuckles]

## Justin: Oh.

**Sydnee:** And then she did not think that was cool. Um, that's wha— When you're a med student, that's what you think. Like, "Oh my gosh, I got that thing I read about! That's so cool!" Especially when it's, I mean when it's benign, you know.

Anyway, it is a self-limited rash. We think it's caused by a virus. There's been some studies that suggest that it's caused by one of the herpes viruses. There are lots and lots of herpes viruses, um, but not every time that they've biopsied one of the rash lesions have they always shown this virus, so were not for sure.

We think it's related to a virus. Basically you get what's called a "herald patch", which is a like two to five centimeter salmon-colored oval patch. Usually on your trunk, or— Like on your chest or your back or something.

## Justin: Yeah.

**Sydnee:** Somewhere like that. And then after a few days or weeks, you get more um on your trunk and chest, and then eventually on your proximal extremities, which means like your ar— the parts of your arms and legs closest to your body, generally.

## Justin: Okay.

**Sydnee:** Sometimes it's called a "Christmas Tree rash", 'cause it has like a sort of vaguely Christmas tree pattern on your back or chest.

## Justin: Okay.

**Sydnee:** It goes away on its own. It can take up to two to three months. Like I said, it's usually triggered by some kind of virus. You don't know that you had a virus though. A lot of people don't have any symptoms. Sometimes they'll say like "I think I had a headache and a sore through a few days before".

Um, sometimes they itch, other times they don't, and you really don't have to do anything. Um, if they're really bothering your or they're really itchy, they can prescribe like topical steroids for 'em, but a lot of the time it's just, just a weird thing that happens and then goes away, thank goodness.

**Justin:** Wow. Okay, well good to know. "I'm one those people who have a lot of moles on their skin. Uh, I've mostly made my peace with that, but not with the long dark hairs that often grow out of these moles. What the heck causes this? I feel like the crone from *Snow White*. Please help."

**Sydnee:** Uh, I like this question because I used— this was one of the things that I read about in med school to try to figure out too. Um, it's not that moles grow hairs. The cluster of cells that make a mole are just a cluster of melanin-producing cells, melanocytes.

Justin: Mm-hmm.

**Sydnee:** That's a pigment, right. That gives skin darker color.

## Justin: Yes.

**Sydnee:** And that's, you know, that's what make moles or freckles or skin generally a darker tone. Um, if you have a little cluster of those, and there's a hair follicle there...

#### Justin: Mm-hmm.

**Sydnee:** A hair will still grow from that hair follicle. But the presence of that pigment, that melanin, will make the hair that grows there darker.

## Justin: Darker.

**Sydnee:** And a little coarser than the hairs surrounding it. So it will look like the mole is growing an especially dark, coarse hair, but actually that hair was gonna grow there, one way or the other. The melanin has just changed what the hair looks like. Does that make sense?

**Justin:** Yeah. It makes perfect sense. It reminds me of, did you know this fact? A polar bear's fur is transparent.

**Sydnee:** I don— I don't think I knew that.

**Justin:** Kinda like the same kind of deal.

Sydnee: Wow. That is interesting.

**Justin:** Yeah, I read about it. Somebody subscribed the girls to this magazine called "Ranger Rick" and they subscribed our PO Box to it.

Sydnee: We like that a lot.

**Justin:** So, every once in a while, this *Ranger Rick* magazine shows up, and we love it.

Sydnee: And we learn things.

Justin: And we learn things.

Sydnee: Um, if it really bothers you, it's okay to pluck it.

**Justin:** Doesn't bother me— You shouldn't pluck a polar bear's fur, by the way.

**Sydnee:** No, no, no. Please don't pluck polar bears. I mean, if you have a hair coming out of a mole and it's really bothering you.

Justin: Mm-hmm.

**Sydnee:** If it doesn't bother you, that's fine too. You can leave it be.

**Justin:** Uh, "If I take two Tylenol pills instead of one, does it last twice as long? Or work twice as well? Would this go the same for other OTC pain relievers?" This is so weird, Sydnee! This is like a backdoor combo. *Sawbones*, uh, classic *Sawbones* overlap.

Sydnee: Yeah?

Justin: Because in our last episode, when we were talking about...

Sydnee: Oh, that's true.

Justin: This exact uh issue came up!

**Sydnee:** It's, well I think it hits on— We've talked about this before, or I've talked about this recently with you and some other people have asked me about like dosing of cold medicine, has been a question. Um, and you asked me this recently about an allergy medicine.

# Justin: Yeah.

Sydnee: "Can I take more of it?" So-

**Justin:** Well, it's `cause Charlie was takin' the same dosage of Claritin that you and I are.

Sydnee: Mm-hmm.

Justin: And that just seemed wild to me.

**Sydnee:** And what we know about medicines is that there is an effective dose, and if you take less that the effective dose for you— I mean you can look on the package, sometimes it's age based, sometimes it's weight based. Um, there are other things, if it's a prescription medicine, that your doctor may be making the decision based on; kidney function, liver function, et cetera.

But the point is, you need to take the effective dose for you for it to work. With a Tylenol, it really depends on, 'cause there are different strengths of Tylenol. Um, if you're not taking... It doesn't necessarily work better.

## Justin: Okay.

**Sydnee:** If you take more of it. You need to take enough of it for it to have the effect you need it to have. So, and once you hit that maximum effective dose, after that, the reason we don't take even more and get more effect and make it last even longer, is because there's a certain point at which the medicine is just, it's doing all it can do in your body. It's interacting with all the enzymes or receptors or whatever it is supposed to do.

## Justin: Okay.

**Sydnee:** It's doing all that it can, and taking more of it won't change that, it may just give you more side effects, which is why we have those maximum doses. So, taking two instead of one Tylenol, depending on the dose, may provide more pain relief, um but if you're already taking the maximum effective dose of Tylenol, it won't do anything other than cause more side effects. So, that's why it's really important to look at the dosing.

And don't just take one and think "Well, I'll be safe and ta—" Look and see what actually works. 'Cause I always hate when, you know, somebody is taking a medicine and, you know, every medicine has side effects, but they're not actually taking enough for it to do anything. You know, you want to take enough for it to have the effect that you need it to have. **Justin:** Yeah. Okay. Um, good to know. "Hey Sydnee and Justin. My question—" Please, it's Doctors McElroy. Please.

Sydnee: Hmm...

**Justin:** "My question is about the medical field—"

Sydnee: [quietly] It's not.

**Justin:** "— folks who are also influencers." Like yourselves.

Sydnee: I don't know— Is that me? [laughs]

**Justin:** And myself. "Do you think it's ethical to share stories about patient encounters for the sake of entertainment? Like sometimes I see stories where nurses or doctors are talking about embarrassing patient situations in a mocking or joking way, and I think to myself that if that was me, I'd feel pretty terrible, even though my personal health information is being protected. Do you think that HIPA will be updated in the future to include vague-posting about patients? Love you guys and all that you do. I wanna be y'all when I grow up. Abby."

Sydnee: Aww.

Justin: That's very sweet.

**Sydnee:** Thank you for that, Abby. I think this is a really important question to ask, because I've seen this too. Um... I won't say that I necess— I mean, I guess it's okay for me to say. I have reported some that I felt were...

Justin: [laughs quietly]

**Sydnee:** Well, I mean, I felt that they were over the line.

Justin: That's extreme— That's extremely on-brand for you.

**Sydnee:** I felt like it was unprofessional and it betrayed the confidence of the patient, even though... So, okay, I guess what we're gonna talk about is there are two different things; there's the legal part of this question, and there's the ethical part of this question.

Legally, if you're gonna talk about patient information, you need to deidentify it. You need to make it so that there would be no way, based on what I am telling you, that you could ever figure out who the heck I'm talking about, right?

# Justin: Mm-hmm.

**Sydnee:** And that's not that hard to do. I mean, it's very easy to do that. And, you know, there are certainly times where, once you've deidentified that information, it is valuable to share. For instance, sometimes I will ask a patient "Can I present, you know, your medical case, you as a case report, to my students or my residents? I think this is a good learning case, and there's some— You know, new doctors could learn to be better doctors from what you have experienced."

And in that educational setting, that's totally appropriate. You get permission. You present the information, you still don't give names, you know, or any other sort of identifiers, other than— You know, it's usually like an age and maybe gender and that's it.

**Justin:** This is like when I have a GI bug last week, and you were like "You're actually the sickest anyone has ever been."

## Sydnee: Hmm...

Justin: "I would love to present this case."

Sydnee: No... [chuckles]

**Justin:** "Because of how inspirational your story is, and how brave, what a brave boy you're being."

## Sydnee: No...

**Justin:** I remember you saying something along those lines.

**Sydnee:** And certainly, this is done in like research papers, right? There are lots of published journal articles, case report things where they use patients' cases and stories, deidentified again. And that's okay, ethically and legally. You get permission, you make sure to remove anything that would make the patient known.

Um, legally, it would be pretty easy to do that. I think that the problem— Now let me say, even with that, it would still be possible, without using someone's name, to give somebody away. Depending on where you live, how small your town is.

Justin: "So, I was treating this guy in the Oval Office, and uh..."

**Sydnee:** [chuckles] Well, or even, I mean if you live in a small enough area, it would not be hard, you know?

Justin: Mm-hmm.

**Sydnee:** So there's still ways that that could be problematic, but let's they're doing it in a way that, legally is okay.

Justin: Okay.

Sydnee: Then you get to the ethics of it.

Justin: Yeah.

**Sydnee:** And ethically, I mean, if we're talking about the oath that I took, there is no circumstance in which you can just share patient stories for entertainment value. Period.

Justin: Mm-hmm.

**Sydnee:** Now, I would say the professional standards of all the other healthcare professions, other than, you know, I am a doctor. I would say it's pretty much the same. Why would you? You know, we share stories about our patients to, um, for a consultant who needs that information, so they can take care of them too. We share those stories with students in residence so they can learn from them and become better at their trade. But why would I share... Especially if it's because if I think it's funny or embarrassing. I mean, there— If you wanna look at the ethics of it, the answer is no you shouldn't. You shouldn't do it.

**Justin:** I feel like we've probably shared some stories of, uh, ancient patients here on this show for entertainment value. We've probably run afoul of that, if you open the scope up to all.

Sydnee: Like Alexis Saint-Jane. [laughs]

**Justin:** That's right. Alex Saint-John, I think.

Sydnee: No. Saint-Martin.

Justin: You know. Austin Saint-John was the Power Ranger.

Sydnee: William Beaumont. Oh my god.

Justin: William Beaumont. Go ahead. I'll come up with them.

Sydnee: Uh-huh.

**Justin:** And? Alexis St-Martin.

**Sydnee:** Alexis St-Martin.

Justin: You had it right.

**Sydnee:** I had it in there. Okay. Anyway.

**Justin:** I was confused with the Power Ranger.

**Sydnee:** Yeah, well, now to be fair, William Beaumont wrote a whole book about that.

Justin: I mean... Okay...

Sydnee: [laughs]

Justin: I'm just saying, Sydnee...

**Sydnee:** But— [laughs] And like, named him.

Justin: Careful of your glass house.

**Sydnee:** No, I am saying that like, I will say things, and I have said this on this show so you can hold me to this, where I will say "I have seen patients, um, use this folk remedy before. I have encountered this condition before. I have had patients ask me this question before." And I think when you're using those sorts of general things, that's different than what I believe Abby is asking with this question.

Justin: Right, I understand.

**Sydnee:** 'Cause I know what you're talking about. I've seen these same posts.

Justin: That was being ornery.

**Sydnee:** "I've had this patient today that did the grossest thing" or "said the worst thing" or "Can you believe this embarrassing story that someone told me today?" And those, I mean, people get in trouble for 'em, that's the other part of this. Those people do get in trouble.

Justin: Because Sydnee reports them. [laughs]

**Sydnee:** Well, I don't call their boss. I just think like it's unprofessional behavior for— I mean they take those down.

#### Justin: Yeah.

**Sydnee:** I mean, if they find those, they'll take them down because it violates their professional standards. And a lot of people, I mean I've

seen the TikToks where people do get fired for this stuff. 'Cause they shouldn't do it.

'Cause exactly like you said, what if that's you? And what if you're scrolling through TikTok and you see a nurse, a doctor, you know, a physical therapist, whatever. A healthcare professional, who is entrusted with your secrets. This sacred thing. Your body, your health. And you see them telling your story and laughing about it.

Justin: Yeah. It's terrible.

**Sydnee:** That would be a terrible feeling, and so I think that there has to be a line there.

Justin: Uh, here's a line here.

Sydnee: Okay.

**Justin:** Right here. It demarcates the difference between the first portion of the episode.

**Sydnee:** And then the part after we go to the Billing Department.

Justin: Let's go.

[ad break]

**Justin:** "I'm lookin' to get a hysterectomy soon, and I'm lookin' for the lowest prices. Where—" No, that's not what it says. [chuckles]

Sydnee: No. [chuckles]

Justin: "I want it done on the cheap and I want it done quick!" No.

**Sydnee:** That's... the American medical system, right there.

**Justin:** "I'm looking to get a hysterectomy soon where only my uterus is removed and I learned that while I will obviously no longer have my uterine wall shedding monthly, my ovaries will continue to release eggs until I hit menopause. Where will the eggs be going? Are they just vanishing into my blood stream? Are the eggs gonna build me a new organ to bleed out of every month? [chuckles] What the heck are these eggs planning?!" That's from Hysterical, In The Fun Way in, well it's LA. Guess it could be Los Angeles or Louisiana.

**Sydnee:** Either way, don't worry.

**Justin:** No matter which state.

**Sydnee:** Don't worry. The eggs are released into the pelvic cavity and harmlessly resorbed into your body. It is fine. There is no problem. They just get resorbed.

Justin: Great.

**Sydnee:** It's a good question though. I bet a lot of people now, after hearing that, are going "Yeah, where do they go?"

Justin: Almost like a-

**Sydnee:** Yeah, they do release them and they do get resorbed.

Justin: Okay. Well, that's easy.

Sydnee: Nothing to worry about.

Justin: "Is it true you can get a UTI..." Or "ootie".

Sydnee: Nobody calls them "ooties".

**Justin:** "...from your body just deciding it hates a certain brand of lube or condom? Why do UTIs suck so much? Sorry if you answered this before. Love you guys and the show. Tasha."

**Sydnee:** So, um, you can't— I think this is always an important thing to talk about, because I talk about like... I like issues that have to do with... UTIs, sexual health, any vagina-havers, you know, vagina health. I think these are important things to talk about because for so long we haven't talked openly enough about them. And so, you get these sort of correlation but not causation kind of ideas about things.

#### Justin: Yeah.

**Sydnee:** Um, so you can't get a UTI, per se, from a new brand of lube or condom, because a UTI is bacteria that infects the urinary tract. The urethra, the bladder, the kidneys.

**Justin:** No reason to think that would be in a lube.

**Sydnee:** Right, right. It shouldn't be.

**Justin:** [chuckles] Let's hope.

**Sydnee:** But what can happen, depending on if you've tried a new brand of lube, condom, underwear, or tampon, or anything down there that might change the pH of that area, that might cause some irritation.

So let's say you used something that caused a little bit of irritation, either because your skin didn't like it, it reacted to it, or if we're talking about like friction. Yes. Any sorts of irritation around the urethra can leave it a little more vulnerable to infection. And so, if you're talking about those kin— That might be the association that you would see, um, but you know, you shouldn't get a UTI, you can't get a UTI directly from the condom, from the lube.

That is part of why it's recommended to void after, you know, penetrative sexual intercourse. And as far as why do UTIs suck so much. [sighs] Man, I don't know. They do though. All I can do is empathize with you. I've had them, they do suck.

**Justin:** Uh, "I was wondering what happens to germs after you use hand sanitizer. I know it kills 'em, but are the dead germs still on your hands?"

#### Sydnee: [laughs]

**Justin:** That seems like, they would be looking at their hands like [in an awestruck voice] "Woah, wait a minute. What happened to all the germs?"

**Sydnee:** I guess yes, I've never thought about it, but the dead germ [chuckles] pieces are still on your hands. The way that it works is the, uh, typically the alcohol component of the hand sanitizer dries out and, you know, explodes, ruptures, destroys, dries out all those little germs on your hands, and uh then they're just sort of— The pieces are just left there. But it's harmless now, because it's been dried out and killed. By [laughs] By the alcohol.

Justin: There you have it.

**Sydnee:** Which is also why it's a good reminder, when you use hand sanitizer, you put it on, you rub it all over, and then you wait for it to dry. Don't touch anything, don't do anything, until it's dried. It's the same thing like if you're using an alcohol swab to clean an area before you, I don't know, check a sugar or have to you know use a needle there or something, um wait for it to dry before you actually stick the needle in there.

**Justin:** Thank you to Bahia for that, um, truly, truly thought-provoking query.

**Sydnee:** I— I knew the answer, but I genuinely have never really thought about it before.

**Justin:** Uh, "Hi there! I don't know if you've already answered this before, but it came to mind since today it's a nice balmy 26 degrees Fahrenheit, why is it when you're cold your teeth clatter? Thanks for taking the time to read this. Love the show y'all do. It's good background noise as I crochet." Um... This— I got this one.

Sydnee: Okay.

Justin: Let me do this.

Sydnee: Okay.

Justin: Okay, it's your body, it's trying to like move.

Sydnee: Mm-hmm.

**Justin:** To... get some heat goin'. So you're like moving the cells around, and you're moving your mouth around, it's clattering. Please don't roll your eyes. Kind wi—

**Sydnee:** No, no, I'm considering.

**Justin:** Well, you're giving me like a "Uh, sort of, like sort of how a very intelligent warthog would explain it, I guess". But um, yeah so that's—It's your body trying to move to generate heat.

Sydnee: Uh-

**Justin:** Since all your teeth— You're shivering.

Sydnee: Uh-huh.

Justin: So your teeth clatter.

Sydnee: Uh-huh.

**Justin:** And the shivering makes your body [through clattering teeth] generate heat `cause you're shaking.

**Sydnee:** Yes. I mean yes, that is it. Your teeth clatter because you're shivering and the shivering is good for you.

**Justin:** Shivering is... wild!

Sydnee: Mm-hmm.

**Justin:** We don't talk about it enough. That's wild.

**Sydnee:** Your muscles are all rapidly contracting and relaxing in an attempt to generate heat. And it works! Do you know how much it works?

Justin: How much?

**Sydnee:** 500% more heat can be generated from visible shivering.

**Justin:** That's wild! Hey, hey everybody? Bodies are so weird! Do you know how wild it is that your body's like "Well, I'm getting' pretty cold. I better make this person sha— I'm just gonna shake."

Sydnee: Mm-hmm.

Justin: "Myself, involuntarily."

Sydnee: Make it shake.

Justin: "To generate some heat." [chuckles] It's wild!

Sydnee: Yeah.

**Justin:** We should have more self-defense mechanisms— I guess we have lots of them, don't we?

**Sydnee:** We do. We have lots of them.

**Justin:** But that's a wild one. That's a wild one.

**Sydnee:** It's pretty cool. It's, so, it's a good thing.

**Justin:** And that had to be evolved.

Sydnee: I mean, it doesn't feel good.

**Justin:** Do you realize that? That had to be evolved. That means one day, some cavepeople were standing around, and they were like "What is Paul doing?!"

Sydnee: [laughs]

Justin: "Paul?! What are you doing?!"

Sydnee: "Are you doing that on purpose? Stop it!"

Justin: "Are you doing that on purpose?!"

Sydnee: "Stop it!"

**Justin:** [imitates shivering] "I... can't!" "Hey Paul, and another thi—" [dying noise] Dead.

**Sydnee:** And then everybody else froze to death. Yeah.

Justin: Frozen to death.

**Sydnee:** And Paul was fine. And you'll keep shivering until either you get out of the cold, or you run— your muscles run out of glucose to do it. And then they can't. That's not good. I'd get out of the cold at that point.

Justin: Or get some glucose. [wheezes] I guess.

Sydnee: Well, I mean, if you have the ability, I would get warm.

**Justin:** "Where does the vaccine live in your body? Is it at the injection site? I've heard that vaccines delivered under the tongue or nasal sprays can be better, 'cause that's where the immune response takes place. If it does stay at the injection site, what would happen if I had that arm amputated?" That's from Kevin. [chuckles]

**Sydnee:** Uh, the vaccine does not stay at the injection site. Once it is taken in, um, by your body, taken in by your cells, it is, you know, transmitted through the blood stream all over the place. Um, it gets to all of your lymph nodes, it gets to everywhere you ca— that's where you make, you can produce your immune response in your lymphatic system, so it gets taken up there and it's all over your body pretty quickly. Like, it's spreading pretty fast.

So, I think this an interesting thought exercise. So it doesn't live anywhere per se in your body. It goes to all of your, you know, your lymphatic system.

## Justin: Mm-hmm.

**Sydnee:** Where you start producing an immune response. Antibodies and B-cells and T-cells against whatever virus you've been immunized against. The pieces of the vaccine, by the way... poof! Your body destroys them. They learn what they needed to learn, and then it all goes away.

## Justin: Crazy.

**Sydnee:** Yeah, so all that part just gets resorbed by your body and is gone. So like, the whole idea that the MRNA or the lipid layer around it lives in your body, no, it's all gone after it's done what it's supposed to do.

Um... How quickly would you need to amputate an arm... [chuckles] Before it could get your immune syst— I don't know, I mean it's an interesting thought exercise.

Justin: [breathes in sharply] You wanna get serious about—

**Sydnee:** Like, if the second you injected the vaccine, somebody whacked your arm off...

**Justin:** Speaking of detoxing from the vaccine. [laughs] I guess that's what— [chuckles]

**Sydnee:** I don't what you're doing it though.

**Justin:** De-axing the vaccine, really.

**Sydnee:** I mean, I guess there is— Certainly there is a time that would work, right? Like `cause it's not instantaneous. It doesn't instantly...

Justin: Yeah.

**Sydnee:** ...appear everywhere in your body all at once.

**Justin:** This is, we don't. We don't need to know this.

**Sydnee:** No, there is no reason to consider that.

**Justin:** There's no reason to consider this.

Sydnee: I just thought it was a thought exercise, but no.

**Justin:** It's an interesting thought exercise.

**Sydnee:** It doesn't live in your arm.

Justin: There's no reason for it.

**Sydnee:** You can't get rid of it once it's in there, you can't detox from it. And you don't want to! 'Cause it's gonna protect you from serious illness and death.

Justin: Ah, here she goes again. All this vaccine stuff.

#### Sydnee: [chuckles]

**Justin:** "Last September, two days after getting my flu shot, I came down with bad gastroenteritis that lasted about a week. I have no idea if it was food related or a side effect of the vaccine, though I've never had such a

bad reaction. Made me wonder; how bad is a vaccine if you're sick with an unrelated illness right after you get it? Would a weakened immune system that your body doesn't effect— mean that your body doesn't effectively learn how to fight the actual flu? Do I need to get a second dose?" That's from Stomach Troubles in Silver Spring.

**Sydnee:** No, the good news is that— Well, first of all, whether or not this was a side effect of the vaccine. I wouldn't think so. It would be very unusual. You know, that's not listed in the very— the more common side effects, so I wouldn't think it was the vaccine. I would say it was probably just bad luck, you got a GI bug soon after you got the vaccine.

Um, that being said, it will not change at all your ability to react to the vaccine. You should still be just fine. Our bodies are amazing in that we can ramp up immune responses to multiple things when our immune system is intact. And so there's no reason to think that just because you got a GI bug after a vaccine that it isn't working, it isn't protecting you, or that you necessarily need to get a second dose.

**Justin:** "Hello. This might seem like a silly question, but can a uterus turn inside-out? I vaguely remember watching some show, *E.R.* or *Grey's*, when I was in middle school. In the episode, a woman delivered twins and then her uterus turned inside-out, and then she died." Frowny-face. [chuckles] "Uh, I know not to—" I'm not laughing at anything but the frowny-face. It just struck me as, as funny.

#### Sydnee: Sure.

**Justin:** Uh, "I know not to put much stock in the accuracy of TV dramas, but the idea has always kind of haunted me, popping back up whenever I have particularly bad menstrual cramps. So, is such a thing possible? Thank you, Megan."

**Sydnee:** Yes, an inverted uterus— uh, complete uterine inversion, I should say, is something that can happen. Um, that being said, I do want to reassure Megan and anyone who has bad menstrual cramps and might hear that, it is not something that would happen spontaneously. That is not the reason it happens. Generally, this is only something that would be related to a delivery.

So, in the example you gave, I don't think I've ever seen that episode, but um, somebody who just had twins and then had a uterine inversion, that could happen. Um, there are multiple reasons why that might happen during a delivery. All of them are sort of something gone wrong.

#### Justin: Mm-hmm.

**Sydnee:** It's not just part of the process.

Justin: Okay, right.

**Sydnee:** This isn't just part of delivering a baby, this is the result of a problem that has occurred.

Justin: A natural, beautiful part of the-

**Sydnee:** No. No, but it is exactly how you've described, the uterus basically turns inside-out in the birthing process. This is, again, an uncommon thing, very uncommon. It is an emergency and does need to be fixed immediately because it can cause a lot of bleeding. Um, and so... it is possible that you could die of this, if it is not managed immediately.

Now as long as you are somewhere where you have access to immediate medical care, um... a doctor who knows what they're doing, or an OR if necessary, it can be fixed and, you know, it does not need to be fatal. But it is a uh...

Justin: It's not good.

**Sydnee:** No. It is an uncommon but catastrophic event when it occurs.

**Justin:** "Feels like this could be learned about in a much more subtle way than an email with my actual real name to a very popular podcast, but here we are. I have a question about my body that I'm not sure if it belongs with *Sawbones* or *MBMBaM*. How come I sneeze when I get horny? It's almost like a reaction to it, and it's exclusively when I'm thinking about being intimate with someone I care about, rather than say looking at porn. It happens once, maybe twice, and then I just carry on."

Sydnee: [chuckles]

Justin: I don't know what else you could do. [wheezes]

Sydnee: [chuckles]

**Justin:** "And then I die from it. 'Cause I'm so horny, I die from it." [continues question] "And thankfully it's not like snotty. I also sneeze when I look at bright lights, which I know other people get and might be relevant, but I've obviously never broached this question with others about this particular erection." Sorry "reaction". Sorry, I misread. "Thanks! Nasal in Nottingham." That's right, Nasal in Nottingham. We've protected your identity. We uh...

Sydnee: I love this question.

Justin: Haven't doxxed you.

**Sydnee:** I love these kinds of questions. These are for me like the heart and soul of these episodes, are questions that are "This is something that is completely benign", in the sense that you're gonna be okay. Now I'm not saying that it might not be very annoying or frustrating for someone who has it, but it just speaks to how... amazing but also just weird—

Justin: Weird.

**Sydnee:** And sometimes inconvenient the human body can be. Just like "Gosh, why?"

Justin: "Here's an inconvenient truth; when I sneeze, I get horny."

Sydnee: [chuckles]

Justin: Or! Do yo- Does sneezing make you horny?

**Sydnee:** No, it's not when you sneeze you— No, it's not sneezing makes you horny, it's when you get horny you sneeze. This is the thing—

**Justin:** What you need to find is two people who have, who have those interlocking things. When you get horny you sneeze and sneezing makes you horny.

Sydnee: Ooh ...

**Justin:** And you have those two people get together.

**Sydnee:** That's a very graphic interlocking you're showing me while... we're doing this.

**Justin:** It's two fingers kind of meeting— You can imag— Four fingers, two on each hand, and they're kind of... I'm just saying—

Sydnee: Anyway.

**Justin:** It'd be nice if they could meet each other. Just seems.

**Sydnee:** Simulated finger sex acts aside.

Justin: Just seems romantic.

**Sydnee:** Sexually induced sneezing is a thing.

Justin: Okay.

**Sydnee:** This is a known entity. There are case reports of it dating back to 1875. There have been doctors going "Someone told me the strangest thing today". See, and these are published case reports, so these are okay ways to...

Justin: Okay, yes.

**Sydnee:** Convey medical information.

**Justin:** Sexually-induced sneezing is a thing.

Sydnee: Mm-hmm.

**Justin:** Sneezing-induced sexing? Not. As far as we know.

Sydnee: Not that I, not that I know of.

Justin: Okay.

**Sydnee:** And, um, these cases have varied from people who sneeze while engaging in the sexual act, upon orgasm, there are some people who upon orgasm will sneeze repeatedly, uh, or simply thinking about a sexual act. So, sexual arousal. You know, like you said, thinking about having sex with someone. Um, it could be, in some people, from watching porn or reading sexually explicit material.

Um, it may have a genetic component. There is some thought that there is some sort of gene, and I'll get to why in a second, but uh it is probably related to just a strange wiring of the autonomic nervous system. Our autonomic nervous system is... [sighs] It's old and it's weird. It's one of the— [chuckles]

## Justin: It's old?

**Sydnee:** Well, you know, when you talk about like the "how did humans evolve?", the autonomic nervous system is one of the earlier things, and it's just it's old and it's weird, uh, how some things were connected in like the early life forms that would eventually beget humanity. Um, and they never quite became disconnected, even though they have nothing to do with each other anymore. So is it possible that there are pathways that connect your nasal tissue...

## Justin: Mm-hmm.

**Sydnee:** With your pelvic... organs...? Yeah. I mean, that— I don't mean like directly. Not that there's a string connecting—

## Justin: No.

**Sydnee:** Between your nose and your penis.

**Justin:** A tube or something, yeah.

**Sydnee:** But I mean like something that like some wiring where when one gets activated, a nerve down there gets activated and vice versa, yeah that can happen, and does. Um, there is a whole article about this that I did find. "Sneezing induced by sexual ideation or orgasm: an under-reported phenomenon" by Mahmood Bhutta. So if you're interested, you could look up this whole article and read it. I found it for free on the internet, you can read it and learn more about your own condition.

'Cause it's mainly from case reports. It's not thought to be dangerous in any way. Um, and it can, uh, from what I've read, it can be improved with like a nasal decongestant. Something like Afrin. I'm not, I'm not paid by Afrin, but that's the most common of those I think people know. Um, which I wouldn't advise using a lot of, we talked about that on the show before.

#### Justin: Right.

**Sydnee:** But if you needed to use it prior to sex. [laughs] Um, to avoid sneezing when you orgasm, there is some thought that perhaps that could help with it. Um, although I don't know for sure. And, as you said, there is something similar to that in the photic sneeze reflex, which is sometimes called Autosomal-dominant Compelling Helio-ophthalmic Outburst, or "ACHOO"—

Justin: Stop it. Guys.

**Sydnee:** — syndrome.

Justin: I try to go to bat for you science people, but...

**Sydnee:** Which is when you sneeze when you look at bright lights. Specifically sunlight, but any kind of bright light, um, and it could affect as much as 24% of people! It's just we don— You don't tell your doctor about it.

I mean, most people don't think to like make an appointment so they can go say "You know, like three weeks ago, I looked at the sun and I sneezed. What's that all about?" And honestly like, I could say, in the middle of a busy day, if somebody told me that, I'd be like "I dunno, man". [chuckles] "I don't know." [laughs]

Justin: Uh, that's actually a...

**Sydnee:** "But you did cut your finger off and you put it in a bag of milk and I'd really like to address that first." [laughs]

**Justin:** [chuckles] That's actually in um... That episode, "The Nightcrawlers", uh *Pete & Pete*. Remember?

Sydnee: Oh, yeah.

Justin: When they're all trying to stay up late, and I think it's...

Sydnee: It is a—

**Justin:** One of 'em, one of 'em, I figure— I think it's Libby? One of the girls on "The Nightcrawlers", when she looks at the sun, it makes her sneeze and that keeps her up. And then—

Sydnee: That is a very—

**Justin:** — eventually the sun goes behind a tree and she falls asleep.

**Sydnee:** That is a very well-documented syndrome, many people do have it. Again, it's benign. It just makes—

Justin: It's not well-documented.

**Sydnee:** — you sneeze.

**Justin:** It's poorly documented, 'cause part of the documentation was calling it "ACHOO".

Sydnee: [laughs]

**Justin:** Do you know how long those nerds must have high-fived each other? Like "We did it!"

Sydnee: And that's-

Justin: "We finally did it. It's so funny!"

**Sydnee:** That is part of why we think it's probably one— this other condition might also be genetic 'cause this, um, ACHOO is. And two, this is also theorized to be some sort of wiring issue. And I don't even want to say like miswiring or whatever. Who knows? Sometimes we—

Justin: Maybe everybody else is weird. [wheezes]

**Sydnee:** Well, maybe there's a good reason— Think about this. It's not good for your eyes to stare directly at the sun. We all know that, right?

Justin: [while yawning] Right.

Sydnee: And what happens when you sneeze?

Justin: You s-

Sydnee: You close your eyes.

Justin: You close your eyes.

Sydnee: Think about it.

Justin: There it is. Think about it.

Sydnee: [laughs]

Justin: Okay.

**Sydnee:** Maybe, maybe there are evolutionary advantages that we just, we don't even understand.

## Justin: Case-

**Sydnee:** The human body is so much more complex than we give it credit.

**Justin:** Case closed, and also episode closed. Thank you for listening to our podcast. It's called *Sawbones*. Listen, we're coming up on, it's almost time for that special time of year, Candlenights, which may have already begun or it may be over, it's different for everybody, so you really need to look into your heart and see. But I will say, if you wanna watch a Candlenights video special... okay?

**Sydnee:** I'm so proud of this.

**Justin:** Yes, it is our virtual Candlenights special. It's going live December 18<sup>th</sup> at 9pm. It is a pre-taped video spectacular, benefitting Harmony House. Tickets are on sale now for just \$5, and there is an option to give more. So if you can, for Harmony House, please do that. It is, as Sydnee will attest, a wonderful organization. Bit.ly/candlenights2021. There's a VOD that will be available until February 22<sup>nd</sup>. There's segments from *My Brother, My Brother & Me, Sawbones, Schmanners, Wonderful!, Still Buffering, Neat.* Uh, the *Sawbones* I just finished, and if you've been following the *Medicine Called Christmas* saga, um...

**Sydnee:** There's a whole new chapter for you.

**Justin:** There's a whole new chapter and it's like 15 minutes long. [wheezes] It's— We worked way too hard on it!

**Sydnee:** I wrote, I wrote parody songs again, so that's back up in there, for *Still Buffering*. And, um, Harmony House is a wonderful organization that really, all through the pandemic has continued to do amazing work and serve our community, people facing homelessness, and um really needs as much support as we can give. So if you're able to, it really means the world to us and to this wonderful organization.

**Justin:** Bit.ly/candlenights2021. That's gonna do it for us. Oh, thanks to the Taxpayers for the use of their songs "Medicines" as the intro and outro of our program. And thanks to you. For listening. We love you. That's gonna do it for us. Until next time, my name is Justin McElroy.

Sydnee: I'm Sydnee McElroy.

Justin: And as always, don't drill a hole in your head!

[outro music plays]

[ukulele chord]

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