

Podcast: Impact on U

Host: America Cox

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Impact on U Episode 3 Transcript

Cox: Welcome back to the Impact on You podcast. This is America Cox. And today we are taking another deep dive into air pollution and its health impacts. This is our concluding episode. And just as a little recap, we started off with Bauer introducing the issues of the Great Salt Lake drying. Then we went to Kailey, who demonstrated the geographic and historical impacts to different community exposures.

Cox: And now I'm going to show yet another community impacted by the air pollution athletes. Utah generates top notch athletes. I mean, 83 members of the 2026 Olympics had ties to Utah. However, Utah produces athletes for all seasons in 2022. Utah was ranked fourth in the nation for highest concentrations of athletes per 100,000 jobs. Sports can provide a personal fulfillment, a shared community, and a profession.

Cox: We hosted the 2002 Olympics and will be hosting the 2034 Olympics. With all of this excitement approaching the global stage so close to home. What will the air pollution here do to these athletes? Bauer interviewed a student athlete at the University of Utah swim team to get an insider perspective of exactly the impact air pollution has on athletes.

Anderson: All right. I am here with the one and only Evan VanBrocklin. Evan, if you want to just introduce yourself who you are and what you do.

VanBrocklin: Well, hi. I'm Evan VanBrocklin and I swam for the University of Utah, and I also do some research on the site. Amazing. And thank you so much for taking your time to be here today.

Anderson: So today we're going to be talking about air quality here in Utah and how it specifically impacts athletes. So to start as an athlete, when did you first realize that Utah's air quality was affecting your breathing?

VanBrocklin: I first realized when I was diagnosed with asthma, I was nine years old. And for context, I started swimming when I was three. I started in Vegas and I moved up here, and I remember I was in practice and for a long period of time I was really struggling to breathe. So my parents brought me in to the doctors, and the doctor explained that my asthma, that the diagnosis came most likely from the Utah winter inversion. The air pollution in our valley.

Anderson: Yeah, that that is interesting and quite frankly, pretty concerning. So with that very bad air quality, what does it actually feel like on a day where it's really bad, especially, you know, going through practice and training?

VanBrocklin: It feels like you're drowning. Having asthma, first of all, is not great. It feels as if you are trying to run, but you can only breathe through a straw. And there are days where we

swim and they open the doors to give us, quote unquote, fresher air. And on days that it is really smoggy out, it feels as if there are tiny shards of glass actually in your lungs cutting you up. I kid you not. It feels like you're drowning, but with a little bit of a sharp touch to it.

Anderson: Yeah, that sounds brutal and that miserable to deal with day to day. Do you have a moment that stands out like a frustrating or scary experience you've had competing because of your asthma?

VanBrocklin: Yes. I will never forget when I was ten years old, I was competing at the summer championships in Cedar City, and I was already a little bit sick at the time, which is also adding extra stress on my lungs because they're inflamed from an infection. So I remember going into this race feeling a little nervous, but ready to go, and then it was the 200 fly. And if you don't know that in swimming, that is the hardest race, I'd argue. You are breathing very hard. And I remember getting to halfway already, feeling like I can't breathe at all. I was genuinely scared for my life, but I finished the race and I was breathing hard, and my heart rate was probably over 200 for the next 30 minutes. I cried after that race. It was genuinely traumatic.

Anderson: That's honestly terrifying, especially at that age on that big of a stage that's miserable to deal with day to day. And with that, has asthma changed the way you prepare for meets or practices at all?

VanBrocklin: It does. Now I'm on medications that I take twice a day, and I have a rescue inhaler. At this point, I'm pretty reliant on my rescue inhaler for just about every practice, and especially

around summits. I need to use that inhaler a lot. And it also doesn't help that the pool has chemicals in it. That's also it even harder to breathe. So it's getting behind the block, getting ready for my race, always having my rescue inhaler on me. It is an annoying thing. I do need to also monitor before a race. Yeah.

Anderson: Now, with sports there's always that no excuses mentality. Have you ever had moments where you've just had to push through breathing issues, because it seemed like stopping really wasn't an option?

VanBrocklin: Absolutely. That's a very good way to put it. And I also push myself very hard. I will never stop in the middle of the race. And if I'm in a race where I can't breathe, I'm just gonna deal with it. It sucks because I am trying as hard as I can, already gasping for air, and then I realize I'm only halfway through the race. It is very painful, and it's actually scary too.

Anderson: Wow. I couldn't even imagine that. That sounds absolutely terrifying. Especially mid-race. That's, that's tough to hear. And I gotta say, the fact that you've been able to excel like this in swimming while dealing with asthma is very impressive. I just have to say that, but shifting gears a little bit, I'm sure you've heard about the dust that's coming from the Great Salt Lake.

Anderson: As an athlete and just a resident of Utah, does that concern you, independent of me being an athlete?

VanBrocklin: That does concern me. I'm not sure I want to live here when there is ancient, toxic dust that is being uplifted from the Great Salt Lake as it's being dried out, that is going to cause many more health concerns down the line. And as an athlete who has asthma, that is especially concerning because that affects me more. It's already bad enough that our air pollution is damaging my lungs day to day, and then having an additional toxic dust on top of that. It's terrifying.

Anderson: Yeah, it's it is scary to think about, especially in your case where you have all of these things stacking on top of each other, like things you're dealing with. Combined with that. But but when you think about the future of Utah's air and the lake drying up, what do you think is at stake for athletes and just people in general?

VanBrocklin: I think there's a lot at stake, and I think there's a lot of more, many more health concerns to come. For athletes, and especially I mentioned earlier, we're being pushed harder and harder as every sport is becoming more and more competitive. And we are ambitious. We are trying to go up in the ranks and I feel like pushing us more, and especially with all this new pollution and this toxic dust from the Salt Lake, it's just adding more and more stress on everyone mentally and physically especially. And I think I'm worried really for the future, especially for athletes.

Anderson: Yeah. And also something, I wanted to mention, you mentioned it before we started recording. Even when you're swimming indoors, the outside air is still coming in. So it's and it's

not even really filtered. Right? I would honestly argue it's worse than the outside air. Explain why. So the air we get is either when the doors are closed or either pumped in from just outside.

VanBrocklin: I don't know if there's any filters, but it certainly doesn't feel like it. And that is also to keep in mind chlorine in the water. While we are swimming, we are inhaling toxic chemicals, carcinogens. Could you not? On top of all the air pollution and dust that we're getting. So I think being inside is even worse because all the chemicals from the pool stay inside the building. I don't think they do a very good job at pumping it out. And there are some practices where they do open the door up to give us, you know, fresher air, but it doesn't do anything to help. So we are just in this cesspool of chemicals when we're working out as hard as we can, breathing, getting in every ounce of the chemicals is very harmful.

Anderson: Well, Evan, I really appreciate you taking the time to talk about all of this. And I it definitely paints a bigger picture of what athletes specifically here dealing with, especially those managing asthma. On top of everything else. So yeah, thank you so much again for doing this. And I appreciate your time.

VanBrocklin: Of course, thank you.

Cox: Yikes. Looks like Evan is not alone in the concern for air pollution. With red air days and asthma making life difficult. I'm sure that you can think of an instance where you were moving outside, and it got really hard to breathe really fast. I mean, from running the mile in high school to even taking the track across campus, it can be pretty difficult.

Cox: The prevalence of asthma in Utah has remained above the national average throughout the 21st century, and this makes it harder for people to breathe the already difficult to breathe air.

Kailey interviews the experts to determine what it means to be breathing all of this in for athletes overexerting themselves, including asthma impact and where all this pollution is coming from in the first place.

Gilbert: This is Kailey Gilbert from the University of Utah. Air quality and health are hard to talk about independently. Their stories are intertwined. Pollution is a big, big, big problem for those of us with asthma and even healthy people. This is Andrea Jensen. She's the founder and director of Asthma Club LLC with certifications in public health and asthma education. She also has asthma.

Jensen: So this is kind of a normal person. This is your bronchial tube. This is your airway. And you can see how open that is.

Gilbert: She holds up a paper tube with elastics loosely crossing over the top.

Jensen: So as you go along and you get your body gets annoyed by things, you start develop this mucus. So a lot of people might start coughing up stuff in the morning. This is what happens when you have asthma. This is what you breathe through. And then this is what I breathe through.

Gilbert: This time she holds up a pool noodle representing inflammation with elastic, squeezing the hole almost closed. And this is what most people don't realize is swelling is what happens inside the lungs.

Jensen: This is what those of us with asthma deal with every day. The other problem is generally when we're having an asthma attack is these bands, these smooth muscles around the outside, they tighten and they shorten and they squeeze from the outside. So you can see how much that is squeezing versus a normal person. If you have something like this going on and then you get Covid on top of it, or you're outside into some high air pollution day and you're breathing in those particles, that's really going to affect the lungs. And that can easily lead to a lung infection. It's unclear what exactly causes asthma. In some cases, it's genetic. In others, it can be developed. Asthma caused by bad air quality is possible. In other cases, air quality just worsens. Symptoms. Olympic athletes can actually develop asthma because of their intense and prolonged exercise regime. So they didn't have it before, but they can actually develop it as their training and competing.

Gilbert: The article Andrea shared shows that people who practice heavy endurance sports are often more vulnerable to developing asthma. Olympic athletes specifically were mentioned in this study. And with the 2034 Winter Olympics coming to Salt Lake, bad air quality days could put endurance athletes already at risk of developing asthma at an even higher risk. Not to mention the other health impacts of bad air quality.

Gilbert: So I'm going to look over for a second. We have some data from American Lung Association. And air pollution can harm children and adults in a variety of ways. So with respiratory you can cause coughing and wheezing, shortness of breath, chest tightness, asthma attacks. If there's someone with COPD that will get worse, it can make asthma. Her list goes on.

Gilbert: Listing impacts of bad air quality on both people with asthma and those without it, including strokes and premature death. So we know air quality has health impacts. We know it can cause or compound symptoms of asthma. But who were the contributors to air pollution in the Valley? I went to the University of Utah campus to speak with Daniel Mendoza, an air quality and atmospheric science researcher, to find out more.

Mendoza: It's early March and it's been raining off and on through the morning. It's a good air quality day. The air is fresh and smells like rain. The birds are singing, and all the gunk that's been suspended above the city has been temporarily washed away because of the rain.

So, like most urbanized spaces, we have, I would say that approximately 50% of pollution comes from the on road sector, which are cars. A very rough breakdown, and it's very pollutant specific, but just sort of an overall top view. 50% would be from cars, about 30% would be from building, and the remainder, about 15% is from industrial sources. And then the remainder is from other sources such as airports, railroads. But people aren't the only source of pollution. Now, one of the issues is that when we see what's happening in terms of what we could almost call natural pollution, meaning it's not directly our combustion. So, for example, we see more wildfires. We see a higher amount of dust events any time the greater lake recedes. We see more dust storms. These natural pollution events are escalating. Whether it's the relevance of wildfires or more

frequent dust events from the Great Salt Lake here and the the part of it was very science, as we have a long history of having had a camera on our older building, the WB building, which is just a stone's throw away from here. And we're able to actually see this, for example, many times we can probably see it in our own cars when we really look at the windows and they're all coated in dust. Some of that could be from the Great Salt Lake. Through this podcast series, we've talked a lot about the doom and gloom surrounding these health and environmental issues.

Gilbert: It's clear that air quality and the decline of the Great Salt Lake are issues we need to be concerned about. So is there still hope? I asked Doctor Mendoza what keeps him looking forward to get to potentially more regulation or really try to improve our air? We need to show that there's a direct economic cost of poor air quality.

Mendoza: So when we start to now add dollars to the equation, it makes a lot more sense. We need to also take accountability, because we actually are responsible for a large fraction of the pollution of our own immediate environment. Of course, outside factors like if you live next to a factory or a highway would also contribute to these health impacts.

Gilbert: And Doctor Mendoza validates these concerns. Even so, he thinks the responsibility for creating cleaner air belongs to everybody. He talks about the importance of education, teaching peers and neighbors not to idle your car while checking your phone. Being mindful about where and who pollution might be impacting and taking individual accountability to drive less, walk more, bike more, or take public transportation.

Fairborn: I love the quote. If you assume there's no hope, you guarantee that there is no hope. And limiting self belief can be one of the most toxic things, not only for your own personal life, but for us as a collective.

Gilbert: This is out of Fairborn from the Utah Rivers Council. We heard from her in an earlier episode, but hope to me is knowing that like there's a dark future, but like, I can do something to make it better.

Gilbert: The biggest thing I've taken from these conversations is that there is hope in community. Grassroots efforts, bottom up education, local organization events, and self-empowerment are common themes that have come up time and time again. Is it fair? The responsibility of changing the status quo is on each of our shoulders. That's up for debate, but empowering our own action and organizing within community has the power to produce change. This is Kailey Gilbert reporting.

Cox: And with that, Kailey gives us a view into what is really going on in day to day life that we might not see happening, but we sure do feel it every time we breathe in that smog. Before I close out our third and final episode, I would like to take a minute to iterate a message that we all hope that you were able to take away, and definitely that we learned along the way, is the massive community support that there is for this issue.

It's so easy to feel alone when you look outside, and there's so much smog that you can't see the mountains, or you're going for a run and all of a sudden it's harder to breathe than it was yesterday. It's really easy to feel alone as you can't control the air. And sometimes it just feels like you have to accept that we're kind of being poisoned a little bit every day.

But that's not necessarily the whole story. You can find a group. There's lots of grassroots efforts. Bauer talked to the Westside Coalition. Kailey talked to the Rivers Council and I myself talked to a member of us. There are so many communities out there that you can join and try and make a difference. Because when we make a big enough of a force, that's when change happens.

It's the squeaky wheel that gets the grease right. So at the end of the day, we really want everyone to know that, yes, this is a problem. It does have an impact on you, but in turn you also have an impact on it. So in efforts to make the air the most breathable and cleanest, brightest future for all of us and the future athletes for the Olympics and the next generation as a whole, please remember when you are outside, how you can make an impact on the air. And with those closing remarks, I hate to say it, but it is time to say goodbye. Thank you for listening along in all of our episodes, and we hope that you enjoyed it and you learned something along the way. This is America closing out on impact on you.