November 21, 2024 / Robert Fluoride Kennedy, Jr

[HALF SECOND OF SILENCE]

[BILLBOARD]

NOEL KING (host): Keren, did you ever do any, like, ✨theater ✨as a young person?

KEREN LANDMAN, MD (Vox senior health reporter): I… I did. <laughs>

NOEL: Good! Yes, I knew it.

KEREN: <laughs>

SCORING <Saloonhop>

NOEL: Okay, guys, I have pulled a section from your piece. It is two lines.

KEREN: Yeah.

NOEL: And I'm going to have you read those lines with feeling and…

KEREN: Feeling!

NOEL: … with nuance….

KEREN: Nuance!

NOEL: This would come at the top of the show in the billboard. It's going to be your voice coming out.

KEREN: Wow.

NOEL: Amanda, can we get those lines to Keren? …

SCORING BUMP

KEREN: Alright. <big breath> No matter where a person stands on the political spectrum, they can probably find something to agree with Kennedy on. He's the personification of the growing distrust of science and the public health establishment that many Americans have felt in the post-pandemic era.

SCORING BUMP

NOEL: Robert F. Kennedy Jr., Health and Human Services Secretary? Coming up on Today, Explained.

[THEME]

*<CLIP> PATRICK BOYD: Hey, I’m Dr. Boyd. I’m gonna listen to your heartbeat real quick.  
HEART: Today. Explained.*

NOEL: I’m Noel King. Dr. Keren Landman did not make it as an actor. Instead, she’s a senior health and medicine reporter at *Vox*. She is also a physician and epidemiologist. Keren, what is this job, Secretary of the Department of Health and Human Services?

KEREN: This job is overseeing a bunch of federal agencies that have a lot to do with health, including but not limited to the CDC, the FDA (or the Food and Drug Administration), the Centers for Medicare and Medicaid, the Indian Health Service. Lots and lots of important agencies that, together, really chart a course for the health of our nation.

NOEL: And we're told that RFK is an unorthodox pick for this job. What makes him so unorthodox?

KEREN: He has a lot of beliefs about health-related issues that are based in conspiracy theory lore:

*<CLIP> ROBERT F KENNEDY, JR, MARK HYMAN PODCAST: 2006 marks the date when suddenly gluten intolerance starts exploding, and celiac disease…*

*<CLIP> KENNEDY, DEFEAT THE MANDATES RALLY: They are putting in 5G to harvest our data and control our behavior…*

*<CLIP> KENNEDY, LEAKED AUDIO: Covid-19 is targeted to attack caucasians and, and, and Black people…*

KEREN: And I think kind of at the heart of that is a distrust of the scientific process and of the people who do it and a tendency to really confuse causation with association. You know, the fact that two things kind of happen at the same time in the same place, to him, is proof that one caused the other…

NOEL: Hmm.

KEREN: …where the whole scientific process exists to disentangle those things from each other. And science really drives a lot of the way America's health agencies function. And he fundamentally distrusts the process that makes science. So this is a person deeply at odds with the way that these organizations function.

NOEL: You have not said the word “vaccines” yet, but I feel like that's what we're headed toward. Talk to me about this gentleman's history of vaccine skepticism. Where does it start?

KEREN: I mean, his involvement with it starts in the 2000s. He had been, prior to that, an environmental lawyer. He'd done a lot of work with cleaning up polluted water systems.

*<CLIP> KENNEDY, UCHICAGO SPEAKING ENGAGEMENT: You know, coal claims to be cheap and clean. When they say they’re clean, we know that they’re – that’s a dirty lie. <audience laughs> When they say they’re cheap, that’s also a lie… <fade>*

KEREN: A group of people with the World Mercury Project reached out to him to see if he would help them push back against vaccines. Basically, they felt, on the basis of some since-disproven research purporting to link vaccines with the presence of a preservative in vaccines that did contain a little bit of mercury, long since not present in vaccines anymore. But they asked him to get involved in informing the public about the scourge – quote unquote – of thimerosal and and of mercury in vaccines and its impacts on health. (Again, not proven by science, not really rooted in reality.)

NOEL: Hm.

KEREN: He got involved with this group, eventually became its head and it has now changed names to the Children's Health Defense. [It] arguably has been one of the most influential groups in anti-vaccination advocacy worldwide. He became the face of it internationally and brought his platform, his, you know, his fame, a lot of money and a lot of attention to their cause.

*<CLIP> KENNEDY, PBD PODCAST: If science is so overwhelming on the link between vaccines and autism, it needs no further research. The research is out there… <fade>*

KEREN: I think he has seeded doubt in a million different ways on the utility and the life-saving nature of vaccines, which, you know, by the way, we should just say have saved hundreds of millions of lives worldwide. So, you know, he's cast doubt on the process of creating them in the process of administering them and of recommending them for decades in so many different ways.

NOEL: What are some of his other ideas that don't overlap with the scientific consensus?

KEREN: Oh, gosh. You know, he said a lot of stuff about fluoride, which has also saved a lot of teeth…

NOEL: <laughing> Hundreds of millions of teeth.

KEREN: <laughs> Hundreds of – Maybe billions. Who knows? Who can say, you could never be sure. Um…

*<CLIP> KENNEDY, NY SUN INTERVIEW: I think fluoride is a poison.*

KEREN: He has linked chemicals in water with sexual dysphoria in children, not based in evidence.

*<CLIP> KENNEDY, RFK JR PODCAST: If you expose frogs to atrazine, male frogs, it changes their sex and they can actually bear young. And so the capacity for these chemicals that we are just raining down on our children right now… <fade>*

KEREN: …. He has linked antidepressant use with mass shootings, not founded in evidence.

*<CLIP> KENNEDY, CAPITOL HILL SHOW: NIH needs to be studying ‘em to see if there’s connections to some of the SSRIs and psychiatric drugs people are taking, if there’s connections to video games… <fade>*

KEREN: There are a lot of nonscientific beliefs that he has espoused publicly, and just cast doubt on “how much we know” about the causes of a whole bunch of health conditions.

NOEL: So I feel like the most controversial thing you could say about RFK is not that he's totally right or, ‘Ugh, he's totally wrong,’ but: ‘This guy has some good ideas.’

KEREN: <laughs>

NOEL: And truthfully… <laughs> truthfully… Am I in that camp? Perhaps. <laughs> Where does he overlap with the scientific consensus?

KEREN: Yeah, it is funny. You know, when somebody is a shapeshifter the way he is, a lot of people can find a lot of things he said to agree with. You know, he fundamentally distrusts big institutions. And I think a lot of Americans across the political spectrum also distrust big institutions. One of the things that makes big institutions, big government institutions deserving of distrust, including in the eyes of a lot of scientists, is that they are, to some degree, under the influence of the lobbies for big business interests that they interact with a lot. Pharma and agriculture have a lot of interactions with the FDA, and their lobbies do too, and so they drive some of the policy that comes out of FDA that drives the way Americans eat. The drugs Americans have access to. So on that, he and a lot of legitimate scientists and members of the public in the United States agree.

*<CLIP> KENNEDY, FOX & FRIENDS: It’s that the agencies – the USDA, the FDA – have been captured by the industries they’re supposed to regulate. And they all have an interest in subsidy and in mass-poisoning the American public.*

KEREN: I mean, he holds our agriculture system responsible for the high levels of chronic disease in this country. Right. He says, yeah, it's their fault that we're fat. It's their fault that we have such high rates of diabetes. It's their fault that we have such high rates of heart disease. He's not wrong. I mean, it's you know, we have a really unhealthy food system in this country. You know his goals, you know, reducing chronic illness in this country, reducing our unhealthy weight epidemic and our epidemic of chronic disease is the same as the goals of, I would guess, probably more than 90% of health experts in this country. It's just the way that he wants to get there and the ground-level causes of these things, he often has a lot of disagreement with those experts.

NOEL: If he is confirmed, RFK Jr is confirmed, what are likely to be his priorities?

KEREN: So there are several different ways that he could kind of attack vaccines.

SCORING <Infinite Whack-a-Mole>

KEREN: One of the ways is to simply weaken the recommendations – or do away with the recommendations – that the CDC makes and that states and health care providers all over the country rely on to determine who should get vaccinated and when. He could influence how vaccines are paid for. So there's a program called Vaccines for Children that pays for low- income kids nationwide to get vaccines for free. And he could simply direct or pressure whoever is appointed to run the Centers for Medicare and Medicaid to do away with that program, to ask Congress to defund that program, and that that could theoretically happen. And I think, you know, perhaps one of the biggest things he could do is just by having his enormous platform, cause a lot of Americans to doubt vaccines more than they did before and cause Americans that didn't really doubt the FDA or the CDC authority before to really distrust it now. So there's a lot of new distrust that he could bring to the system and that he could affirm, you know, amid people who already distrust these big institutions. So there's a lot of damage to be done on vaccines.

NOEL: Can he take fluoride out of the water?

KEREN: He cannot. That is something that is usually determined by municipalities. It’s sometimes determined by voters.

NOEL: Ah!

KEREN: But in as much as he could lead a lot of people to distrust fluoride for the first time and to question the science that shows fluoride has done far, far more good than harm.

NOEL: Mm.

KEREN: He could cause a lot of people to lobby their elected officials or their municipalities or to even vote to remove fluoride from their water, which would harm the dental health of hundreds of millions of Americans.

SCORING OUT

NOEL: What does RFK's rise say about the way Americans now think about science and about public health? There does seem to be something bigger afoot here, and he seems to be representative of that bigger thing.

KEREN: Yeah, I think… You know, somebody pointed out to me the other day that he speaks the same anti-intellectual language that Trump does.

NOEL: Mm.

KEREN: And he also… He seems like a vengeance pick, right? Like he has a list of grievances that he moves through life with. And even though they may come from a different place than Trump does, he ends up in the same place where he distrusts experts. He distrusts big institutions. He feels wronged by a lot of the world. You know, I think a lot of Americans really are attracted to conspiracy theories as well, in part because of how excluded from society they have felt over the past few decades. So I think he seems like a really sympathetic character to a lot of Americans for, for a lot of those reasons.

SCORING <Lizard Music>

NOEL: *Vox* Senior Reporter Keren Landman is also a doctor. Coming up! Why are so many Americans skeptical about fluoride? And … I’m gonna come right out and say it: do they have a point?

[BREAK]

[BUMPER]

*<CLIP> 1956 CREST AD: Now, after years of fluoride research, Proctor and Gamble proudly announces triumph! over tooth decay! for everyone everywhere!*

NOEL: *Today, Explained*. We’re back - this time with Michael Schulson of *Undark Magazine*. He’s a reporter and editor there –

MICHAEL: And in general, I write a lot about scientific controversies and kind of debates over, over what science says and, and does not say.

NOEL: His recent writing is about fluoride. The science on it is not settled. Many public health experts in the dental community love it. But a small number of experts in the toxicology community has been asking questions about negative effects on developing brains.

SCORING <It’s That Man Again–APM>

MICHAEL: This starts in the US in the early 20th century, largely from kind of incidental observations, which is that: people drinking water with naturally occurring levels of fluoride seem to have some lower rates of, of tooth decay. And by the 1940s, there were some public health researchers and dental researchers who came to think that it seemed like the evidence was actually fairly strong, that there was something about the exposure of teeth to a little bit of added fluoride that could help to slow or prevent the effects of tooth decay.

*<CLIP> UNITED STATES PUBLIC HEALTH SERVICE, 1952: Grand Rapids’ fight against tooth decay started in January 1945, when fluoride was added to the water supply…*

MICHAEL: So you start to see municipalities in the 1940s doing this. Wisconsin is leader, Michigan is leader. And some of the initial evidence that comes back from some of these interventions suggests that it's been really helpful. It's really helping to, to reduce rates of tooth decay, especially in children, and to improve oral health in these communities.

*<CLIP> USPHS, 1952: After 6 years of fluoridation, the study shows that the 6-year-old children who drank the water from birth had 65% less tooth decay.*

SCORING OUT

NOEL: All right. So it's wonderful news. The kids’ teeth are getting better. Where and when do the conspiracies about fluoride in the water start?

MICHAEL: You know, there's a specific story that I have been fascinated by for a long time, which is the story of Stevens Point, Wisconsin, in the 1940s, where there was debate in the community about whether to… whether or not to add fluoride to the water. This was this exciting .new possible intervention. Some local citizens got some concerns about it. They were worried that fluoride could be poisonous, that it could have some toxic effects, and they pushed back and essentially were pushing for a referendum seems to have gotten the city council to stop. And then in secret, the city council decided to add fluoride to the water anyway, and did so before that process had finished. And so some of the specific concerns that those people were raising about toxicity may not have borne out, right? But at the same time, if they were feeling like there was something about fluoride that was conspiratorial, in that case, they were correct. elected officials in their community where we're going behind their back to do something that they had concerns about.

NOEL: How does the mistrust about fluoride develop in the ensuing years?

MICHAEL: You know, it becomes this kind of issue that a lot of different groups that have some deep distrust in public health or some deep distrust in government more broadly can kind of express some of those anxieties through or come to see through that lens, come to see this as being a threatening or dangerous intervention.

*<CLIP> LADY, 1964: You’re not gonna shove fluoridization down our throats. What right has a politician got to tamper with our drinking water!*

MICHAEL: The John Birch Society, the kind of right wing organization, famously takes up fluoride as one cause. There are concerns about fluoride being in some ways a communist plot related to brain control. You know if, if you were to try to design something that would become a locus of, of these fears, you almost could do it better. It's invisible. It's in the water. It comes out of your tap. It's very difficult to avoid. You know, if you don't trust the people who are making that decision on your behalf, this is a way that their decision making is coming directly into your home and directly into the stuff that you're putting in your body. And, you know, I think, you know, fluoride has over the years inspired a tremendous amount of fear and concern.

NOEL: What is the attitude of science toward fluoride in the water and how does that evolve?

MICHAEL: So, I think one piece of context that's important to understand here is that, like many things at higher doses, fluoride is toxic. Right? And I don't think that that's been a controversial point during this period. The question is whether the much, much lower doses of fluoride that are appearing in water actually have some effect.

SCORING <Vector Mode>

MICHAEL: During this period in the 19, you know, going into the 1980s and 1990s, you have small numbers of scientists who expressed some concerns about potentially-toxic effects from fluoride. But this is really by no means a kind of anywhere near even a consensus or non-fringe position during this period. In the 1980s, there are some people at EPA who raise some questions about fluoridation. And then in the 1990s you start to see more research coming in particular from China and India, looking at higher at communities that have high naturally- occurring levels of fluoride in their water and starting to detect some potential link between higher levels of fluoride and lowered IQ in children. These studies are, by all accounts, very poorly done. There are a lot of other things that could be causing this effect besides the fluoride, But getting into the early 2000s especially, you start to see some researchers at least noting this and asking some questions about, ‘Okay, is there a pattern here that we need to investigate?’

NOEL: Huh! And then do they?

MICHAEL: They do. Ummm.. Although it happened slowly. In 2006, there's kind of a panel of advisers commissioned on behalf of the federal government say, ‘Some of this evidence about neurotoxicity is suggestive enough that we need to see more research.’ And that begins in particular to trigger some studies, some initial research within the National Toxicology Program, which is… which is housed within the National Institutes of Health By especially the mid 20 tens, the National Toxicology Program is beginning to invest some considerable resources both in funding research – funding epidemiological research – on fluoride, and also commissioning a systematic review by some of their own scientists, meaning an intensive, intensive, exhaustive look through the scientific literature to try to understand whether there's a pattern here that merits further attention or even warrants more serious concern.

SCORING OUT

NOEL: Where is the science on this today? What do we know? What do we know we know, and what do we know we don't know yet?

MICHAEL: Yeah, you know, it's a tough question and it's a question where, depending on who you ask, you can get dramatically different answers. What I would say is that there are there is a small body of evidence that suggests that there may be some link between fluoride and neurodevelopmental effects, especially sort of negative effects for fetuses or for young children at doses of fluoride that are not that much higher or maybe actually are the same as what people are routinely encountering when drinking water that has been treated as part of a community water fluoridation program. So the sort of typical fluoridated water that most Americans get out of their taps, I wouldn't say that there is by any means a scientific consensus around that at this point. But at the same time, I don't think it's a fringe position within the worlds of environmental epidemiology or toxicology to say we see a concerning signal here. And this is something that we need to be paying more attention to. At the same time, you have some folks who are really skeptical of this research. You have, especially in the world of dental public health, some… some researchers who say, ‘We just don't think these studies are very good and we don't think the evidence is nearly strong enough to be making these kinds of changes to a public health program.’ And you have other people outside the dental health world as well who are also raising some concerns about this research.

NOEL: We learned in the first half of the show that RFK can't just go and take the fluoride out of the water. Cities, municipalities have to make that decision. We also talked in the first half of the show about the problem of RFK being: He does have some good points. And I'm not a conspiracy theorist, but I read a piece like yours and I found myself thinking… If I were a parent where my brain might go is: it is going to be easier to fix my kid's teeth than it is to fix my kid's brain; if fluoride does something to their development.

MICHAEL: Yeah. You know, I think this is one of those areas where dismissing even having the conversation as being not okay, right, or saying – even considering this is engaging conspiracy theory has the potential to backfire. Right. For for people who have public health in mind. I think, you know, as I said before, it is not a fringe position right now within the world of environmental epidemiology and toxicology that there may at least be some signal here that needs to be… researchers should be paying attention to. But I think this brings us back to this really deep question in, in public health, which is: how do you communicate uncertainty and what does it look like to talk about uncertainty in public? And answering that is, is well above my pay grade. But I think it's something that we’d all do well to wrestle with.

SCORING <An Upward Stomp>

NOEL: Michael Schulson, *Undark Magazine*. Amanda Lewellyn produced today’s show! Jolie Myers edited! Patrick Boyd and Rob Byers engineered! Laura Bullard aggressively checked the facts! Special thanks to Michael Shank, out walking the streets and asking the questions! I’m Noel King. It's Today, Explained.

[10 SECONDS OF SILENCE]