

Cut Deep – What’s at stake in the gutting of U.S. biodefense?

Wed, May 28, 2025

SUMMARY KEYWORDS

Biodefense, pandemic preparedness, biological threats, national security, dual-use technologies, bioeconomy

SPEAKERS

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Maggie Fox 00:00

Hello and welcome to One World, One Health, where we chat with people working to solve the biggest problems facing our world. I am Maggie Fox. This podcast is brought to you by the One Health Trust with bite-sized insights into ways to help address challenges, such as infectious diseases, climate change, and pollution. We take a One Health approach that recognizes that we are all in this together, and everything on this planet — the animals, plants, people, and the climate and environment — are all linked.

Some threats come from nature. Some are human-made. Sometimes it's hard to tell them apart. Either way, it's important to protect ourselves against them.

In this episode, we're chatting with Dr. Asha M. George, Executive Director of the Bipartisan Commission on Biodefense. As the name suggests, it's a group of experts from across the political spectrum who are concerned about being prepared against threats of all types. They've been involved for years in the lack of funding and attention to the various dangers, not just to the US, but to all of humanity. It's no exaggeration to say that COVID-19 came seemingly out of the blue, despite years of warnings, and it came right after the first Trump administration dismantled the pandemic response team. Now, biodefense efforts are again under fire, and Dr. George is not happy about it. We're chatting with her about what's happening and what's at risk.

Asha, thanks so much for joining us.

Asha M. George 01:34

Thank you. Thanks for having me.

Maggie Fox 01:36

These are extraordinary times, but biodefense has been struggling for quite a while, hasn't it?

Asha M. George 01:44

It has. It's always been sort of in the background, a concern, but not really a concern. It's just been in the background, is what I would say. It hasn't disappeared. No one has ever said this is not an issue. We don't have to worry about anything. But at the same time, it's never really been prioritized highly, unless we have had a precipitating event like the anthrax attacks of 2001, the use of biological weapons during World War II, or, most recently, with the COVID-19 pandemic or influenza.

Maggie Fox 02:15

Tell us a little bit about biodefense. What is it exactly? Because it's not about just attacks, is it?

Asha M. George 02:21

No, it's not! Biodefense is really about defending against all biological threats. And with the commission, we further define it as biological threats that would affect our national security.

So that is a huge set of buckets, I would say. You have naturally occurring diseases. You have accidental releases from facilities and laboratories. You have biological weapons that could be used for warfare or terrorism. Now we have the rise of the bioeconomy, which really is dependent quite a lot on biotechnology and advances in biology, and we have all those concerns, what happens if there's a misapplication? What happens if something gets beyond our control? It might fall under the category of accidental. But how can you tell it's increasingly difficult to tell what those applications might be, and so you have to sort of prepare, at least for the worst-case scenario, which would be warfare or the production of a pandemic that we just have no ability to respond to. So that's how we define biodefense.

Maggie Fox 03:26

This is scary, aren't you just scaremongering? Because honestly, this stuff doesn't happen all the time. It only happens every few years, every few decades.

Asha M. George 03:38

Well, it depends on what kind of incident you're talking about on the naturally occurring side. I think as of last week, we counted seven different pandemics that are affecting the United States. They're not all doing it at the same level, obviously, but they are of great concern.

You, of course, are well aware of the avian influenza situation we have here in the United States, and that one is of such concern because it's not just affecting Avians. It's moved into cattle, and we've seen it in a lot of different kinds of Avians and increasing numbers of other animals. We're not doing a great job with surveillance of that, so we aren't really 100 percent sure where it's gotten to but that's of great concern. Look, tuberculosis is back in the country. This is not a good thing. And it's not just tuberculosis we you know, we know how to deal with that. The issue then, with that kind of disease, is whether it is resistant to the treatments that we have for it. If it is those old diseases that we thought we had conquered with antibiotics or with vaccines or whatever, are not going to be useful. And can you imagine tuberculosis sweeping through the country, it would become a national security issue.

But you asked the question about fearmongering. Are we fearmongering? I don't think so. I think that we're just trying to point out that there are going on and that could happen and that we need to respond to, and that we need to prepare for, and can't just say, "Well, we're tired."

You know, everybody has COVID fatigue. Still, "We're too tired. So, we don't want to deal with this. We want to face it." I think that would be foolish on our part. One of the things I said recently during our State of Biodefense address is that from a military perspective, it is a strategy to weaken a population in any way you can. It's not all just about bombs and bullets. If you can cut off food supplies, you can cut off water, introduce a disease, or allow a disease to occur in a particular area and weaken the population. Well then, frankly, you don't have to try that hard to overcome that nation.

So, if you look at what's going on in our country right now, our immunity levels are just there. It's reduced and in all different ways, even if you're not going to make a big deal about it, measles is on the rise. Mumps is on the rise. Pertussis is on the rise. Whooping Cough is on the rise. All these things that had been somewhat under control have not been eliminated and are now coming back.

Plus, all the other stuff happening, I would say that, though there is some value in expressing some fear about this, I think we should be scared about it and do something about it. But I don't think, and I know our commissioners don't think that just running through the streets and screaming about how horrible everything is or could be is valuable at all. It must be matched with action.

Maggie Fox 06:28

And of course, protecting the U.S. against disease outbreaks, against bioweapons, protects American citizens, but it also protects the whole world. This stuff doesn't stop at borders.

Asha M. George 06:37

Agreed! You know another point that would go with that is everything doesn't come to us from outside of our borders. The disease doesn't know any borders. Disease moves throughout the planet. Disease, particularly that's picked up by others, like human beings and birds that move throughout the world, take that disease with them wherever they go. What happens in one place happens to everyone.

Maggie Fox 07:02

Do you mean H5N1? Is that what you're talking about? Or do you mean measles?

Asha M. George 07:06

Yeah, I'm talking about H5N1 although I do think Measles is probably an issue too. I mean, frankly, if your kid gets measles and it's within the incubation period, and you happen to get on an airplane and you land somewhere else, and now your kid has full-blown measles, you have brought it somewhere else.

Maggie Fox 07:23

We do have a lot going on right now. It's kind of astonishing when you talk about it.

Asha M. George 07:27

Yeah, we do, and we haven't even touched upon laboratory incidents. We still have accidents occurring. There's a lot of competition going on now.

Maggie, when it comes to the bioeconomy and biotech, if you look at a country such as China that has decided it's going to invest \$20 billion over a very short period, and that's what they're willing to say, you know, out in the public, you have to assume they're putting way more than that in they are pushing hard to create advances in biology and biotech.

So other countries are not just going to say, "Well, okay, you know, let the Chinese do that." We're going to focus on something else. They can't! So, the whole world is beginning to move into this area, an area that the United States had a great deal of dominance in. We were the leaders, and I would say we're probably still the leaders, but not for very much longer. If everybody's investing in the bioeconomy and these science and technology advances, I believe we're about to get lapped, if we have not already been lapped by others that are investing so much.

But that being the case, we're back to worrying about misapplication, dual-use applications, and so forth, and it's hard to know what we're going to do to combat those things if we're not investing in our research, not just to combat but also to understand what's happening with these various technologies.

Maggie Fox 08:50

When you talk about dual use, can we explain that just a little bit?

Asha M. George 08:55

Yeah, so dual-use technologies are those things that could be used for good, and oftentimes are used for good, but could also be used for bad things, malevolent things.

One of the best examples that we usually use is the equipment that we use to produce vaccines is also used or could be used to produce biological agents that would then eventually be weaponized and then would be put in biological weapons.

Maggie Fox 09:20

Now that is one of the arguments that's being used to justify some of the cuts that are being done here in the U.S. right now, right that they're getting a handle on some of the dual-use research that it's claimed is out of control.

Asha M. George 09:35

I hear you on that, and there are some technologies, some science that we're extremely concerned about.

We are a sovereign country, like everybody else's sovereign country, and while they do pay attention to everybody else what happens here and what we think, they make their own decisions. So, I do think it's worth saying that, but I also think that primarily what's going on with the cuts is what I want.

There's a determination that we were just spending too much. The administration decided we were spending too much on all these different things. It looks to me like cuts are being made, and then after the fact, a justification is put forward. So, what you're referring to, I think, could very well be in that same category, and maybe it's not after the fact, there is an examination, but I think we have to be very careful about that.

And what I'm not seeing is a lot of care being taken when it comes to these cuts. It seems like there are just cuts and more cuts. And then someone says, "Well, okay, this is why we did them," but also we have to take into account how things have happened in the past.

When you look at Elon Musk and how he has dealt with companies in the past, he comes in, and by his admission, he's proud of it. He cuts as much as he thinks he possibly can. And he has said he goes too far. And then he waits for the system to come back and say, "Oh no, here are the most critical things. You have to have those." And then he brings those back. That's what he did at X, for example. Well, Twitter, before it became "X". Then if you look at President Trump, his approach to many things in life, not just his companies, is to put a lot of pressure on people, on companies, and now on countries, and exert that pressure. Then he too, at some point, backs off, and then he negotiates. I think that's what's going on.

You know, we have to add all this. What are the leadership philosophies, what's happening with management, and what are the objectives for the cuts? I don't believe that the top objectives for any of the things that have to do with biodefense have to do with biodefense.

Maggie Fox 11:45

So, what do experts like you to do to build all of this back after the slashing and burning are done?

Asha M. George 11:52

Well, look, I think that while we wouldn't have picked this particular approach, I think there is value in identifying those things that are critical and making the argument now before building back that these are the things that have to stay and figuring out a way to communicate effectively with the administration and with Congress that these are the things that are critical we can't have everything. This is the way it is right now. It is worth doing that. It is worth cataloging not just what we're losing, but what the value is of what we're losing, and then looking to the future Maggie, I think it's a great question because it's not going to be like this forever. It just isn't. And you know what happens in this

country? We are a pendulum — people who have swung over to one side, and we're going to swing over to another eventually, at that time, I want us to be ready. I want us to be ready to go to that administration or to that Congress and say, "This is what we need, and this is why we need it."

Not that we will never be able to go back to what we had last year. We just are not going to be able to. I think we have to accept that, but we should build back. And we should build back better, more efficiently, more effectively, but we have to be ready if we wait around for years and then wake up and say, "Okay, we have a new president, or we have a new Congress, or we have new both."

I just can't even imagine how long it would take to do this backward analysis and then come forward with a plan. And it doesn't have to be negative. Let's think about how we design a system that works better and is more efficient but contains the things we must have in order to defend the nation properly. It's not all doom and gloom. There are good things that are happening. There are still people who are fighting the fight. Science does continue. The administration has not shut down 100 percent of the government, 100 percent of science, 100 percent of public health or medicine or defense, or you name it. There are good people still doing good things. I think we need to support them, but I also think we have to maintain that forward look at life, and we must just continue doing what we are doing, shining light on the situation, and making recommendations as to what can be done, and then acting ourselves. We can do it. We are still doing it. I think this is just a challenging situation in which we must figure out how to do it. But I think we can.

Maggie Fox 14:19

Do you think that the Trump administration will listen to you?

Asha M. George 14:23

Well, our commission had a pretty good relationship with the Trump administration. The first administration, we made a recommendation in our 2015 blueprint for biodefense that we the nation, needed a national biodefense strategy, and someone needed to create that. President Obama signed off on that requirement in the National Defense Authorization Act. But that administration didn't have enough time to do it, and then the Trump administration itself picked it up and it did produce it.

The President was quite proud of it. It was the first one, and he was excited about it. They did a lot of things about bio, so I think there's hope. Yeah, it's just that they're quite busy right now, very focused on the cuts. I think that once they themselves can calm down a little bit. Then I think about the cuts, I think they'll put some more emphasis on the other business aspects of government, including biodefense. I think we'll be able to work with the administration.

They're gonna have to stop shifting chairs and offices and combining and disrupting at some point for us to do that, but I think we can. I do wanna point something out, and that is, every administration comes in, every single one comes in, and two things happen. One is that they all have bioactivity. Somehow, somebody's focused on the bio within the White House, specifically, we did some research and figured it out.

Back to the Woodrow Wilson administration. There was somebody in the White House who was always addressing some aspects of bio-defense, and that's true. That's been true for these white houses since then. But the second thing is, that almost every administration shuts down whatever the previous administration had going when it came to biodefense.

So, you mentioned that the Trump administration shut down what the Obama administration did, but Maggie, the Obama administration shut down what the Bush administration did. Now, President Bush maintained some of what the Clinton administration did, but we could go back and back and back and back.

So there are many things that I think people have issues with when it comes to this current administration, but I know it's not a popular sentiment, but I don't fall on the side of oh, they shut everything down, and they're horrible, terrible human beings for having done that when it happens with one administration after another. If we want to solve that problem, we must turn to the other body and tell Congress to put something in that says you can't do that. You can't shut these offices down. You can't drop biodefense as an issue, because it's pervasive and it goes across time, and so you must keep it there.

As we have said about the National Security Advisor and the council, we have to have it so that's what I think needs to happen, needs to happen. I always clarify. They're not the only people who have shut things down in the past and then had to bring things back up.

Maggie Fox 17:15

And of course, that's why your commission is composed the way it is. You've got former members of Congress. You've got people who understand why there are three branches of government and why you have advisors from different areas.

Asha M. George 17:29

Absolutely yes.

Maggie Fox 17:33

Asha, thank you so much for taking the time to chat. What a lot of insight you have to offer.

Asha M. George 17:39

Oh, thanks. Always good to talk with you

Maggie Fox 17:42

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