What is the CDC we need?  A multi-partisan dialogue
Alfredo Morabia

JG  The CDC suffers from long-term budgetary insufficiency that spills over into our state and local health preparedness, and that structural deficiency is one that cannot be addressed by supplemental funding or emergency infusions of capital.  It needs operate from a framework of a foundational change in how we think about biosecurity as a component of our national security instead of something that we react to when it happens and then wonder why we don’t do a good job the next time a threat emerges.

RG  Public health is like an insurance policy: You need it when you need it, but if you don’t have it and you have a major event, you’re in big trouble and the losses far exceed what could have been in place if you’d had that policy.  I think that what we need to do is rebuild, not just the CDC, but local and state public health infrastructure.

[musical interlude]

AM  Hello and welcome, or should I say hello and goodbye, to follow Francis Jacob’s inspiration for this podcast music.  This is the April 2021 podcast of the American Journal of Public Health.  As it is now a tradition in the April issue of AJPH, we publish several points and counterpoints between Democrats, Republicans, and Libertarians about key issues in public health.  In this podcast, we will focus on one of these conversations dealing with the future of the Center for Disease Control, the CDC.  My two guests are Dr. Rebekah Gee and Dr. Julie Gerberding.  Rebekah Gee advised the Biden team during the last presidential election, and Julie Gerberding was Director of the CDC under the George W. Bush Administration.  They approach the future of the CDC from very different political perspectives.  It will be fascinating to see where their opinions diverge and whether they can converge.
RG  I’m Dr. Rebekah Gee, I’m a practicing obstetrician/gynecologist and CEO of Healthcare Services here at Louisiana State University, formerly Secretary of Health for the State of Louisiana and co-author with Dr. Ali Kahn of an article, “Leading the world again: Creating a 21st century public health agency”.

AM  Thank you, Rebekah. Julie?

JG  I’m Dr. Julie Gerberding. I’m the Chief Patient Officer at Merck and an Executive Vice President responsible for policy communications and population health. I’m also the former CDC Director from 2002 to 2009, and I’m on the faculty of the University of California—San Francisco in the Department of Medicine and Infectious Diseases.

AM  Great, thank you both of you. Let’s start our discussion, and since we’re talking about the future of CDC, let’s see how did the CDC do over the last year and the challenges. So, Rebekah, what do you think the CDC did well and what did it do less well?

RG  I mean this is the greatest public health crisis of our generation, and the CDC fumble the ball, to use a football analogy. It took the CDC, after the WHO issued guidance on January 13 for how to test for Covid, it took them 46 days to deploy something that worked—a fumble that caused thousands of deaths and many missed opportunities to be able to get a handle on this disease before it was spreading like wildfire throughout our nation. I mean, the administration undermined the scientists and professionals of the CDC; in fact, the director now is trying to repair that, but the professionals sometimes hid data from the public that would have helped the public understand the magnitude of this pandemic and silenced a lot of the scientists, including Dr. Fauci, not at the CDC but people at the CDC who were very concerned about how severe this pandemic would become, and unfortunately that had severe consequences. And so, what is strong about the CDC is the CDC has a tremendous cohort of professionals who are dedicated to
public health, many of whom did the very best they could throughout the pandemic to help support the American public and to educate about this deadly disease. But again, I think the CDC could have strong guidelines on education, K through 12—did not, should have had stronger guidelines on partnership with OSHA on how to protect workers—did not, should have had a consistent and very public-facing set of scientists who were reassuring yet realistic in how they presented data, and they did not. So, what needs to happen now is a reorganization and redesign, and that’s what Dr. Kahn and I talk about in our piece.

AM Julie, what’s your perspective on the record of CDC last year?

JG I think there are three main frames to think about this, and I don’t disagree that there were some performance issues related to testing early on. People also need to understand what the CDC has done and how the public health system has stepped up, because a lot of those stories haven’t been told including hundreds of deployments around the world, 4,000+ guidance documents, and a whole lot of public health information that has hit the streets in ways that are being used locally. I know I’m certainly using them within my own company. So, there were performance issues and those need to be thoroughly reviewed and addressed; but there were also ongoing and, I think, accelerated examples of suppression, obstruction, obfuscation of information coming from higher levels of our government, and that is unprecedented in my experience and something that absolutely needs to be brought to the light of day and addressed with structural and real reform so that we’re never in the situation where that could happen again. I think what we learned is that there aren’t sufficient safeguards in our government to avoid that kind of politicization of our public health science, and we need to insert them. In the past, things have operated [in] the sense of altruism, good will, and common sense, and in the wrong political environment that is insufficient to protect the CDC’s ability to provide the
science that should be underpinning the effective policy. The third thing that I do say though, because I think this is the area for the greatest opportunity, is that the CDC suffers from long-term budgetary insufficiency that spills over into our state and local health preparedness but also our healthcare system preparedness, and that structural deficiency is one that cannot be addressed by supplemental funding or emergency infusions of capital. It needs to operated from a framework of a foundational change in how we think about biosecurity and as a component of our national security, really, instead of something that we react to when it happens and then wonder why we don’t do a good job the next time a threat emerges.

AM Thank you. There were some specific issues related to the previous administration but also long-term problem that affected and influenced the response by CDC last year. Is this right?

JG I will just jump in and say I think there were some very significant long-term issues. I co-chair the CSIS Commission on Global Health Security, and one of the areas that we have tried to really highlight, not as an I told you so but in fact we did tell people, so last November when we published our findings that referred to moving from crisis to complacency that we have a threat, we gear up, we respond to it, money eventually flows, and then when the threat goes away, the resources go away or get diverted into something else. So that cyclical nature of our revving up and then tamping down has created a very woefully insufficient system of preparedness. And I think that’s foundationally where we need to start to end that crisis of cycle to cycle, long-term, really inhibition of effective planning and move into a space where we progressively improve our biosecurity, not just in the United States but around the world; and that takes CDC as a very important leader, but of course it isn’t CDC alone that has to contribute to that effort.
Yeah, public health is like an insurance policy: You need it when you need it, but if you don’t have it and you have a major event, you’re in big trouble and the losses far exceed what could have been in place if you had that policy. So, Julie’s right, and you know I think that what we need to do is rebuild, and not just the CDC but local and state public health infrastructure, because what we’ve seen with the Covid pandemic is that states like Louisiana that had an excellent local and state public health infrastructure had robust testing, have had a great rollout. West Virginia’s another example. Places that have had positive stories, but places that didn’t have a local footprint, didn’t have strong relationships, have suffered more. The good news is we don’t have to explain this to the President and to our legislators on both sides of the aisle. People understand the importance of public health, and I’m very optimistic that there will be significant funds invested in rebuilding.

So, what would have been the scenario if we had the dream CDC last year?

You know, one of the areas that I would say would have been very different is communication. I like to use New Zealand as an example of exemplary risk communication in the context of this pandemic, and what we’ve seen in New Zealand is that when you have consistent, accurate, compliant information but compassion, really acknowledging that this is hard, we’re all in this together, and if we can appeal to people’s spirit of altruism we can really bring people together and help them do the right thing. And the earlier you do the right thing, the less time you have to be involved in social distancing and all of the other measures because it works if everyone participates, and we’ve seen that over and over again particularly in Asia where folks have had more experience managing respiratory disease outbreaks. But, the CDC was not able to provide that consistent, compassionate, accurate, credible information to people and instead, we have a thousand voices all chattering away saying different things, undermining
each other, and then on top of that we have the intentional misinformation and disinformation which really confuses in the context of an election year which further polarized and politicized what was going on. I don’t think you could have painted a worse scenario for communication.

[musical interlude]

AM There is a consensus that one of the biggest problems is the inequity in which Covid-19 has hit more vulnerable communities, so what could the CDC have done differently to assure that the response was more equitable?

RG So, two things, we fumbled the testing and so it was no shock that we had popup testing throughout communities in this country, many of whom probably weren’t the epicenter of disease. You had a very random assortment of [rubes] that it wasn’t informed by a population health data infrastructure that would have really led us to test the places first that needed [it] the most, and in this country this would have been black and brown communities, because it is absolutely clear that black and brown people have died disproportionately from this pandemic. So, why didn’t we learn from that, then, when we had a vaccine? Why didn’t we then say it’s not just about the vaccine? We’re going to have a plan in place, we know we have some time, because it’s going to take a few months to develop a vaccine, and let’s develop a national strategy. What is needed to develop a communications campaign so that people of color who have very well-earned distrust for the US healthcare system can understand what the scientific process is? Let’s make sure we enroll in clinical trials, let’s make sure that in black and brown communities we’re engaging prior to the vaccine coming, and that when we roll this out we have assets to help people get access to the vaccine, to help with education with the vaccine, and to make sure that the vaccine has not, unfortunately, being given first to the privilege and last to those who need it most. So, I think that the planning should have occurred. Part of this is not
having the data in place, and many states don’t even have data now on who has gotten the vaccine by race, so they don’t even know what the level of disparity is. I would say the one silver lining here, though, was that there was a recognition about the impact of health disparities. That is no longer a confusing concept. That is no longer controversial. So, I’m excited about the future, but we need to have better data, we need to have better partnerships, we need to build trust, and we need to involve, and -I mean nothing about me without me, communities that have these needs and make sure that they are part of our planning and process, not an afterthought as happened both with the rollout of testing and a rollout, arguably, of the vaccine.

AM Julie, do you also agree that the main issue is that we didn’t know exactly what was happening because of surveillance system was insufficient?

JG Well, certainly the data modernization is a big issue. This is something that I think we have to all be careful not to overpromise on because there have been multiple attempts, at least for the many years that I’ve been involved in public health, to try to create interoperable data systems and to modernize even within a hospital the interoperability of data. So, the vision is grand; the reality is hard, and we need to make a much bigger investment than we’ve ever made before. But, I also think that science is on our side, and we ought to be able to harvest the leading edge technologies and opportunities to improve, not just data modernization but, a whole cadre of public health sciences that are languishing for lack of investment. But let’s just take an obvious one that is actually part of this pandemic and that has to do with the intersection between humans and animals and spillover. That one health interface is an absolutely critical biosecurity issue, and yet it gets lost in the shuffle because, you know, we fund the human health side or we fund a little bit on the animal health side; we fund very little in the ecological side, but we don’t actually have a strategy as a country or as a global network to really understand how do we go
from mitigating a catastrophe like the one we’re in toward predicting where these spillovers are most likely to occur and preemptively engaging to try to nip it in the bud before it becomes a containment issue or, worse, a pandemic. And yet the investment in that is public health science, and it’s just not happening in an integrated way or with suspicion, resource investment. It’s a longstanding issue, but if we don’t learn our lesson in the context of this pandemic, I don’t know what it will take to drive the change that we need.

AM Yeah but Julie, this is for me a mystery. We still don’t know, a year later, what’s the proportion of the population that has been infected. We don’t know where we are in the herd immunity curve. Like Spain, they did really random sample of their population, sero sample, they know what’s the progression of the pandemic. In the US, we don’t know, and this is relatively simple. How come we haven’t been able to do that this last year?

JG You know, one of the things that I think we need to have a conversation about across the entire public health community is what happens to states in the context of the public health emergency? Because as you know, we are 50 jurisdictions plus territories and tribes, and you know CDC does not really have the authority to tell a state how they conduct surveillance or what they should be reporting or how they should report it. We have a wonderful spirit of cooperation and collaboration and we can get a lot of things done that way, but it’s not efficient. And wouldn’t it be important to understand, in the context of this kind of public health emergency, couldn’t we have a more national approach to things and avoid a lot of the back and forth that has to go on to try to harmonize the response effort? Take vital statistics, for example. I mean, how archaic is our vital statistics system, and yet it depends on local jurisdiction, local governments receiving death reports, adjudicating them, sending them to the state, the state has their part, trying to integrate what the doctor reports and what the coroner reports, and then
ultimately getting those to the CDC where they have to be manually, and in many cases recoded, and harmonized. That’s just an absurd situation. We can do so much better, but we need to think about how to do it in a way where we don’t have to invent it 50 times.

AM Rebekah, this is one of the core of your article is the reform of the surveillance system, and you invoke a lot of very advanced technologies and sciences. You even site Google to explain to us how this new technology will help.

RG Yeah, well first, I agree with Julie that all public health is local and that the response really depends on states. I do think one thing the CDC does so well and it saw it over and over again because Louisiana got pummeled with hurricanes and floods when I was secretary is that we do a great job on responding to weather events. We activate FEMA, we activate the CDC, the core is here within 24 hours on the ground with local leaders reacting and helping and setting up infrastructure and teaching and mentoring. And that’s exactly what should happen with pandemics. We just need to take where we’ve been successful and replicate it when we’re talking about infectious disease, whether it’s talking about an HIV epidemic or an emerging infectious disease or the next avian flu or Covid. We’ve got to have a crisis mentality when it comes to these things but to have the infrastructure and resources, and the CDC has done a great job—the Public Health Service Corps, the [Epidemic] Intelligence Service, and these are things I think we should have a corollary for at Medicaid. There’s a lot to learn from the CDC, but we need to think about that same level of urgency when it comes to a pandemic like Covid, and part of that’s the data. Look, the core of public health is surveillance, and the pioneers of public health were folks who used data to understand trends and disease, and so the CDC needs to prioritize this. Dr. Kahn and I argue a position of chief health data scientist at the CDC in a digital age where artificial intelligence and incredible amounts of data are available and
companies like Walmart understand what I want to buy there tomorrow, why aren’t we using the same type of data infrastructure to predict when a pandemic will occur? Why aren’t we using it to understand trends within communities, and why aren’t we revitalizing and optimizing these connections between the data that we do have so that it can lead to a better understanding. If all you use vital records for is to print birth certificates and death certificates, you’re not going to optimize what you could understand about your population. So we talk a lot about having a unique identifier, potentially in NPI. It could be something different, but being able to understand a person and then be able to understand their vulnerability in a way that’s much more sophisticated.

[musical interlude]

AM Both of you have been talking about the independence of CDC and it’s [independence also from political pressures, et cetera, so I want to know, do you have a solution to have an independent CDC that could not be submitted to presidential pressure as it’s been last year? JG You know, I’m advocating that this be one of the very important questions that is a component of the after-action review that will no doubt occur, probably or at least at the end of this pandemic. There are some ideas that are under consideration, and they have some merit, but there are also controversies inherent in them. For example, we have a federal reserve system that was created at the beginning of the last century in part to avoid the politicization of our central banking system, and that’s a model that might have some merit in thinking about how we organize and oversee our public health system in the United States. There’s a process that the Department of Defense used to adjudicate the many military bases around the United States, some of which were no longer serving their original purpose but had a great deal of political capital tied up in them and was very difficult to rationalize that network, so an external process
was created to really study it as objectively as possible and make recommendations to congress which congress implemented. And I think the third area for consideration really is something as simple as the appointment of the CDC director and the avoidance of additional political appointees within the agency which was a specific problem for the CDC in past years, I think that in and of itself is just an opportunity to remove the relationship between the leadership of the agency and the political environment that is operating and is an idea worth considering. In the past, the CDC director did not change every time the president changed, so there’s a precedent for that from the inception of the agency. Then the final thing I would say is budget. We must restructure the CDC’s budget and just being under the thumb of the budget caps in congress means that congress is constantly having to make tradeoffs. CDC does not have a sustained budget, so long-term hiring at the federal level but also at the state and local level is problematic. You can hire people on supplemental money because you only have it as a one-shot deal, and so it really doesn’t end up solving the problem; it just kicks the can down the road.

RG Julie, I think that’s a great point. I think we need to establish statutory protections for the integrity of science. If you were a scientist, you can speak out without retribution, whether that’s an inspector general or an emergency fund investigating some of these things, or some ways that scientists and professionals can have assistance. I think second is that having governance and structure of the CDC to limit political influence is really important, and whether that’s what Ali and I talk about which is analogous to the FCC or looking at our federal model of how we regulate the banks, but having some way that you have non-partisan and/or agnostic folks who oversee the agency over a longer period of time and transcend four-year terms, I think, is really important. But, there has to be some kind of governance of public health that is not linked to political influence.
AM  For example, if the CDC director was nominated by congress for 10 years, would this be a good solution?

JG  I think these are the kinds of things we need to really thoughtfully examine the pros and cons of, because we’ve had this conversation multiple times in the past and there are some agencies where that approach has worked well and then there are some agencies where at the end of the day it really doesn’t seem to make the difference. I don’t think it alone is a solution, but it’s part of the process of really depoliticalizing science, as Rebekah has said, and it’s going to take more than one contribution, I think, to really pardon the situation so this doesn’t happen again. I’m very fearful that now that we’ve demonstrated how easy it is to do that we are going to see this be increasingly a part of the public health competency, and we need to extirpate it as quickly as possible.

[musical interlude]

AM  Alright, what a fascinating discussion. My guests are both exceptionally gifted communicators. They have delineated a clear agenda for a foundational transformation of the CDC. Let me stress first the dynamic of the conversation. We began with an assessment of the CDC response to the Covid-19 pandemic. It was a question of opinion, and this is where my interviewees diverged the most. Dr. Gee stressed the failures, saying that CDC fumbled the ball, that it lost control of the pandemic response early in the game, while Dr. Gerberding insisted that the CDC, despite performance issues, raised to the challenge and delivered guidance and deployed its staff all around the world. But when we turn toward the future of CDC and what needs to be done, Gee’s and Gerberding’s visions converged. My guests were on the same page. The one main message that struck me is that CDC needs to be ahead of the disasters. It now reacts to pandemics when they occur, but it needs to be able to predict them and be prepared to
contain them as early as possible. We currently track hurricanes and respond more effectively to
natural disasters than we do with issues of biosecurity such as pandemics. The foundational
changes include a modern surveillance system, a national coordinated response capacity, and an
ecological perspective built on an integration of animal and human sciences. Dr. Gee and Dr.
Gerberding also agree that the future CDC needs to be a nonpartisan agency protected from
political interferences.

[musical interlude]

I’m grateful to all the members of the panel for taking the time to share and discuss their ideas.
I’d also like to thank Emily D’Agostino and Michael C. Constanza for edits on an earlier version
of this podcast. Anthony Bansie is the student producer for today’s episode. In this issue, the
public health dialogue between Democrats, Republicans, and Libertarians inspired Francis Jacob
to paraphrase a class rock song about duality. According to one of the two composers, it
promoted the more positive side. Francis composed the arrangement and plays the guitar. The
papers discussed in this podcast are available in the April issue of the Journal. For more
podcasts, including podcasts in Chinese, visit us at www.ajph.org or subscribe to it on your usual
podcast app. A full transcript of the podcast is available on our website for persons with hearing
disabilities. This is Alfredo Morabia at AJPH. That’s it, thank you for listening!

[musical postlude]