Lessons From the COVID-19 Pandemic: It's Time to Invest in Public Health

Federal Practitioner talks with RADM Boris Lushniak, the former Deputy Surgeon General and US Public Health Service Officer, about the public health challenge of addressing the COVID-19 pandemic with an underfunded public health system.

This conversation, recorded May 18, 2020, has been lightly edited for clarity and space.

What have you been doing since you left the US Public Health Service?

RADM Boris D. Lushniak, MD, MPH. I retired in 2015 and spent a year at the Uniformed Services University for the Health Sciences in Bethesda, Maryland as the Chair of Preventive Medicine and Biostatistics before I took the opportunity to become the Dean of the School of Public Health at the University of Maryland in College Park. I was very intrigued with that position. It's a large and young school of public health—just 13 years since its inception. And it functions at both the undergraduate and graduate school levels. We have 2,400 undergraduates in 4 different degree paths. The intriguing part of this is the ability to influence a young person's educational pathway, and for them to look at all the opportunities in public health, and to focus on a mission, which falls into the mission of the US Public Health Service (PHS) Commissioned Corps: Protect, promote and advance the health and safety of our nation.

It has been a very intriguing transition; I have been the Dean there for 3 years. Who would have predicted that things would change drastically in that time, both at the academic level (ie, moving a school from being a normal college environment to an online environment) and now moving into the realm of preparing for the near future of that university in terms of a potential reopening. It is using all of my public health experiences and putting it at that culmination point, which is my community of 52,000 people—40,000 students at the University in College Park, and 12,000 faculty and staff members.

We are responsible for making sure that the return is as safe as possible. With so many unknowns in the world of COVID-19 and so many unpredictable components, it is quite an undertaking to be able to determine for that community of 52,000 whether it's time to return, and under what circumstances do we return.

In addition, we're part of a larger community. The University of Maryland in College Park is in Prince George's County, which is the epicenter of disease and death in Maryland. The School of Public Health is working closely with county authorities. Some of our students are now contact tracers. It's been interesting to see our faculty, staff, and students standing up as a volunteer support structure for Public Health.

We have incredible research going on at the school. One of my prime research physicians, Don Milton, MD, DrPH, has been studying the transmission of influenza. Now his work is priming on not just influenza, but also COVID-19. Our hope is to establish a community that will be safe and healthy for everyone, and so it's been an incredible amount of work.

How would you describe the federal/local public health cooperation?

RADM Lushniak. First and foremost, we have seen a major issue in terms of state and local response to the COVID-19 pandemic. I have to congratulate the state and the local officials for doing as best as they can under the strained circumstances that they're in.

The first strained circumstance is that local and state health departments have lost nearly a quarter of their workforce: 50,000 jobs across the country since the recession of 2008. Part of the answer why it's been such a struggle is that our nation as a whole hasn't looked at public health and hasn't looked at prevention as a key component of how our country works. We have seen a lack of support at the state and the local level, the shedding of jobs, and the lack of foresight in terms of saying that prevention works and public health is important for our cities, states, regions, and the nation. We need to reemphasize that in terms of public health.

In the State of Maryland, in general, the counties are doing as best as they can under the circumstances. They certainly started out with trying to do as much testing as possible. Testing

is a critical component to this response, and obviously, we have a situation nationwide with the testing still trying to be put online to the extent that it needs to be. We need to be able to test more and more individuals to be able to determine the people who are positive. The curve ball that COVID-19 threw us is that 25 to 50% of individuals who may have a positive test may be asymptomatic. So, this isn't simple. It's not a matter of just saying, "Okay, you're sick. You may then have it." It may be: "Hey, you're feeling healthy, you still may have it."

But just as important as testing is what you do with those individuals who are tested. You need to have health departments turning to these individuals and providing them directions of what needs to be done. If one is COVID-19-positive, one goes into isolation for at least 14 days. And if ill, they need to be connected with a medical care system. That's an important part of the state and local response is making sure the individuals are properly directed to the right pathway.

In addition, contact tracing is critical. The way we're going to fight COVID-19 is the ability for us to go out there and determine if you are a positive, who did you come in contact with, and did you potentially spread this to others? You need to direct individuals who may have been in contact with the person who is now COVID-19-positive, saying "You may have to quarantine yourself, watch out for symptoms, and you have to be really careful in the meantime."

State and local officials took up the burden of making decisions in terms of communicating the directions given to the population. Is stay at home required? Is it the closure of businesses? Is it the wearing of masks? Certainly, the issue of physical distancing plays a role.

All that was implemented at the state and local level. Under the circumstances, it has been done as well as possible, but that now reflects on the issue of the federal response. And the federal response, I'll admit, has been less than I had hoped for on several realms.

Number one, coordination and direction from the federal level has been rather piecemeal. State and local officials, I think, were waiting for further directions. What did federal officials think; what did they want us to do? State and local officials want independence to implement things, but what's the right answer? I think this has been not handled well at the highest levels of the US government.

Secondly, obviously, there was an issue with testing, and the responsibility here lays with the Centers of Disease Control and Prevention (CDC), which had problems from the get-go with setting up their testing caches and getting them out. We're still catching up from there. Now it's unfolding that the tie in between the federal government and the private sector and academic centers are at least making some headway on that testing front.

Third, people rely on the federal officials not only for action but also for communication. It really boils down to: Who's in charge, who's telling me the information that I need to know, who's honest with me and telling me what they don't know, and who has the insight to say, "Here's how we're going to find out the things that we don't know?" Who's there empathizing with the population?

The reality is there's been a mismatch between the communication channels for the federal government and getting down not just to the state and locals but, also, to the general population in this country.

RADM Boris Lushniak, MD, MPH
Dean of the School of Public Health at the University of Maryland in College Park, RADM Lushniak spent 27 years in the US Public Health Service (PHS) before retiring in 2015 as Deputy Surgeon General. RADM Lushniak's PHS duties included 16 years at the Centers for Disease Control and Prevention, 6 years at the US Food and Drug Administration where he was the Assistant Commissioner for Counterterrorism Policy, and 5 years in the Office of the Surgeon General both as Deputy Surgeon General and acting US Surgeon General. As Acting Surgeon General, RADM Lushniak led the PHS response to the Ebola outbreak in western Africa.


On deployment to West Africa

How would you characterize the US Public Health Service Response?

RADM Lushniak. I'll first start off with kudos and congratulations to the Commissioned Corps of the PHS for their response to date. I think the latest numbers that ADM Brett Giroir, MD, Assistant Secretary of Health, told Congress in May, was that at the time more than 3,100 of the

6,100 current officers at the PHS have been deployed over the last several months. The reality is that the Commissioned Corps is out there doing service to our nation and to the world. PHS teams were deployed initially to Japan and the Diamond Princess cruise ship. The Corps been out there internationally.

Nationally, the Corps was at the Javits Center in New York assisting in setting up that medical response. They have been assisting at the military bases initially where some of the individuals who were coming in from China and other places were being held in quarantine. They have been assisting with investigations at nursing homes across the country and meat packing plants where there have been outbreaks occurring. The Commissioned Corps has been out there, so that's the good news.

The bad news is that the Corps is a small uniformed service. The reality is nobody still is seeing the Corps or knows about the Corps as they're out there doing their thing. It was very nice that ADM Giroir put a plug in for them in his recent congressional testimony. That's great that our leadership is out there acknowledging the Corps. But to a large extent, I still have an issue with the Commissioned Corps being an underfunded uniformed service of this country. The Commissioned Corps is the only uniformed service in the world whose only mission is public health. But, lack of support reflects the idea of the lack of importance that public health plays in the minds of policy makers.

To a large extent, we have had no dollars in the Corps recently for training of officers to prepare for this. For 10 years we've waited for a Ready Reserve to be set up. The Ready Reserve component was part of the Affordable Care Act. I was in the office of the Surgeon General as we were told to ramp this up. Now 10 years later, in the midst of this COVID-19 pandemic, Congress finally has passed legislation that sets a pathway for a Ready Reserve.

Why is the Ready Reserve important? In essence, we have incredible public health professionals out there in the civilian ranks who would be willing to assist the Commissioned Corps in their mission, either to backfill critical positions where Corps officers are currently stationed and need to be deployed, or as a Ready Reserve that's ready to deploy itself. All this is happening right now. I hope for better days, and I hope this COVID-19 pandemic will wake our nation up to the need of a Public Health Service Commissioned Corps, a uniformed service, that's out there doing good.

What lessons are we learning about public health in this pandemic?

RADM Lushniak. We've just developed a new space force, the 8th uniformed US service. In reality they are talking about tens of thousands of people assigned to it. Excuse me if I'm going to be assertive. I'm a big fan of space exploration. I realize that space is the final frontier and that perhaps we have to be able to defend our country in that regard. But we're already saying that space is worth investing in. Where is the wisdom that we're not investing in battling on this planet against emerging threats like COVID-19? And why is it that to this date the Commissioned Corps of the Public Health Service does not have its own budget; does not have a line item anywhere; does not have money directed for training; and, in essence, only serves because its officers are stationed at other agencies who pay for these officers? It's a personnel system and not really treated as a key and critical uniformed service of this country. That's point number one in terms of lessons learned and what needs to be done.

In addition, it's not just the people in uniform who serve at the federal level, civilians serve as well. These civilians work at the CDC, at the US Food and Drug Administration, at the National Institute of Health, at the Indian Health Service, and at many, many other agencies throughout the US government. Within those realms, we need to show support of those federal practitioners who are working very diligently and in a devoted fashion to fight this pandemic as well. Part of it is the moral support to recognize that there are multiple fronts to fighting this pandemic and the federal practitioner who is working out there, is a key component to this.

I don't want everything to be money, money, money, but the fact is that CDC's budget has been decreasing over the years. How are we supposed to set up the laboratories, how are we supposed to demand the high level of expertise when, in fact, everything has to be done on a shoestring?

Finally, we notice public health in the midst of a crisis, but public health matters each and every day. The idea that the pandemic certainly brings to light what needs to get done, but without a pandemic, what do we have?

We still have cigarette smoking, the number 1 killer in this country. That's a public health issue. We have cardiovascular diseases as an extreme killer in this country. That's a public health issue. We have diabetes mellitus that is rampant. We have substance abuse, including the opioid epidemic. Those are public health issues. We have hypertension, we have overweight and obesity. Those are all public health issues that public health battles each and every day without the recognition.

What we need is a major shift in the philosophy of this country to really take the health and wellness of our society as a key component of how you'll raise that on to a pedestal—the idea that health and wellness is critical to the functioning of this country.

How have recent public health emergencies influenced the Commissioned Corps?

RADM Lushniak. The key feature is that the Public Health Service Commissioned Corps has been growing in its mission over the years. The pre-9/11 Commissioned Corps, was a different life. The post-9/11 world is the first time that the Commissioned Corps really fell into this idea of being America's public health responders. I think that we ramped it up; we started out strong.

This was shown not only in the World Trade Center and the 9/11 disasters that occurred, but in the anthrax scenario that unfolded shortly afterwards. We saw it further continue in Hurricane Katrina and the multiple hurricane responses.

Then the Ebola response, in my last year of serving in uniform, was another action of both the civilian sector of federal responders as well as the uniformed sector. The beauty of that in terms of what we learned from Ebola was that coordination is key. That was the first time that the PHS worked so closely with the US Department of Defense and our sister services to basically have an international mission unfold with that level of coordination.

We can use those changes that have gone on, the metamorphoses that have happened over the years, as a jumping off point, but they need to be fulfilled with further growth and support of the Commissioned Corps of the US Public Health Service. The numbers are the lowest they've been in recent times in terms of active duty officers. That's not a good thing. As the mission expands, the idea of recruiting and retaining remains a problem. We have to deal with it.

Was your interest in taking the position at the University of Maryland in part to help build the future of public health?

RADM Lushniak. Certainly, I was so excited to be at the University of Maryland College Park exactly for that reason. The undergraduates are coming in from high school and their eyes are wide open. Two things are important at that stage. One is to teach them about the beauty of public health. That it's a bold and noble mission. As I always tell our students, it's about the 3 Ps: Promoting health and wellbeing, preventing disease and injury, and prolonging a high quality of life.

When you put all those things together, that's an incredible mission. I want to tell them at that young age, "Be a part of this, figure out where you fit in." But it's not for everyone. I tell my students that one of the major attributes that I need to see in a student is optimism. Public health does not deal well with pessimism. If your character is pessimistic, I actually dissuade you from becoming a public health person because there are a lot of barriers in this incredible bold and noble mission, and optimism needs to be a key feature that keeps us all going.

Next is the realization that there's so many different public health issues in our world, so many different problems to deal with. I mentioned some of them previously in terms of the public health issues we see each and every day.

Let me talk about one that's, in particular, shining through in the midst of COVID-19, but also shines through each and every day. That's the issue of health equity in our communities. A young person, who usually comes in and wants to help their community, needs to realize that part of the battle of public health is to make sure that we deal with the disparities that exist. We must make health equity a key component of our jobs. We are here to serve others.

There's a saying at the University of Maryland College Park that we're a "Do good university." I would say that public health is a do-good profession. It is about compassion, it's about love, it's about caring. Those are the types of people that I try to bring into the school, and I try to mentor and support.