
Interview: Dr. W.F.K. Seymour

'Expandable' Capabilities Needed For Medical Crises

Microbiologist Dr. W.F.K. Seymour, PhD, was interviewed on Oct. 25 by Colin Lowry, Associate Editor of 21st Century Science & Technology magazine. For 28 years, Dr. Seymour headed the Microbiology Laboratory at the District of Columbia General Hospital (D.C. General)—until the lab was shut down in January, as the phaseout of the entire facility began, a process which, except for a few clinics, was completed in June. In the early 1960s, Dr. Seymour was at the National Institutes of Health. Recently, he prepared a deposition for the D.C. City Council on emergency preparedness.

At the time of the interview, the anthrax attack in Washington, D.C. necessitated emergency mobilization of staff and facilities, which threw the national spotlight on the need to reopen D.C. General as a full-service center.

In his wide-ranging exchange with Lowry, Dr. Seymour discussed not only certain specifics of D.C. General, but also the principle that localities must have infrastructure for health and medical services (hospitals, laboratories, decontamination capabilities, teaching cadre) in appropriate depth, meaning that there should be a built-in "expandability characteristic" for emergencies. The following is excerpted from the interview.

Q: What kind of regional emergency preparedness network really should be in place in the D.C. metro area?

Seymour: I think preparedness should all come under the disaster plan, and D.C. General was one of three hospitals that were examined and found capable of handling a biological, chemical, radiological disaster. In other words, we could take people in; they could be decontaminated, triaged, and given appropriate treatment.

Now, this may seem very simple and insignificant, but in fact, unless you are set up to do it, you could easily contaminate an emergency room, and then the hospital hallways; and then the next thing you know, the whole hospital can become contaminated—because of radiological dust, anthrax spores—if someone is carrying around something that's contaminated, or tracks a chemical around. So, having the capability to decontaminate effectively—and I think that either the State Department or the Pentagon approved us, along with George Washington Hospital and Walter Reed Army Hospital. And Walter Reed personnel actually came down, and went through the drills with us, and did training last year and the previous year—1999 and 2000. We were certified as being

effective to take care of such a problem.

D.C. General has a large, potentially expandable bed capacity. When I got there, it was said to be a 1,200 bed hospital, but they quickly downsized, because they didn't have enough nurses to keep certification. But, in an emergency, what you need is space and beds, and we have five floors of wards. Each floor had three wards on it. Much of that space is now administrative office space.

D.C. General is so centrally located; it is so obvious that it be an emergency center, no matter what. Do you realize that the National Guard, which sent the MASH [mobile surgery] unit into the war in Saudi Arabia and Iraq, is located across the street, in the D.C. Armory?

The hospital was readily accessible; close to the Baltimore-Washington Parkway, Interstate Highways 295, 395, 495, and I-95, plus the Metro [regional subway system]. There are many parking areas around the hospital, and also at the RFK Stadium/D.C. Armory site, which augment the two hospital heliports. . . . With all that space, you could imagine fleets of helicopters coming in and out. [Other sites have severe limitations—ed.]

So, it's so accessible, so flexible. And, of course, you had stadium and Armory parking lots for triage activities, and other decontamination, if you had to get out. But basically, the hospital had a corridor that was set up to decontaminate people; just wash them off, and put them into fresh clothing, and admit them to the hospital.

Q: What other capabilities have we lost with the shutdown of D.C. General Hospital?

Seymour: D.C. General was a *training* hospital—everybody is talking about a community hospital—but, as a training hospital, you had professors ready for just about anything. We had several very experienced infectious disease specialists as attending medical officers and professors of medicine in the hospital. So, it's not just a community hospital; it's a training center with very intelligent and capable people.

D.C. General Hospital could also process exposures to chemical and radiological assaults, as well as biological. . . . Because it was a training facility—can you imagine, you've got medical students, interns, residents, nurses-in-training, and nurses. Now, all the people in training, all of a sudden, could be given upgrades in their assignments, and be able to do as well as physicians. So, then, you could have many more people treated per infectious-diseases attending physician, or physician in charge. That's the expandability characteristic.

Q: What about the impact on teaching itself, without D.C. General?

Seymour: I think it's a disaster, because Howard and Georgetown medical students had to be farmed out elsewhere; I don't know where they all are now. And, you find that training for minorities was a critical problem. A lot of these people would come over to the universities, having graduated from



Dr. Frederick Seymour speaks at an Emergency Meeting To Save D.C. General Hospital in March 2001.

foreign medical schools, and they are here to get training in the U.S., and they either get fellowships, or they go on to their internships and residencies. At one time, there were close to 150 or so, but over the last few years they downsized, because they didn't have enough staff to teach them.

. . . So, by not having the hospital—I believe, but I'm not a physician, so I can't say accurately, or from experience—that in the case of a disaster, or a biological warfare event, absence of the hospital would mean that many people would not be treated, and many people would be treated slowly.

That means, the whole Anacostia area—which has already been designated by D.C. Health and Human Services as underrepresented from a medical standpoint—is just bereft of sufficient medical facilities, and D.C. General provided help there.

Q: Do you think that the poorest part of any population is more susceptible to infection, if you are not able to provide access to treatment quickly, in the case of even naturally occurring disease?

Seymour: As a generality, I would say that's a logical statement to make, yes. On a case-by-case basis, possibly not. It would depend on what kind of cases you had. But, in the worst-case scenarios, the poor people, and the majority of the people in Northeast [Washington], would be at risk—that's all there is to it. Now, how much risk, whether everyone would

be hurt or not, or whether it would be long-lasting illnesses or infections, I couldn't say. It depends on what turns up.

I think what's been lost in all of the discussion—I just cannot understand it—is that you imagine the worst that could happen, and then, you set up the best you can do to respond. I don't have anybody thinking in that frame of mind. They all say, "Well, statistically, you are not likely to get ill, so you don't have to worry about it." That's true, but if you were exposed, I think you want to be able to say that anyone who is exposed, "We know what to do with you; we know where to take you, and we're ready to treat you," realizing that the majority of people would not need the treatment, but at least you can address the ones who do. But that means that you have to have a well-distributed system, that's capable of modifying its daily activities, and you can say that the hospital—at least one of three places in the District—did go through drills, did realize that they might have to handle some things. But, their main objective, at first, was decontamination. I think that everyone is assuming that they will have additional help from CDC [Atlanta-based Centers for Disease Control].

But the CDC has limited resources. They have been cut back for years. I've heard people talk who work there and they said they had to cut their budgets, because they are not going to get as much help, or supplies, or personnel. I don't understand the priorities sometimes. . . .

D.C. General had an experienced and capable trauma service. If there is going to be any kind of disaster, whether it is infection or otherwise, you may have to deal with trauma. The emergency room was experienced in getting all sorts of things. We had a couple of potential lassa fever patients that, once they recognized what needed to be done, they shipped them off to Walter Reed or George Washington, which had the capability to handle it. And, I think there was another African disease that came up, that we had a patient in the hospital, and they had that patient up on the medical ward, totally isolated. Everyone who went in was totally covered until they were able to treat them successfully, or ship the person out.

Q: From the past, have there been any specific episodes of tuberculosis, or any diseases coming into the capital, that you dealt with?

Seymour: We were involved in tuberculosis. We've been tracking TB ever since I've been there, and they did it well before that. There were people who were just dedicated to TB. In our laboratory, what we were doing was, if we had a patient, and an adequate sample, we could, the same day—if not, the next day—know that we had potential TB, and within 48 hours of receiving the sample, we could do a DNA probe, and determine whether we were dealing with tuberculosis or another form of microbacteria.

We had a good system set up with infection control. I'm not sure if you know, but TB control was a couple of buildings away from our laboratory, and we kept them posted on any

positive cases, and the development of any antibiotic susceptibility profiles on positive cases. We had a good situation set up there. . . .

Now, with TB, there is a potential problem. We took any patient in the hospital—whether they could pay or not, whether they had a Goodwill card, or had a Medicare/Medicaid card, or nothing. And therefore, any potential TB patient could be screened, and treated. The new system, with the Alliance Health Plan that the Mayor has, does have that weakness—they don't take *anybody*, because you have to fall within a certain parameter of income, be a District resident, and have registered with Alliance. Otherwise, you could be turned away, or things get so difficult, that in a *practical* sense, you are turned away. And these people are hard to find once you treat them anyway—no known address, no telephone numbers; or maybe, get them once, and never get them there again. Not only homeless, but people who have homes move around to different locations, different friends. It's a big problem.

So, from a practical standpoint, you have to be open-minded, and good-hearted, and realize that if you've got a potential TB patient now, take care of him to the hilt. Don't do anything to have him walk out the door. And, that's happened many times. When they thought that they were going to be probed, or pushed, or something like that, they'd just disappear.

I'll come back to what I said before: Take the worst-case scenario, and imagine what could happen if you didn't resolve it now, and get it started on a solution pathway. If you don't do it, you could have a disaster.

We may be running into a disaster right now, because the patients aren't freely coming into a hospital, or being brought in—by a friend, a neighbor, the police, or whatever. I would predict, that within a few years, all of a sudden there's going to be a blip: a high number of exposures to people who are positive for TB, that we haven't treated, discovered—God only knows. And someone will say, "It costs an awful lot to take care of these people." Yeah, but it costs a lot more when you've got exposures, and you have to treat a thousand more people, or even ten more people.

We had some patients six to seven months in the hospital, from potential patients, to discovery, to full DOT [directly observed therapy] treatment, to the point they were [in a non-infectious condition] to be discharged. That can take up to eight or nine months. You have to keep them incarcerated to be sure that they have been treated properly. You could not discharge a patient until they were considered to be organism-free.

It's a subtle thing most people don't understand. And it doesn't happen very often. I think, in the hospital, at any one time, in 2000, or 1999, we had about three patients in the hospital in that category. That's expensive. But it meant, that when they were out, they were free, and they would not infect anyone. God only knows how many patients are falling into

that category right now, have not even been *seen*. I don't like to be an alarmist, but I think you have to be practical, too.

The fear in my mind, that hasn't been said enough, is pediatric patients. With more adults that are positive, coughing and spewing acid-fast bacillae, you have the potential for children getting ill, and when they're ill early, if they live, it's not going to be a good life for them. We haven't seen many cases, but we have seen them. D.C. General has seen quite a few.

Q: Can we expect further problems from the shutdown of D.C. General?

Seymour: When, in any area—but they didn't think it was necessary to think it through—you remove a joint-commission certified, licensed, state-of-the-art-equipped laboratory, I think you're going to have problems. And we had so much state-of-the-art equipment there—I mean, Dr. Kisch, the director, thought, if you could save money, if you would save time, he wanted the equipment. And we got it. And of course, the other justification, if you have a training hospital, you should have some of the latest equipment, so the physicians become familiar with using it.

But the cost-cutting strategy means that you have to get administrators to decide where to save money. You are paying *more* to hire a battery of administrators than it does to run the laboratory!

You've got to demand more of the managers who run the laboratory, too, I think—run things more efficiently. Don't run to save money. Run to make the best turn-around time, the best treatment potential. Sometimes it's going to cost you a lot. Sometimes it won't.

That means you're an idealist. Nobody likes an idealist.

. . . The Mayor had that big plan for the District—the new health plan, and it's got a lot of good points to it. The cost was not very clear, and I think they're finding that the cost is huge. But it's a good idea except for one thing: They've got too many managers, and they don't have D.C. General Hospital!

D.C. General Hospital was always saving money. When they had problems, they would get up and go, and get the thing done. Because they had to work with a small budget. And now, you don't have any operation in the District that is willing or capable of handling everything with a small budget. I mean, for all the things that were done wrong, and the poor managers we had at the hospital from time to time—money being mis-spent—*still, having the hospital there saved the District so much money*. And right now, I hope they're starting to realize how much it's costing to get—*not* what they got from D.C. General, but about a third, if not a quarter, of what they used to get from D.C. General. The outlay is huge.

I think the Mayor and [D.C. Health Director Ivan] Walks have good people on the staff. But when you're cast into a situation where all of a sudden you have to deliver services, and you've closed the hospital that delivers the services, you kill yourself.