Hello and welcome to “Our American States,” a podcast from the National Conference of State Legislatures. This podcast is all about legislatures: the people in them, the policies, process and politics that shape them. I’m your host, Ed Smith.

“With respect to Covid-19, CDC has provided a comprehensive package of guidance and tools for developing, implementing and monitoring Covid-19 contact tracing programs.”

That was Dr. Kyle Bernstein at the Center for Disease Control and Prevention, our guest today on “Our American States.” Dr. Bernstein is chief of the epidemiology and statistics branch in the division of STD prevention at the CDC. He’s also an expert in contact tracing, the focus of today’s podcast.

Contact tracing is a long-time tool used by public health officials. During this pandemic, the idea is to identify people infected with the coronavirus and then contact others they’ve interacted with recently. Contact tracers then help people get testing and offer support for self-isolating.

While every state receives some funding from the federal government to support contact tracing, states have the flexibility to manage their contact tracing plans differently. At least 17 states and the District of Columbia have introduced legislation related to contact tracing, with at least 11 states and DC having enacted those measures so far during the pandemic.

So, with that background, let’s talk to our guest. Dr. Bernstein, welcome to the podcast.

Dr. B: Thank you so much for having me.

Time Marker (TM): 01:49

Ed: Well, Dr. Bernstein, thanks for taking the time to be on the podcast. I wonder if we can start with just kind of an overall explanation of contact tracing, sort of the 101, and the role it plays in public health.
Dr. B: Contact tracing approaches have been utilized by public health programs for decades. Typically, historically, they've been used to address the epidemics of HIV and Aids, viral hepatitis, sexually transmitted diseases, and tuberculosis. And contact tracing approaches were also utilized in the response to the Ebola epidemics in West and Central Africa.

Within the context of the coronavirus epidemic, we've taken these activities and modified them somewhat to be more applicable for the specifics of the coronavirus epidemic.

So, when we think about contact tracing in the context of Covid, it really is the culmination of three distinct, but related activities. First, there is the case investigation, which is when someone from the health department will be notified that a person is infected with Covid-19. They’ll reach out to them, make sure that they are doing alright, that they’ve got all the support that they need, and in that discussion they will ask them to identify persons that may have been exposed to Covid while that individual was sick or incubating.

The second step in the contact tracing activity is the actual contact tracing part. So that list of all of the close contacts is then shared with either the same health department staff or different folks, and they will reach out to those close contacts, notify them confidentially of their potential exposure, refer them to testing services, and then monitor for Covid symptoms over the course of their self-isolation or self-quarantine.

And then the third step in the contact tracing spectrum is the follow-up of symptoms, monitoring, as well as providing support, so that persons who are self-quarantining or self-isolating have access to things like food, medical care, laundry services, and other social supports that may be needed to make sure that people can stay home or away from others that are uninfected for the full period of their isolation.

TM: 04:26

Ed: Well, that sounds like a pretty complex task. Can you tell us about how the CDC is working with states on implementing contact tracing programs?

Dr. B: Sure. So, CDC has had trained case investigators and contact tracers for over 40 years. CDC has got a long history of supporting contact tracing activities in collaboration with state and local health department for HIV, sexually transmitted diseases, tuberculosis and other infectious diseases. And there are even instances of responding to natural disasters or bioterrorism using case investigation and contact tracing.

In a lot of cases, CDC directly funds personnel to work in state and local health departments in order to conduct or manage and oversee local contact tracing programs. With respect to Covid-19, CDC has provided a comprehensive package of guidance and tools for developing, implementing and monitoring Covid-19 contact tracing programs.

And CDC has developed this guidance so that it can be utilized and adapted by state and local health departments to be able to respond rapidly to changing circumstances on the local level.

So, CDC has developed a number of rubrics for evaluating digital tools and how they can best be used for Covid-19 contact tracing. CDC is also supporting a national training network that is
developing and implementing web-based training for contact tracers and case investigators. And additionally, CDC in collaboration with the CDC Foundation, is actively seeking public/private partnerships to help support critical contact tracing activities at state and local levels.

**TM: 06:06**

**Ed:** So, that sounds like some of the structure states need. Is there other infrastructure that states need to have an effective contact tracing program?

**Dr. B:** In the United States, the state and local health departments are really the ones who maintain the responsibility for Covid-19 contact tracing, and CDC is there to provide support. So, the most important thing in terms of establishing and implementing and maintaining a contact tracing program is really about workforce.

Contact tracing is a skill that is highly specialized. It’s not as easy as I think people think it is. And the time to start building that trained workforce is now. So, the magnitude of the pandemic has resulted in jurisdictions likely needing to build up a large workforce, recruit new applicant pools, and train individuals from a variety of backgrounds.

It’s important to again reiterate that contact tracing and case investigation is a specialized skill and it’s not something that you can just pick up off the street. So, in order for it to be done effectively, it requires people who have the appropriate training, and there is support for supervision and access to social and medical support for both patients and their contacts.

So, some of the skills that are really critical for case investigation and contact tracing include an understanding of patient confidentiality including the ability to conduct these interviews without violating that confidentiality, an understanding of medical terms and principles of infectious disease epidemiology like exposure and infection.

I can’t stress enough how important interpersonal skills are and interviewing skills. It’s really critical that contact tracing staff can develop and maintain rapport and trust with those patients who are infected with Covid, as well as their contacts. Staff who are resourceful in using innovating ways for locating patients are always successful.

And then finally, ensuring that the staff have a good foundation in cultural competency and sensitivity that’s appropriate to the local communities. In the United States, every state is different, so making sure that the state and local contact tracing programs align with local community culture and sensitivities is really critical.

**TM: 08:30**

**Ed:** So, recruiting and training contact tracers is crucial. Are there any other key challenges in terms of putting together a successful program?

**Dr. B:** Contact tracing is just one part of the comprehensive package of interventions to prevent and control Covid-19. But it definitely brings about its own unique challenges. So, as you suggest, the recruitment is really challenging. We’re asking programs to scale up their staffing pretty
significantly in a fairly short period of time. So, just being able to identify and successfully recruit a large number of new staff can be a challenge.

There are challenges in training. As I mentioned earlier, case investigation and contact tracing require that staff get adequately trained in issues around Covid-19 as well as cultural sensitivity, confidentiality, and being aware of what resources are available, both from a social and medical standpoint.

So, this level of specialized training is what contributes to a highly specialized professional workforce. But that takes a little bit of time. So, once you’ve identified and onboarded your staff, you need to make sure that they can get trained appropriately.

Additionally, we’re seeing lots of cases and it can very quickly overwhelm a state or local program. One area that can be a challenge is the need to identify a way to prioritize the large number of cases and contacts that a jurisdiction may be trying to investigate.

So, prioritization can be based on things like vulnerability of the population, or whether or not they’re specific high-risk settings such as congregate settings or workplaces, healthcare facilities including long-term care facilities, and other confined spaces, so correctional settings or camps.

Another challenge for contact tracing and case investigation programs is the need to manage a large amount of data that may be coming in through different data streams. So, for example, being able to link quickly data related to testing, clinical services and contact tracing activities is really critical.

Technology partners are key in the modification of existing data systems and in helping develop new, maybe more user-friendly data systems, because we need to be able to manage these multiple data streams in something that is seamless.

Additionally, there are challenges related to data sharing and many local, state, tribal, territorial and federal jurisdictions need to establish or modify or augment their current data sharing agreements to make sure that persons who are moving between jurisdictions or states can have a seamless experience with respect to contact tracing.

**TM: 011:21**

Ed: It’s interesting that data management is such a key element of these programs.

Dr. B: Yeah, it’s actually a huge challenge because you have to pull in a lot of different data streams and make sure that they all align and stay together, and then ensuring that the confidentiality and data security behind all of those streams is maintained can be really challenging, particularly for a state and local program that may not have a super robust IT infrastructure.

I would say the last area that can be a challenge for implementing these programs is issues around engagement with the public. Case investigators and contact tracers need to be seen as trusted members of the community that are there to help. It’s really important that key public officials and community leaders are engaged and supportive of these case investigation and
contact tracing efforts, and encouraging community members to follow the guidance from public health agencies including the contact tracers and case investigators is really important.

And one of the things that I think is really critical here is ensuring that the supportive systems are in place to help people complete their self-isolation and quarantine.

*TM: 012:36*

*Ed:* So, the audience for this podcast is largely legislators, legislative staff and other policymakers. What is it important for them to know as they assess the contact tracing efforts in their states? And are states taking different approaches?

*Dr. B:* Yes. So, contact tracing programs are designed and implemented at the state and local level with support from CDC. This allows the states to tailor their approaches to their specific local contexts, and also account for differences in laws and regulations that are granted to each health authority.

State legislators and staff should reach out directly to their state or local jurisdictional health departments to help identify barriers and opportunities to facilitate effective contact tracing efforts, not only in one community, but across the whole jurisdiction or other states.

CDC has a comprehensive package of guidance and tools for helping state and local jurisdictions develop, implement and monitor Covid-19 contact tracing programs, and this should be used as a starting point when evaluating where policymakers and public health professionals can work with others to improve these efforts at the state and local level.

*TM: 013:47*

*Ed:* Can you talk a little more specifically about that guidance the CDC has put out and how state lawmakers can use it, how they should think about that guidance?

*Dr. B:* Sure. So, the guidance that is available on the CDC website provides a range of tools for the development, implementation and monitoring of Covid-19 case investigation and contact tracing programs.

The primary document is the internal guidance for health departments to develop contact tracing programs, which provides a number of key considerations that need to be at least thought through when these programs are developed.

There is also a range of tools that are provided through the CDC including checklists, infographics that can be used to develop promotional material or health education material. There is guidance on the evaluation of the use of technology-based contact tracing tools.

There is also information about training of contact tracers and case investigators. Available trainings are listed on that website, as well as links to agency partners that are supporting the large scale-up of hiring of contact tracers and case investigators.

*TM: 015:08*
Ed: Let me ask you about the privacy issue. We’ve certainly seen this issue come up in news stories and I know state leaders have indicated concern about that. How are states addressing that privacy concern? And talk a little bit about what those privacy concerns are.

Dr. B: So, privacy is of utmost importance, but it’s not something that’s new to public health professionals. Many of the principles with patient privacy/confidentiality are the same principles that we’ve been using for contact tracing for HIV, tuberculosis and sexually transmitted diseases, and these programs have been around for decades.

So, all aspects of case investigation and contact tracing need to be voluntary, confidential and tailored to meet the unique needs of each individual community. Minimal professional standards for any agency handling confidential information should include providing employees with appropriate information and training regarding confidentiality guidelines and legal regulations.

So, efforts to locate and communicate with clients and close contacts need to be carried out in a manner that preserves confidentiality and privacy of all the people involved. Generally, public health staff involved in case investigation and contact tracing activities have access to information that requires training and signature on confidential statements acknowledging that they are aware of the legal requirements not to disclose any patient health information including Covid-19 information.

The legal and ethical concerns for privacy and confidentiality extend beyond Covid-19. So, all personal information regarding any Covid-19 client and contact should be afforded the same protection. So, whether you are a case of Covid-19 or someone who is named as a contact, those confidentiality and privacy standards would apply to all of that information.

And then data and security protocols need to include recommendations around password-protected computer access, as well as the use of locked confidential storage spaces and proper shredding and disposal of notes and other paper records.

So, CDC has developed guidance on how to ensure that these standards of privacy and confidentiality are maintained, and also, again, has guidance for the implementation and use of digital tools, something that is new but, again, has been utilized in the context of HIV, sexually transmitted disease and tuberculosis investigations for a period of time.

TM: 017:47

Ed: So, Doctor, what is the single most important message you’d want state lawmakers in our audience to take away from this podcast?

Dr. B: I think one is that immediate action is needed. Communities need to scale up and train a large workforce and work collaboratively across public and private agencies in order to help stop the ongoing transmission of Covid-19.

Secondly, case investigation and contact tracing are specialized skills and contribute to a high-impact public profession able to give back and protect your own community. So, in order to be
done effectively, it really requires that people have appropriate training, supervision and access to social and medical support for the patients and contacts that they’ll be interacting with.

Additionally, time is of the essence. For contact tracing to be maximally effective, it needs to be able to identify contacts and ensure they self-quarantine and stay away from others quickly. So, delays in getting cases assigned and investigated will reduce the ability for contact tracing programs to be effective.

And finally, I would say that private/public partnerships with respect to data management, workforce and other public health response activities may be substantially important in supporting a robust health department response to Covid-19.

Ed: Well, Dr. Bernstein, thank you so much for taking the time to fill the audience in on this critical issue, and stay safe.

And that concludes this edition of our podcast. We encourage you to review and rate our episodes on iTunes, Google Play or Spotify. You may also go to Google Play, iTunes or Spotify to have these episodes downloaded directly to your mobile device when a new episode is ready. For the National Conference of State Legislatures, this is Ed Smith. Thanks for listening and being part of “Our American States.”

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