



## Capitol Hill Steering Committee on Pandemic Preparedness & Health Security



JOHNS HOPKINS  
BLOOMBERG SCHOOL  
of PUBLIC HEALTH

Center for  
Health Security

### Transcript from March 30, 2021: Strengthening the Supply Chain for US Pandemic Response: Strategies for Stockpiling, Surge Capacity, and Distribution

1

00:03:15.120 --> 00:03:29.190

Andrea Lapp: Welcome to today's webinar strengthening the supply chain for us pandemic response strategies for stockpiling search capacity and distribution our moderator Anita Cicero will now begin.

2

00:03:36.510 --> 00:03:37.230

Andrea Lapp: you're on mute.

3

00:03:46.830 --> 00:03:47.760

Anita Cicero: sorry about that.

4

00:03:48.960 --> 00:04:03.210

Anita Cicero: Let me start again thank you good morning everyone thanks for joining us today for the Capitol Hill steering committee on pandemic preparedness and health, security, my name is Anita Cicero and i'm deputy director at the Johns Hopkins Center for health security.

5

00:04:04.590 --> 00:04:14.640

Anita Cicero: Our Center launched the Capitol Hill Steering Committee last fall it's a bipartisan effort that's been supported by Congressional leaders and also former administration officials.

6

00:04:15.030 --> 00:04:22.530

Anita Cicero: all of whom are committed to ensuring that we're more prepared for public health security crises in the future.

7

00:04:23.340 --> 00:04:30.840

Anita Cicero: And we're so grateful that both today's webinar and really this whole endeavor is supported by the open philanthropy project.

8

00:04:31.800 --> 00:04:37.980

Anita Cicero: And today's you heard we're going to be talking about some supply chain issues and the stockpile.

9

00:04:38.610 --> 00:04:51.360

Anita Cicero: The what we have seen is that the length and and tests intensity of this pandemic response has really exposed vulnerabilities in the domestic supply capacity for key products that are needed during a pandemic.

10

00:04:51.780 --> 00:04:59.970

Anita Cicero: Including, as we know, p P medical supplies lab supplies needles syringes key therapeutic compounds.

11

00:05:00.390 --> 00:05:15.690

Anita Cicero: And we still face supply issues currently I think it's probably fair to say that supply chain issues were not really front and Center for many people, prior to this pandemic, although they were attended to.

12

00:05:16.260 --> 00:05:30.180

Anita Cicero: it's now time to give that area, much more attention and we've seen some emerging lessons, both from the private and the public sectors that really can inform our preparedness for the next public health crisis.

13

00:05:30.930 --> 00:05:42.810

Anita Cicero: To ensure that products are going to be available when the US needs them in future pandemics, we have important decisions that need to be made now about our domestic manufacturing and distribution infrastructure.

14

00:05:43.140 --> 00:05:53.550

Anita Cicero: As well as the strategic national stockpile and today we are so pleased to be joined by our newest honorary senate co chair Senator van hollen.

15

00:05:54.090 --> 00:06:03.060

Anita Cicero: We are also going to be hearing from four experts in the field, Tim manning, who is the coven 19 supply chain coordinator for the White House.

16

00:06:03.480 --> 00:06:14.460

Anita Cicero: nicollette Lewis sot who's executive director and President of healthcare ready phyllis Arthur who's Vice President for infectious diseases and diagnostic policy at bio.

17

00:06:15.030 --> 00:06:28.020

Anita Cicero: And Eric toner, who is a senior scholar at the Johns Hopkins Center for health security it's really an honor for me to let me check with Andrew first to see, I know, Senator van hollen was having some.

18

00:06:29.700 --> 00:06:31.500

Anita Cicero: audio issues is.

19

00:06:32.550 --> 00:06:33.600

Senator Van Hollen: Here, if you can hear me.

20

00:06:33.750 --> 00:06:45.300

Anita Cicero: You are wonderful Hello Senator great to have you it's my great honor to welcome you to this first webinar I want to tell our group here i'm sure everyone knows, but.

21

00:06:45.720 --> 00:06:53.280

Anita Cicero: Center van hollen represents Maryland he sits on the appropriations and budget committees as well as the foreign affairs and banking committees.

22

00:06:53.700 --> 00:07:06.150

Anita Cicero: he's played a key role in the passage of the affordable care act and he continues to work to end health disparities and ensure access to affordable health care so Senator over to you Thank you so much for joining us today.

23

00:07:07.350 --> 00:07:13.290

Senator Van Hollen: Well, thank you and nita and thank you for your leadership that's great to be with everybody on this.

24

00:07:13.740 --> 00:07:27.570

Senator Van Hollen: Call, I am pleased to be part of the Capitol Hill steering committee on the pandemic preparedness and health, security, thank you to Johns Hopkins for launching this by Cameron and bipartisan group.

25

00:07:28.320 --> 00:07:44.400

Senator Van Hollen: Really to you know address the supply chain issues we're facing now, but also to take that look into the future, to make sure that we're better prepared for future pandemics and I want to thank Hopkins.

26

00:07:45.480 --> 00:07:58.080

Senator Van Hollen: I represent the state of Maryland, of course, and we're very proud of the role that Johns Hopkins played before the pandemic in terms of a major research institution that is provided important help.

27

00:07:58.950 --> 00:08:04.830

Senator Van Hollen: In partnering with the Federal Government i'm lots of public health challenges that here at home and around the world.

28

00:08:05.580 --> 00:08:14.220

Senator Van Hollen: And for what you've done from the very beginning of the pandemic on all aspects of of this battle, from the surveillance.

29

00:08:14.970 --> 00:08:30.030

Senator Van Hollen: As well as the R amp D and the development of of vaccines so we're proud to have Hopkins habits at home in our state of Maryland and thank all of you for joining us from around the state around.

30

00:08:30.870 --> 00:08:41.460

Senator Van Hollen: The country, I think, and i'm going to be short, because I really want to get to the experts, and you know, the purpose of this this group, of course, was to.

31

00:08:42.270 --> 00:08:54.330

Senator Van Hollen: look for answers we we did begin to take some steps as part of the American rescue plan to provide resources to address this issue, and I want to thank TIM manning and his work.

32

00:08:55.080 --> 00:09:11.550

Senator Van Hollen: With the with the administration and his leadership as we think through this hundred day review that the President announced recognizing that we have the supply chain issues so in the in the American rescue plan, we did provide.

33

00:09:12.810 --> 00:09:21.450

Senator Van Hollen: \$10 billion for the use of the defense of production Act, which the previous administration under utilized.

34

00:09:22.470 --> 00:09:46.620

Senator Van Hollen: This administration has really put those authorities to good use and our purpose in the American rescue plan was to better resource that effort, as well as about \$6

billion for research and development into all of these supply chain issues you know just last week.

35

00:09:47.700 --> 00:09:59.220

Senator Van Hollen: I visited one of the sort of ups distribution centers with Secretary of transportation that pete booty judge Senator card and Congressman Anthony Brown.

36

00:09:59.760 --> 00:10:12.690

Senator Van Hollen: You just to you know better appreciate the whole part of this process that does get less attention, which is the whole logistics of of supply chains.

37

00:10:13.710 --> 00:10:23.220

Senator Van Hollen: we've seen what our scientific community can do with the you know record fast development of vaccines that's an incredible tribute.

38

00:10:24.270 --> 00:10:37.500

Senator Van Hollen: To the scientific community, but we also know that the beginning of this pandemic we faced lots of problems with P P testing, we have the issue of stockpiles.

39

00:10:38.220 --> 00:10:50.910

Senator Van Hollen: That were that you know did not have you know the equipment and materials that were needed, and then of course we recognize that we're very dependent in in many cases on.

40

00:10:51.420 --> 00:11:03.840

Senator Van Hollen: single sources of these supplies, often in lower cost countries and we need to diversify, we need to diversify those supply chains for critical materials.

41

00:11:04.710 --> 00:11:18.090

Senator Van Hollen: And we need to also have a more diverse and better idea of what kind of stockpile we should have so that if we're in an emergency, we can both use that stockpile.

42

00:11:18.570 --> 00:11:28.080

Senator Van Hollen: In the immediate term, but also then have a more diverse supply chain system to make sure that we're ready to fight, and of course we've got to be prepared.

43

00:11:28.620 --> 00:11:39.870

Senator Van Hollen: For you know not just this particular strain of virus, but we really have to prepare for what might be thrown at us next which which could be a different kind of.

44

00:11:40.290 --> 00:11:48.630

Senator Van Hollen: Public health or other other challenge, so thank all of you for being part of this this team that's thinking through.

45

00:11:49.620 --> 00:11:59.190

Senator Van Hollen: These important questions, I think all of us look forward to the recommendations you you develop and look forward to working to implement those.

46

00:11:59.970 --> 00:12:10.800

Senator Van Hollen: through the legislative process if it's if additional legislation is required or additional resources so good to be with you could be part of this effort, and thanks for what you're doing.

47

00:12:13.140 --> 00:12:17.670

Anita Cicero: Thank you so much, Senator and thank you for those remarks.

48

00:12:18.720 --> 00:12:28.620

Anita Cicero: We know you are a key supporter of the American rescue plan that provided the substantial funding to address the pandemic and just wondered if you could take a quick question.

49

00:12:28.950 --> 00:12:40.350

Anita Cicero: Which is you know pretty open ended, but in addition to that kind of funding what what more do you think Congress can do in the future to to strengthen and ensure sustainable supply chain.

50

00:12:42.330 --> 00:12:52.350

Senator Van Hollen: Well, I think our work needs to be informed by the kind of recommendations that come out of this 100 day review, I can tell you that there's strong bipartisan.

51

00:12:53.520 --> 00:13:03.870

Senator Van Hollen: readiness to to act and we'll have a number of opportunities to do it on upcoming legislation if additional legislation.

52

00:13:04.890 --> 00:13:18.930

Senator Van Hollen: is required, based on those recommendations I do think, right now, and I know this work is being done, but we need a lot better transparency and better.

53

00:13:19.770 --> 00:13:39.870

Senator Van Hollen: information as to what are the current bottlenecks and kinks in the system are, and so you know, there are gaps and loopholes and reporting requirements to the FDA that we experienced during this time there's a limitation on the supply chain data.

54

00:13:41.010 --> 00:13:52.470

Senator Van Hollen: And so I know you know, one of the things that you know to man in his team, and all of you who are looking into this are doing is to try to get a much better visibility.

55

00:13:53.520 --> 00:13:54.000

Senator Van Hollen: into.

56

00:13:55.230 --> 00:14:03.630

Senator Van Hollen: All the supply chain issues, because, as I said, it is often the overlooked part of this, but you know.

57

00:14:04.950 --> 00:14:13.380

Senator Van Hollen: Having being able to resource something from from a a place that where the.

58

00:14:14.430 --> 00:14:23.850

Senator Van Hollen: nate happy up and provide the materials, when you need them obviously doesn't do us any good and what we know from a global pandemic of courses all at once, the entire world.

59

00:14:25.080 --> 00:14:36.480

Senator Van Hollen: is looking you know for the few places that may be able to provide those supplies and so there's the demand outstrips the supply very quickly and so that's why.

60

00:14:36.750 --> 00:14:50.370

Senator Van Hollen: We need to diversify the supply chains, make sure we have adequate stockpiles for the early days of any emergency and, of course, also give a lot of thought to them, which I know that by demonstrations doing this is that early detection.

61

00:14:51.510 --> 00:15:03.030

Senator Van Hollen: You know, through the CDC and you know other other early warning systems that we can better detect an outbreak, you know the previous administration had dismantled the.

62

00:15:03.390 --> 00:15:13.950

Senator Van Hollen: office of the National Security Council that had been tasked with sort of keeping eyes and ears open for early warnings and glad that that offices in reestablished but.

63

00:15:14.970 --> 00:15:27.330

Senator Van Hollen: So we have everything from the early warning systems to the focus of this effort, which is making sure that we really study the supply chain issues diversify.

64

00:15:28.440 --> 00:15:32.250

Senator Van Hollen: Those supply chains and have on hand and adequate stockpile.

65

00:15:33.930 --> 00:15:44.700

Senator Van Hollen: For any immediate response that may be necessary, so thank Thank you all for what you're doing and very much look forward to the recommendations that come out of this group.

66

00:15:45.480 --> 00:15:51.030

Anita Cicero: And thank you so much, Senator and thanks for joining us today we're really looking forward to working with you.

67

00:15:51.540 --> 00:15:58.890

Senator Van Hollen: Well, thanks i'm gonna I can't stay for the whole thing but i'm looking i'm going to stay on it here some of the early part of this conversation some takeaways Thank you.

68

00:15:59.220 --> 00:16:08.640

Anita Cicero: wonderful thing, so let me turn now to our first panelist Mr TIM manning TIM serves as the supply coordinator for the White House Cobra 19 response team.

69

00:16:08.970 --> 00:16:16.350

Anita Cicero: They are he organizes federal effort focused on securing strengthening and ensuring a sustainable pandemic supply chain.

70

00:16:16.980 --> 00:16:28.020

Anita Cicero: Prior to joining the this response team TIM had been an advisor and executive with the Pacific disaster Center, which is a global applied research Center managed by the University of Hawaii.



71

00:16:28.320 --> 00:16:43.770

Anita Cicero: And he served on the Faculty of the disaster and emergency management studies program at Georgetown University. TIM also served as deputy administrator for FEMA for protection and National Preparedness so TIM Thank you so much for joining over to you.

72

00:16:44.790 --> 00:16:47.550

Timothy Manning: Thank you and good afternoon or good morning everybody.

73

00:16:48.720 --> 00:16:57.720

Timothy Manning: So it's wonderful to be with you. Take a few minutes to kind of give you a sense of what we at the White House code response team are working on and.

74

00:16:58.380 --> 00:17:08.730

Timothy Manning: With some specific I towards supply chains and really look forward to the conversation of the panelists. Really impressive panel and it's a great honor to be on and to be with you all today.

75

00:17:09.300 --> 00:17:18.420

Timothy Manning: So at the White House covert team we're currently focused on restoring public trust and moaning and aggressive safe and effective vaccination campaign.

76

00:17:18.960 --> 00:17:27.690

Timothy Manning: We're advancing the steps that we know will stop the spread like expanded masking testing and social distancing and all the things we need to do to support those activities.

77

00:17:28.080 --> 00:17:36.510

Timothy Manning: And we're focused on providing critical tools and protective equipment to people on the front lines and healthcare industry and first responders.

78

00:17:37.860 --> 00:17:46.740

Timothy Manning: We're working with states and cities tribal communities private industry to increase the supply and administer testing vaccines critical medical equipment personal protective equipment.

79

00:17:47.070 --> 00:17:56.670

Timothy Manning: All the things that will help us get our economy back get people back to our normal lives as quickly as we can help hurry up in schools and help Europe in businesses safely.

80

00:17:57.360 --> 00:18:07.770

Timothy Manning: and central to all those efforts, of course, is equity ensuring their communities and people being disproportionately infected and killed by the pandemic receive the care they need and deserve.

81

00:18:08.820 --> 00:18:15.450

Timothy Manning: So right now I work with teams across the government from Department of Defense to department, health and human services, the veterans affairs.

82

00:18:16.110 --> 00:18:28.380

Timothy Manning: fema the whole Interagency to ensure our country has what we need for the pandemic response when we need it as most efficiently and quickly as possible, so we all know.

83

00:18:28.770 --> 00:18:35.040

Timothy Manning: This pandemic has laid bare the vulnerabilities that exist in our supply chains and our ability to scale up to respond.

84

00:18:35.820 --> 00:18:45.810

Timothy Manning: it's it's critical to have resilient systems in a crisis and we've seen that our systems were not all that resist resilient.

85

00:18:46.650 --> 00:18:55.260

Timothy Manning: And you know it's important for us to remember the most critical moments of the shortfalls back of availability of pee pee in the spring and summer.

86

00:18:55.890 --> 00:19:02.100

Timothy Manning: You know, and while we've made great progress and we're making incredible progress every day there's still work to be done.

87

00:19:02.970 --> 00:19:21.210

Timothy Manning: So, as we additionally as we ramp up vaccine manufacturing to a scale that's never been done in human history and this week alone we're approaching 200 million doses shipped this week and just this week alone will be moving 33 million vaccine doses across the country.

88

00:19:22.260 --> 00:19:33.300

Timothy Manning: Is the biggest thing we've undertaken as a government since World War Two probably and we're working across a wide field of secondary and tertiary suppliers.

89

00:19:33.660 --> 00:19:42.480

Timothy Manning: without whom all of this would stop, and these are companies you've never heard of well, many of you on this group, probably a very many these are companies and most people have never heard of.

90

00:19:42.960 --> 00:19:56.850

Timothy Manning: And you know that small firm in suburban Boston or somewhere in Maryland is the linchpin, to be able to get vaccines manufactured in and out around the country and eventually around the world.

91

00:19:57.510 --> 00:20:08.160

Timothy Manning: So these raw materials through manufacturing of components to the manufacturing of the final product and distribution so we're looking at sand to glass to vials then filled with vaccine CAP frozen shipped.

92

00:20:09.570 --> 00:20:16.260

Timothy Manning: Combined it combined with needles and syringes hundreds and hundreds of millions of them and finally a needle in an arm.

93

00:20:16.740 --> 00:20:24.000

Timothy Manning: So we'll talk to you a little bit real quickly about where we're coming from what we're working on right now so we're spending, most of our time.

94

00:20:24.480 --> 00:20:33.270

Timothy Manning: On the immediate priorities related to the supply chain in the today's response we're focused on, as I mentioned, vaccines therapeutics.

95

00:20:33.570 --> 00:20:44.490

Timothy Manning: Testing diagnostics and increasing importance always important but increasing focus on sequencing so we can identify emerging variants mutations of the virus.

96

00:20:45.360 --> 00:20:56.910

Timothy Manning: And all types of PP, each of which has an extraordinarily complex supply chain of raw materials and processes and then distribution in many cases very siloed distribution.

97

00:20:57.450 --> 00:21:03.480

Timothy Manning: So the Center mentioned we've taken a lot of recent action using the Defense production act and and other tools that.

98

00:21:04.110 --> 00:21:06.810

Timothy Manning: We can mirror those authorities that lie with barta.

99

00:21:07.470 --> 00:21:18.450

Timothy Manning: In the department, health and human services and that's allowed us to do everything from additional support to Pfizer, for example, to accelerate their production and bring forward another vaccine.

100

00:21:18.870 --> 00:21:27.390

Timothy Manning: From the original projections of mid to late summer to may have to have enough vaccine meant to vaccinate all adult Americans who want a vaccine.

101

00:21:28.920 --> 00:21:38.370

Timothy Manning: that's helping us get things like tangential flow filtration skids an additional filters and the continual use consumables.

102

00:21:38.940 --> 00:21:44.760

Timothy Manning: And we're using this combination of expertise from across the government to help facilitate these things.

103

00:21:45.210 --> 00:21:55.200

Timothy Manning: So when you hear us talk about DPA a lot of times it's about accelerating the delivery, but one of the more important things is the ability to increase the industrial base in the first place.

104

00:21:55.800 --> 00:22:04.980

Timothy Manning: DPA the party ratings, let us go to the US, the US Government go to the front of the line with its contracts, but its Title three, is the ability to expand production and build more lines.

105

00:22:05.400 --> 00:22:13.200

Timothy Manning: That really will solve the problems the global supply crunch right now isn't really because of any one particular authority or contracting mechanism.

106

00:22:13.440 --> 00:22:26.190

Timothy Manning: Is because there's we're making 7 billion courses of vaccine with the infrastructure designed for you know pre coven and all those medicines, all those other vaccines, they all still need to be made so there's just not enough to go around.

107

00:22:27.480 --> 00:22:37.440

Timothy Manning: So as we're doing this, you know a lot of the work that we're doing, we have to look to the longer term as well, we have to sustain these investments we've made.

108

00:22:38.310 --> 00:22:46.320

Timothy Manning: billions and billions of dollars in investments we're going to be making an additional 10 billion investments in additional stock files and expanding capacity.

109

00:22:46.890 --> 00:22:52.380

Timothy Manning: But we need to sustain that we need to never find ourselves in a situation where we were that last spring and over the summer.

110

00:22:53.130 --> 00:23:00.000

Timothy Manning: And that's going to mean continued investments in and changes in the regulatory environment.

111

00:23:00.570 --> 00:23:06.780

Timothy Manning: that allow us to build a US domestic manufacturing capacity less susceptible to interruptions and global.

112

00:23:07.320 --> 00:23:14.850

Timothy Manning: supply chains like port congestion on the west coast or maybe a blocked canal so for a global shipping.

113

00:23:15.600 --> 00:23:23.460

Timothy Manning: So we need to do this and that it's going to require things like rethinking the way that we do purchases and as a government.

114

00:23:23.910 --> 00:23:32.610

Timothy Manning: With focuses on domestic production, you know American made products and working closely with allies on reassuring and you're sharing projects.

115

00:23:33.180 --> 00:23:39.180

Timothy Manning: So just i'm looking forward to questions, I want to take them too much more times, can be a fantastic dialogue.

116

00:23:39.480 --> 00:23:46.650

Timothy Manning: So just just In closing, you know we don't take this work lightly we're trying we're not working in silos and we're looking at these issues through broad lenses.

117

00:23:46.920 --> 00:23:55.380

Timothy Manning: And it's you know we have very specific view towards the coven response now, but we understand there are wide variety of challenges to the supply chain, we have to take into account.

118

00:23:55.740 --> 00:24:03.810

Timothy Manning: Things like changing shipping routes and climate change, and you know production all around the globe, and so the US the world we need resilient.

119

00:24:04.620 --> 00:24:09.120

Timothy Manning: Secure diverse supply chains for our collective health and security so we're.

120

00:24:09.630 --> 00:24:20.040

Timothy Manning: going to just end there, and really look forward to the the comments of the other panelists and then any questions we're going to get a little bit, thank you for again for letting me be with you this morning, I look forward to the conversation.

121

00:24:21.420 --> 00:24:28.260

Anita Cicero: Thank you so much, Tim and really appreciate with all that's going on, that you took the time to join us today it's great to have you here.

122

00:24:29.910 --> 00:24:42.360

Anita Cicero: Our next speaker is Dr nicolette Lewis on executive director and President of healthcare ready, which is a nonprofit organization that's focused on strengthening the US healthcare supply chain preparedness and response.

123

00:24:42.810 --> 00:24:56.130

Anita Cicero: during and after disasters and disease pandemics nicolette works to establish strategic public private partnerships and interacts in the organization interacts with government partners at the federal state and local levels.

124

00:24:56.730 --> 00:24:59.760

Anita Cicero: Prior to this role during the height of the Ebola epidemic of.

125

00:25:01.020 --> 00:25:16.440

Anita Cicero: nicollette served as senior advisor at the US State Department Special Coordinator for Ebola in this role, she was responsible for coordinating international efforts and help to jumpstart diplomatic the diplomatic response to the epidemic nicollette, thank you for joining us.

126

00:25:17.190 --> 00:25:24.690

Nicollette Louissaint: Thank you so much, and nita and it's always a pleasure to be with you all, and I just want to thank you for hosting such an important conversation in this moment.

127

00:25:25.230 --> 00:25:32.970

Nicollette Louissaint: As many of you know, I am more than happy to have as many conversations with you all about enhancing resilience in the supply chain at any time.

128

00:25:33.720 --> 00:25:38.940

Nicollette Louissaint: But I really do appreciate this space, because I know there have been many discussions about.

129

00:25:39.660 --> 00:25:47.130

Nicollette Louissaint: The reaction to the supply chain or supply chain challenges, but very few to really review what we've learned and really determine how to move forward.

130

00:25:47.340 --> 00:25:55.530

Nicollette Louissaint: In a way that allows us to get past, not just the COPA 19 pandemic, but also the other catastrophic events that we know will impact us in the years to come.

131

00:25:55.800 --> 00:26:00.150

Nicollette Louissaint: So I do hope that this is the beginning of many more discussions like this that we need to have.

132

00:26:00.840 --> 00:26:08.940

Nicollette Louissaint: For those who are not familiar with us as Anita said healthcare ready as a nonprofit organization, I think our history is an important part of this conversation.

133

00:26:09.540 --> 00:26:19.950

Nicollette Louissaint: We were actually created by a coalition of public and private sector partners, shortly after hurricane Katrina and what started as an informal coalition to make the availability of supply.

134

00:26:20.580 --> 00:26:24.600

Nicolette Louissaint: Specifically, a pharmaceutical products in the greater New Orleans area.

135

00:26:24.990 --> 00:26:37.740

Nicolette Louissaint: Consistent after that event really morphed into the organization that we are today and our goal is to make sure that there is a stand standing maintain partnership between government at the federal state and local levels.

136

00:26:37.980 --> 00:26:45.510

Nicolette Louissaint: And the private sector supply chain, to be able to focus on these issues of disaster preparedness and response, not just during a pandemic.

137

00:26:46.020 --> 00:26:52.530

Nicolette Louissaint: And we recognize that it is impossible to maintain Community and public health without a functioning and resilience supply chain.

138

00:26:52.830 --> 00:27:02.130

Nicolette Louissaint: And because of that we work to provide the coordination, the information sharing and Problem Solving that's needed to prepare for and respond to disasters and disease outbreaks.

139

00:27:02.910 --> 00:27:11.790

Nicolette Louissaint: Over the past year we've been focused on using our partnership to not just resolve and and react to but also anticipate supply chain challenges.

140

00:27:12.030 --> 00:27:15.720

Nicolette Louissaint: related to the searches associated with the COPA 19 pandemic.

141

00:27:16.020 --> 00:27:24.750

Nicolette Louissaint: So my remarks are going to be informed by that experience and to the extent possible, I will be making the differentiation between the pharmaceutical supply chain.

142

00:27:24.960 --> 00:27:29.130

Nicolette Louissaint: And the medical surgical supply chain, because, while we often talk about them in aggregate.



143

00:27:29.370 --> 00:27:38.070

Nicolette Louissaint: They are two very separate and highly dynamic supply chains and so i'm really going to try to focus in on with some specificity, in the few minutes I have.

144

00:27:38.340 --> 00:27:42.480

Nicolette Louissaint: On the portions of the supply chain and the part of the supply chain that we're really talking about.

145

00:27:42.900 --> 00:27:50.790

Nicolette Louissaint: And so, with that i'm going to try to provide very quickly a few main takeaways from the last year, but also to very specific recommendations for our path forward.

146

00:27:51.780 --> 00:27:58.380

Nicolette Louissaint: The first takeaway is that most of the assumptions that we've had in print them preparedness plans regarding supply chain resilience.

147

00:27:58.620 --> 00:28:05.460

Nicolette Louissaint: Both on the pharmaceutical and medical surgical side that went into our pandemic response plans actually held up.

148

00:28:05.820 --> 00:28:13.050

Nicolette Louissaint: But the known interventions that we had were not necessarily activated quickly enough to delay some of the strains that we saw.

149

00:28:13.410 --> 00:28:19.740

Nicolette Louissaint: it's important to remember that when we are talking about a pandemic, we often think through the needs, as it pertains to.

150

00:28:20.190 --> 00:28:29.100

Nicolette Louissaint: Healthcare workers or health supply for global demand, but we often forget that when we're specifically talking about MED surge stuff P, p.

151

00:28:29.640 --> 00:28:36.660

Nicolette Louissaint: we're not just thinking about the healthcare workers that need those products we're also thinking about all of those other critical infrastructure sectors.

152

00:28:36.990 --> 00:28:43.260

Nicolette Louissaint: And so we know that there was a lot of time spent in the early months recreating work that have already been done.

153

00:28:43.680 --> 00:28:47.670

Nicolette Louissaint: Including trying to determine the largest manufacturers of certain critical products.

154

00:28:48.000 --> 00:28:57.930

Nicolette Louissaint: Assessing strategies that could be used to surge production identifying new manufacturers and existing manufacturers that had capacity to boost but we knew a lot of that already.

155

00:28:58.530 --> 00:29:03.660

Nicolette Louissaint: But we also knew that there were conservation strategies that needed to be implemented right away.

156

00:29:04.080 --> 00:29:18.090

Nicolette Louissaint: And without having the ability to implement those conservation strategies quickly that date did put undue strain on the supply chain in the early months and prevented us from using the available supply, especially a pee pee in the smartest ways.

157

00:29:19.020 --> 00:29:32.550

Nicolette Louissaint: Knowing also what it, how much product was going to be released from the SNS and when would have also given manufacturers insight into what additional steps they needed to take and what product they may need to be able to release to make available faster.

158

00:29:33.420 --> 00:29:45.630

Nicolette Louissaint: But further again how we post P P conservation strategies more widely across all sectors and not just healthcare would have extended available product, we saw in a lot of the early months.

159

00:29:46.200 --> 00:29:51.990

Nicolette Louissaint: A lot of our critical infrastructure sectors and and I want to underscore that they are critical infrastructure sectors.

160

00:29:52.470 --> 00:30:03.060

Nicolette Louissaint: Electricity oil and natural gas it and telecoms trying to procure and then hoard P P, because they knew that they had critical operations that needed to be maintained.

161

00:30:03.300 --> 00:30:12.840

Nicolette Louissaint: and their staff needed to use those products well that took away from what we can make available to health care, but also in the absence of those conservation strategies, extending to them.

162

00:30:13.200 --> 00:30:21.990

Nicolette Louissaint: There was also the likelihood that that product could have been wasted or turned over a lot more quickly than could have been otherwise with different guidance.

163

00:30:22.230 --> 00:30:25.770

Nicolette Louissaint: So really thinking about how we manage that conservation because.

164

00:30:26.130 --> 00:30:37.770

Nicolette Louissaint: With all of the interventions that we're looking at the reality is that we will very likely have to continue to consider conservation in the early phases of a pandemic as we're boosting production so just want to start there.

165

00:30:38.910 --> 00:30:46.710

Nicolette Louissaint: The other challenge and I will be honest and say this one doesn't have a clear solution in my eye is to manage the level of mass procurement and hoarding.

166

00:30:46.950 --> 00:30:53.880

Nicolette Louissaint: That done in the reaction to the threat of the pandemic in the early months, this is another phase that we really have to be mindful of.

167

00:30:54.150 --> 00:31:02.460

Nicolette Louissaint: And this really from Ireland is an equity issue and one that will have to require multiple interventions, including the use of allocation strategies.

168

00:31:02.640 --> 00:31:08.520

Nicolette Louissaint: But, making sure that the ability to procure more product from the supply chain doesn't mean that you can you can hoard.

169

00:31:08.790 --> 00:31:19.350

Nicolette Louissaint: The available product, because at the end, we find that Community hospitals and some of those facilities clinics, for example, that didn't have that same purchasing power we're at a significant disadvantage.

170

00:31:20.340 --> 00:31:30.840

Nicolette Louissaint: The second takeaway is that the pharmaceutical supply chain held up fairly well as notice in many reports that have recently come out happy to link those in the chat or make those available later.

171

00:31:31.260 --> 00:31:37.230

Nicolette Louissaint: But it's important to make this distinction, not just to celebrate what was, but to understand why it held up well.

172

00:31:37.650 --> 00:31:44.070

Nicolette Louissaint: The pharmaceutical supply chain had two challenges that had to be managed with equal priority the planning and development of metal.

173

00:31:44.460 --> 00:31:55.650

Nicolette Louissaint: medical countermeasures to combat covert 19 but also maintaining production and and availability of routine medicines, including medicines that we're going to be used for treatment against.

174

00:31:57.090 --> 00:32:09.120

Nicolette Louissaint: The components of the supply chain that were shown to be resilient on but did see impacts we're also based on bulk purchasing a product for stockpiling I point to the example of hydrochloric Quinn, and what we saw with that.

175

00:32:09.570 --> 00:32:14.700

Nicolette Louissaint: strain in the supply chain as an example of something that we may want to try to avoid in the future.

176

00:32:15.360 --> 00:32:24.060

Nicolette Louissaint: But most of the strains in the supply chain were avoidable with a different level of coordination between the Federal Government and the manufacturers and distributors of those products.

177

00:32:24.750 --> 00:32:34.500

Nicolette Louissaint: Additionally, the challenge of moving products from other countries, specifically finished product to the US was our biggest risk once commercial air travel became more limited.

178

00:32:34.740 --> 00:32:41.430

Nicolette Louissaint: This was overcome with a lot of investments in transporting finished products, specifically from Asia and Europe which prevented shortages.

179

00:32:41.880 --> 00:32:51.060

Nicolette Louissaint: But that showed me at least that the product was available, and at that point, it wasn't about manufacturing, it was about again that the logistics is centered around Helen mentioned.

180

00:32:51.300 --> 00:32:58.770

Nicolette Louissaint: Those incredible logistics that are required to be able to move that product and then also thinking through into my final takeaway.

181

00:32:59.340 --> 00:33:06.030

Nicolette Louissaint: The time spent reimagining this supply chain and the strategic national stockpile strategies at the height of the pandemic.

182

00:33:06.540 --> 00:33:16.200

Nicolette Louissaint: There was a lot of tension between how do we reimagine this s&s that could be an assessment us that we've been talking about in the previous years, to be able to respond.

183

00:33:16.740 --> 00:33:25.170

Nicolette Louissaint: Not just to an anthrax event but also a pandemic, as well as thinking through what strategies could be made an investment in the supply chain.

184

00:33:25.860 --> 00:33:32.220

Nicolette Louissaint: it's an understandable approach trying to balance attention of looking forward round dealing with the strain of the pandemic.

185

00:33:32.940 --> 00:33:47.130

Nicolette Louissaint: But we also have to remember that this was a moment where we, we could have revamped a lot of strategies, but we were trying to combat an immediate pandemic and thinking about strategies and proposals for the next 20 years by it.

186

00:33:47.760 --> 00:33:52.050

Nicolette Louissaint: And the takeaway here to me is that, while it might be tempting to get away from.

187

00:33:52.320 --> 00:34:03.330

Nicolette Louissaint: The discussions of the immediate threat two years to come, we really have to use that time between events differently to build and maintain the supply chain that can continue to be responsive to catastrophic events.

188

00:34:03.660 --> 00:34:10.020

Nicolette Louissaint: But that also means that the questions of the replenishment of the strategic national stockpile of other stockpiles cause strain.

189

00:34:10.560 --> 00:34:20.130

Nicolette Louissaint: During the height of the pandemic it's understandable how we got there there been a lot of concerns about routine funding to the SMS and the ability of.

190

00:34:20.700 --> 00:34:26.400

Nicolette Louissaint: regions, as well as large health systems to be able to invest in and maintain their old stockpiles.

191

00:34:27.090 --> 00:34:38.280

Nicolette Louissaint: But if we aren't being intentional about how we address that between events what we find is that during that catastrophic event we're trying to use resources to balance that future replenishment.

192

00:34:38.580 --> 00:34:43.260

Nicolette Louissaint: While trying to determine how to respond in real time and that creates a lot of tension.

193

00:34:44.190 --> 00:34:51.810

Nicolette Louissaint: In my last minute um as we look ahead, it is tempting to push towards instituting changes that could shift the response to covert 19.

194

00:34:52.230 --> 00:35:02.670

Nicolette Louissaint: But I would not be an emergency manager if I did not cost us us costing us against being overly reactive and preparing for the disaster that is behind us, we really do have to look ahead.

195

00:35:02.970 --> 00:35:11.010

Nicolette Louissaint: And the first recommendation I have is that while we are pushing to work with domestic supply chain that diversification component is incredibly important.

196

00:35:11.280 --> 00:35:22.110

Nicolette Louissaint: We do have to consider the current elasticity and strategies that are in place to build resilience for all hazards events, we do know that the supply chain does have some resiliency.

197

00:35:22.350 --> 00:35:32.910

Nicolette Louissaint: that are in place that have allowed us to respond to hurricanes like hurricane Maria and other events and the strategies that are in place, there may need to be extended to other parts of the supply chain.

198

00:35:33.180 --> 00:35:38.820

Nicolette Louissaint: So I would say let's start there by thinking about those strategies that can match this make product.

199

00:35:39.150 --> 00:35:49.290

Nicolette Louissaint: manufactured in the US, but thinking about the strategies that allow for available product to be pushed into the US, even as phil finish as something that can be considered.

200

00:35:49.530 --> 00:35:56.850

Nicolette Louissaint: Also, making sure that we're mindful that if we are moving production line to the United States, we are intentional about not creating additional.

201

00:35:57.180 --> 00:36:07.380

Nicolette Louissaint: In in Leicester city, because if we're not careful, we could be creating other risks and this potential disruptions My second point is on the use of the Defense production act.

202

00:36:08.010 --> 00:36:14.130

Nicolette Louissaint: it's been a very important tool to boost production, but we have to carefully manage the cascading impacts.

203

00:36:14.430 --> 00:36:24.690

Nicolette Louissaint: Of the use of the DPA to boost production of particular products so as we are dealing with finite resources and and we have to be honest about that we're never going to be in a space of infinite resources.

204

00:36:24.960 --> 00:36:35.460

Nicolette Louissaint: We have to track the products that are not being produced because of the prioritization of DPA rated orders and because we're in a world of continuous threat natural disease natural hazards.

205

00:36:36.390 --> 00:36:46.710

Nicolette Louissaint: recurring flu seasons and other threats, we have to be intentional, to ensure that the products that are not being produced right now do not have implications for our ability to respond to future threats.

206

00:36:46.980 --> 00:36:55.890

Nicolette Louissaint: Even in the months to come with hurricane season wildfire season and, as I said, flu season so going forward, we should continue to think about the DPA as a critical tool.

207

00:36:56.190 --> 00:37:09.780

Nicolette Louissaint: But need to ensure that there's routine analysis in place to mitigate later impacts, but further it's important that we do not use the DPA in place of what standing partnerships and long term investment in a resilience supply chain could accomplish.

208

00:37:10.410 --> 00:37:18.480

Nicolette Louissaint: I recognize that this is simply scratching the surface of a very complex and important topic so again, I just want to thank you all for this invitation and for your time.

209

00:37:18.720 --> 00:37:30.810

Nicolette Louissaint: i'm hopeful that this is a continuation of a very important conversation that should continue, and, as always, I look forward to engaging with you all in a dialogue where we can explore the strategies to create more resilience in the supply chain, thank you.

210

00:37:31.890 --> 00:37:40.380

Anita Cicero: And thanks so much nicolette and and thanks for scratching a little bit below the surface, I think, and being really specific in your observations and recommendations.

211

00:37:41.040 --> 00:37:48.450

Anita Cicero: Our next speaker i'm pleased to introduce this phyllis Arthur who's Vice President of infectious diseases and emerging science of bio.

212

00:37:48.870 --> 00:37:59.520

Anita Cicero: In this role phyllis is responsible for working with Member companies in vaccines molecular diagnostics and bio Defense on a range of policy legislative and regulatory issues.



213

00:38:00.420 --> 00:38:13.500

Anita Cicero: Prior to joining bio phyllis worked in marketing and sales positions for Merck and their vaccine division so over her 16 year career there she helped to launch several new vaccines, including the first HPV vaccine.

214

00:38:14.070 --> 00:38:22.260

Anita Cicero: During her years of marketing she worked with clinical and academic thought leaders and infectious diseases oncology and public health, so phyllis over to you.

215

00:38:23.250 --> 00:38:32.340

Phyllis Arthur: Thanks so much Nina can you hear me Okay, yes um Thank you so much it's really a pleasure to be here today and talk about this extremely important issue.

216

00:38:33.060 --> 00:38:44.640

Phyllis Arthur: I wanted to actually talk about a couple of things one, obviously, as you said, I represent, that many of the companies that are working on the code 19 response in the medical countermeasure space.

217

00:38:45.000 --> 00:38:53.610

Phyllis Arthur: And in this case, obviously, those companies have worked extremely closely with their their public sector partners and also amongst themselves.

218

00:38:53.970 --> 00:39:03.660

Phyllis Arthur: To bring forward a host of really important vaccines diagnostics and therapeutics that have helped us with our response, not just in the US and worldwide.

219

00:39:04.050 --> 00:39:13.890

Phyllis Arthur: And I think as part of this preparedness discussion we're having this discussion of what we're learning, I think the companies have learned a great deal about what we can do.

220

00:39:14.340 --> 00:39:25.680

Phyllis Arthur: In a pandemic that really helps to resolve that pandemic and we're certainly going to talk about the supply chain part of that today, but it's also important that we look at how much we learned.

221

00:39:25.980 --> 00:39:32.490

Phyllis Arthur: about how quickly we can go if we work together companies really work closely with the FDA had excellent.

222

00:39:33.150 --> 00:39:45.630

Phyllis Arthur: excellent opportunities to partner between companies very quickly share data share manufacturing facilities get products, you know products that were an early stage, development, all the way through development in record time.

223

00:39:46.170 --> 00:39:51.870

Phyllis Arthur: I think the other thing companies have learned is how to do scale up and scale out in.

224

00:39:52.110 --> 00:39:59.880

Phyllis Arthur: record time this was obviously very much because of the partnership, they had with the government and meet each other that we were able to not just.

225

00:40:00.150 --> 00:40:06.990

Phyllis Arthur: Do clinical development but actually create relatively complicated manufacturing processes.

226

00:40:07.260 --> 00:40:16.710

Phyllis Arthur: That were GMP worthy that were you know actually well character as and well explained with help from the FDA and the do D and Barbara and ask for teams and NIH.

227

00:40:17.070 --> 00:40:28.050

Phyllis Arthur: And I think that's a testament to what we can do when we put our collective minds to it with great science and the great expertise of both industry and government players.

228

00:40:28.800 --> 00:40:33.240

Phyllis Arthur: I think the other thing that we actually learned is that we can also work very closely.

229

00:40:33.570 --> 00:40:39.930

Phyllis Arthur: With our communities to actually have the kind of diversity and clinical trials that we all have been talking about for decades.

230

00:40:40.200 --> 00:40:46.470

Phyllis Arthur: And I hope at some point will dedicate some space to that as a topic to because it's vital to our overall preparedness.

231

00:40:46.710 --> 00:40:56.850

Phyllis Arthur: That we can show the American people in the world, in essence, how these products work products work and products like it medical countermeasures work and underlying conditions by race, ethnicity age.

232

00:40:57.390 --> 00:41:01.560

Phyllis Arthur: I think that's one of the things I hope will carry forward into the.

233

00:41:02.130 --> 00:41:11.640

Phyllis Arthur: Inter pandemic period as well that was talking about and use for better research overall in in all of facts that all aspects of health care.

234

00:41:12.120 --> 00:41:25.800

Phyllis Arthur: um, but I think one of the things that we're talking about today that's so important is we're learning more and more about the fact that this biopharmaceutical industry is truly an ecosystem and we have to treat it as an ecosystem.

235

00:41:27.060 --> 00:41:36.840

Phyllis Arthur: TIM actually referred to the fact that we're trying to do 7 billion courses of vaccine worldwide we're actually trying to do 14 billion doses of vaccine and deliver that to the world.

236

00:41:37.800 --> 00:41:45.750

Phyllis Arthur: Historically, the entire vaccine industry, all countries included all vaccine manufacturing types included.

237

00:41:46.020 --> 00:41:57.690

Phyllis Arthur: produced 5 billion doses of vaccine that's it and that's flu twice a year that's all the pediatric vaccines, we make that's the narrower set of adult vaccines that we make.

238

00:41:58.170 --> 00:42:08.520

Phyllis Arthur: That was it 5 billion doses and we're trying to make 14 billion doses, on top of that, by leveraging that infrastructure by doing partnerships between.

239

00:42:09.000 --> 00:42:13.560

Phyllis Arthur: Companies by you know doing voluntary technology transfer.

240

00:42:14.400 --> 00:42:20.430

Phyllis Arthur: And that investment that we've made in that manufacturing capacity worldwide, and certainly in the US, where we have.

241

00:42:20.760 --> 00:42:29.640

Phyllis Arthur: Fantastic investments you've made at the company level with our contract manufacturing organizations that historical investment made by Barbara and the CMOs.

242

00:42:29.970 --> 00:42:39.900

Phyllis Arthur: This isn't this is extremely important to our search capacity for manufacturing, but what we realized is, you have to invest in the supply chain before that.

243

00:42:40.260 --> 00:42:48.990

Phyllis Arthur: And you have to do that, globally, because it's a Globe when we have a global pandemic, we need to be able to have all the vaccine companies working on products.

244

00:42:49.290 --> 00:42:59.220

Phyllis Arthur: be able to not just regionally manufacturing deliver for the region, but source as close as we can, as close as they can to those areas where they're manufacturing.

245

00:42:59.730 --> 00:43:10.230

Phyllis Arthur: Our global supply chain is pivotal pivotal to the US response and it's pivotal to a successful global response so those redundancies that nicole just refer to our are really important.

246

00:43:10.590 --> 00:43:21.390

Phyllis Arthur: To our global preparedness as a US This does not mean, as industry that we don't support the idea of investing more in the critical infrastructure of the biotech industry in the US, we absolutely do.

247

00:43:21.720 --> 00:43:32.130

Phyllis Arthur: it's vital that we actually invest more and suppliers of consumables glass syringes dnos all the medical surgical supplies we've been discussing.

248

00:43:32.520 --> 00:43:46.410

Phyllis Arthur: But there's definitely a need to make sure that we look at that, particularly in pandemics in a global and holistic way that we have those redundancies that allow companies to have several manufacturers of.

249

00:43:46.830 --> 00:43:55.380

Phyllis Arthur: of their various supplies, particularly those needed those consumables that we're having interesting supply issues with right now, as we expand globally factoring.

250

00:43:55.800 --> 00:44:05.070

Phyllis Arthur: That we have deep investment in multiple kinds of suppliers of consumables of vials of all the things we need the sterile bags the.

251

00:44:05.340 --> 00:44:13.950

Phyllis Arthur: tubes so that we can surge in the truest sense in manufacturing and I hope that, as we go through the process of.

252

00:44:14.520 --> 00:44:21.870

Phyllis Arthur: analyzing what we're going to do, moving forward, which I think is the conversation we want to have today that view the entire chain.

253

00:44:22.440 --> 00:44:32.850

Phyllis Arthur: of development is our perspective, so those suppliers, the small biotech that are doing innovative platform technologies that many of which got picked up by larger pharma.

254

00:44:33.150 --> 00:44:38.670

Phyllis Arthur: The need to invest in larger pharma because they're, the ones who can rapidly deploy manufacturing facilities.

255

00:44:38.970 --> 00:44:45.540

Phyllis Arthur: The need to inject vest and again contract manufacturing because they can be working on multiple different products at one time.

256

00:44:45.810 --> 00:44:50.970

Phyllis Arthur: But also can quickly pivot to add a lot of extra manufacturing capacity that need it.

257

00:44:51.300 --> 00:44:56.910

Phyllis Arthur: But that whole chain has to be surrounded by a very robust set of suppliers.

258

00:44:57.180 --> 00:45:06.990

Phyllis Arthur: Who are in us and, particularly, I think, in our allied countries so that we can work together to make sure that supply goes further, Mexico, Canada Europe.

259

00:45:07.260 --> 00:45:11.880

Phyllis Arthur: A lot of the supplies and consumables were actually coming from allied countries were already partners with.

260

00:45:12.360 --> 00:45:21.390

Phyllis Arthur: So I think it's extremely important as we go into this next stage and start to look at SMS 2.0 that we actually look at.

261

00:45:22.200 --> 00:45:27.810

Phyllis Arthur: All the different products that are in the stockpile and here i'm going to focus on the medical countermeasures particularly.

262

00:45:28.290 --> 00:45:32.730

Phyllis Arthur: Right so some of our medical countermeasures, particularly in the Chem bio rag new space.

263

00:45:33.120 --> 00:45:43.170

Phyllis Arthur: You actually don't have time to make them over a year smallpox anthrax things that you need to have the finished product stockpile because.

264

00:45:43.530 --> 00:45:55.770

Phyllis Arthur: An emergency like a city being attacked by about threat has to be addressed right away with a product in the stockpile you need a diagnostic you need a therapeutic he definitely the vaccine and the strategy that goes with that.

265

00:45:57.210 --> 00:46:01.080

Phyllis Arthur: There are other products where you can do what like we did with the code pandemic.

266

00:46:01.380 --> 00:46:07.140

Phyllis Arthur: You have rapid development of diagnostics you deploy innovative platforms to make new product.

267

00:46:07.380 --> 00:46:14.940

Phyllis Arthur: And you really need to control those surge activities across suppliers and manufacturers and do the scale up and scale out as we did just now.

268

00:46:15.240 --> 00:46:23.880

Phyllis Arthur: And so, investing in more platforms, like Mr na like add know virus, so that we can have many shots on goal to make sure we can make vaccines that work.

269

00:46:24.150 --> 00:46:32.520

Phyllis Arthur: And the same for therapeutics is something we're going to have to do, going forward and, if you look at our past investments in this This is where we've fallen so what short.

270

00:46:32.970 --> 00:46:43.710

Phyllis Arthur: The investments and emerging infectious disease r&d both in companies and with the government has been short changed in terms of investments from the fence the enterprise.

271

00:46:44.070 --> 00:46:52.560

Phyllis Arthur: And that is a place where I think we need to focus some entries, and then the strategic national stockpile would be a place to particularly consider.

272

00:46:53.790 --> 00:46:59.130

Phyllis Arthur: reservoir you know stocking things like agile events that can be used on multiple products.

273

00:46:59.970 --> 00:47:09.270

Phyllis Arthur: stocking some products and maybe phase one or two for things that you need to go fast on how can we be pathogen agnostic you know R amp D.

274

00:47:09.960 --> 00:47:21.120

Phyllis Arthur: and have as many different opportunities to stockpile some things in earlier stage, development or have them sitting at companies ready to go via these platforms.

275

00:47:21.420 --> 00:47:28.230

Phyllis Arthur: These are the kinds of preparedness issues that we hope will be focusing on with Congress, as we start to get out of the pandemic.

276

00:47:28.500 --> 00:47:38.070

Phyllis Arthur: And look backwards and think about the things we want to retain that we learned from this pandemic i'm really excited about the conversation I think there'll be a lot of really great ideas coming out of this.

277

00:47:38.850 --> 00:47:48.750

Anita Cicero: And thanks so much fellas appreciate it, and our final speaker today is Dr Eric Toner who is my colleague and a senior scholar at our Johns Hopkins Center for health security.

278

00:47:49.080 --> 00:48:03.690

Anita Cicero: Eric is an internist he practiced emergency medicine for 23 years his primary areas of research are on healthcare preparedness for catastrophic events pandemic influenza and medical response to bioterrorism.

279

00:48:04.200 --> 00:48:19.560

Anita Cicero: During the Cobra 19 pandemic he's authored numerous articles regarding hospital preparation approaches estimating PP he needs and proposing an ethical framework for the allocation of scarce vaccine so.

280

00:48:20.580 --> 00:48:33.960

Anita Cicero: Eric over to you and I want to quickly mention that we will probably take the webinar and additional 10 minutes to make sure that we can have some of the good questions that are coming through thanks Eric well.

281

00:48:34.020 --> 00:48:44.400

Eric Toner: Thanks neither appreciate the opportunity i'm one of the disadvantages of being the last speaker on a panel is that all the really good major points have already been made.

282

00:48:45.690 --> 00:48:49.410

Eric Toner: But what I think I can add is some perspective from.

283

00:48:50.730 --> 00:48:55.770

Eric Toner: The view in the hospital and the perspective from bedside about.

284

00:48:56.820 --> 00:49:06.420

Eric Toner: What the impact of these supply chain challenges or so many items came scarce during the pandemic because we've heard about.

285

00:49:06.780 --> 00:49:23.040

Eric Toner: i'll talk about three that I think stand out as being particularly critical for us, hospitals and 95 respirators ventilators and oxygen our failure to be prepared with these items almost certainly cost people their lives.



286

00:49:24.270 --> 00:49:33.360

Eric Toner: So the 95 shortage was a true crisis, most of these devices and their source materials come from China, which had suspended exports.

287

00:49:33.840 --> 00:49:46.770

Eric Toner: The domestic manufacturing capacity in the US was limited small manufacturers had difficulty breaking into the market and rapidly expanding manufacturing was essentially impossible in the early months.

288

00:49:47.760 --> 00:49:58.770

Eric Toner: And the donate demand was enormous many times and manufacturing capacity so hospitals are forced to reuse disposable masks without guidance on how to say for clean them.

289

00:49:59.340 --> 00:50:18.960

Eric Toner: Many turned unapproved devices which put them at risk, and no one could tell them when or how many devices would come available hospitals turned the SNS but found that stockpile was depleted so hospitals and states ended up competing with one another for the scarce buys.

290

00:50:21.060 --> 00:50:35.190

Eric Toner: It quickly became clear in early months of pandemic that there would not be enough ventilators for all who needed them there were limited number of ventilators on the stockpile a limited number of manufacturers with limited manufacturing capacity.

291

00:50:36.390 --> 00:50:44.310

Eric Toner: Some of the ventilators and the stockpile as well as ventilators or available in the marketplace did not have features needed by many coven patients.

292

00:50:45.180 --> 00:51:03.510

Eric Toner: Hospitals therefore had to cancel surgeries to free up ventilators and not all ventilators there were freedom were that were or could be sourced were well suited for Kovac patients so clinicians had to prioritize who got access to the full function ventilators and who did not.

293

00:51:05.730 --> 00:51:16.830

Eric Toner: There was also a shortage of oxygen in any hospitals so much oxygen was being drawn the system's literally froze and oxygen pressures dropped dangerous levels.

294

00:51:17.610 --> 00:51:27.120

Eric Toner: To compensate hospitals turn the bottle box Jen but this depleted, the supply of these cylinders, which are needed for alternate care facilities and for Andorran says.

295

00:51:28.050 --> 00:51:40.950

Eric Toner: The supply chain for oxygen cylinders and relate this buys couldn't keep up so once again conditions had to improvise and prioritize any amount of oxygen provided to some patients had to be reduced.

296

00:51:42.480 --> 00:51:58.590

Eric Toner: So these are just three examples of complex medical supply chains that proved to be fragile and subject interruption at several crucial choke points, the impact of these shortages was felt both by healthcare workers and their patients.

297

00:52:00.330 --> 00:52:10.830

Eric Toner: Certainly one solution is more stockpiling, we must reassess the mission and scope of the SNS at specifically what scenarios are we stockpiling for.

298

00:52:11.910 --> 00:52:19.410

Eric Toner: And certainly this will require additional funding, but not just funding, we can never entirely stockpile our way out of this problem.

299

00:52:20.310 --> 00:52:38.220

Eric Toner: We must have a more robust resilient and agile and medical supply chain that it's not solely dependent on small numbers of suppliers in one country or region as we've talked about already, we need a holistic look at this as an has, in the context of the medical supply ecosystem.

300

00:52:40.140 --> 00:52:55.710

Eric Toner: we've also learned a great greater government visibility into the medical supply chain is essential, so we know when there are bottlenecks before there's a crisis and the government must have all the levers that they can pull when there are impending shortages.

301

00:52:57.660 --> 00:53:09.240

Eric Toner: The Federal Government must also assess which medical supplies are so essential they take our national security significance, not just for Cobra 19 but for future unknown threats as well.

302

00:53:10.320 --> 00:53:26.970

Eric Toner: We should ensure a more reliable redundant and robust manufacturing capacity for these items, including for their components or raw materials, and if there is a shortage needs the Federal Government must play a central role in coordinating in the States.

303

00:53:28.020 --> 00:53:30.450

Eric Toner: So thank you, I look forward to questions.

304

00:53:31.800 --> 00:53:41.340

Anita Cicero: But thanks so much Eric appreciate those remarks, and now we will get right into the Q amp a I will.

305

00:53:42.240 --> 00:54:01.410

Anita Cicero: pass on a pre submitted question that we received from a Congressional staffer and we've talked today about domestic manufacturing versus international or manufacturing in relying on supply chain manufacturing buy from our US allies.

306

00:54:02.460 --> 00:54:16.650

Anita Cicero: But the question is, you know which, how do we decide which goods are vital to our national security or national infrastructure and there by deserve to have domestic production, supported by the Federal Government.

307

00:54:18.540 --> 00:54:19.500

Anita Cicero: So let me see if.

308

00:54:20.670 --> 00:54:26.400

Anita Cicero: let's go to TIM, would you like to respond to that or you were just taking yourself off mute.

309

00:54:27.720 --> 00:54:38.730

Timothy Manning: Oh, just in anticipation of an opportunity exists a great question and one we're actively working, you know that you've heard from all the all of my colleagues here on the panel about the importance of.

310

00:54:40.050 --> 00:54:42.930

Timothy Manning: Building resilience supply chains not not just.

311

00:54:44.850 --> 00:54:52.170

Timothy Manning: Too much focus in one geographic area, you can create brittle you can create brittleness where you really don't necessarily want it, so when.

312

00:54:52.830 --> 00:55:01.950

Timothy Manning: there's a couple of lines of effort currently happening President Biden issue to executive orders since inauguration day, the first on the day after inauguration day.

313

00:55:02.850 --> 00:55:13.080

Timothy Manning: focused on resilient pandemic supply chain and they had a series of deliverables do one was a review basically an inventory of the SNS.

314

00:55:13.860 --> 00:55:29.970

Timothy Manning: Second, was an end end inventory of what's most critical in the current response, and that was actually that's we're currently working through the results of that, and then the third being a national strategy for resilient pandemic supply chain, which will be do this summer.

315

00:55:31.980 --> 00:55:45.660

Timothy Manning: Second separately, there was an executive and additional executive order focused on resilience supply chains in one of one line of effort being critical api's and and, by extension, finished product.

316

00:55:46.680 --> 00:55:55.680

Timothy Manning: Both of those are focused on how do we determine what are the most important critical inputs to the response and it's everything, as I was describing from P, p.

317

00:55:56.670 --> 00:56:09.390

Timothy Manning: Eric and made reference to the crisis in the 95 space, you know all the way through to the key components, you know, the current global supply crunch on vaccine manufacturing is first was describing.

318

00:56:09.990 --> 00:56:14.820

Timothy Manning: going from 5 billion, the 14 billion a year on top of the five so over 20 billion doses a year.

319

00:56:15.570 --> 00:56:26.220

Timothy Manning: Now result it all relies on like three companies manufacturing of single use products, the disposable you know one, at a time things that go into the manufacturing.

320

00:56:27.090 --> 00:56:36.150

Timothy Manning: So we have a an enormous data set over the last 14 months of what is most critical what have we seen repeatedly as the constraints.

321

00:56:36.690 --> 00:56:44.490

Timothy Manning: In the manufacturing and the response from everything from industry through to health care, into the manufacturing plants so we've got a pretty good sense of.

322

00:56:44.790 --> 00:56:52.770

Timothy Manning: What we need to focus our efforts on and these lines of study that are directed by the President of these executive orders are focused on exactly that.

323

00:56:53.040 --> 00:57:01.860

Timothy Manning: prioritizing and ranking where we need to make those investments and where we need to sustain those investments over long term to bolster the R amp D.

324

00:57:02.550 --> 00:57:16.140

Timothy Manning: That that all of the panelists mentioned is you know the next fight the next fight not refight the last fight isn't it nicolette was mentioning so yeah active efforts in those spaces and super critical great great question.

325

00:57:17.340 --> 00:57:19.530

Phyllis Arthur: thanks for that one can I add one thing and Nina.

326

00:57:19.830 --> 00:57:20.370

Anita Cicero: Tell us yeah.

327

00:57:21.300 --> 00:57:29.400

Phyllis Arthur: Obviously, I agree with everything to him to set up, I think that the other thing we have to think about in the context of the by American issue is that.

328

00:57:30.000 --> 00:57:39.870

Phyllis Arthur: And this is where we have to look at all the different products that are critical and and also evaluate whether or not the by American issue of can apply to them or not.

329

00:57:40.230 --> 00:57:51.000

Phyllis Arthur: This is an issue that will take time, I want to make sure that particularly policymakers understand that shifting how a company leveraging its supplies.

330

00:57:51.780 --> 00:58:00.810

Phyllis Arthur: is not an overnight activity, some of these products, their demand is relatively limited and so there's a manufacturing facility.

331

00:58:01.320 --> 00:58:10.020

Phyllis Arthur: Making another one would could add in efficiencies and add cost and add infrastructure issues, so the evaluation of what products.

332

00:58:10.320 --> 00:58:20.160

Phyllis Arthur: are appropriate for by American rules that are decided by whether your supply chain is us enough, and what parts of your supply chain are us.

333

00:58:20.550 --> 00:58:29.850

Phyllis Arthur: So is it about the end devaluation of the supply chain, the drug substance the phil finish isn't about the entire supply chain that has the American.

334

00:58:30.180 --> 00:58:33.900

Phyllis Arthur: These kinds of nuances are going to be extraordinarily important for industry.

335

00:58:34.230 --> 00:58:44.430

Phyllis Arthur: Because the investment required to shift around all those things that are part of your regulatory filing and go through the process of changing all that, with all your regulatory bodies worldwide.

336

00:58:44.760 --> 00:58:52.350

Phyllis Arthur: is one that needs to needs to actually be thought through so definitely agree that this this idea of reevaluating how he supplies pivotal.

337

00:58:52.770 --> 00:59:07.020

Phyllis Arthur: Adding redundancy is pivotal but how we approach the issue of by American, in particular, is going to take some nuance as some products will not be able to either switch it all or switch overnight, depending on the cost effectiveness.

338

00:59:08.040 --> 00:59:10.710

Anita Cicero: Good excellent points thank thanks to you both.

339

00:59:11.790 --> 00:59:22.920

Anita Cicero: Our one of our founding members for the the steering committee Steve red is on the phone steve's a former CDC official and the Steve if you'd like to take yourself off mute we'll take a question from you.

340

00:59:23.610 --> 00:59:24.510

Stephen Redd: or fifth thanks.

341

00:59:26.160 --> 00:59:34.890

Stephen Redd: we've heard a lot about the public, private collaboration that's been needed and has developed a wonder if anyone could speak to.

342

00:59:35.340 --> 00:59:43.170

Stephen Redd: The the interface between the state and federal systems where the federal supply and procurement efforts and the.

343

00:59:43.620 --> 00:59:52.770

Stephen Redd: supplies that are available at state level how to make sure that that interface as seamless as possible i'm particularly thinking about things that happened early in the.

344

00:59:53.160 --> 01:00:09.720

Stephen Redd: In the pandemic with governors meeting airplanes at airports to offload diagnostic tests and the competition around P P wonder if someone could speak to how how that problem is being solved now and the vision for how that would be managed in the future.

345

01:00:13.590 --> 01:00:15.300

Anita Cicero: nicollette would you like to take that one on.

346

01:00:16.530 --> 01:00:22.710

Nicolette Louissaint: I am happy to but I imagine that that TIM also has some perspective here so.

347

01:00:23.730 --> 01:00:35.460

Nicolette Louissaint: From from our vantage point on this is where federal leadership is very, very important, and the Federal understanding of how to work with the jurisdiction or authority is is really critical.

348

01:00:36.210 --> 01:00:45.390

Nicolette Louissaint: So what we saw in the early phases was this recognition that states were essentially charged with going it alone and that created a.

349

01:00:45.810 --> 01:00:51.300

Nicolette Louissaint: dynamic, where there was competition for product, there were states that we're creating their own strategies and plans.

350

01:00:51.870 --> 01:01:00.750

Nicolette Louissaint: What we see as a shift towards first and foremost the federal government having to articulate their plans for what the federal government.

351

01:01:01.560 --> 01:01:05.160

Nicolette Louissaint: Will procure what strategies, the Federal Government will put in place.

352

01:01:05.820 --> 01:01:15.060

Nicolette Louissaint: What partnerships, the Federal Government is going to establish with parts of the supply chain, and that gives the States and opportunity to understand their part to play.

353

01:01:15.390 --> 01:01:21.630

Nicolette Louissaint: And so what that is look like is everything from you know the SMS and understanding what parts of the SMS.

354

01:01:22.200 --> 01:01:33.930

Nicolette Louissaint: would be made available, there is also a distinction that that I think it's emerging there's a difference between forward deployed product that may be an s&s product that's forward deployed to a State or region.

355

01:01:34.230 --> 01:01:40.920

Nicolette Louissaint: versus what we're starting to see now states like the one that i'm in Maryland exploring having state stockpiles.

356

01:01:41.520 --> 01:01:49.320

Nicolette Louissaint: And so that's another dynamic that we're starting to see emerge is this idea of regional compacts regional or state level stockpiles.



357

01:01:50.010 --> 01:02:04.410

Nicolette Louissaint: That would reduce dependence on the s&s for specific types of events but also allow for the States to maintain some level of autonomy over the types of protections and resilience that they're able to ensure in their state or in their region.

358

01:02:06.060 --> 01:02:08.640

Anita Cicero: Thank you, Tim would you like to add anything to that.

359

01:02:09.390 --> 01:02:13.170

Timothy Manning: Sure, I mean it's a fantastic question, of course, and.

360

01:02:14.430 --> 01:02:24.060

Timothy Manning: I should it's probably truth in lending I did full disclosure anyway, you know it was that situation that caused President Biden then during the campaign to call for the creation of my position I just like.

361

01:02:24.870 --> 01:02:37.110

Timothy Manning: To help alleviate those those kind of issues and show you know federal leadership and you mentioned, so I spent time as a deputy administrator at fema I was also a state.

362

01:02:37.860 --> 01:02:43.650

Timothy Manning: Emergency managers director of emergency management for a State before you came to fema so i've seen that from both sides, you know the state.

363

01:02:44.190 --> 01:02:53.790

Timothy Manning: States having to go out governors needing to go out and having the responsibility to protect their citizens and the critical role fema and the Federal Government famous.

364

01:02:54.300 --> 01:03:05.250

Timothy Manning: The executor on behalf of the President to coordinate all of that, across the 50 States I think we've all been in probably involved in planning and exercises around pandemic response.

365

01:03:05.640 --> 01:03:17.010

Timothy Manning: Going back 2030 years and in every case in every one of these plans, this is the situation that developed this was not a surprise that this was the that's what ended up happening, when you had.

s366

01:03:17.700 --> 01:03:25.530

Timothy Manning: A response happening in 5050 States all at once, there is, you know, there are clear mechanisms for the government for the Federal Government to.

367

01:03:26.520 --> 01:03:35.940

Timothy Manning: coordinate and broker and help alleviate those conflicts, you know where there's basically constrained resources required at all places at once.

368

01:03:36.780 --> 01:03:45.810

Timothy Manning: And you know the I think we're have a lot of additional revisions to the plans that need to be done, based on the lessons learned over the last 14 months, but I think.

369

01:03:46.080 --> 01:03:54.000

Timothy Manning: strong coordination and working with the state's a great example and leadership and a great example is where Rockefeller and the step Program.

370

01:03:54.540 --> 01:03:59.670

Timothy Manning: stepped in and took the role that you would normally expect the Federal Government to have carried out to say.

371

01:03:59.970 --> 01:04:05.280

Timothy Manning: we're going to backstop a lot of contracts we're going to help build in industrial expansion and then.

372

01:04:05.670 --> 01:04:14.430

Timothy Manning: Anybody any States who want to buy tests can buy against these backstop contracts that allow that takes risk out of it for industry, allows for focus purchasing.

373

01:04:14.820 --> 01:04:27.570

Timothy Manning: Those are roles that are very clearly its authority that's that's granted the government in the Defense Protection Act it's, a role that the government can fill so those kind of things going forward, I think, or plants and you'd be put in place so that we don't run into that again.

374

01:04:29.040 --> 01:04:35.970

Anita Cicero: Excellent Thank you i'm going to turn now to my colleague, Margaret who has been monitoring the many questions coming into the Q amp a.

375

01:04:36.930 --> 01:04:42.750

Margaret Miller: Right, as we have a question from us and it stopper will be the biggest challenge to depend on supply chain over the next six months.

376

01:04:46.470 --> 01:04:54.210

Timothy Manning: it's a risk of talking too much i'll jump out and say this, the vaccine supply chain it's the single use products and consumables in the manufacturer of injectable.

377

01:04:54.510 --> 01:05:03.090

Timothy Manning: Medicine so it's vaccine, but it extends across all of the injectables and that's the single biggest supply chain challenge we're faced with right now.

378

01:05:04.200 --> 01:05:13.380

Phyllis Arthur: And how does to TIM for managing it, as well as he has been because this is not an easy task so Hats off to you, sir.

379

01:05:15.390 --> 01:05:20.850

Nicolette Louissaint: Absolutely um great great truly great and complicated task ahead of him.

380

01:05:22.140 --> 01:05:30.930

Nicolette Louissaint: I would add to that, though, that while we are talking about Kobe This is my routine opportunity to remind all of us that over the next six months, there will be.

381

01:05:31.650 --> 01:05:38.610

Nicolette Louissaint: As we are seeing wild cards in the Midwest right now, we will be approaching wildfire season we've seen two of the most intensive wildfires seasons.

382

01:05:38.880 --> 01:05:49.350

Nicolette Louissaint: That we've seen to date in the last two years we're approaching hurricane season and we're also going to be approaching the beginning of flu season in those six months and so important to remember that.

383

01:05:49.860 --> 01:05:52.740

Nicolette Louissaint: In those challenges, how well we're able to.

384

01:05:53.190 --> 01:06:08.790

Nicolette Louissaint: carry out an equitable and effective vaccine, distribution and ministrations strategy, as well as how we're able to make sure that we are well positioned to withstand what

could be catastrophic natural disaster seasons ahead of us in a flu season ahead of us are equally important.

385

01:06:11.970 --> 01:06:20.970

Margaret Miller: Great and we have a question from Patrick Doyle Senator van hollen mentioned the lack of visibility into the supply chain as the result of loopholes, on that day reporting requirements can someone elaborate.

386

01:06:21.360 --> 01:06:24.960

Margaret Miller: On what components those loopholes apply to and whether it's being actively addressed.

387

01:06:30.630 --> 01:06:40.920

Phyllis Arthur: It TIM any of you aware of a loophole, I feel that, between the existing law that came from the various rufus.

388

01:06:41.640 --> 01:06:53.700

Phyllis Arthur: And the care sacked companies actually have very clear reporting requirements that they have with the FDA tour to report as well in advance as they can, and when they think they're going to have a supply.

389

01:06:54.060 --> 01:07:00.810

Phyllis Arthur: shortage of a key of any medicine and, in addition, because of the processes been put in place with.

390

01:07:01.320 --> 01:07:11.790

Phyllis Arthur: With to manning's group and the asperger's office there's also a process for companies, starting to send up a signal when they think they won't get a key supply that they need.

391

01:07:12.030 --> 01:07:20.430

Phyllis Arthur: For manufacturing that might trigger a shortage, so I feel like there's quite a number of processes, a little bit of belt and suspenders.

392

01:07:20.790 --> 01:07:31.170

Phyllis Arthur: That can help companies plan appropriately, I do think it's interesting to think about how we can work, particularly with suppliers, and this is definitely.

393

01:07:31.530 --> 01:07:39.180

Phyllis Arthur: You know, in the remit of the US Government to understand some way in some way what's of what's being manufactured.

394

01:07:39.750 --> 01:07:46.320

Phyllis Arthur: what's available in the supply chain and what's already out to its consumers.

395

01:07:46.890 --> 01:07:55.980

Phyllis Arthur: Some way to get that top line visibility might be helpful, I don't think we want to get too far into the confidentiality weeds of each manufacturer.

396

01:07:56.250 --> 01:08:03.090

Phyllis Arthur: But there's there is most likely some top level way that companies working with the government.

397

01:08:03.750 --> 01:08:12.750

Phyllis Arthur: can get an understanding of their forecasted needs looking out several months, if you look at the way President Biden actually was able to go from.

398

01:08:12.960 --> 01:08:17.850

Phyllis Arthur: Company states having a week's notice of doses to having several months notice that notice is coming.

399

01:08:18.210 --> 01:08:21.300

Phyllis Arthur: The same kind of thing can be applied here where you're looking at and saying.

400

01:08:21.600 --> 01:08:32.400

Phyllis Arthur: Okay we're going to be making X amount of coverage 19 vaccines, the flu companies are making X amount of flu vaccines i'm sorry amount of time, that means this amount of consumables that required across the supply chain.

401

01:08:33.480 --> 01:08:44.190

Phyllis Arthur: You know, pay to biologics we this much, and then you can have some idea of how much, especially as the government invest in expanding the suppliers capacity.

402

01:08:44.520 --> 01:08:54.180

Phyllis Arthur: How much are you going to have how much you're going to need several months out it's really just it's planning it's planning that we're really looking for I think visibility might be.

403

01:08:54.810 --> 01:09:03.450

Phyllis Arthur: A danger word is, I think, planning and looking across demand the cycles, would be the way I would approach it.

404

01:09:05.040 --> 01:09:11.580

Nicolette Louissaint: And I would just add to what phil said I don't i'm not familiar with the loophole and I think there's often been this perception that um.

405

01:09:12.210 --> 01:09:21.720

Nicolette Louissaint: You know, as we've said it in other spaces, just because we don't have the information does not mean that the information is not been made available think there's been a lot of information made available.

406

01:09:22.290 --> 01:09:27.090

Nicolette Louissaint: And there are a lot of requirements, but in addition to the requirements and what goes to the FDA.

407

01:09:27.630 --> 01:09:32.250

Nicolette Louissaint: As the regulatory authority, I think what phyllis just lifted up is really important, the information that's.

408

01:09:32.730 --> 01:09:38.340

Nicolette Louissaint: going to the White House and to ask her and even in what was created us a supply chain control tower.

409

01:09:38.550 --> 01:09:51.210

Nicolette Louissaint: are doing what we'd like to call illuminating the supply chain in ways that allow for us to actually use those initial signals and not wait until there is a shortage to take action, and I think what we're trying to get is.

410

01:09:51.450 --> 01:09:59.520

Nicolette Louissaint: Really left a boom right, how do we get as far away from using the shortage as a triggering event to actually intervene and how do we illuminate.

411

01:10:00.150 --> 01:10:05.760

Nicolette Louissaint: The supply chain, which is highly dynamic and so any static picture is going to be too late in and out of date.

412

01:10:05.970 --> 01:10:12.150

Nicolette Louissaint: How do we eliminate it in a way that we are informing that for planning, but I think a part of that is also understanding.

413

01:10:12.360 --> 01:10:21.030

Nicolette Louissaint: As we're eliminating that supply chain, we have to be very clear on what parts of the supply chain we're actually trying to plan for is it that we're trying to understand.

414

01:10:21.930 --> 01:10:27.240

Nicolette Louissaint: Specifically i'm like MED surge and consumables are we trying to understand how we need to plan for.

415

01:10:27.780 --> 01:10:35.910

Nicolette Louissaint: planning for future months as it relates to flu vaccines are we trying to understand all of it at once, which may not be tenable or realistic.

416

01:10:36.540 --> 01:10:46.680

Nicolette Louissaint: or or effective and then, how do we actually determine what interventions can both assist with the planning for that event without triggering or cascading.

417

01:10:46.980 --> 01:10:51.120

Nicolette Louissaint: Other consequences that could put us at a disadvantage or trigger a shortage.

418

01:10:51.360 --> 01:11:02.040

Nicolette Louissaint: inadvertently and so that's the type of thing that we're looking for and I don't think that there's a reporting challenge, but I do think things like the supply chain control tower have been one opportunity to illuminate.

419

01:11:02.580 --> 01:11:07.920

Nicolette Louissaint: And maybe that's something that we could explore expanding across other parts of the supply chain as well.

420

01:11:09.930 --> 01:11:11.700

Timothy Manning: If I can throw another two i'll just say.

421

01:11:12.990 --> 01:11:21.840

Timothy Manning: Absolutely right and the the progress has been made between certainly the control tower and almost more importantly, the team around it, the the supply chain management team.

422

01:11:22.200 --> 01:11:29.250

Timothy Manning: And the relationships in the insight into all of the supply chain across the entire response has been really critical.

423

01:11:29.910 --> 01:11:38.730

Timothy Manning: Even more so than any kind of mandated reporting requirements and they fit they feed each other but it's it's the nuanced understanding of our fits and it just a quick example.

424

01:11:39.690 --> 01:11:49.650

Timothy Manning: Obviously won't name names or anything but as a result of the winter storm and in the South, a few weeks ago, or Time runs together every day Monday around here the.

425

01:11:50.670 --> 01:12:00.000

Timothy Manning: way it was a month ago, or so, there were and the widespread power outages well that led to shut down the number of petrochemical plants which which restricted, you know there's.

426

01:12:00.540 --> 01:12:10.830

Timothy Manning: there's downstream impacts on the availability of the chemical components, the resins and a lot of the petrochemical components to the manufacturing pieces and poly are things in pipe proper means and.

427

01:12:11.400 --> 01:12:18.930

Timothy Manning: And we got word from a potential shortage because of a DPA rating going towards testing manufacturing that there was going to be.

428

01:12:19.560 --> 01:12:25.620

Timothy Manning: Potential crunch on other critical supplies not covered, but critical to the national preparedness in the national security.



429

01:12:26.400 --> 01:12:31.230

Timothy Manning: We were immediately able to at the chemical component level go back to where that was going to be.

430

01:12:31.800 --> 01:12:37.620

Timothy Manning: What what was where that was being siphoned off and be able to make balanced adjustments and understanding of.

431

01:12:38.040 --> 01:12:43.530

Timothy Manning: What levers, we need to pull to ensure that we can all move forward that would that was really not wouldn't have been possible.

432

01:12:44.070 --> 01:12:52.290

Timothy Manning: A year ago, and now was actually that was able to be done in matter about an hour or you know so it's it's pretty quick it's working pretty well these days.

433

01:12:52.650 --> 01:13:03.450

Timothy Manning: But we need more, better visibility and we need better real time nicollette mentioned how the static data expires immediately, we need to be able to have better visibility and we are working towards planning in a better, more.

434

01:13:04.470 --> 01:13:14.100

Timothy Manning: kind of permanent way to have an understanding of that supply chain, through the control tower so it's not something that's just an emergency till we set up, that is something that works in perpetuity.

435

01:13:18.060 --> 01:13:28.200

Margaret Miller: Great thanks and i'll ask one last question and then hopefully all the panelists can just comment on this briefly how do we keep leaders at all levels, accountable to follow up on the supply chain issues as we move forward.

436

01:13:32.910 --> 01:13:35.400

Margaret Miller: Neglect you want to start and then we'll continue down.

437

01:13:35.820 --> 01:13:37.770

Nicolette Louissaint: Or, so I think.

438

01:13:37.800 --> 01:13:47.040

Nicolette Louissaint: I think accountability comes in multiple ways I think for one on you know the routing of our mission is understanding that there really can be.

439

01:13:47.340 --> 01:13:55.530

Nicolette Louissaint: Those to sing a sustained community and public health without Overdoing supply chain, so I think part of that is thinking through like how we are accountable.

440

01:13:56.010 --> 01:14:02.790

Nicolette Louissaint: Even as partners across the supply chain to one another and to the patients and communities that are you know inevitably.

441

01:14:03.000 --> 01:14:13.110

Nicolette Louissaint: going to be on the recipients of of these products, another level of accountability, though, is understanding that we have to make consistent investments.

442

01:14:13.530 --> 01:14:19.560

Nicolette Louissaint: That reflect our stated priorities and That to me is about, not just the authorities.

443

01:14:20.040 --> 01:14:30.660

Nicolette Louissaint: That may exist, whether that be at the federal level at the state or local levels, but also about how we are appropriating in ways that reflect those stories to me, that is.

444

01:14:31.440 --> 01:14:37.380

Nicolette Louissaint: Honestly, the level of accountability that's often missing between events.

445

01:14:37.620 --> 01:14:41.880

Nicolette Louissaint: And so, really, it really if we're going to talk about how to build accountability.

446

01:14:42.000 --> 01:14:50.520

Nicolette Louissaint: I think it's really not just about accountability for how we get out of this pandemic how we respond to this pandemic it's the accountability that needs to be instituted, to make sure that.

447

01:14:50.700 --> 01:14:59.280

Nicolette Louissaint: The things that we are authorizing the expectations that we have specifically a federal and state governments are matched with the level of sustained investment.

448

01:14:59.610 --> 01:15:09.720

Nicolette Louissaint: That can sustain the level of authority the responsibility that's going to need to be in place for mitigation and preparedness for future events.

449

01:15:13.320 --> 01:15:22.620

Phyllis Arthur: Maybe i'll refer nicolette which I love to do actually um I heard her point about sustained investments.

450

01:15:23.370 --> 01:15:28.830

Phyllis Arthur: Obviously I make the case that we need sustained investments in our car manufacturers and companies for rnb.

451

01:15:29.130 --> 01:15:38.220

Phyllis Arthur: But i'm actually go out from them, I think the thing we learned from covert is our resilience is not that high not as high as we would hope, it would be.

452

01:15:38.520 --> 01:15:44.490

Phyllis Arthur: And what we really learned if we have to invest in communities across the board, because.

453

01:15:45.180 --> 01:15:54.090

Phyllis Arthur: Truly our economy sits on multiple different levels of socio economic people being able to do multiple different kinds of jobs.

454

01:15:54.390 --> 01:16:01.770

Phyllis Arthur: And if we really want to make sure that the US bounces back it means we need to be able to protect the grocery store worker that.

455

01:16:02.160 --> 01:16:12.600

Phyllis Arthur: The person who's driving the bus like there's a lot of people in socio economic positions that jobs are crucial to the running of our country and our lives.

456

01:16:13.260 --> 01:16:26.760

Phyllis Arthur: But their resilience is not as high and investing in those communities to make sure they're distilling it whether it's a hurricane or it's a fire or it's Texas outage of electricity or it's a global pandemic.

457

01:16:27.090 --> 01:16:38.550

Phyllis Arthur: actually makes the entire us able to be more resilient and bounce back when we are affected by something like this, and so a think that investment we make in our global public health.

458

01:16:39.540 --> 01:16:53.700

Phyllis Arthur: In our overall health care is actually a part of our national security preparedness initiative, and I know that's a broad thing to say, but I think we learned it when a global pandemic comes down to it, the economy suffers from the bottom down.

459

01:16:55.020 --> 01:17:12.870

Phyllis Arthur: It falls right out and, and that is something we can't go through again it's trillions of dollars, when we could spend you know millions or billions actually building up our overall resilience to these kinds of things and mitigate those great costs in the future.

460

01:17:15.390 --> 01:17:17.250

Phyllis Arthur: optimism that's what that is.

461

01:17:20.760 --> 01:17:23.010

Margaret Miller: Eric you want to go next, and then I can finish with him.

462

01:17:24.930 --> 01:17:39.120

Eric Toner: So i'm thinking about how, how do we ensure that this happens number one to reinforce what nicolette said, there has to be appropriations has been money if if the.

463

01:17:40.380 --> 01:18:00.270

Eric Toner: flow of appropriations does not continue or is not sufficient, the first place it's not possible and, and so we need to have that we need to have oversight Congress has a role here, they have a role of ensuring that these problems that we've talked about get fixed.

464

01:18:02.340 --> 01:18:13.800

Eric Toner: And then the public has a role to the public has to hold of the congress's feet, to the fire and make sure that this happens and that's I think a role of the press to large extent.

465

01:18:15.300 --> 01:18:25.230

Eric Toner: If we six months from now say the pandemic is over we move on to other things and we forget about all of this, and there are no more news stories about it.

466

01:18:26.400 --> 01:18:35.370

Eric Toner: Congress will forget about it, and this will once again, we will go into this panic neglect cycle that we've seen so many times before.

467

01:18:36.030 --> 01:18:52.530

Eric Toner: So we need to keep this in front of the in front of the American people, these are important issues that have to be solved, and it can't be done in a matter of days or weeks it takes years to solve these problems, and so we need to keep focus attention on these problems.

468

01:18:55.290 --> 01:18:57.960

Timothy Manning: it's my turn to as Eric mentioned earlier.

469

01:18:59.280 --> 01:19:10.680

Timothy Manning: Try to wrap up with when all the great things have been said i'll just echo what everybody is said before, and maybe just put a couple of examples to that I couldn't agree more with the my panelists here.

470

01:19:12.000 --> 01:19:15.510

Timothy Manning: Really luminaries the I say.

471

01:19:16.530 --> 01:19:23.340

Timothy Manning: Echoing comments made earlier, I think, by both phyllis and nicolette about the importance of nickel, in particular, the importance of.

472

01:19:24.120 --> 01:19:29.100

Timothy Manning: Looking at it from a pathogen agnostic and all hazard perspective right the.

473

01:19:29.940 --> 01:19:36.510

Timothy Manning: We don't want to fight the last war, we want to learn the lessons for the last 14 months and the next however many months we're going to.

474

01:19:37.080 --> 01:19:46.140

Timothy Manning: be dealing with this and ensure we never repeat those again and we do that through and the accountability part of that is we do that through as Eric was describing.

475

01:19:46.770 --> 01:19:57.210

Timothy Manning: reforms to legislation we do that through the attention that the public a now very much more well educated public in the public health space.

476

01:19:57.810 --> 01:20:08.850

Timothy Manning: has in its accountability of its elected officials and appointed officials, you know the constant calling the question to make sure that we are in fact doing everything possible.

477

01:20:09.390 --> 01:20:23.820

Timothy Manning: And kind of two examples that I can point back to was involved in some of the reforms, the post 911 that created the department Homeland Security and created this homeland Homeland Security industry we're 20 plus years now 20 years past.

478

01:20:24.870 --> 01:20:42.840

Timothy Manning: That event, and you know there, while the attention of the public may have may not have the same focus that it did in the early days post 911 the it's the reforms in the institutions have taken old and there are programs there, and probably even more salient Lee.

479

01:20:43.980 --> 01:20:55.920

Timothy Manning: fema is a much stronger, more capable organization today than it was in 2004 because of the reforms put into place in the post Katrina act and and a series of.

480

01:20:57.240 --> 01:21:06.240

Timothy Manning: Appropriations and accountability and report requirements and expectations placed on the leadership of the female department Homeland Security, to ensure that.

481

01:21:06.780 --> 01:21:11.940

Timothy Manning: That level of kind of organizational atrophy never happened again and.

482

01:21:12.780 --> 01:21:19.890

Timothy Manning: One thing in particular we've learned a lot about logistics in public health over the course of this response management of the supply chain and being able to.

483

01:21:20.880 --> 01:21:33.060

Timothy Manning: Understand what's moving where and make sure things get where they need to do fema was not very good at that pre Katrina one of the reasons that we saw the results in Katrina one of the big reforms is the creation of a really strong logistics management.

484

01:21:34.590 --> 01:21:43.740

Timothy Manning: function in fema that is a direct result of of reform done to the agency in response to a poor response in Katrina.

485

01:21:44.460 --> 01:21:50.490

Timothy Manning: We have opportunities to do that same kind of leveraging to fill us this point around building a stronger.

486

01:21:51.270 --> 01:22:00.990

Timothy Manning: infrastructure to be able to deal with public health emergencies going forward and treat our public health industry industrial base and our public health infrastructure, like we do national security.

487

01:22:02.700 --> 01:22:03.570

Timothy Manning: And this.

488

01:22:04.020 --> 01:22:07.620

Timothy Manning: really big honor to spend time with all of you and thank you for the opportunity.

489

01:22:08.550 --> 01:22:12.270

Anita Cicero: Well, thank you all again for for joining us today and.

490

01:22:12.570 --> 01:22:20.430

Anita Cicero: I think this was an excellent discussion really got below the surface in terms of you know we're not just talking about onshore and offshore and we're not just talking about coven.

491

01:22:20.670 --> 01:22:24.600

Anita Cicero: And we're really not starting from scratch, we have a lot that has been developed.

492

01:22:25.260 --> 01:22:34.950

Anita Cicero: And a lot more complicated work, we need to do, going forward so really appreciate your comments and appreciate the audience who stayed on for a little extra time.

493

01:22:35.670 --> 01:22:45.420

Anita Cicero: Our next Capitol Hill steering committee webinar will be on April 28 So please, please join us, then, if you can thanks so much and have a good day.

494

01:22:46.980 --> 01:22:48.600

Phyllis Arthur: Thank you, thanks.