



Capitol Hill Steering Committee on Pandemic Preparedness & Health Security



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Center for
Health Security

Transcript from February 24, 2022: Next Generation Masks and Respirators: How the Strategic National Stockpile Can Better Protect Essential Workers and the Public During Pandemics

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00:00:03.840 --> 00:00:19.350

Andrea Lapp: Welcome to today's webinar next generation masks and respirators how the strategic national stockpile can better protect essential workers and the public during pandemics, our moderator Anita Cicero will now begin.

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00:00:20.790 --> 00:00:27.720

Anita Cicero: Thank you, and welcome everyone, thank you for joining today for the Capitol Hill steering committee on pandemic preparedness and health security.

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00:00:28.110 --> 00:00:33.930

Anita Cicero: My name is Anita Cicero and I am deputy director at the Johns Hopkins Center for health security.

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00:00:34.890 --> 00:00:51.780

Anita Cicero: The Capitol Hill Steering Committee is a bipartisan effort formed, with the support of 11 Congressional leaders and also former administration officials who are all committed to making the country in the world more prepared for the greatest health security threats.

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00:00:52.950 --> 00:01:02.340

Anita Cicero: The Steering Committee is managed by our Johns Hopkins Center for health security with this support that we're very grateful for from the open philanthropy project.

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Anita Cicero: So today we're going to be discussing the strategic need for mass and respirators in pandemic response mass and respirators have played an important role and keeping people safe in both Community and healthcare settings storing the coven 19 pandemic.

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00:01:21.270 --> 00:01:35.280

Anita Cicero: The evolving evidence behind the effectiveness of mass has made it clear that they're going to be needed to provide protection against SARS could be too, but also as well against future large scale public health threats.

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00:01:36.750 --> 00:01:49.410

Anita Cicero: Mass available to the public and healthcare workers have at various times during the pandemic been in short supply, and have run the gamut in terms of fit and effectiveness.

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00:01:51.780 --> 00:02:06.330

Anita Cicero: As we have seen in our various communities many essential workers and other working adults and children and the elderly, still rely on handmade masks or other masks that are not necessarily reliable in terms of protection.

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00:02:07.620 --> 00:02:16.920

Anita Cicero: Even medical mass and respirators available to healthcare personnel, while very effective they haven't changed appreciably since the 1990s.

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00:02:18.180 --> 00:02:24.150

Anita Cicero: So we want to talk about the possibility of you know whether was sufficient investment and foresight.

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00:02:24.810 --> 00:02:42.120

Anita Cicero: And in a future large scale outbreak or pandemic, would it be possible to increase protection of healthcare workers and also the public from infection through the use of more efficient certified well fitting widely available and comfortable masks.

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00:02:43.350 --> 00:02:55.950

Anita Cicero: So today we're going to discuss mass and respirator stockpiling strategies we're also going to discuss the scientific advances that could lead to more effective and accessible masks.

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00:02:56.340 --> 00:03:03.930

Anita Cicero: and policies that the US Government could support to build capacity in anticipation of future public health threats.

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00:03:05.160 --> 00:03:25.230

Anita Cicero: We are very pleased today to be joined by Dr Stephen read, who is former Director of CDC Center for preparedness and response, Mr Jason steer the budget and issues

management section chief management and budget operations branch of the strategic national stockpile.

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00:03:26.340 --> 00:03:32.130

Anita Cicero: Ellen white, who is Vice President for global respiratory and welding at 3am.

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00:03:33.150 --> 00:03:44.700

Anita Cicero: Dr sandy patel the director of barda the bar to drive program and Dr Eric toner, who is a senior scholar at the Johns Hopkins Center for health security.

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00:03:46.260 --> 00:03:55.920

Anita Cicero: So our first speaker to offer opening remarks is Dr Stephen read, who is one of our honorary founding members for the Capitol Hill Steering Committee.

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00:03:56.370 --> 00:04:05.400

Anita Cicero: Steve recently retired from CBC after 35 years of service, he was most recently the deputy director for public health service and implementation science.

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00:04:05.820 --> 00:04:17.460

Anita Cicero: A role of oversight for the Center for preparedness and response, the Center for global health, the Center for state tribal local and territorial support and the office of minority health and health equity.

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00:04:18.390 --> 00:04:26.940

Anita Cicero: He became director for CDC Center for preparedness and response, while CDC responded to the 2014 West Africa Ebola outbreak.

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Anita Cicero: And where he helped to ensure that Congressional Stakeholders were kept up to date on the evolving outbreak and he worked across the Agency to respond to the possibility of additional Ebola cases in the United States.

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00:04:41.070 --> 00:04:43.860

Anita Cicero: He also served in the passes incident commander of the.

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00:04:45.330 --> 00:04:58.320

Anita Cicero: In one pandemic response and as leader of the response involving more than 3000 CDC staff, he aided in the effort to vaccinate 81 million people against each one in one.

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00:04:59.400 --> 00:05:05.670

Anita Cicero: He also has participated in many outbreak investigations and responses in the past, including Legionnaires disease.

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00:05:06.330 --> 00:05:17.550

Anita Cicero: strategic development for the control of malaria and the elimination of measles measles in the United States, so Steve Thank you so much for joining us today, and I will turn the floor over to you.

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00:05:18.660 --> 00:05:26.940

Steve Redd: Thank you, thank you, Anita I am really glad that we're having this this webinar respiratory protection is really an important topic.

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00:05:27.990 --> 00:05:42.660

Steve Redd: And it's played out in a large way in the code pandemic, but most of the focus during the current pandemic has been on getting supplies and on recommendations for us and also the politics around.

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00:05:43.440 --> 00:05:52.140

Steve Redd: Recommendations or requirements, but so there hasn't really been that much focus on where innovation could take us and the need for.

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00:05:52.890 --> 00:06:00.660

Steve Redd: For new technology and that's really, in contrast to vaccine development and laboratory test development.

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00:06:01.500 --> 00:06:20.490

Steve Redd: So the need for a focus on respiratory protection is not not something that is a surprise in a big tan pandemic and you'll hear this, I think, a couple times for me, but we weren't as prepared as we needed to be for the covert response from from the standpoint of respiratory protection.

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00:06:22.590 --> 00:06:23.640

Steve Redd: If if we could.

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00:06:24.870 --> 00:06:36.450

Steve Redd: But i'm going to focus today, our focus today, as you outline will be on this new technology, what what do we need to be better prepared from a device standpoint what.

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00:06:37.200 --> 00:06:46.920

Steve Redd: characteristics of in 95 and facemask are better suited would be better suited to endemic response than what we currently have in the arsenal.

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00:06:48.180 --> 00:07:04.410

Steve Redd: If we just look back for a moment this focus on respiratory protection goes back before the H1 in one pandemic, the strategic national stockpile procured around 100 million in 95 respirators.

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00:07:05.220 --> 00:07:18.630

Steve Redd: Under emergency conditions there were different models, some of these were were FDA approved, many of them were industrial in 95 that weren't cleared for medical use.

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00:07:19.560 --> 00:07:30.030

Steve Redd: During the H1 in one pandemic we distributed these these respirators and facemasks to to stay health departments and they weren't replaced.

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00:07:31.140 --> 00:07:41.820

Steve Redd: Since since H1 in one there's been this kind of expectation that we would have a better a better product, something that would be better suited to a pandemic response than what we had available.

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00:07:42.600 --> 00:07:52.830

Steve Redd: you'll hear today that this is a barda priority i'd like to point out one of the things that was in this kind of interim period between H1 in one and the Cobra pandemic.

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Steve Redd: The va lead and effort in collaboration with with nyasha OSHA and even NASA to develop requirements for a new, better respirator this was known as.

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Steve Redd: Project brief and I think we'll have that document in the link posted into the chat.

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Steve Redd: But the bottom line is that neither of these efforts, change the landscape.

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00:08:19.230 --> 00:08:21.600

Steve Redd: One One barrier that was identified.

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00:08:22.650 --> 00:08:34.560

Steve Redd: In this process was that the existing commercial system supplies and adequate number and quality of in 95 and facemasks to the medical care system.

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00:08:35.100 --> 00:08:50.280

Steve Redd: This is a familiar problem in medical countermeasure development and stockpiling for future emergencies that, how do you stimulate innovation in the absence of the commercial need or commercial demand.

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00:08:51.600 --> 00:08:55.950

Steve Redd: So let me propose a few solutions, some of these have actually already been accomplished.

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00:08:56.520 --> 00:09:06.780

Steve Redd: We need more respirators in 95 and facemasks in the stockpile than we had before the code response, we need to bring production back to the US on shore and.

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00:09:07.350 --> 00:09:13.560

Steve Redd: And we need better in 95 some of the characteristics of these these in 95 would be.

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00:09:13.950 --> 00:09:22.980

Steve Redd: That they're more durable both when they're being used that they can be reused, that they can be the clean that they're actually designed to be clean not kind of.

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00:09:23.970 --> 00:09:35.250

Steve Redd: MacGyver it into being cleaned and they need longer duration and storage and we need to know we have we have some system to assure that they're actually viable when they're in storage and prolong storage.

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00:09:36.060 --> 00:09:55.800

Steve Redd: We need easier fit testing we needn't be comfortable, we need them not to impede communication and the bottom line, too, is that we need them to be effective and filtering viruses and in preventing infections so i'm looking forward to today's seminar, let me turn back to you needed.

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00:10:00.570 --> 00:10:01.260

Anita Cicero: Thank you Steve.

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00:10:02.550 --> 00:10:19.830

Anita Cicero: Our next speaker is Mr Jason steer Jason is the budget and issues management section chief in the management and business operations branch of the strategic national stockpile, which is in the office of the Assistant Secretary for preparedness and response at hhs.

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00:10:20.850 --> 00:10:28.350

Anita Cicero: after serving four years as a marine supply officer Jason transitioned to supply chain and logistics management experience.

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00:10:28.710 --> 00:10:37.650

Anita Cicero: and join the SNS working on the newly created compact project, where he helped establish Kim pack as a permanent nationwide Program.

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Anita Cicero: He next transition to policy analysis and issues management under the SNS office of the Director and he helped create and manage what is now called the management and business operations branch.

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00:10:50.310 --> 00:11:00.270

Anita Cicero: jason's current position at the SNS includes work in budget projection formulation and execution policy and legislative analysis.

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00:11:01.020 --> 00:11:05.460

Anita Cicero: and organizational evaluation strategy and issues management activities.

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00:11:06.090 --> 00:11:24.360

Anita Cicero: He advises SNS and asked her leadership on emerging and projected budget policy and legislative issues and informs critical decision making in support of the departmental positions and priorities so Jason Now I will turn to you, thank you so much for joining us.

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00:11:25.620 --> 00:11:30.750

Jason Stear: Thank you, Anita and try to make sure I have my notes here, I could actually see them.

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00:11:31.920 --> 00:11:42.570

Jason Stear: Thank you to the steering committee for this opportunity to address this critical issue for the future of the strategic national stockpile, I think, Dr read laid up very clearly.

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00:11:43.980 --> 00:12:03.150

Jason Stear: What the the magnitude of this issue is and the the spectrum of questions that we need to answer to do this effectively as US Government as hhs and as the strategic national stockpile to best serve the population, the United States with.

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00:12:05.010 --> 00:12:22.770

Jason Stear: High quality masks and respirators for our people so before I start, I would like to share regrets of Steve Adams our director he accepted this invitation, in recognition of the importance of addressing this question, unfortunately.

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00:12:24.720 --> 00:12:31.740

Jason Stear: Since you accept the invitation, he was also invited to participate in the initial meeting of a public health emergency medical countermeasures.

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00:12:32.250 --> 00:12:43.740

Jason Stear: Enterprise Advisory Council, which is comprised of the senior leaders across the Interagency that inform the strategy and requirements of the strategic national stockpile and.

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00:12:44.670 --> 00:12:53.100

Jason Stear: In the juggling act they're going to be addressing this question along with several others today and Steve is working with them to help that body understand.

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00:12:53.760 --> 00:13:12.300

Jason Stear: The history and the the current challenges faced by the SMS so he very much wanted to be here today, he expresses his apology, so that he can be, and I will do my best to do a Steve Adams impersonation and give you the best answers that I can invest information to work from so.

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00:13:13.470 --> 00:13:18.900

Jason Stear: This is a very busy day for good work of government and we're going to do some good work here.

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00:13:20.010 --> 00:13:27.120

Jason Stear: To give you some brief background, Dr read did tell you about where we came from prior to coven 19.

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00:13:29.280 --> 00:13:30.540

Jason Stear: The quantities of.

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00:13:32.790 --> 00:13:36.900

Jason Stear: personal protective equipment and devour drugs purchased for pandemic influenza.

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00:13:37.920 --> 00:13:44.610

Jason Stear: In starting in 2005 were what we had on hand the tools that we had on hand at the start of each one and one in 2009.

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00:13:45.660 --> 00:13:48.690

Jason Stear: We deployed, the majority of that product again as Dr ED said.

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00:13:49.770 --> 00:13:54.450

Jason Stear: We were able to replenish the end of our drugs were not able to replenish the personal protective equipment.

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00:13:54.870 --> 00:14:14.940

Jason Stear: Due to the competing priorities for the SMS budget in each year between 2009 and 2020 so we came into the coven 19 response, as has been widely reported, as has been discussed with our stakeholders in Congress and elsewhere, without the tools that we needed to support.

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00:14:16.860 --> 00:14:22.560

Jason Stear: As our understood mission, the healthcare delivery sector to provide that bridge of supply needed.

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00:14:23.760 --> 00:14:36.570

Jason Stear: In that severe disruption of the supply chain at the outset of 2020 as production shut down internationally as shipping shut down and we were unable to get supply into the country.

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00:14:37.560 --> 00:14:53.100

Jason Stear: We were effectively start for a 95 and the health care providers that needed them couldn't get them, so the first steps that we took it started the response worked push out all the limited supply that we had after validation with niosh our colleagues that.

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00:14:54.570 --> 00:15:01.470

Jason Stear: i'm not going to garble there they're accurate, but under CDC the niosh colleagues that we had worked with previously.

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00:15:02.160 --> 00:15:08.280

Jason Stear: gave us the results of their study, yes, this product is still good for us, based on the conditions of storage based on testing.

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00:15:08.670 --> 00:15:19.320

Jason Stear: So all of that product pushed out of the SNS was validated, for us, prior to putting it in the hands of healthcare workers, so that they could use it safely in treating their patients and protecting themselves.

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00:15:21.210 --> 00:15:28.290

Jason Stear: Then, not subsequently but concurrently we started working contracting actions as soon as we got.

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00:15:28.860 --> 00:15:47.550

Jason Stear: some indication that supplemental funding will be available to purchase additional quantities event 95 the most required most requested product that we were seeing and to purchase those in 95 we awarded contracts for 800 million units to be delivered to be SNS and.

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00:15:49.290 --> 00:15:52.170

Jason Stear: Without going into the law, the history of theory.

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00:15:53.250 --> 00:16:06.780

Jason Stear: We knew that we couldn't work contracts or them has Defense production act requirements and require the manufacturers to deliver product directly to the SNS that would set us up as the middleman it would introduce additional delay.

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00:16:07.710 --> 00:16:14.460

Jason Stear: And it would be counterproductive in the long run and getting that product in the hands of people needed it rapidly so we awarded those contracts.

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00:16:15.480 --> 00:16:23.670

Jason Stear: For extended delivery or delayed delivery, so that the manufacturers to continue to meet their commercial demands.

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00:16:24.090 --> 00:16:30.540

Jason Stear: meet orders meet orders to the best of their ability for as long as necessary before SMS started to take delivery.

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00:16:31.410 --> 00:16:37.800

Jason Stear: Generally speaking later in 2020 or even into 2021 before we started taking delivery on those contracts.

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00:16:38.760 --> 00:16:47.850

Jason Stear: And that was done, working with our commerce supply chain partners to understand the impact, make sure that we didn't do anything to disrupt their business and disrupt their ability to meet.

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00:16:48.300 --> 00:16:55.770

Jason Stear: Demand but also to give them a clear signal from us government, we want this product, we want this product.

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00:16:56.370 --> 00:17:05.430

Jason Stear: Ideally, to be produced in the United States to increase our domestic supply chain security that we have the resources that we need that we have the production, we need.

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00:17:06.330 --> 00:17:23.430

Jason Stear: domestically and then also to give them the assurance that we're your customer, we will be buying this product, but meet your other needs first ensure that you're meeting your business case, and then we will take delivery when you can meet our needs to replenish the stockpile so.

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00:17:25.290 --> 00:17:27.000

Jason Stear: Those contracts played very well.

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00:17:28.350 --> 00:17:34.170

Jason Stear: And I you fives have been generally speaking, a success story for us in that.

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00:17:35.310 --> 00:17:36.780

Jason Stear: as of the beginning of January.

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00:17:38.400 --> 00:17:47.970

Jason Stear: s&s had a holding of more than 770 5,000,095, which is a very big number, and we can all agree that's a very big number but.

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00:17:49.200 --> 00:17:58.320

Jason Stear: that's a very big number to serve the healthcare delivery needs of the United States when we start talking about serving the general public and.

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00:17:58.920 --> 00:18:06.360

Jason Stear: Considering the numbers of people that we have to serve that's a much different question and the the requirements to meet the needs of the general public in a pandemic.

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00:18:07.260 --> 00:18:18.510

Jason Stear: are far far larger than that exceeding three to 4 billion of masks required respirators required and that presents some severe logistical challenges so.

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00:18:19.050 --> 00:18:28.200

Jason Stear: That is the challenge that we're confronting that we're working through with hhs with the White House to understand what the vision for the SNS.

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00:18:28.770 --> 00:18:41.280

Jason Stear: Moving forward is what the expectation is and how the SMS can be used most effectively as a tool to protect the health security, the United States in a pandemic, so the.

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00:18:41.820 --> 00:18:51.000

Jason Stear: Recent news I will give you some brief statistics you've seen that and 95 have been available through pharmacies and grocery stores.

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00:18:51.600 --> 00:19:04.470

Jason Stear: For the last several weeks, today we have shipped just over 200 and 40,000,095 as a piece of be commitment to ship 400 million for distribution to the general population.

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00:19:06.510 --> 00:19:12.180

Jason Stear: That has been a tremendous effort, not only on behalf of so that staff who.

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00:19:13.560 --> 00:19:23.070

Jason Stear: took the weekend off and try to get as many of our staff as possible the weekend off after working 24 seven since the beginning of the year to to implement this vision.

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00:19:23.790 --> 00:19:34.320

Jason Stear: But really on behalf of our commercial partners, the pharmacy chains that are participated with us and helped us see how this can be done, this is a new model for for SNS.

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00:19:35.460 --> 00:19:43.080

Jason Stear: The the direct integration for supply chain as a push rather than buying and pulling things in from the commercial supply chain is.

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00:19:43.830 --> 00:19:53.970

Jason Stear: A new new model for us so great partnership all around, and we know that that is going to be a key component of anything that we can do, moving forward.

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00:19:54.630 --> 00:20:01.470

Jason Stear: Both to secure and protect the health care delivery supply chain, but also the general public.

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00:20:02.070 --> 00:20:08.040

Jason Stear: it's going to require partnership Public Private Partnership is is the only way to accomplish these large logistical movements so.

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00:20:08.520 --> 00:20:19.290

Jason Stear: I think that's a good place for me to stop, and I was to move on, but I look forward to this discussion, and I hope that I can answer some of the questions and maybe post some good ones have my own, thank you.

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00:20:20.430 --> 00:20:22.200

Anita Cicero: hey Thank you so much Jason.

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00:20:23.280 --> 00:20:30.960

Anita Cicero: Our next speaker is Ellen white and Ellen i'm going to truncate your bio a little bit I know you have a hard stop at 1130 but i'm.

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00:20:31.260 --> 00:20:47.880

Anita Cicero: Ellen is a business Vice President of three m's respiratory protection business and has led this business through the coven 19 pandemic she is 21 years of other rich experiences within 3am so Ellen without further ado i'll just turn the floor to you now Thank you so much.

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00:20:48.630 --> 00:20:53.700

Ellen White: Thanks Anita it's a real pleasure to be able to address this audience today um.

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00:20:54.210 --> 00:21:05.520

Ellen White: I really wanted to say, you know, three times a global leader and respiratory protection, but what we really have, I think, is 50 years of r&d and manufacturing in the United States.

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00:21:05.820 --> 00:21:17.160

Ellen White: really looking at us workers, and I think that's an important way that we've been able to address the pandemic from a number of different angles, in cooperation with.

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00:21:17.580 --> 00:21:31.290

Ellen White: various parts of the US Government and one of the key things, of course, was increasing our our manufacturing capacity, we had a great partnership, but I think sometimes it's missed.

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00:21:32.010 --> 00:21:48.180

Ellen White: how important it is to support the products and the education and information sharing, both with government entities, as well as the general public, to make sure that people have the right information on how to use the products effectively.

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00:21:49.770 --> 00:22:00.300

Ellen White: Throughout the last couple of years, the supportive key agencies, including FDA and niosh CDC has been really essential to the pandemic response.

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00:22:00.960 --> 00:22:09.900

Ellen White: Particularly in increasing the availability of respiratory protection to healthcare other critical industries and even more recently, the general public.

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00:22:11.280 --> 00:22:29.760

Ellen White: I think, as we move into the next stage of the pandemic it'll be important to continue, we ensure that these key agencies continue to be well staffed and funded, so we can research support research in regards to respiratory protection i'm.

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00:22:30.810 --> 00:22:46.950

Ellen White: One of the things we have to keep in mind is you know all these are highly regulated products, and you know respiratory protection standards need to be continually updated you know, right now, I think the ones that are top of mind are.

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00:22:48.090 --> 00:22:55.740

Ellen White: encouraging innovation in the area of adopting fit criteria, because the products need to fit well in order to be effective.

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00:22:56.760 --> 00:23:03.660

Ellen White: Within 42 CFR ad for filtering face piece standard and also really establishing.

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00:23:04.650 --> 00:23:13.560

Ellen White: performance and standards for respiratory protection for children, like this is an area where I think we would like to be able to innovate, but we're going to need.

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00:23:14.340 --> 00:23:22.410

Ellen White: Were any partnership in terms of the regulatory standards to really make that happen, additionally, as we look at this.

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00:23:23.100 --> 00:23:35.370

Ellen White: I think it's important and i'm glad to see the panelists as kind of a variety of standpoint, we really need to look at the the holistic impact of any new designs, all the way from, of course, we need them to be.

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00:23:36.420 --> 00:23:43.830

Ellen White: more comfortable and better fitting for the users, but we also need to be thinking about the impact on the overall supply chain.

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00:23:44.070 --> 00:23:52.260

Ellen White: how well they can be scaled out to they can they can be brought to scale, how we can train people on the use of new products because.

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00:23:52.560 --> 00:23:58.950

Ellen White: Most of these products, require training and we need to make sure that people know how to use them effectively.

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00:23:59.550 --> 00:24:12.600

Ellen White: And then I think I guess I sort of close out there, I think the key to making that happen is this public private cooperation you know, three um can innovate, but we can only innovate, within the space.

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00:24:13.440 --> 00:24:24.900

Ellen White: Of the regulatory framework, and we also need you know support of the key people in institutions and enough people to make them happen in a in a in a.

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00:24:25.590 --> 00:24:37.980

Ellen White: quick way to be able to be agile and so we've had a great partnership so far, so far, I think there's even more we can do and I guess i'll leave my comments there, thank you.

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00:24:41.880 --> 00:24:54.630

Anita Cicero: Thank you so much Ellen and we know you have to drop off soon, but I were also thankful, your colleague from three three of us on the line to follow up and answer any questions, so thank you for that presentation.

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00:24:55.680 --> 00:25:06.450

Anita Cicero: or next panelist is Dr sandy patel Dr patel is the first director of barta's new division of research, innovation and ventures known as Dr.

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00:25:06.960 --> 00:25:13.140

Anita Cicero: And oversees a diverse portfolio of health security innovations to address current and emerging threats.

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00:25:13.860 --> 00:25:25.320

Anita Cicero: He is an entrepreneur and restless innovator, who uses his experience to advance high impact science build new products and launch new programs and initiatives that focus on health and wellness.

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00:25:25.920 --> 00:25:39.810

Anita Cicero: San Diego prior roles and hhs focused on advancing innovative policies and funding solutions to complex long standing health related problems so we're very happy to hear from you today sandeep.

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00:25:40.020 --> 00:25:40.860

Anita Cicero: The floor shares.

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00:25:41.910 --> 00:25:52.830

Sandeep Patel: Great thanks to nita and thanks to the steering committee for the invitation I agree with all the panelists, this is an extremely important topic, and you know part of the conversation here so.

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00:25:54.090 --> 00:26:03.840

Sandeep Patel: Maybe just start, I thought I would introduce very briefly a little bit about Dr just so you have a some context as to how i'm approaching this topic, no problem.

144

00:26:05.250 --> 00:26:17.340

Sandeep Patel: So, Dr the division of research, innovation, ventures as part as newest division about three years old now and our goal really is to look into the future and think about and invest in.

145

00:26:17.910 --> 00:26:27.240

Sandeep Patel: technologies that we think are potentially transformative with regards to preparing and responding to emergencies developing you know novel.

146

00:26:28.410 --> 00:26:36.660

Sandeep Patel: vaccine and therapies that may prepare us for for multiple threats, you know developed, we have programs that are that are designed to develop.

147

00:26:37.740 --> 00:26:49.860

Sandeep Patel: You know, Micronesia skin patch delivery for vaccines, we have programs to do you know drug screening on Oregon chips, and you know, develop a home based lab tests and things like that so.

148

00:26:50.370 --> 00:26:57.240

Sandeep Patel: So we look at a variety of problems and we're really looking at you know what's what's potentially transformative cross cutting and.

149

00:26:58.710 --> 00:26:59.160

Sandeep Patel: i'm.

150

00:27:00.780 --> 00:27:06.690

Sandeep Patel: Really in the pandemic I think if you recall, there was a tremendous upsurge in entrepreneurial and.

151

00:27:07.350 --> 00:27:15.780

Sandeep Patel: Innovation activity and a lot of areas, really, but certainly for public use mass, which was really a new concept at the time right, we have a an infrastructure and.

152

00:27:16.170 --> 00:27:30.990

Sandeep Patel: The paradigm around occupational use fans, but before the first time we you know you saw a scramble for for public use mass and and you know we got a lot of these entrepreneurs coming to us looking for support and telling us you know what they've been working on and.

153

00:27:32.340 --> 00:27:44.940

Sandeep Patel: You know if you're the things that we saw in common across these is that we heard that many of these entrepreneurs, you know many of them were engineers and other industries or you know worked in other types of product development.

154

00:27:45.510 --> 00:27:55.290

Sandeep Patel: really needed access to experts testing equipment manufacturers a federal experts and things like that, and what was remarkable to me about about this and sort of the general.

155

00:27:56.100 --> 00:28:09.030

Sandeep Patel: You know thing that we saw was that designing masks was was was really an interesting way to provide many people away to feel some sense of agencies and sense of control over the pandemic that they could do something about it.

156

00:28:10.320 --> 00:28:14.100

Sandeep Patel: You know people can't make vaccines in the garage but people did design.

157

00:28:14.580 --> 00:28:31.590

Sandeep Patel: Many masses, we saw it's really powerful and I want to point that out, because you know, one of our goals, when we when we heard and saw this was that you know we needed to find a way to harness that energy towards the development of the future evidence base public use mass.

158

00:28:32.700 --> 00:28:42.030

Sandeep Patel: And you know, and particularly as we look to the future, I think we're going to see, and this is a frame that we started with we're going to see more future outbreaks.

159

00:28:42.690 --> 00:28:47.880

Sandeep Patel: forces like climate change are going to drive acceleration of things like wildfires and other health hazards.

160

00:28:48.360 --> 00:28:54.750

Sandeep Patel: And you know respiratory protection for public use in a variety of settings and for a variety of.

161

00:28:55.230 --> 00:29:05.040

Sandeep Patel: Different people is going to be a vital component of any response horizon future and so so as a result of that we launched with niosh and now in phase two is missed.

162

00:29:05.490 --> 00:29:10.470

Sandeep Patel: What we call the mask innovation challenge and the goal is really, really quite simple.

163

00:29:11.160 --> 00:29:19.560

Sandeep Patel: we're asking people to design a public huge mass of the future that can improve the current state of art for comfort utility and protective factor.

164

00:29:19.920 --> 00:29:31.920

Sandeep Patel: So we're trying to solve this problem of of you know how do we develop really comfortable mass that people will want to wear in a variety of settings and a variety of durations in a variety of environmental conditions as well.

165

00:29:33.360 --> 00:29:42.120

Sandeep Patel: And, and as part of this challenge, the first phase, we asked for ideas on paper and offered a nominal amount \$10,000 for up to 10 winners.

166

00:29:42.900 --> 00:29:55.020

Sandeep Patel: But we got a tremendous response we have 1400 submissions everybody from school groups that designed as classrooms to large multinational companies to leaders and industry.

167

00:29:55.830 --> 00:30:14.880

Sandeep Patel: To two leading academic groups and designers and it was a really, really encouraging kind of response we ended up awarding 10 winners, you know some examples are we had folks we had a mom who was designing a mass that that her child would would want to wear.

168

00:30:15.960 --> 00:30:18.180

And wouldn't want to immediately take off.

169

00:30:19.290 --> 00:30:27.270

Sandeep Patel: We had a you know academic groups to keep on completely novel materials that might do think you know might have enhance performance.

170

00:30:27.810 --> 00:30:44.190

Sandeep Patel: Like you know active in activation of viral particles, we had folks looking at the the supply chain manufacturing to think about how do we develop kind of more agile manufacturing systems like that, so it was it was kind of a fairly robust response.

171

00:30:45.330 --> 00:30:57.720

Sandeep Patel: we're now in phase two, which is focused on getting to prototype and and really developing evidence towards of focus on commercialization and feature and our goal really just to step back a little bit is to.

172

00:30:58.140 --> 00:31:12.960

Sandeep Patel: is to sort of build up this pipeline of innovators and entrepreneurs and give them some lift towards towards designing these massive the future barta is not going to prepare mass as a result of of this challenge, but we really wanted to stimulate some innovation.

173

00:31:14.670 --> 00:31:25.320

Sandeep Patel: That I thought it'd be worthwhile to serve focus on a couple things with regards to this, so one is you know just in terms of the emerging technologies and what we're seeing based on you know what we saw with it with the challenge.

174

00:31:26.430 --> 00:31:27.630

Sandeep Patel: You know, one is that.

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00:31:28.770 --> 00:31:34.920

Sandeep Patel: You know I think emerging technologies really have the power to force us to rethink how we define respirators mass face barriers.

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00:31:36.030 --> 00:31:48.840

Sandeep Patel: You know, things like a material design so i'll break it down into a category so material design right so so things like communication barriers, we put on mass you know, we had novel materials that could.

177

00:31:49.290 --> 00:31:56.010

Sandeep Patel: Have the comfort and protective factor, but would be translucent or transparent system, you know communicate that would be.

178

00:31:57.240 --> 00:32:01.470

Sandeep Patel: Enhanced functionality that we're looking for you know novel materials can also.

179

00:32:02.910 --> 00:32:10.830

Sandeep Patel: help with marlon activation and we've seen this with a number of materials as well, the second category is around design so many mass.

180

00:32:12.030 --> 00:32:22.530

Sandeep Patel: can be designed well on paper, but maybe in different ways that are suboptimal and reduce the protective factor, and so this is where design innovation coming to me, we saw a lot of folks.

181

00:32:22.890 --> 00:32:34.500

Sandeep Patel: You know approach the problem this way, which is you know you can use this to reduce user error, so that you can open up and and have a mask fit only one way or without any instructions and things like that.

182

00:32:35.670 --> 00:32:49.530

Sandeep Patel: There are non traditional designs to that kind of challenge or notion of what a mass is and and you know, maybe design lead differently, we also have very different populations, you know we're talking adult pediatric a different face shapes different.

183

00:32:50.760 --> 00:32:55.920

Sandeep Patel: User needs and that really challenger notion of so how to design for for.

184

00:32:57.390 --> 00:33:07.560

Sandeep Patel: A mass we also you know saw a lot of activity, and also the manufacturing piece of this, and this is important because we, this is something that we've seen and we're going to.

185

00:33:08.070 --> 00:33:17.970

Sandeep Patel: continue to be a challenge which is how do we create a system that can withstand supply and demand shocks for for mass which we're never going to see.

186

00:33:18.510 --> 00:33:28.980

Sandeep Patel: And so you know a lot of people approach this problem of you know, doing employing agile manufacturing approaches 3D printing additive manufacturing of people, ie.

187

00:33:30.600 --> 00:33:34.740

Sandeep Patel: You know, things like that I can either help personalize these these.

188

00:33:35.940 --> 00:33:44.670

Sandeep Patel: masks or or help with stands in these sharks and the last category that I think is going to be important that we that we've seen is sort of the integration of sensor based technologies.

189

00:33:46.140 --> 00:33:50.820

Sandeep Patel: The integration of sensors can play a really important role to enhance the books, now the mass.

190

00:33:52.050 --> 00:34:03.270

Sandeep Patel: You know, for example, you can detect the presence of a particular virus in the air or as a result of infection, they can measure physiological indicators like breathing rate carbon dioxide provide.

191

00:34:03.810 --> 00:34:12.450

Sandeep Patel: Information also on the effectiveness of the mass you know particle count temperature things like that will become really important actually enhance the the functionality of them as.

192

00:34:12.960 --> 00:34:22.410

Sandeep Patel: A part of the challenge, though in a lot of these approaches, is that a lot of these new innovations just don't fit the mold of what we think about as a mask or a respirator.

193

00:34:22.800 --> 00:34:29.010

Sandeep Patel: And, just like we need innovation for products we're going to need innovation in the testing and standard development things like that.

194

00:34:29.310 --> 00:34:40.590

Sandeep Patel: And so, this is where our partnership with nash's is has been really fruitful because we're thinking about you know how innovations on the on the side of testing can really support and catalyze innovation product development which will be important.

195

00:34:41.760 --> 00:34:55.230

Sandeep Patel: And the last point I want to make here is so just going back with face to that's currently in process, so the way it's going to work is we actually just closed our White Paper phase, and we had over 70 submissions.

196

00:34:56.640 --> 00:35:03.030

Sandeep Patel: For a novel mass but we're going to do is invite 10 of those to send in a prototype we're going to have national miss.

197

00:35:03.600 --> 00:35:13.980

Sandeep Patel: test them using their equipment we're going to provide information back to this participants though they'll be allowed to redesign their mass based on based on evidence and then resubmit for final.

198

00:35:15.210 --> 00:35:22.890

Sandeep Patel: Consideration we're gonna look to make those announcements for the 10 finalists at the end of March.

199

00:35:23.610 --> 00:35:29.460

Sandeep Patel: we're really excited about is the is a collaboration that formed, as a result of this, and some of the lessons learned that we've had.

200

00:35:29.970 --> 00:35:40.200

Sandeep Patel: Based office, and you know number one, I think, is the fact that I, you know, there are a lot of federal entities that have a stake in role in in mass development and design, I think.

201

00:35:40.560 --> 00:35:45.420

Sandeep Patel: You know, bringing those energies together in a more integrated way, is going to be really important.

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00:35:46.140 --> 00:35:55.620

Sandeep Patel: finding ways that we can support entrepreneurs is going to be really important, especially with access to testing and expertise and manufacturing and all these kinds of things that will create a robust innovation pipeline.

203

00:35:56.160 --> 00:36:04.740

Sandeep Patel: I think these are the things are going to really create the environment that it's going to stimulate innovation, not just in mass and respirator other types of as well in the future.

204

00:36:05.910 --> 00:36:11.790

Sandeep Patel: I will stop there, turn back over to me and happy to participate in the in the Q amp a thanks.

205

00:36:12.720 --> 00:36:19.290

Anita Cicero: Great thank thanks so much Sunday our final speaker before the Q amp a is my colleague Dr Eric toner.

206

00:36:19.620 --> 00:36:29.970

Anita Cicero: Eric is a senior scholar at the Johns Hopkins Center for health, security and a senior scientist in the department of environmental, health and engineering at the Johns Hopkins Bloomberg school of public health.

207

00:36:31.290 --> 00:36:53.100

Anita Cicero: He has a prior medical career, where he was an internist and emergency physician, he has worked for years on issues related to hospital preparedness pandemic influenza emerging infectious disease mass mass casualty disasters, the list goes on, we have asked him to speak today.

208

00:36:54.180 --> 00:37:04.890

Anita Cicero: Based on some findings in his is very good recent report on mass and respirators so Eric at the floor is yours thanks for joining.

209

00:37:06.390 --> 00:37:07.050

Eric Toner: Thanks nita.

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00:37:08.070 --> 00:37:16.290

Eric Toner: And, first of all, let me say that I agree with everything that's been said so far and I could actually stop here in just a DEMO, but I want.

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00:37:17.850 --> 00:37:23.100

Eric Toner: You to my colleagues and I issued a report last fall, which I think will be dropped in the chat.

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00:37:23.700 --> 00:37:35.490

Eric Toner: And we consider the development, the manufacture the approval acceptance and stockpiling have better rest protection for healthcare workers first other central workers and for the public and the US.

213

00:37:36.990 --> 00:37:42.660

Eric Toner: And, as we all know, mask and respirators have played in a central role in the healthcare respond to coven 19.

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00:37:43.290 --> 00:37:55.350

Eric Toner: But, as has been said, despite drawbacks, in terms of comfort fit and effect from this, the disposable masks and disposable and 95 respirators have been used by most healthcare workers.

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00:37:56.100 --> 00:38:07.110

Eric Toner: really have not appreciably changed since the mid 90s, and as we have all seen or experienced prolonged use of traditional and 95 is difficult.

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00:38:08.820 --> 00:38:10.740

Eric Toner: And, as has also been said during.

217

00:38:12.180 --> 00:38:26.670

Eric Toner: For the first time to pop up has been advised to wear masks and respirators as well, and in a future pandemic, it is possible to increase the public's protection and reduce spread of disease through more efficient, well fitting and comfortable masks.

218

00:38:28.020 --> 00:38:39.000

Eric Toner: and better mass respirators are possible as as we've heard discussed by harnessing the emerging technologies, the innovation that was evidence during the pandemic.

219

00:38:40.260 --> 00:38:43.440

Eric Toner: And the availability of resources to support that innovation.

220

00:38:45.030 --> 00:38:57.270

Eric Toner: So why is print public use of effective Kirsch commercially available masking respirators could help save thousands of lives during the next severe opinion, I can could reduce the resulting economic damage.

221

00:38:57.840 --> 00:39:05.850

Eric Toner: You can also reviews transmission of common resurrect pathogens, such as flu, which goes on average 15,000 Americans each year.

222

00:39:07.020 --> 00:39:13.710

Eric Toner: Therefore, ready supply as well as a surge manufacturing capacity of high quality devices as needed.

223

00:39:15.390 --> 00:39:25.410

Eric Toner: But while metre better masks and respirators are possible progress in their development manufacturer has been blocked as well, through the server referenced.

224

00:39:26.040 --> 00:39:43.830

Eric Toner: As been blocked by influence of several factors industrial inertia lack of competition complacent consumers, by which I mean health care systems prior to October 19 regulatory barriers and uncertain market and gaps in the US government policy.

225

00:39:45.180 --> 00:39:57.090

Eric Toner: So so based on some general principles we made recommendations for federal actions which i'll describe and some of these which we have already heard about are already in progress.

226

00:39:58.110 --> 00:40:18.570

Eric Toner: So in general principles disposable single use devices are not as cost effective and are more dependent on long and fragile supply chains than some reasonable devices, therefore, a shift to increase use of improved reasonable devices and healthcare facilities is needed.

227

00:40:20.220 --> 00:40:24.330

Eric Toner: Innovation and design is occurring and should be encouraged for federal policy.

228

00:40:26.610 --> 00:40:43.080

Eric Toner: stockpiling alone cannot be the sole solution sensitive not realistic to stockpile enough devices for every possible scenario a robust and in manufacturing supply chain that can rapidly research to supplant the stockpile is also needed.

229

00:40:44.550 --> 00:41:02.700

Eric Toner: Additionally, all devices deteriorate over time and the SMS must implement strategies to use them before they expire, and finally, increased use of masked by the public to prevent routine rush great health threats, would help maintain an active market and help sustain manufacturing capacity.

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00:41:03.990 --> 00:41:13.830

Eric Toner: So the following our eight recommendations for federal action we have more in our report, but these are the ones I thought most salient to this discussion.

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00:41:14.610 --> 00:41:26.610

Eric Toner: First of all, the SNS shouldn't supplement its supply of disposal in 95 with purchase of reasonable respirators including a spectrum of sizes and shapes for different ages and face types.

232

00:41:27.930 --> 00:41:44.550

Eric Toner: As per should commissions scenario Griffin modeling studies to determine the appropriate number of reasonable and disposal respirators to purchase for the s&s and these scenarios should include the possibility of severe pandemic even worse than covered 19.

233

00:41:46.290 --> 00:41:50.310

Eric Toner: The SMS should use a recurring competitive procurement process.

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00:41:51.390 --> 00:41:59.310

Eric Toner: increasingly demanding requirements as a purchases new respirators for health care workers and other virus essential workers.

235

00:42:01.500 --> 00:42:10.440

Eric Toner: barda should foster the development of better masks respirators and public keys masks by continuing to issue challenges in establishing target product profile.

236

00:42:12.360 --> 00:42:24.840

Eric Toner: varnish and also explore the means of providing financial incentives or other kinds of support to the investor companies to scale up and maintained production once devices meeting the target product profiles are developed.

237

00:42:27.120 --> 00:42:41.220

Eric Toner: The business should consider a program to rotate it stockpiles of mask and respirators through the healthcare system to hospital specifically so that always has unexpired products and participating hospitals could reduce their supply costs.

238

00:42:42.810 --> 00:43:00.300

Eric Toner: The CDC and asked her should work together with professional organizations accrediting bodies CNS to find ways to encourage possible risk for protection program to move towards greater use of reusable respirators that part of their routine respiratory protection Program.

239

00:43:01.800 --> 00:43:17.610

Eric Toner: And lastly, CDC should have a sustained national communications campaign to encourage Maskey is by the public during flu season, or when having refresh infections are seasonal allergies or when they're high levels of duster smoke.

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00:43:19.200 --> 00:43:29.310

Eric Toner: So on behalf of our research team, I appreciate appreciate the opportunity to share our recommendations with you and I think Congress can play an important role in helping to advance these.

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00:43:29.310 --> 00:43:30.120

recommendations.

242

00:43:31.230 --> 00:43:32.520
Eric Toner: So nita back to you.

243

00:43:33.570 --> 00:43:40.770

Anita Cicero: Okay Thank you so much we've got a lot of content and I had some questions I was going to start us off with but.

244

00:43:41.460 --> 00:43:52.440

Anita Cicero: But I see so many coming into Q amp a that I think will go to the viewers questions and just as a reminder, please, if you have a question just pop it in the Q amp a box.

245

00:43:53.400 --> 00:44:05.310

Anita Cicero: As we noted Ellen white handily for previous commitment but her colleague JESSICA how GIs the global regulatory manager at 3am has joined us for questions, thank you for joining us JESSICA.

246

00:44:05.910 --> 00:44:16.470

Anita Cicero: And so now i'll turn it over to our communications director Margaret Miller who's going to facilitate the Q amp a she's been watching that box closely so Margaret, what do you have.

247

00:44:16.920 --> 00:44:32.940

Margaret Miller, JHU: A thing, so the first question is for Mr steer is a seat SMS still looking to add more and 95 to the stock fire file or are all the contracts already awarded also will there be sorry i'm going to butcher this last one metric West respirators and surgical masks added to the SMS.

248

00:44:34.650 --> 00:44:36.660

Jason Stear: I can actually answer both of those questions.

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00:44:37.980 --> 00:44:43.890

Jason Stear: Generally speaking, yes, we understand that we will be buying more and 95.

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00:44:45.030 --> 00:44:46.740

Jason Stear: currently working to understand.

251

00:44:47.970 --> 00:44:55.110

Jason Stear: The intent and requirement that we should require to that's part of the discussions that.

252

00:44:56.400 --> 00:45:08.910

Jason Stear: director Steve Adams is having today as part of the MC body, but we expect that we will be replenishing the 95 that we have deployed over the last several weeks to the general population.

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00:45:09.420 --> 00:45:15.840

Jason Stear: As to Latin America respirators yes, we have requirements to hold those believe we have currently.

254

00:45:16.500 --> 00:45:25.830

Jason Stear: Or, to date, we have a word and contracts for half of our environment and we expect that at some point in the future, as we gather additional data on the.

255

00:45:26.580 --> 00:45:35.040

Jason Stear: Last room eric's currently held by the SMS that we will be investing in additional quantities to either complete that requirement or working with MC.

256

00:45:35.430 --> 00:45:47.640

Jason Stear: The again the public health emergency medical countermeasures enterprise to adjust that requirement, based on the data generated go through the code response answer studies of the existing list last America respirators.

257

00:45:49.530 --> 00:45:57.210

Margaret Miller, JHU: Great Thank you so much, and I have a question for Dr patel well medical material is very important to the world of response so as climate sustainability.

258

00:45:57.690 --> 00:46:09.000

Margaret Miller, JHU: As we as response directors and planners look to the future and fighting count both challenges what considerations have you seen a design, implementation that has taken into account climate neutrality and or sustainability.

259

00:46:11.550 --> 00:46:19.020

Sandeep Patel: yeah, so I think I think there's this part of the addressed by others, but, but I think one important consideration is going to be the usability.

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00:46:20.250 --> 00:46:24.060

Sandeep Patel: Is is trying to get away from the the single use mass.

261

00:46:25.080 --> 00:46:36.270

Sandeep Patel: ones that are more reliable and can be either cleaned or used in you know over repeated instances and that's it that's the criteria that we're asking for in our in our challenge and recognize its importance.

262

00:46:37.200 --> 00:46:43.980

Sandeep Patel: The other piece of this too is is just thinking about comfort and design, so that.

263

00:46:45.090 --> 00:46:48.690

Sandeep Patel: so that you know people will will.

264

00:46:49.110 --> 00:46:59.940

Sandeep Patel: feel more comfortable wearing wearing masks over longer periods of time under under different humidity humidity temperature conditions, and this is something that we're also making into the into the prizes as well.

265

00:47:00.300 --> 00:47:10.740

Sandeep Patel: Talking about those design elements and one thing I just wanted to note, just to reference Dr reds comments earlier on project three we've actually incorporate a lot of the very ambitious.

266

00:47:11.550 --> 00:47:25.980

Sandeep Patel: Criteria product profile criteria from project into into this phase two of the challenge you know around readability and comfort and things like that so so So those are all important control considerations and certainly for us in the future.

267

00:47:28.620 --> 00:47:41.070

Margaret Miller, JHU: Great Thank you so much, and now I have a question for miss Peggy once a pandemic retreats, how can we incentivize manufacturers to maintain sufficient production capacity so that masks are available to the general public, at the start of the next pandemic.

268

00:47:42.390 --> 00:47:43.860

Jessica Hauge - 3M: For, thank you for the question.

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00:47:45.510 --> 00:47:55.650

Jessica Hauge - 3M: Obviously, it is a challenge for manufacturers when demand for respirators spike as intensely as it tends to during a pandemic and, in particular during a global pandemic.

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00:47:56.250 --> 00:48:13.410

Jessica Hauge - 3M: And so it is important for governments to partner with manufacturers in order to help to smooth the demand over time and, of course, stockpiling, as an essential best practice in order to help ensure that P P that's needed will be available to those workers who need it, when it's needed.

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00:48:16.770 --> 00:48:20.070

Margaret Miller, JHU: Great thanks, and I actually have kind of a follow up from from one of the things you just said so.

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00:48:20.670 --> 00:48:34.200

Margaret Miller, JHU: Maybe you could start, and then the rest of the panel could offer things questions to comments to, but how can availability of respirator stockpiles being globally, including in lower income countries for the for the general public but also for public health workers.

273

00:48:35.400 --> 00:48:40.020

Jessica Hauge - 3M: Well, and of course I cannot speak on behalf of all manufacturers but.

274

00:48:41.130 --> 00:49:01.020

Jessica Hauge - 3M: One thing that does in order to help ensure local supply of pee pee to each country that needs it is diversifying the locations in which we manufacture pee pee so we've got manufacturing locations all over the globe and each manufacturing location serves the area around it.

275

00:49:04.860 --> 00:49:07.890

Margaret Miller, JHU: Great and Jason are Steve did you have any other comments on that one.

276

00:49:11.100 --> 00:49:15.270

Steve Redd: Well, I hope that we learn from some of the things that are going on with.

277

00:49:16.860 --> 00:49:22.950

Steve Redd: distribution of vaccines that could be applied to some of these other countermeasures like testing and and and positive.

278

00:49:23.760 --> 00:49:36.150

Steve Redd: personal protective equipment, I think it's going to be a huge challenge, but a lot of the things that we've talked about today in terms of usability will help in that you know it helped make better global supply possible.

279

00:49:37.920 --> 00:49:41.580

Anita Cicero: I can jump in with a quick question I just see.

280

00:49:41.640 --> 00:49:49.530

Anita Cicero: Jason Jason you can get into this too, but just this is a follow up to a comment that Ellen white made.

281

00:49:49.890 --> 00:50:00.540

Anita Cicero: Which is that there needs to be kind of a communication piece of training piece, and we have seen that you know with vaccines, you can have great medical countermeasures if people.

282

00:50:00.990 --> 00:50:06.660

Anita Cicero: don't trust it don't trust government are you know, have a lot of questions about.

283

00:50:07.020 --> 00:50:13.650

Anita Cicero: The research, etc, then they're less likely to take them we've seen that around the world, and certainly in the US, and I think.

284

00:50:14.010 --> 00:50:28.470

Anita Cicero: similar thing could be said about masks and so i'm wondering, in terms of like investment in the development of new mass and respirators should investment include as connected to that investment in.

285

00:50:29.220 --> 00:50:37.350

Anita Cicero: behavioral sciences social science, research, of how best to communicate how best to train how best to encourage the where's of these.

286

00:50:37.590 --> 00:50:44.340

Anita Cicero: Things besides just putting in the stockpile so I don't know Jason if you want to take that on or or JESSICA i'm happy to hear all of your thoughts on that.

287

00:50:45.270 --> 00:50:53.850

Jason Stear: I greatly appreciate it ellen's comment earlier about that the need for education, the need for communication and clear communications materials to go with.

288

00:50:54.630 --> 00:51:02.040

Jason Stear: masks that you know as as Alan said, you know, a 95 is a heavily regulated product is designed.

289

00:51:02.550 --> 00:51:16.320

Jason Stear: for use by medical professionals or other industrial professionals with a perfect fit testing to ensure that is maximally effective and meets the advertised specified rating for for protection that's the right word.

290

00:51:17.370 --> 00:51:26.100

Jason Stear: But that's going to be key to anything that we're we're doing as a government or that we are doing it, you know, a global people.

291

00:51:26.640 --> 00:51:37.950

Jason Stear: To make people more available to make it more usable I think is going to be key that anything that we're innovating and we're developing new products it doesn't need to be in 95.

292

00:51:38.970 --> 00:51:49.830

Jason Stear: And fall under that regulatory framework that exists there is there is there space to develop a different class of mass for general public use without fit testing.

293

00:51:50.250 --> 00:51:58.650

Jason Stear: A the there are some heavy questions that follow on to that I think everyone would recognize the greater good of.

294

00:51:59.490 --> 00:52:07.230

Jason Stear: Diversifying availability diversifying production diversifying the types of masks available respiratory protection available.

295

00:52:07.890 --> 00:52:15.870

Jason Stear: But there, there are some serious questions that need to underpin and inform the decision making, both for government investment.

296

00:52:16.380 --> 00:52:35.400

Jason Stear: but also for private sector investment what products are they investing in producing what what products are cost effective or I guess profitable for a company to produce, and how can we work in private, public private partnership to produce the products that may not have a clear.

297

00:52:36.570 --> 00:52:47.490

Jason Stear: Profit case but that if we can incentivize somehow or sufficiently that we can get made and get production at scale to meet that that global demand.

298

00:52:51.480 --> 00:52:54.990

Margaret Miller, JHU: Great Thank you so we have a question from a colleague working at the state of Maryland.

299

00:52:55.380 --> 00:53:08.430

Margaret Miller, JHU: What actions was s&s and phones and our Federal Government taking to address the distribution of respirator to the general public that have expiration dates required for use within healthcare settings but have minimal impact fresh important to us for non medical environments.

300

00:53:08.880 --> 00:53:17.730

Margaret Miller, JHU: it's been pushed back related to the distribution of perfectly usable respirators but pass their respective hospital expiration dates.

301

00:53:19.830 --> 00:53:27.690

Jason Stear: So that's a challenging question, because when we're talking about any size, these are regulated products they have the expiration dates for a reason.

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00:53:29.100 --> 00:53:46.080

Jason Stear: And I say that acknowledging that the majority of the 95 is held in the stockpile at the start of code and 19 were expired, but the expiration date labeled on them showed that they were expired and we distributed those with do your healthcare provider to your doctor letters.

303

00:53:47.280 --> 00:53:58.170

Jason Stear: To the recipients of those masks explaining that they've been tested by nyasha they've been found to be effective and say, for us, based on testing in the components.

304

00:53:59.100 --> 00:54:07.200

Jason Stear: But there are concerns about degradation of masks and Jessica I don't want to throw it to you, but it, you know components degree.

305

00:54:08.250 --> 00:54:20.670

Jason Stear: phone pieces over knows clips degrade and disintegrate the elastic straps degrade over time and depending on storage conditions and those masks may not be effective for us, they may be more effective than nothing.

306

00:54:21.750 --> 00:54:29.130

Jason Stear: But there are still concerns that need to be addressed before they can be issued to the public with certainty that they are safe for us.

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00:54:32.460 --> 00:54:48.300

Jason Stear: As to actions to take everything it needs to be continued collaboration collaboration with manufacturer collaboration with FDA to ensure that anything that government is putting out or that we're asking private sector to put out.

308

00:54:49.350 --> 00:54:58.830

Jason Stear: Either on our behalf or on their own with perfect protections or other federal protections that there is agreement that product is safe and effective for us.

309

00:55:01.380 --> 00:55:09.270

Margaret Miller, JHU: Great Thank you so much, Dr Turner what should be done to improve masks for children, especially in the 95 spaces if that's.

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00:55:10.470 --> 00:55:11.010

Margaret Miller, JHU: feasible.

311

00:55:13.200 --> 00:55:24.660

Eric Toner: really important issue, particularly as we are now in a world in which we're recommending respiratory protection for for children, the general public and and schools um.

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00:55:25.440 --> 00:55:35.700

Eric Toner: You know it's a complex question because it's it's not just about design and manufacturer, but it's about regulation and we have to have standards for.

313

00:55:36.930 --> 00:55:46.020

Eric Toner: children's masks, particularly if we were have children's respirators that provide the kind of protection and 95 does.

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00:55:47.370 --> 00:55:53.940

Eric Toner: So those standards don't exist regulations don't exist that they have to be developed um.

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00:55:54.960 --> 00:55:56.550

Eric Toner: Well, I think we also have to think about.

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00:55:57.690 --> 00:56:18.270

Eric Toner: The use case is an n 95 like device really the device that's most appropriate for children to use, for example in the classroom I think probably there are better designs that work in that situation, so I think this is a opportunity for a lot of innovation and research, as well as.

317

00:56:19.410 --> 00:56:26.700

Eric Toner: regulatory work, but I think it's a it's an essential need it's not a need that's going to go away, I think i'm.

318

00:56:27.780 --> 00:56:42.420

Eric Toner: In next year's flu season, we will remember that you know we don't want kids in schools, who are coughing and spreading disease, and so I think the issue of kids and Max will keep coming back, and we should have ISIS.

319

00:56:46.560 --> 00:56:56.490

Jessica Hauge - 3M: If I could jump in there if that's all right, I agree with a lot of what you said, and this is, this is an incredibly important space as Ellen mentioned earlier.

320

00:56:57.270 --> 00:57:10.830

Jessica Hauge - 3M: manufacturers can only innovate, within the space that is allowed by regulatory framework, when it comes to respiratory protection and currently there, there is no respiratory protection for children framework.

321

00:57:12.210 --> 00:57:21.870

Jessica Hauge - 3M: Indeed, I think there is a great opportunity here to do for the scientific community to do some research that can contribute meaningfully to everybody's understanding of.

322

00:57:22.290 --> 00:57:37.200

Jessica Hauge - 3M: Which products would be needed, effective and tolerated by kids in the settings and situations in which they would need respiratory protection, I also want to point out that it's it's I think it's not necessarily the case that.

323

00:57:38.460 --> 00:57:50.370

Jessica Hauge - 3M: That regulatory framework needs to be built from scratch, we do have regulatory framework, including you know performance criteria for and 95 respirators and.

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00:57:51.840 --> 00:57:55.200

Jessica Hauge - 3M: it's I think it's likely based on what the research shows that.

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00:57:55.710 --> 00:58:08.670

Jessica Hauge - 3M: Only some certain adjustments to the performance requirements for and 95 that have already exist, would need to be implemented in order to make those regulatory those performance requirements apply to respirators for children.

326

00:58:09.240 --> 00:58:26.700

Jessica Hauge - 3M: And one final point is that the more similar the regulatory requirements are for child respirators two and 95 respirators for occupational use the more flexible and resilient the manufacturing of those respirators could be in times when they are needed urgently and suddenly.

327

00:58:30.240 --> 00:58:31.260

Anita Cicero: hey thanks so much.

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00:58:32.400 --> 00:58:39.930

Anita Cicero: We have maybe i'll throw out one final question would love to hear from from you all about this, I mean we've talked about the need to.

329

00:58:40.590 --> 00:58:46.140

Anita Cicero: incentivize innovation, the need for better masks for the public.

330

00:58:46.800 --> 00:58:57.870

Anita Cicero: I understand from your comments and deep that the there's this mask innovation challenge, a lot of exciting things are happening and showing us what's possible potentially in that area but.

331

00:58:58.200 --> 00:59:10.020

Anita Cicero: we're not actually you know we can't stockpile our way out of the problem, because when we need mass the most storing a pandemic, or some kind of extreme event we're not going to all be in the stockpile so they.

332

00:59:10.290 --> 00:59:25.530

Anita Cicero: There has to be that robust chain So how do we, you know, is it possible to push that innovation forward get regulations in places JESSICA said, though, the industry needs in order to know like what the specifications are do we have.

333

00:59:26.700 --> 00:59:33.810

Anita Cicero: What else can Congress do what else can the Interagency do to try to make that possible what's missing.

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00:59:36.600 --> 00:59:38.430

Anita Cicero: Anyone want to take that one on.

335

00:59:50.370 --> 01:00:02.520

Sandeep Patel: yeah I can jump in with just a maybe a couple quick things on this front, so I think we can talk about product innovation material innovation design innovation, you know, all we want, and I think at the end of the day.

336

01:00:03.900 --> 01:00:14.610

Sandeep Patel: What needs to happen, probably, it is to better is to provide some clarity on on what this market looks like and how do we, how do we channel.

337

01:00:15.090 --> 01:00:23.610

Sandeep Patel: You know, entrepreneurial innovation activity, you know into those into that market, and I think there's clearly a regulatory or place for this.

338

01:00:24.420 --> 01:00:38.010

Sandeep Patel: But that there are other other things that need to happen as well, but yeah no, I think I think it's about connecting and creating kind of an innovation ecosystem that exists in a lot of other medical kind of measure areas, but not necessarily in massive PPs.

339

01:00:39.540 --> 01:00:54.330

Anita Cicero: Okay, thanks so much I with that, I think we are out of time, I just wanted to thank all of our panelists today Thank you so much for your remarks, this is extremely important area we've had a lot of interest from viewers on this so.

340

01:00:55.260 --> 01:01:07.740

Anita Cicero: goodbye, for now, we will next return with another Capitol Hill steering committee webinar on march 30 when we're going to be focused on focusing on testing and ways to expand this capacity to for other health care.

341

01:01:08.160 --> 01:01:12.180

Anita Cicero: Health security threats in the future so thanks very much have a good day.