

Speaker 1: Welcome to on the pandemic. This episode is hosted by Mario Dowd, executive director of health systems and population health integration for Rutgers university and former commissioner of health for the state of New Jersey. Joining the discussion today are Dr. Lawrence Kleiman, chief division of population health quality and implementation science department of pediatrics, Rutgers Robert Wood Johnson medical school, and Dr. Steven Barnett, senior co-director of the national Institute of early education [00:00:30] research.

Speaker 2: Good morning, and thank you for joining us. This is Mario Dowd from Rutgers university. And today we are talking about kids school and COVID to explore these topics. I am joined by two of my Rutgers colleagues, Larry climate, a pediatrician and population health researcher, and Steve Barnett, an education researcher and founder of the national Institute for early education research, both have been leading research on the impact of COVID on kids to set [00:01:00] the stage. There are three general ways that kids and their physical and emotional development have been affected by COVID first, when they have caught the COVID virus themselves. Second, when someone in their lives, either a parent teacher grandparent has gotten COVID and has either been sick hospitalized or even died. Um, and third, they have been impacted as members of the broader community and all the social effects of not being able to go to school, not being able [00:01:30] to visit or socialize with friends and family. Of course, there has been variation in the impact of these issues for different communities. And some children have also been dealing with the issues of food insecurity, a job loss, or a parent, or the overall stress for families with parents working from home. Larry, let's start with the effect of the actual virus in kids when they get it. I've heard you say that it's a myth that kids don't really get [00:02:00] sick from COVID as a pediatrician who is studying this, what can you tell us about kids who catch the virus?

Speaker 3: Thank you, Mary. I would say that indeed, the original myth of COVID was that children are spared or one of the original myths. What we know is that a small but predictable fraction of children will get very sick with the illness. Most of those children will have, uh, have other conditions which may [00:02:30] be as, uh, uh, as diverse as obesity or other chronic illnesses. Um, but not all of them about one in 20 who gets, uh, very sick will not have, uh, another, uh, illness. So we have to be aware that if many children get the infection, some will get very sick. And then there is also, uh, there are longer term effects that I know want to talk about that

Speaker 4: [00:03:00] As well.

Speaker 2: Right? One of those longer term effects on kids is what they're calling the multi-system inflammatory syndrome in kids. Miss C I think is the acronym. Um, I was looking at the data and here in New Jersey, there have been 115 kids hospitalized for this. And across the country, over 3000 pediatric cases have been reported with 36 deaths. What is this?

Speaker 4: Well, Mary Missy is the poster child [00:03:30] for a group of syndromes that we're still learning about called post-acute sequella of COVID P a S C and Ms C presents typically with fever, with inflammatory symptoms. That may be from the respiratory tract with the, uh, cardiac functioning, uh, with the GI tract, the stomach intestines, um, skin

rashes, all of these, it's a broad range [00:04:00] of symptoms that present typically about four weeks after the initial infection and, uh, many children who get this get very, very sick. They often need life support. Um, some of them are as sick as you're likely to see a child, but the fortunate news is that many recover, most recover, almost all recover, but as you noted, there are a few who don't and, and of course that's a terrible loss.

Speaker 2: Let me ask you this. Larry, when you know, [00:04:30] you talk about it as it was an early myth, that kids were not impacted by the virus. And, you know, as you've talked about it today, there are children who not only get sick, but some that get very sick. Um, but generally speaking, when you look at the numbers, they are smaller for the pediatric population and particularly the very young kids than they are for many other age groups. Is that a fair statement? How would you categorize this,

Speaker 4: Mary? I would say that is a fair statement [00:05:00] that children are our wet once infected children are less likely than adults to get very sick. That being said, when the numbers are in the millions who gets sick, the numbers of children who get very civic is meaningful. And that's one of the challenges that the proportions are low, but the numbers are impactful. We also don't know very well. The long-term impacts of this. If you think [00:05:30] about children, as on a course of growth and development over a life course, we don't know the extent to which this impacts that life pers. We do know, for example, in adults that even asymptomatic adults may have pneumonia. If you get an x-ray on them, we don't have this data on children. We don't understand the neurocognitive effects of this and the neurodevelopmental effects in the short or the term. So

Speaker 3: I think that there is a lot [00:06:00] of work to be done before we can feel comfortable that, that those numbers are more than the tip of the iceberg.

Speaker 2: Thanks, Larry. That's really helpful. Um, let's talk a little bit about the fact that schools have been closed, um, significantly over the course of the, more than a year now, and that impact on children. Steve, this school year has been nuts. Um, you know, as a mom of three boys, two of which who have been in school, this has been really [00:06:30] a strange and challenging year for both myself as a parent, but also for them as kids going through it. Um, some kids have been in school, full-time in person, this, this current school year. Um, other kids have not been in school at all. And other children like mine have been in a hybrid model with almost every week, feeling like a different schedule. What has been the impact on kids?

Speaker 3: I think that's a great way of phrasing the [00:07:00] question, Mary, because it, it, it brings out the variability. So there isn't one answer, right? Some kids, uh, have hardly been affected at all, um, because their schools didn't close. Um, there, their parents may have still been working, um, other kids, uh, whose, uh, school's closed, got good supports for hybrid. Um, their parents were good at supporting their education. Uh, their families [00:07:30] were doing all right. And so probably minimal impacts on those, uh, and all to predictably. These differences correlate with socioeconomic differences. So the children who were the most disadvantaged to begin with who needed the public

supports from public education the most are the ones who've been most, uh, disadvantaged by the pandemic. Uh, they're the ones who are, who are most likely [00:08:00] in preschool or kindergarten, not to just have been held out, not to get anything remote or in person whose parents had a great difficulty in providing them a remote services.

Speaker 3: Do I will say across the board for younger children and, and the younger children are, uh, the more difficult it is educating them virtually or remotely, right. Um, the parents of young children, I kind of across the board, [00:08:30] we're very unsatisfied, uh, with we remote education and the difficulties they had, uh, navigating and supporting that. Um, then in addition, you have children missing out on the social opportunities on sports opportunities, uh, you know, physical activity and even meals, uh, while many, many programs provided meals to kids who weren't physically in school. Um, and, uh, some [00:09:00] even stepped up to do that about a quarter of children in poverty, uh, ceased getting the food supports that they used to get when they were in school. And, uh, all of that negatively impacts physical, social, emotional, cognitive development.

Speaker 2: You know, what you're staying really rings true for my experience. I have a fourth grader who, except for the fact that he started to skip his virtual classes, that he didn't like generally was able to get [00:09:30] a lot of the academic material in the virtual environment. But I had a kindergartner who it was just a brutal battle to get him to engage on the virtual platform from day to day. And so I think the age of the kid really, really does make a difference for those kids that you were talking about that were significantly disadvantaged. Um, do you think there's a last year for kids in terms of learning and education?

Speaker 3: [00:10:00] It's not an entirely last year, but it's a year of setback, right? If you think about summer learning loss, the most of the weight gain that we worry about in the obesity problem with kids is actually summer weight gain. Uh, people don't realize that, uh, now we've had many children, three extra summers, um, that that's damaging, [00:10:30] um, the Wharton school, uh, economists estimate, uh, as much as a 10% decrease in lifetime earnings, we know that lifetime earnings are associated with longevity. So, so that's an increase in, in, uh, mortality or decrease in lifespan. It's probably also an increase in morbidity. Uh, long-term uh, both because of the associations with cognitive social, emotional development, but also [00:11:00] just the physical impacts of, of increase, um, decrease in physical activity and the increase in obesity.

Speaker 2: I, I can tell you that the days that my son is on all virtual school are much more sedentary days. We have a Fitbit now in our house because of this, just to try to stay on top of it. And so we're tracking it and it's, it's there. The data [00:11:30] is there it's really striking.

Speaker 3: Yes. And parents have very different access parents and children to outdoor spaces where their children can get exercise. Um, so, you know, again, it's, there's a lot of disparity in what you can do to make up when these opportunities are lost. What are some of the things that

Speaker 2: Parents and teachers should be thinking about in terms of how to deal with it,

Speaker 3: Or they should be thinking [00:12:00] about the kinds of things they normally do and how to get back on track doing those. So, for example, we've seen a big decline in parents reading to their children at home. Um, is that because everybody's more stressed out because they're doing virtual learning and it's like, no more mommy and daddy, I'm sorry, enough learning already. Those are words we don't want to hear. And unfortunately, I think too many parents are hearing that. [00:12:30] Um, so figuring out how do we work these into activities, um, that are normal, you know, reading, playing games, um, inside in an outdoor, um, so that they don't seem like they're in positions. Um, but rather fun opportunities. Um, getting back into regular routines to the extent possible. And the same for teachers, the best thing teachers [00:13:00] can do is to be the best teachers. They can be in the ways they always were. Uh, and you know, if you have to figure out how to do that virtually, um, then that's what you do. But in addition to that, we need to open schools and figure out how to do that safely. I should say, I don't think we need to figure that out. I think we need to commit to doing what we already know work.

Speaker 2: Yeah. A lot, [00:13:30] a lot of information has come out on that. You know, you've talked a little bit about the family dynamic and the stress and the relationship between parents and kids. Um, and there are new levels of stress because of the different roles parents are taking on and the impact that the pandemic is having on them as an adult and as a parent, when schools are closed in particular, this is challenging. And the fact that they need to support their kids with [00:14:00] virtual learning at home was a new job for many of them in addition to dealing with their own job, um, which sometimes they had to do from home and collect close quarters with their, their, uh, family members. And this has been an adjustment for, and some people have adjusted better than others. What are you seeing in terms of the impact of this kind of stress on kids and how does that impact their ability to learn? Generally,

Speaker 3: [00:14:30] There are two different, um, components of this. We've done now surveys of a thousand families of children, ages three to five, uh, who are not yet in kindergarten. So these are preschoolers. Uh, we don't know about older kids, uh, but we don't see any within preschoolers. We don't see an age trend. Uh, their levels of stress are about twice what's normal. Um, their [00:15:00] parents' concerns about their ability to get along with peers, either with pro-social activities or in terms of antisocial behavior are twice as high as normal. Um, so this stress has definitely gotten transmitted to kids. Um, we know that that happens. Um, uh, the sooner we can get the stress off the parents, uh, the sooner we can get the stress off the kids. Um, but the, these are very [00:15:30] high levels. Um, 20, 25% of kids presenting with problems when, when we would have expected 10%. Um, so that, that by itself is a problem for social, emotional development. It spills over into cognitive and academic, but the main problem with cognitive and academic is the lack of opportunities because parents are reading less at home. Children [00:16:00] are engaging in fewer activities with their peers and teachers.

Speaker 2: Steve, I've heard you say that, you know, if an adult is angry or stressed out, they're not listening and learning. And it's the same for kids, is that as simple as it is really

Speaker 3: That's as simple as it is. If a child's crying at the screen or frustrated that I can't make this work, they're not learning. Uh, and they are acquiring [00:16:30] habits and dispositions. We don't want them DAF, right? They're, they're, they're developing, uh, a view that this is a Versive and something they don't want to engage in. So it's, it's, you know, the feeling and thinking go together, uh, and, uh, we have to address both of them.

Speaker 2: Thank you, Larry. You know, Steve was talking a lot about some of the physical health impacts. This is all having with kids as well. And there have been reports that [00:17:00] kids are missing out on routine care, not getting regular vaccines. Um, you know, according to the vaccine schedule, not getting things done in their doctor's office that they normally would like led screenings, which we know is, is really important, not only for physical, but also learning, um, and also concerns that Steve highlighted about childhood obesity and, and I didn't realize it was the summer months that were the most problematic. Um, how is this situation impacting the broader [00:17:30] health risks?

Speaker 3: Uh, I think it's, uh, it's like so much of COVID, um, not quite as simple as, uh, uh, as, as what I agree with is a simple thing that if kids are stressed, they don't learn here. There is the reality kids getting less

Speaker 4: Health services, some of which they ought to be getting, um, there at the beginning of the pandemic, we didn't know how to do it safely. So the message was stay at home, [00:18:00] but since then, we have figured out how to handle health care safely, uh, at the same time. Um, anything that congregates is a risk benefit analysis. I mean, it brings people together. So if you, uh, if your child needs vaccinations, they should be coming in. If your child needs screenings or assessments, they should be coming in. If your child has a cold or a cough, maybe you should be doing [00:18:30] a telehealth visit initially, and then let the physician help you, the clinician to help you to decide, uh, if there's a visit, that's there, we've seen over the course of the winter, a dramatic reduction in the respiratory viruses that kids generally get.

Speaker 4: So they seem to actually have had a healthier year in terms of other infectious diseases. Although I'm getting reports now from my colleagues in New York city, that, uh, some of those winter viruses are coming with abandoned [00:19:00] now in the spring. So whether we're going to see that in New Jersey or not, I don't know. I also think I want to pick up on something that Stephen, you were talking about a little earlier in terms of disparities, because I think that, uh, COVID desperately affects Latino and black children. Um, school districts, uh, with, uh, higher minority populations may have less money to, uh, [00:19:30] to bring in all the safety protocols that we know work in schools. So I think this whammy just keeps on hitting and the disadvantage, uh, piles up. So I do think it's going to be important for us and also by the way, access to healthcare, uh, can be worse in those settings. So I think we have to think about, as we think about coming out, um, how we're going to, uh, mitigate those disparities to the greatest extent possible because, uh, [00:20:00] it has, uh, it's compounded some of the tragedies of this pandemic.

Speaker 2: I'm glad you raised that Larry, because, you know, as I'm looking at all of this and how much our schools have been through in this last year, I feel that there should be some kind of a statewide school recovery and resiliency plan. Um, and that comes, that language is very much emergency preparedness, jargon. Um, but I think it speaks to what's required here. Um, Steve, [00:20:30] some of your research speaks to how we can transform our educational systems to adapt to these new needs that we see for our kids and our teachers. Um, given the pandemic, if we could write ourselves the three of us, um, you know, uh, plan for New Jersey or for country to help a recovery plan to address both the immediate needs that we have, um, and work towards those transformational, um, things that you've talked about, what do you think [00:21:00] should be included in this plan that would help our communities, our teachers and our schools better meet the needs of our kids and catch up from this learning loss.

Speaker 3: I think the first thing would be to engage the educational community in developing that plan, uh, as a community, right? Um, they're, they're all working on this on their own, uh, and to some extent, self-organize it. I mean, it's superintendents in New Jersey talk to each other, [00:21:30] meet together, their organizations help with that. Uh, but I would like to see some state leadership, um, bringing them together, um, and then planning for the summer. What can we do to create an on ramp for the fall that, uh, enables us to be successful in all the things we have to do, both preparing to educate kids and preparing to mitigate the risks of reopening schools. [00:22:00] Uh, what can we do in the summer to make up for the lost opportunities for, uh, whether those are academic, physical, social? Um, there are lots of good summer program models, uh, that we can engage with bringing schools together with nonprofit organizations like the Y's, for example, um, and many others, uh, and [00:22:30] then figuring out what are we going to do in the fall, uh, without making too many additional demands.

Speaker 3: I think we need to think about how do we support teachers to be the best they can be, rather than asking them to reinvent themselves for fall. Uh, we are constantly asking schools to transform themselves. Uh, we have an abysmal track record of actually making that happen. Uh, and they often, they just feel like they're on a merry-go-round [00:23:00] or Groundhog day. I'm not sure what the Annapolis she is. Uh, but, but none of them are good. And so how do we support teachers who are going to be stressed themselves? Uh, how do we ensure that when they come back and they have kids who have twice the normal level of behavior problems, they have the supports to deal with that. Um, those are the kinds of things that, uh, that I would prioritize and that then I would add, what can we put [00:23:30] on top of that?

Speaker 3: Not additional demands for the same people, but what can we do with afterschool programs and other kinds of supplemental tutoring programs, uh, diagnosing, identifying the kids who have, um, problems exactly what those problems are focusing tutoring on that, giving them intense string, giving them intensive tutoring, either using expert teachers or even volunteers or some good volunteer tutoring programs. Um, [00:24:00] we, we can make up a lot of the difference. And then thinking about this as a long-term problem, we don't have to do all of the catch-up in one year. I mean, we can think about what do we do over the next three to four years to support this cohort of kids who have had problems. All right.

Speaker 2: So we'll amend it to a five-year plan or all of the things that take a little longer than we expect. And I like what you're talking about in terms of using the summer [00:24:30] and afterschool programs, because I think that's when you can really engage community-based organizations to support our schools as well. I have to say, I want to endorse the why here, because they have been one of the few organizations that came out early to provide outdoor activities, even through the winter, for kids that were able to, um, participate. And, um, you know, it was a real, uh, a real relief for me because, um, you know, I, I was [00:25:00] lucky enough to be able to look for these opportunities and pay for these opportunities. But I think to some of your suggestions, this, this is going to cost some money. So I think there has to be some financial support for some of these programs. That's different than just asking teachers to do more. Is that what I'm hearing you?

Speaker 3: Absolutely. And there's a lot of money. Uh, we just have to make sure it gets allocated to the right thing. Uh, and there will be a stampede to allocate [00:25:30] the money, to meet all sorts of agendas short-term and long-term. And I think we need to make sure that the kids, uh, get first in line and, and their needs are prioritized and then the needs of the teachers and families that support them, uh, to make sure they they're able to do that. That's good.

Speaker 2: Uh, good, um, centering goal for whatever our plan is going to look like. [00:26:00] Larry let's, let's talk a little bit about what you would see in this recovery plan. Um, how would you, uh, look at this as something that might include things that would address the physical and mental health with kids?

Speaker 4: I think it actually starts with where you and Steve were just talking about that support for kids support for families, it's identifying kids who have, uh, lost a part of the education and making sure they catch up [00:26:30] and where you can grouping them together. So it's not an individual, but a joint in a social endeavor. I think it's recognizing that a part of the work of being a kid is schooling. A part of it is play, and we need support for all of that. And then making sure that, uh, as a corollary there's access to the health care, I think it would be worth doing some surveillance to see about neurocognitive development, um, and health impacts [00:27:00] long-term of COVID. I think the federal government will do some of that, but I think the state can do, uh, some fruitfully as well. Uh, I think understanding that children, uh, are holistic beings who live in a context of a family, which exists within a community is really important.

Speaker 4: I think at the same time, we need to remember that in Middlesex County right now COVID cases are far above their peak from last [00:27:30] April. So we feel like we're on the down slide of this and hopefully from a, uh, uh, temporal, uh, an attack general sense we are, but this is not yet in the rear view mirror. So we need to also maintain safety and continue to think about things as risk benefits. I like, I will say, I think that one of the things we know works is masks with social distancing ventilation and hand-washing [00:28:00] with the cleaning of high contact surfaces. Um, I'm not sure that's that three feet social distancing as the CDC has suggested maybe safe is safe. What we know is it can be if everything else is done right. But, uh, if we think about, uh, the, the

potential risks as trying to win them selves through the various protections we put up every time we lose a, [00:28:30] a barrier, we make it easier for, for failures to happen.

Speaker 4: And we are seeing that, uh, illnesses spreading in schools. And, um, we need to get vaccines for kids. That's another piece that will happen, I hope soon, but, but once those vaccines are available, we need to make sure that the state and others support the distribution of them for, uh, for children. And they're currently available the Pfizer vaccine to age 16. Um, and there's a new emergency [00:29:00] use authorization, uh, application that Pfizer has put in for down to 12. Uh, but we need to get the studies down lower for the, uh, the grade school kids and the preschool kids. And, um, I would encourage your, uh, uh, your listenership to take advantage of vaccination whenever possible.

Speaker 2: Steve, thank you so much for joining me here today. Um, for this very important conversation, I have a feeling we'll be back [00:29:30] together, um, in a few months to see how things are going.

Speaker 4: Look forward to talking to you anytime. Thank you, Mary,

Speaker 2: To learn more about the research that Steve and his team are doing on how COVID 19 is affecting education for kids, you can visit the national Institute for early education [research@nier.org](mailto:research@nier.org).

Speaker 1: You've been listening to on the pandemic. We'll be back soon with new guests and new information [00:30:00] from the top minds in health, to learn more about how Rutgers is making a difference during the COVID-19 pandemic visit [rutgers.edu/united](http://rutgers.edu/united).