

*[musical introduction]*

AM Okay, and welcome to this podcast of the American Journal of Public Health. Today with my guests and my co-host, Vickie Mays, we are to discuss work-related inequities because that's the theme of the June issue of the Journal. And, it's a constant thing in the Journal; we've been covering it again and again, and unfortunately it's an underfunded domain and much more should be done in terms of funding research and also in doing research. So, before we start, let me ask our guests to introduce themselves. Let's start with Paul Lee.

PL Hello, my name is Paul Lee. I'm a professor emeritus from University of California Davis, and my specialty is the economics of the, economics of occupational safety and health.

AM Thank you very much, Paul. And Jerzy...

JE Hi, my name's Jerzy Eisenberg-Guyot, I've been a postdoc at Columbia in the psych epi training program since fall 2020, and generally I'm a social epidemiologist and I focus on how the structural organization of work like workplace power and balances effect inequities and mental illness and other outcomes like mortality.

AM Thank you very much, Jerzy. Adam?

AG My name's Adam Gaffney; I'm a pulmonary and critical care physician, assistant professor of Harvard Medical School. My research interest has mostly focused on healthcare reform and, um, healthcare financing, but I've been interested and I've studied several other aspects of Covid policy, and that's kind of where I came at this.

AM Thank you very much, Adam. You know, Vickie Mays is a professor at UCLA, and Vickie, you know, I want to start with you, actually, because you, you probably—you know, work-related

inequities is probably not the main domain of your focuses but they're surely present in all your research. So, what would you expect from a podcast like ours with our guests? What's your expectation from this podcast?

VM Well, it's interesting, because you're absolutely right. Work is not my first domain. It's always been inequity work, because during Covid is how people got exposed, you know, in terms of you know people without PPE, so there's so many ways in which work becomes important, but where it is upfront for me—and Jerzy is my person on this one—is when you think about dealing with mental health, we always say things like housing and employment are very important to those, so I think that this whole notion of what occupation you hold is critical.

AM Right, right, and we'll probably come to this in a moment. So let's start with our guests now, and see, Paul, my question is to you first because you've been looking at the state of public health in American workers for a long time now, and so what's your impression? We're coming out of this pandemic. What's the status of public health in the working population?

PL Well, um, I see at least three different impacts on American workers. Let me just mention a couple of these. The first is that Covid exposed a chasm in the work force between essential and non-essential workers. Essential workers include physicians, nurses, and police officers but also nursing home aides, warehouse workers, and meat packers. With the exception of healthcare professionals, most essential workers are lower-paid blue collar workers. This chasm has always existed for occupational diseases. Covid merely exposed it for everybody to see. Dr. Gaffney's study is the best analysis I've seen that indicates the extent of this chasm. Second impact on the American worker involves labor unions and strikes. Public interest in unions has been increasing and strike activity has also been increasing since at least 2019. Christian Smalls is the leader of the new Amazon labor union in New York. He helped organized a Covid-related strike in April

of 2020. He attributes his activism to management's disregard for the well-being of warehouse workers. Similar sentiments have been expressed by Starbucks employees during their recent efforts to unionize. I'm very familiar with the research literature in economics and sociology, and I can tell you that occupational hazards are probably the—one of the most important—predictors of union formation as well as strike activity. There's another impact on workers' compensation. Shall I mention that now or perhaps later?

AM Well, let's look at already what you mentioned. I mean, one is the essential workers that have been particularly impacted but, if I understand on the other side, there is a kind of a positive impact which is more unionization and maybe better wages, et cetera. That's what you're saying, there are those two dimensions?

PL Uh, well, the unionization and, is just now starting, so it hasn't really had a huge impact on Covid yet. We'll see what happens in the future, but certainly if you look around you'll see that there's quite a bit more unionization activity than there was just a few years ago. And also, the public interest, by the way, in unions is at the highest level it's been since 1965; but the law is very, makes it very difficult to unionize these days. So, even though, for example, the Amazon labor union passed the first hurdle, they haven't negotiated with management yet, and well, management has been quite slow to negotiate with the workers as well—and exactly the same thing is happening with Starbucks. So, the workers can vote to unionize and here now we're you know a year later and we still haven't, don't have a contract in the Starbucks in Buffalo, New York or the Amazon labor union in Staten Island.

VM Well, I'm going to ask you, who do you think really benefits from unionization? Because we often see it occurring because of, you know, people who are not well paid and at the bottom of

the heap, but at the end of the day the question is who really benefits the most from unionization, in your opinion? Is it going to contribute to better health outcomes?

PL Yes, I think it's going to—well, in general, middle and lower income people will benefit from unionization. Also, these days, African Americans and women are a much higher percentage of unionization than they ever have been before, and it is in economic literature we know that unionization lifts wages, but lifts wages more for people in lower income jobs than for professionals. In fact, there are not a lot of professionals that are unionized, although of course we know teachers are unionized, and it turns out, actually, I'm going to be on a call here next week in Pittsburgh. The resident physicians in Pittsburgh are talking about unionization and they're thinking about—well, they're having a seminar just on that. Well, there's actually, there's a lot I could say about unionization and health and safety; but in general, yes, it definitely improves the health and safety for employees.

AM Yeah, yeah, and I mean we clearly see that now when we talk about union and unionization, the situation is completely different from what it was a few years. I mean, people are much more positive and optimistic and there are some results which did exist a few years ago. So, that's probably also a consequence of this crisis. But, Jerzy, let me turn to you. You've been looking at the situation before the crisis. Can you tell us about your study and your findings and why they are important?

JE Yeah, definitely. So, I'll for coagulate some theory background and then I can go into to like the actual findings, but we use relational social class theory in our analysis. And relational social theory suggests that the magnitude of class inequities in a given work place or historical period, for example, is really shaped by the balance of power between workers and employers. And as we were just discussing recent trends and health affecting working conditions including

plummeting labor union membership and surging class disparities in income suggest power has really tipped away from workers over the last few decades. And I think this tipping of class power is probably reflected in the surging mortality inequities by income and education we've seen in the US as well as declining population life expectancy. So, our study examined class mortality inequities among US adults from 1986 to 2019 in the National Health Interview Survey. In our study, we estimate pretty large class mortality inequities [size] workers in six per hundred greater mortality rate than larger business owners and managers over the 34 years of follow up, with mortality risks especially high for those blue collar workers and service workers as well as the unemployed which is unsurprising. Perhaps most worrisome, we estimated that the class mortality and inequities have increased over time driving by pretty dramatic mortality rate decreases among larger business owners and stagnant or increasing mortality rates among workers. And this aligns with trends in mortality inequities across other social axes like income and education. It suggests a pretty urgent need for public health intervention.

AM So since it's public health, Jerzy, repeat the magnitude of the difference, because that's the public health dimension a little.

JE Yeah, so workers had a 6 per 100 greater mortality rate than larger business owners and managers over 34 years of follow up, and I forget the exact numbers for blue collar workers, service workers, and the unemployed, but I think they all had about a 12 per 100 greater mortality rate over 34 years, and that's just among like working-age adults, so mostly focused from 25 to 64.

AM And so, Adam, you looked at the same survey actually, but you looked at the impact of Covid-19, so what did you find and how do you think this will fit with Jerzy's findings?

AG Well, I think it fits with Jerzy's finding pretty clearly, because it sort of carries through some of the same points that he and his team found before the pandemic. In brief, [we got] only two years of the same survey, the National Health Interview Survey, and there have been previous studies looking at disparities in Covid mortality in particular by occupation. Those analyses, of course, may also reflect differences in baseline health as we heard are quite clear in Jerzy's study and much other work. We wanted to look at the Covid prevalence specifically, because that gives you a little bit of clearer picture of actual exposure as opposed to other factors that might increase risk of complications or severe disease. And so using the NHIS, we can make mass statements for the nation at large; we looked by industry, we looked by occupation at, for the risk of having a Covid diagnosis in the first two years of the pandemic, and we found sort of, somewhat unsurprisingly, that many occupations and industries that have sort of defined as essential workers, that have public facing work, had had higher risks of Covid. Some industries that are, you know, more professional class and managerial class had lower rates. One of the interesting findings we found is that when we compared workers to non-workers, we found an even bigger effect, meaning that whereas only a few occupations had a higher rate of Covid than other occupations, many more occupations and workers in other industries had increased risks compared to non-workers. I would say probably the most origin if again unsurprising finding in our study was that we looked at the risk of having Covid as an adult based on the number of workers in your household. So this is a way of sort of looking at how the risk of occupation affects not just individuals but those in their families, and we found that even if you control for household size, income, age, we found that the number of workers in your household is linked to a higher risk of Covid, that sort of increases death-wise, gets higher and higher as you go from zero to one to two to three workers. And so this really just adds one more bit of evidence

showing that part of the unjust and inequitable impact of Covid was based on occupation, was based on work, was based on inadequacies of work place protections, frankly, and our failure to do more during the pandemic to protect workers, and we can talk about what those policies might have been or might still be, but again I think this does carry forward some of the messages that emerged from Jerzy's study.

AM Absolutely, and I think even if it's expected finding, we need the finding, we need the data, we need to show that they exist, and how did you deal with the limitations of the fact that maybe some workers would not have been tested as often as other groups of the population, that maybe your data would underestimate the real impact? How did you deal with this problem?

JE It's a limitation of our study that we address, I mean that we describe as a limitation. The fact is that in the United States, we didn't have a population-based sero survey as there was in the United Kingdom, so that's what you would want if you could really want to look at true sero prevalence in the society at large, so you know we did look at Covid testing rates to get a sense of, oh was this simply a sort of function of different testing intensity, and it doesn't look like that, you know, is, is clearly the cause, but it is a limitation and there may be some differences in testing intensity that could contribute to some of the findings. I'm very skeptical that it explains it in full.

AM If anything, your results are probably underestimated, that the reality, that's the bias goes in that direction. I don't think it goes in the other direction. Okay, so let's have a conversation about these findings. Paul, Jerzy, Adam, you know, you've covered different aspects of those work-related inequities, so what does it show, your work inspires yourself, and Vickie, what would be your expectation from, on the basis of what we just heard?

PL? Could I talk about workers compensation for a minute?

AM Sure, please, please.

PL This is another impact of what we've been talking about, because who pays when workers contract Covid on the job? Theoretically, workers compensation should pay, but workers compensation insurers argue with some justification they do not know how or when a worker might have contracted Covid. In most states today, the workers compensation law puts the burden of proof on the worker. The law presumes that the Covid was caught someplace else. This is similar to other occupational diseases and explains why workers compensation insurers pay about, I said avoid paying, about 80-99% of occupational disease costs. These costs are shifted onto others like private insurance companies, Medicaid and Medicare, that is taxpayers, and afflicted workers and their families. But there are 11 states that have reversed the role of presumption. Their workers compensation law presumes that Covid was caught on the job and that workers compensation must pay, but not all workers qualify. Utah and Wisconsin limit coverage to the first responders and to health care workers. Illinois, New Jersey, and Vermont cover all essential workers; California and Wyoming cover all workers. Now, workers compensation law is important because it can incentivize employers to take more precautions. If Covid is presumed to be job-related, workers compensation insurance premiums will rise; employers will have an incentive to keep workers safe, thereby reducing premiums. If Covid is presumed not to be job-related, employers will have less incentive to keep workers safe. Anyway, I think that when we talk about what are some of the policy recommendations, I think one policy recommendation should be that all states should have the presumption that, if you work in healthcare or are a first responder, at a minimum, that Covid is job-related and workers compensation should have to pay, and again this will raise premiums and now employer has an economic incentive to provide as much support to reduce the incidence of Covid.



AM Absolutely, yeah, that's a very, very important point.

AG I think that's a really interesting point and one I agree with, yeah, and I think one of the—I mentioned earlier on my clinical area is pulmonary medicine, and there's so many occupational diseases that are closely tied with the history of pulmonary medicine—coal workers, pneumoconiosis, asbestosis, silicosis, and so on and so forth—we don't usually think of respiratory viruses as occupational illnesses, right? We don't traditionally, but certainly we should, and I think that pandemic made this quite clear. You know, I worked in a hospital, I always had access to an N95; the simple fact of the matter is that workers in other non-healthcare industries and sometimes in some healthcare industries did not have access to that. That should have absolutely been that kind of provision of that kind of protection absolutely could have been something that we could have achieved. You know, I think the other flip side of the workman's compensation issue is that healthcare expenses really shouldn't be tied at all to, you know, your work place. In other words from the perspective of getting the care you need and getting healthcare covered, that should be something that should be universal, as a side point. I think we can think of a lot of other things: indoor air quality, you know, thinking about not just Covid but other respiratory viruses, what are the responsibilities, what should be the standards, and many other things, I think, could have made a difference and could still continue to make a difference if we think about respiratory viruses as, in some part, occupational.

AM Absolutely, absolutely. And so this leads us to discuss what should we do now in order to avoid that the same thing happens [if] there is another pandemic or—compensation is clearly one. What do you see as other important reforms that should be implemented rapidly?

AG I'll just mention one other one. I think a big part of this story was the lack of a more robust sort of national OSHA standard. Now, OSHA did pass, did put forth a vaccine versus testing and

masking mandate, and ultimately of course that was thrown out by the Supreme Court. We need to demand that sort of standard and how to deal with it politically and how to deal with a court that seems like it's happy to throw out every single possible public health measure that gets passed, is a separate question, but I think the national regulatory response is an important part of this story.

AM Absolutely, that's a good point.

PL? I would certainly agree with that, and I would like to also mention that Dr. Gaffney's data, you can actually take some numbers from Dr. Gaffney's data to apply to what epidemiologists call the population attributable fraction and using Dr. Gaffney's excellent data you can estimate that about 45% of all Covid cases, the [bns] we're looking at were job-related. So this gives you some idea the magnitude of the, what occupations are contributing to the Covid pandemic and so that there certainly be more attention to what we can do at work to try to minimize the exposure.

AM That's a very interesting computation that you did, Paul, and that will appear in your editorial in the June issue. And, Jerzy, I'm curious, what type of public health consequence did you [derive] from your own finding and your own classification of work position, I would say?

JE I mean I guess since like the theory that we're using to motivate the analysis suggests that like the power imbalances are really a root cause of occupational health inequities including inequities beyond the Covid-19 pandemic. Efficiently and sustainably addressing the inequities might require more like structural worker empowering interventions. Those include the policy changes to decommodify necessities and strengthen labor protections including those like the changes to workers compensation, the expanded unemployment insurance we saw earlier in the pandemic, as well as labor union and social movement organizing, sort of targeting broader economic transformation, and I think the uptick in work organizing exemplified by like the

Amazon and Starbucks worker campaigns is really exciting as are the grad student and postdoc and resident union campaigns at many of our own institutions, and I think it would behoove public health researchers to try to work in solidarity with those movements including not only on the ground but also researching the role of like class and power and worker empowerment in health inequities which is really a area of research that's been neglected as occupational health is neglected, generally, too, obviously in epidemiology, so...

VM Let me ask Jerzy a question because Jerzy is giving us what's potentially a hopeful avenue and that is we've tried in terms of government regulations to do that and it's moving too slow or it gets rejected. Jerzy, what's your thought about the kinds of things that Paul was talking about in terms of strikes? Could it be that it's actually going to be the labor class that can turn this around and really get us the public health protection that we need? How hopeful are you about that?

JE I mean, I think at least in, I guess that's like, that's a huge question and I don't exactly know like what's to do be done--

AM But a great one, Jerzy!

JE I think I'm like at least hopeful in the long term. I feel like the only way we're going to get where we need to go is through like community organizing and worker organizing, and the labor movement, and I do think there are like really hopeful changes recently among like service workers and other oppressed workers that have historically been excluded from the labor movement, but I also think there's such a long way to go and even like the little uptick in strike activity we're seeing now like pales in comparison to where we were 30 years. Like, it's not even close to where that was so I feel like yeah it's really hopeful and there's a lot of interest in unions among like younger people but there's also like so much employer resistance and I think it was right to say that workers want to organize and employers have just developed new tactics

to fight it and so it's going to be about how to get—it's going to be the challenge how to make progress despite all the employer attacks.

AM Thank you--

VM I think you're giving us one of the most hopeful ways forward in the sense of maybe it's not all about government regulation. Maybe it really is about the organizing when you talk about these structural barriers, so I want to thank Jerzy for like the hopefulness at the end that got brought into this, so who might really change things?

AM And because of the hopefulness, I think we cannot add anything beyond that. We want to keep our listeners, you know, with that perspective. I want to thank you all for your time, for your enthusiasm, for how you dedicate to these questions that are again understudied, underfunded, and really we all are very grateful for what you're all doing. And, Vickie, thanks again, you're a terrific host. Thank you everybody! Bye bye!

*[musical postlude]*