## Audio Podcast about the Symposium on the Science of Disproportionate Health Impacts

CHRISTINE GUITAR: With us now is Dr. Jacobs and he's here to discuss his paper on physical infrastructure. Hi David.

DAVID JACOBS: Hello.

CHRISTINE GUITAR: Can you tell us a little bit about who you represent?

DAVID JACOBS: Sure. I am the Research Director at the National Center for Healthy Housing in Washington DC. We look at the association of housing issues and health outcomes.

CHRISTINE GUITAR: Okay, can you tell us a little bit about this paper that you put together?

DAVID JACOBS: Yes. Basically this paper has to do with disparities in the physical infrastructure and health outcomes. We looked at housing, transportation systems and then water quality.

CHRISTINE GUITAR: Dr. Jacobs, can you define what you mean by physical infrastructure?

DAVID JACOBS: By that we mean shelter from the elements, access to food, clean water, clothing, and really kind of the basic necessities of life and that basically makes all of our communication as humans possible.

CHRISTINE GUITAR: So can you provide us with an example of one of those? How is this going to help communities, your paper and your efforts?

DAVID JACOBS: So my own particular contribution to the paper had to do with housing. And, the idea that housing would be related to population health really isn't a new one and in fact our first housing laws were set up to deal with public health problems like tuberculosis and cholera and typhoid. And in fact it was a housing-based intervention that is indoor plumbing that had a lot to do with conquering those epidemics. And yet it really wasn't until the 60s, 70s, 80s, and 90s when the lead poisoning experience remerged as an area of interest that the necessity of having housing professionals and health professionals collaborate really became renewed.

CHRISTINE GUITAR: And so what did you find then in the paper?

DAVID JACOBS: Right.

CHRISTINE GUITAR: What's the status and what can we do to improve the housing situation in the United Sates?

DAVID JACOBS: Well we looked at, basically what we found, is that the disparities with general health and with the housing that has severe and moderate physical problems has remained unchanged for the last thirty years. And so with one notable exception and that has to do with the lead poisoning experience which shows that if you look at the blood lead level of children going back to 1975 to the recent period it shows that not only were we able to reduce health disparities dramatically, that is blood lead levels in African American, Mexican American and our white populations but the overall population blood lead levels went down as well. And we think that's an example of something to point to that can be used in other communities across the board; that is we need to focus on doing general education for the population of those housing conditions that influence health but we also need to target intervention resources to populations that are highly at risk. So the reason that the lead thing worked was because the nation took action. We had a Lead Poisoning Prevention Act in '71; we took lead out of food canning and gasoline which those were general population issues and then in the early '90s we instituted new housing grants for privately-owned low income housing which is the population that's at greatest risk. So the combination of those things, that is, going after the general population but also targeting resources to those populations at risk can be effective.

CHRISTINE GUITAR: Dr. Jacobs, thank you very much.

DAVID JACOBS: Ok. Thank you.