Background
The gig economy describes contingent work arrangements transacted on a digital platform. The gig economy has engaged a growing number of workers. Financially dependent gig workers are more likely to be Black and Latinx. Limited access to labor protections in contingent work contributing to wage theft, unsafe work environment, occupational injuries, and poor overall health. Algorithmic management — software and assuming managerial functions. Previously found that gig workers of color are at risk of discriminatory employment practices both because of the use of consumer-sourced ratings as well as the current limitations of civil rights laws.

Objective
The occupational health and safety concerns of on-demand gig workers and the effects and safety disparities in the gig economy on workers of color need further evaluation.

Methods
We assessed self-reported occupational health and safety related concerns for on-demand workers. We used retrospective data from one year of candid discussions from publicly accessible online forums used by on-demand workers.

Using a constant comparison method, we conducted a thematic analysis on the coded data to identify and explore major themes.

We analyzed a subset of discussions in which on-demand workers related occupational health and safety concerns to their self-identified race and/or ethnicity.

Results

Algorithmic Management
An Instacart Shopper got hurt earlier this week after being told she had to deliver her order that included twelve 50 pound bags of sugar or risk having her account deactivated.

Occ Health & Safety
I have 2 phones. I monitor surge while I drive and pay attention to surge patterns in my area. So I figure out what time window I need to finish a trip in order to pick up a high surge as soon as I am done with my current ride. Sometimes I need to hurry up and maneuver through traffic efficiently to get that next good ride.

I have been asked what I am doing a number of times… I get a lot of dirty looks and nasty stares. I’ve never been as scared on the job as when I worked near brown and crimson. There were a few garages open with Nazi and confederate flags and I wanted out of there so badly.

I have a friend who got the cops called on me the other day for sitting in my car in broad daylight, talking on the phone pull off to the side of the road…”

Safety disparities
I’ve got over 8200 trips and there have been dozens of times I narrowly escaped deadly crashes, physical alterations, false allegations, and many other life changing problems.

I’ve have over 8200 trips and there have been dozens of times I narrowly escaped deadly crashes, physical alterations, false allegations, and many other life changing problems.

Then they gone rate a me low because I’m black… I had a little collage girl say she was afraid to get in by herself with a black man…

References

Conclusions
On-demand gig workers face similar occupational health risks as those found in contingent workers, but many of these may be exacerbated with many gig work factors including algorithmic management.

Gig workers of color expressed occupational health and safety concerns specifically related to their race/ethnicity.

Major themes of worker concerns included:
- Discrimination when interacting with customers or the general public
- Increased risk of police encounters and thus opportunities for police violence
- The affects of inherent or overt bias on their customer ratings, impacting their ability to work.

Limitations:
- Observation-based, qualitative, introductory study

Future Directions
- Representative survey of occupational health and safety implications of gig work
- Policies need to be developed to protect this growing underserved population of workers. For minority workers, specific interventions are needed to address the racial disparities in safety and working conditions.

Acknowledgments
Thank you to Molly Tran, MD, MPH. We wish to appreciate the support of this grant and acknowledged methodology and analytic assistance from our postdoctoral trainee. Acknowledgments to American Occupational Health Conference and presented at the American Public Health Association Conference of 2020.