

Traffic-Related Emergency Department Visits as a Measure of Social Distancing during the COVID-19 Pandemic in Suburban Cook County, IL

Hannah Steinberg, MPH

Epidemiologist III, Cook County Department of Public Health

hannah.steinberg@cookcountyhhs.org

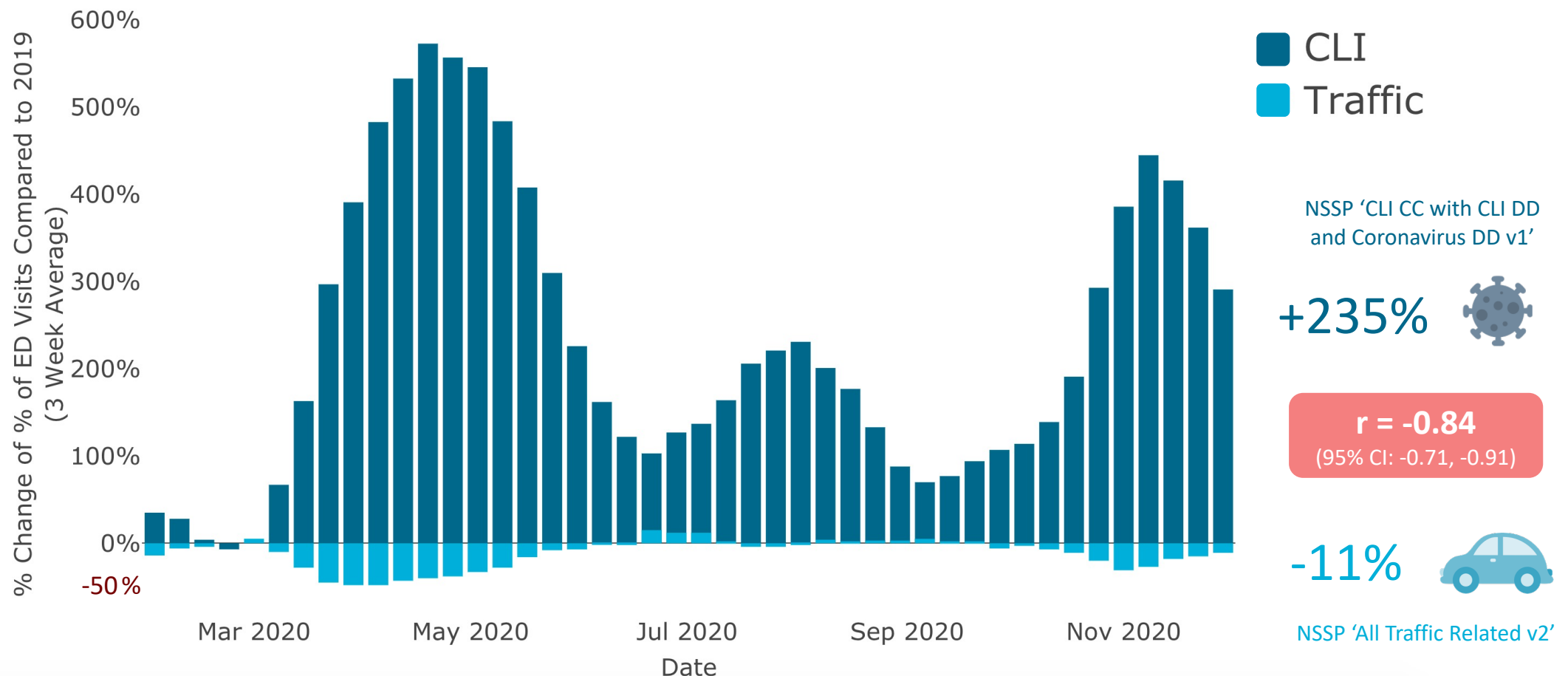
Co-authors: Kelley Bemis, MPH; Demian Christiansen, DSc, MPH

Background: traffic-related emergency department (ED) visits as a proxy for social distancing at county and sub-county levels

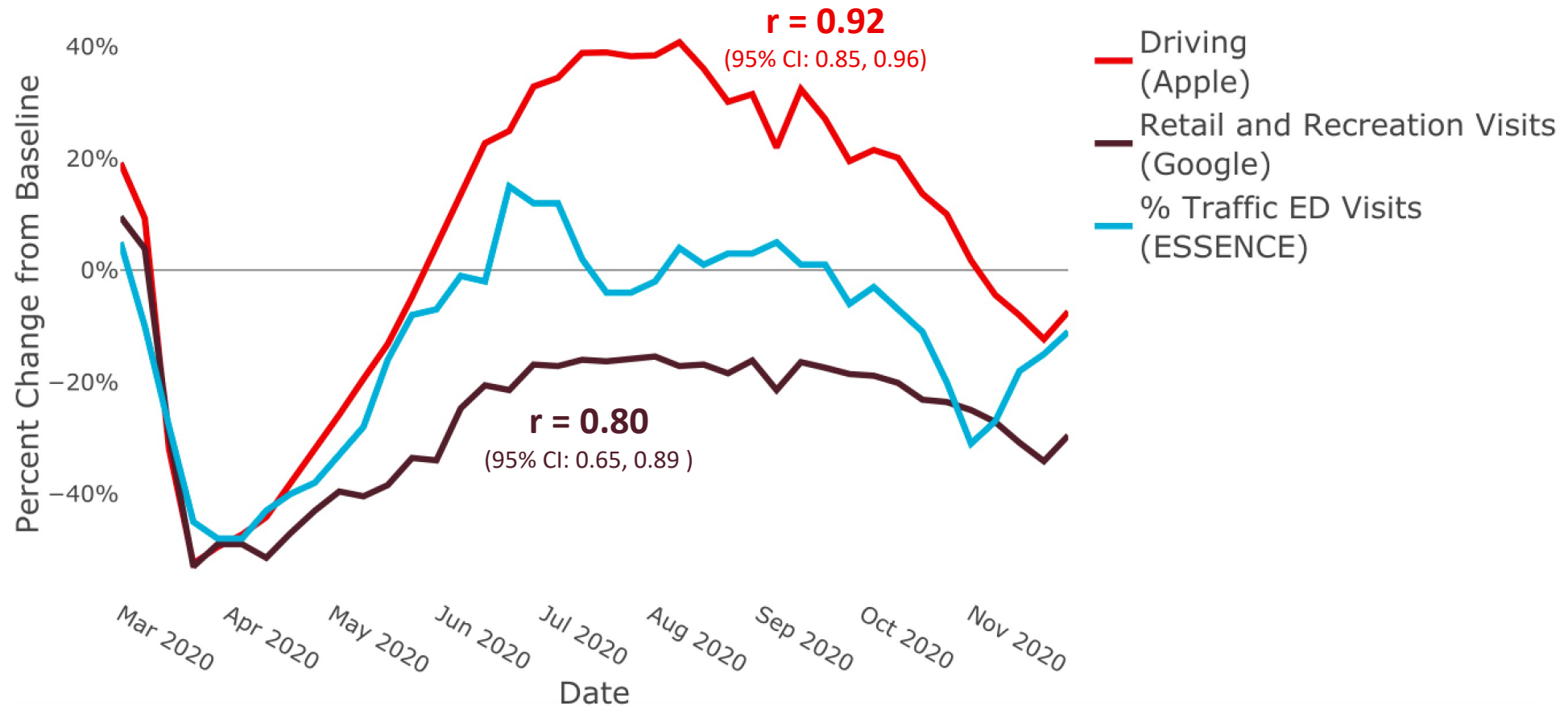
- Social distancing and staying at home are important prevention measures against community spread of SARS-CoV-2
- Mobility data is available from companies such as Google and Apple but not at a sub-county level and not guaranteed forever
- Hypothesis: when people stay at home more, there is less vehicle congestion, fewer car accidents, and thus fewer ED visits for traffic-related injuries



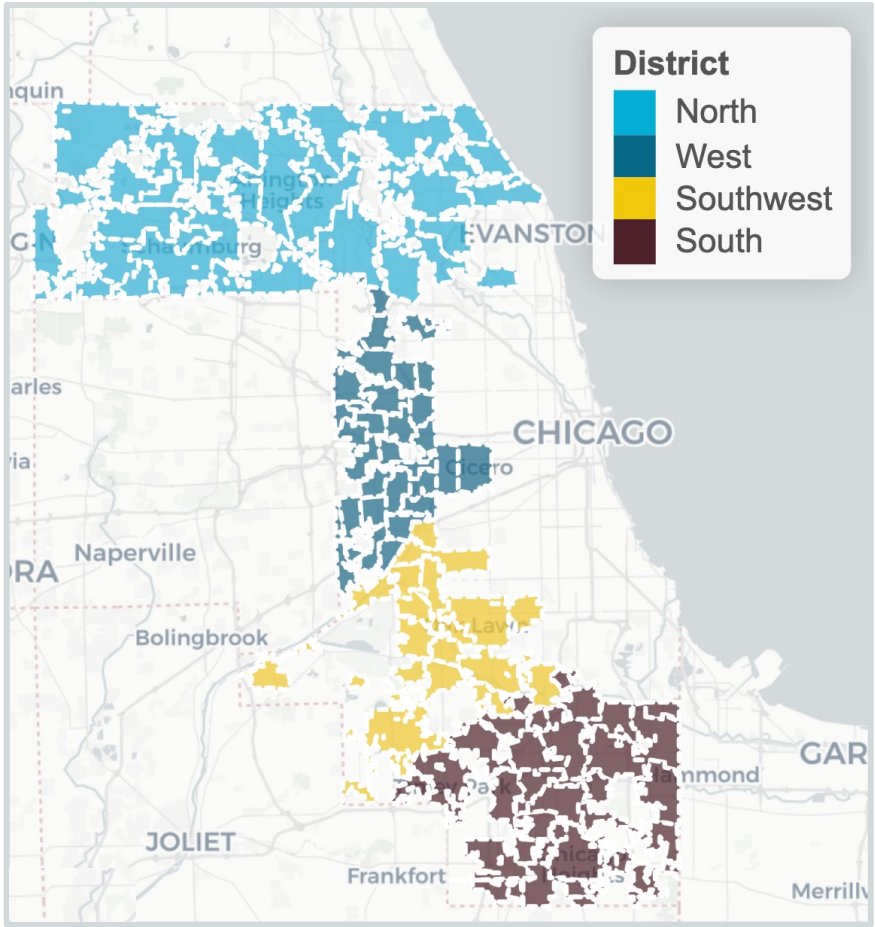
When covid-like illness (CLI) ED visits increased in 2020, traffic-related ED visits decreased. Traffic-related ED visits were down overall in MMWR Weeks 10-50, 2020 compared to 2019.



Weekly percent of **ED visits for traffic-related injuries** was significantly correlated with **Apple Maps usage for driving directions** and with Google data approximating visits to retail and recreation locations in our county.

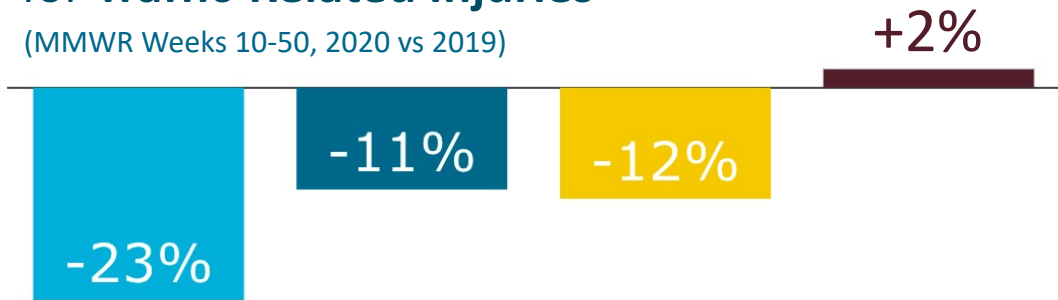


There were marked disparities in the ability to stay home during a pandemic for those hardest-hit in our jurisdiction.



Percent Change in Percent of ED Visits for **Traffic-Related Injuries**

(MMWR Weeks 10-50, 2020 vs 2019)



Covid **Hospitalizations** per 10,000 Population

(MMWR Weeks 10-50, 2020)



Percent Living Below **Poverty** Level

(ACS 2013-2017 Estimates)

