#### Data, Social Determinants of Health, and Migration

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## **Conflict of Interest Disclosure**

We have no perceived vested interests that relate to this presentation, nor do we have any relationship with pharmaceutical companies, biomedical device manufacturers and/or other corporations whose products or services are related to pertinent therapeutic areas.

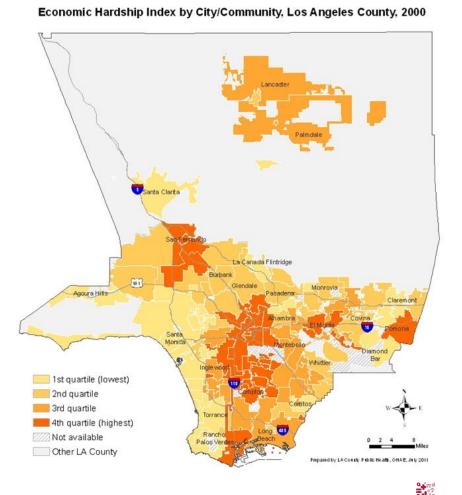
#### A TALE OF TWO BOYS



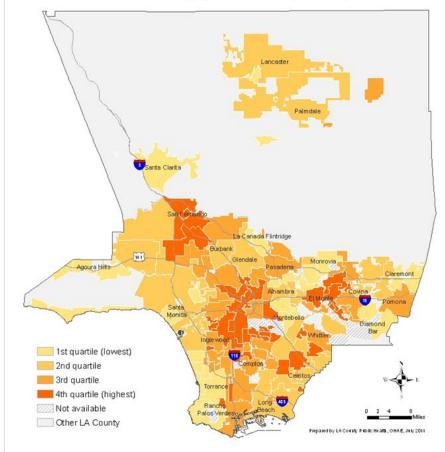


https://wsvn.com/news/us-world/color-blind-boys-scheme-to-get-same-haircut-to-trick-teacher/

### PEOPLE, PLACES AND SYSTEMS DRIVING (IN)EQUITY



Prevalence of Childhood Obesity by City/Community, Los Angeles County, 2005

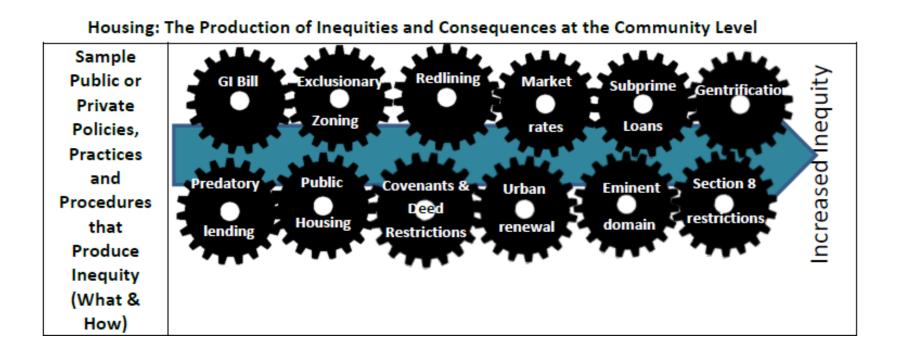




WELL BEING IN THE NATION NETWORK

### CHRONIC PLACE-BASED INEQUITIES ARE NOT ACCIDENTAL THERE IS A SYSTEM IN PLACE THAT PROPAGATES THEM







"Countering the Production of Health Inequities" Report from the Prevention Institute

## The Impact of Legacies of Redlining (Chicago)

Social Vulnerability Index

by zip code As of April 6, 2020

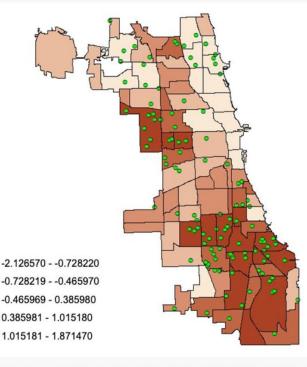
Social vulnerability index

PATHWAYS TO POPULATION ----- HEALTH EQUITY ------

#### **Risk Factors**

**Risk scores by zip code** 

Locations of COVID-19 fatalities



As of April 6, 2020

represented by green dots

One of the reasons for such racial disparities is due to the fact that African American communities are disproportionately affected by multiple chronic diseases before the COVID-19 pandemic. Here, I created a risk factor score for the 77 Chicago Community Areas. The risk factor score includes the rates of heart-related death, stroke deaths, asthma, hypertension, diabetes, obesity and smoking. I utilized data from the Chicago Health Atlas.



Source: Chicago Health Atlas

-2.06393 - -0.83905

-0.83905 - -0.24714

-0.24714 - 0.37961

0.37961 - 0.96703 0.96703 - 2.45875

### PEOPLE, PLACES AND THE SYSTEMS OF SOCIETY DRIVING (IN)EQUITY





### VITAL CONDITIONS OF PLACES WE ALL NEED TO THRIVE



WHAT HAPPENS IN THE CONTEXT OF MIGRATION, WHEN PLACE CHANGES?

## **Case Study**

34-year-old male from El Salvador

Crossed into the US 5 years ago for both economic and personal discovery

Diagnosed with HIV disease during a community health fair

Needs and infectious disease specialty consultation

UT Health Sciences Center agrees to provide the consultation if he can present to the infectious disease specialty clinic



## **Case Study**

- 47-year-old woman from Mexico who receives a mammogram in South Texas.
- Her results come back
  "abnormal" but when the
  health center calls her number
  she has already migrated on to
  Florida for work.

## Migration...

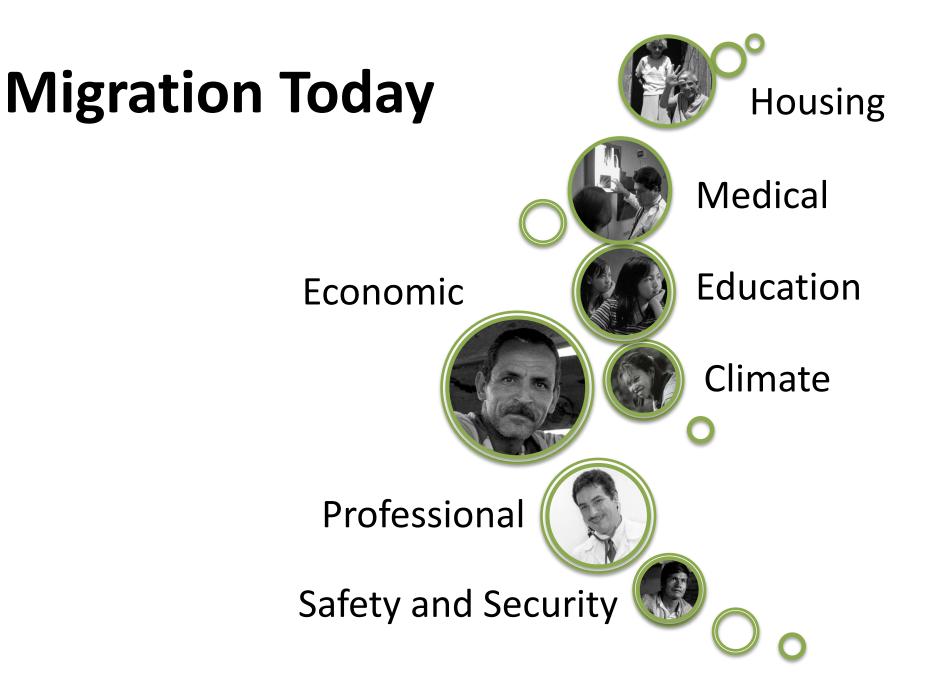
- Any movement by humans from one locality to another
- Moves in all forms
- Often over long distance, but not necessarily
- Or in large groups



## **Movement of populations:**

# **Voluntary Migration** within one's region, country or beyond, or

2 Involuntary migration which includes slave trade and human trafficking



## Social determinants of health

The conditions in which people are:

- Born Beyond DOB
  - Where
  - To whom
  - Under what circumstances
- Grow Beyond where
  - Level of education
  - Medical care received
  - —
- Live beyond current address
  - With whom
  - safety
- work beyond current job
  - Previous employment
  - Work risks
  - \_
- Age beyond current age and DOB
  - Previous illnesses
  - Life experiences

## Chat: Who are essential workers?















More than 70% of immigrants in the United States work in jobs classified as "essential"





Low wage workers forced into a basic needs versus safety dilemma that places them at much great risk

## Blame workers

- "Home and social conditions" cause of meatpacking outbreaks"
- "Living circumstances in certain cultures"
- "They go to work in school buses, and they're all packed in there like sardines."

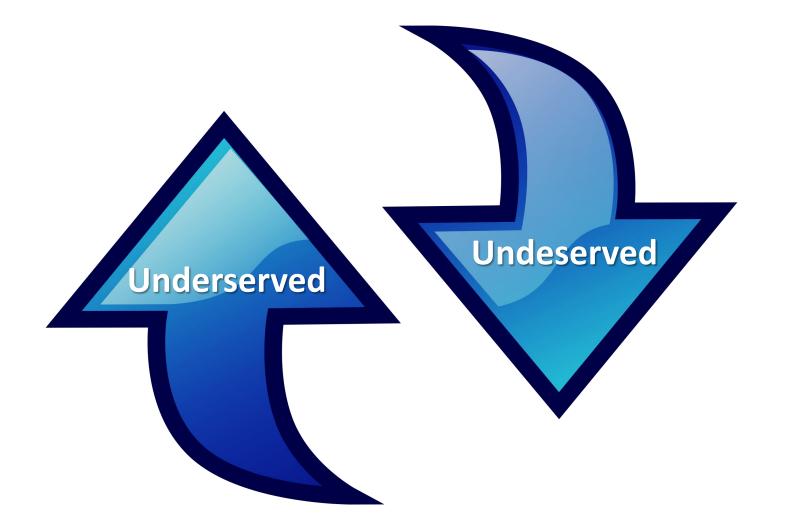




## Mixed Immigration Status Households Common

- 16.7 million live with at least one unauthorized family member
- 5.9 million US citizen children live with at least one unauthorized family member
- 1 million US Citizens have an unauthorized spouse

# FEAR

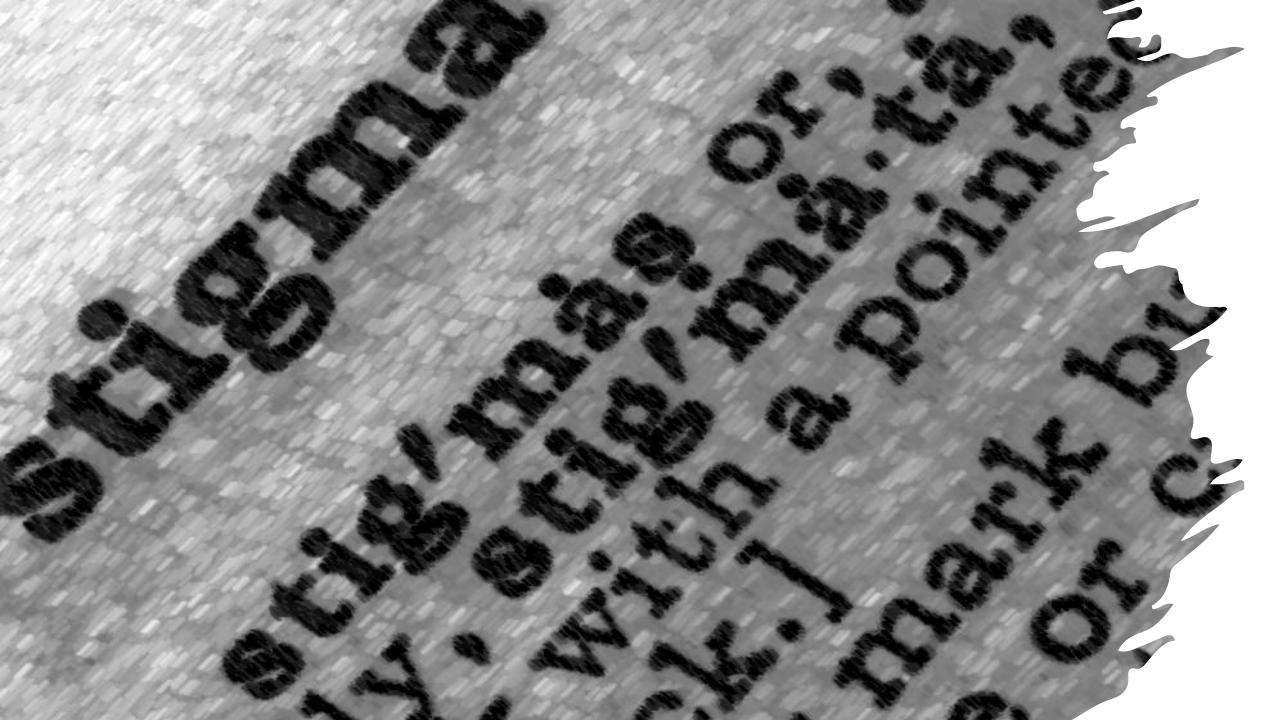


## Population mobility, vulnerability and equity

#### various phases:

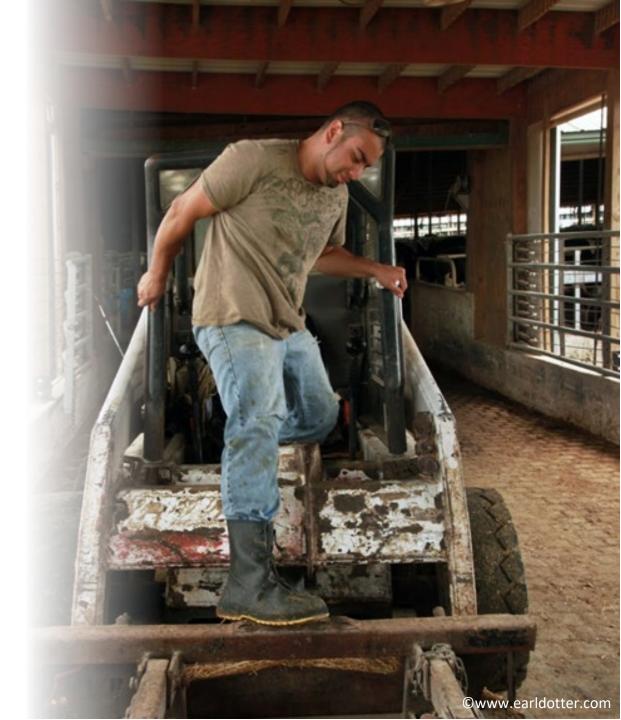
- during transit,
- in destination communities,
- in communities of departure and return



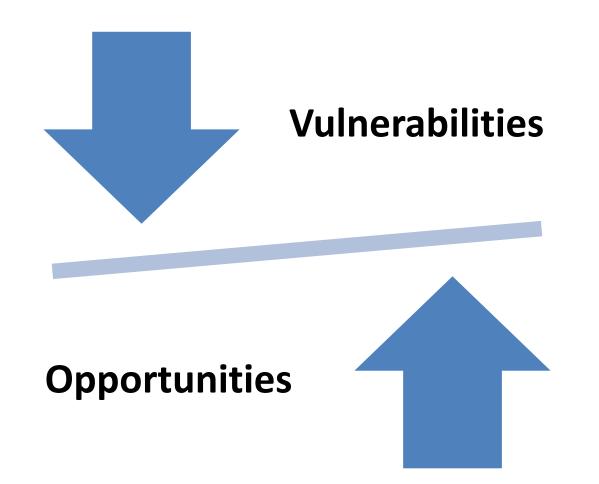


# Vulnerabilities

- Cultural and language differences
- Low-wage
- Inherent dangers and health risks of occupation
- Immigration status
- Migratory lifestyle
- Lack access to health care, insurance or financial resources
- Lack of regulatory protection



## Migration presents both...



## **Mobility Status - Movers**

- Living in a different house at the end of the period.
- Living in a different county, state, region, or moving from abroad.
- Moving within or between central cities, suburbs, and non-metropolitan areas of the United States.



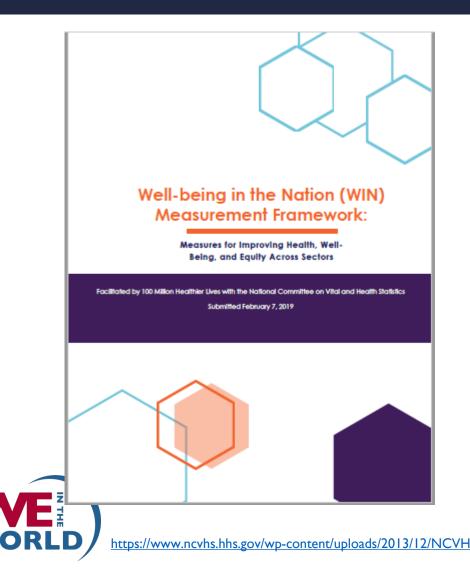


## SDOH need not be an impediment to health

Str	uctural Vulnerability Domains and Potential Sample Questions						
Financial Status	How do you make money?						
	Do you have any difficulties doing this work?						
	Do you have enough money to live comfortably—pay rent, get food, pay utilities and phone, basic living						
	supplies?						
	Do you run out of money at the end of the month?						
	Do you receive any forms of government assistance?						
	Are there other ways you make extra money, or do you depend on anyone else for their income?						
	Have you ever been unable to pay for medical care or medicines at the pharmacy? Do you have access to						
	preventive and primary care?						
Residence	Where do you sleep?						
	How long have you lived there?						
	Is that a stable or reliable place for you to live?						
	Do you feel the place that you live is safe and clean?						
Risk Environments	Are you exposed to any toxins?						
	Are you exposed to any violence?						
	Are you exposed regularly to drug use?						
Food Access	Do you have adequate nutrition and access to healthy food?						
	What does your regular diet consist of?						
Social Network	Which people make up your social network, family and friends? Is this network health or unhealthy for you?						
	Do you have people who function as a social support system for you when needed?						
Legal Status	Do you have any legal trouble?						
-	Do you fear any repercussions related to your legal status?						
	Are you eligible for public services?						
Education	Are you able to read? In what language(s)?						
	What level of education have you reached?						
Discrimination	Have you experienced discrimination based on your skin color, your accent or where you are from?						
	Have you experienced discrimination based on your gender or sexual orientation?						
	Have you experienced discrimination for any other reason?						
Presumed Worthiness	The clinician could ask themselves if this person is likely to be considered by others as someone not to be						
	trusted because of aspects of their appearance, ethnicity, accent, addiction status, personality, or other						
	traits.						
	The clinician could ask themselves if other people are likely to assume that the patient deserves their plight						
	in life or their sickness due to any of their traits.						
	The clinician could ask themselves if other people are likely to assume that the patient does not deserve top						
	quality health care due to any of their traits.						

## MEASURING WHAT MATTERS

## About the Well-being In the Nation Measures



National Committee on Vital and Health Statistics (NCVHS) is a Federal Advisory Committee – reports to secretary of HHS

Was charged with identifying *multi-sector* measures to support population and community health and wellbeing and address social determinants of health

Report from January 2017

Handed off the process of developing measures to 100 Million Healthier Lives/WE in the World

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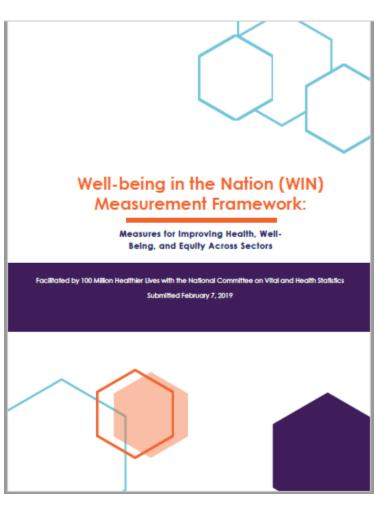


## Well-being In the Nation (WIN) Measurement Framework (NCVHS Framework)

- I. Core measures
  - Well-being of people
  - Well-being of places
  - Equity
- 2. Leading indicators
  - I2 domains and associated subdomains related to determinants of health
- 3. Full flexible set (developmental measures)
  - 12 domains and associated subdomains

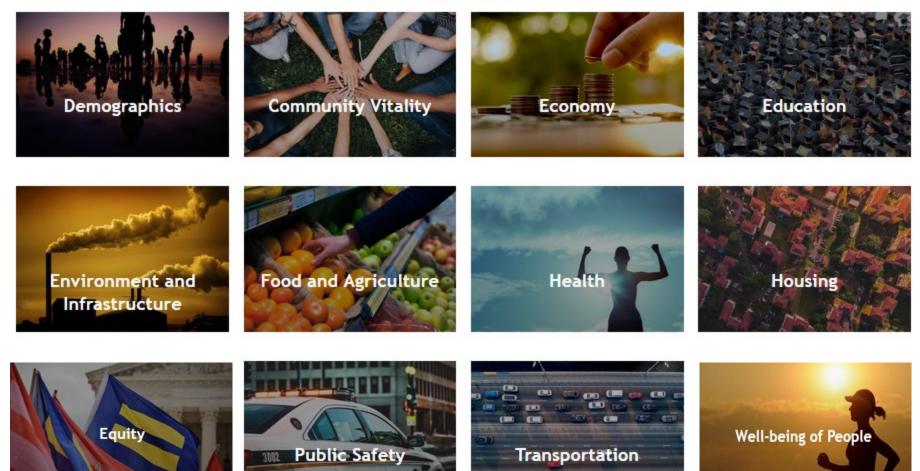






## Social Determinant of Health Indicators





WORLD



## Well-being In the Nation (WIN) Measures

#### I. Wellbeing of people

- People's perception of their well-being
- Life expectancy

#### 2. Wellbeing of places

- Healthy communities index (USNWR/CHRR)
- Child poverty

#### 3. Equity

- Differences in subjective well-being
- Years of potential life gained
- Income inequality, graduation rates
- Differences by demographic variables (race, place, gender, educational level, language, sexual identity, etc.)













## CANTRIL'S LADDER: WHAT IF WHAT PEOPLE FELT ABOUT THEIR LIVES MATTERED?

Common Measures for Adult Well-being



<ol> <li>Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the <u>best possible life for you</u> and the bottom of the ladder represents the <u>worst possible life for you</u>.</li> </ol>										
Indicate where on the ladder you feel you personally stand right now.										
0	1	2	3	4	3	6	7	8	9	10
2. On which step do you think you will stand about five years from now? 0 1 2 3 4 5 6 7 8 9 10										
0	1	2	3	4	5	6	7	8	9	10
3. Now imagine the top of the ladder represents the <u>best possible financial</u> <u>situation for you</u> , and the bottom of the ladder represents the <u>worst possible</u> <u>financial situation for you</u> . Please indicate where on the ladder you stand right now.										
0	1	2	3	4	3	6	7	8	9	10

Life evaluation

% people thriving% people struggling% people suffering

Overall life eval index: %thriving - % suffering

Age Sex Race/Ethnicity Education Zip code Veteran status

#### Two simple questions

- Administered 2.7 million times, highly validated
- Relates to morbidity, mortality, cost
- Useful for risk stratification
- Works across sectors
- Recommended by OECD
- Recommended by National Academies as a Leading indicator for Healthy People 2030

www.winmeasures.org

#### WELL BEING IN THE NATION (WIN) COVID Assessment – BRIEF

#### A. OVERALL OUTCOME - TO ASSESS IF THRIVING, STRUGGLING, OR SUFFERING

Healthcare

□ Transportation

Personal safety

Employment

Call/Text/Wbat'sApp( )

Childcare

Other

Loneliness or social isolation

I don't need help with any of these

4. If we need to get back to you, what is the best way to reach you (circle)?

Finances

Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you.

1. On which step of the ladder would you say you personally feel you stand at this time?   Worst Best   0 1 2 3 4 5 6 7 8 9 10   0 1 2 3 4 5 6 7 8 9 10   2. On which step do you think you will stand about five years from now? Worst Best possible 0 1 2 3 4 5 6 7 8 9 10 9 10 9 10 9 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10<														Best Possible
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<ul> <li>2. On which step do you think you will stand about five years from now? Worst possible 0 1 2 3 4 5 6 7 8 9 10 </li> <li>Thriving, Struggling, Suffering determination:         <ul> <li>Thriving, Struggling, Suffering determination:</li> <li>Thriving (highest category): Item 1 ≥ 7 AND Item 2 ≥ 8</li> <li>Suffering (lowest category): Item 1 ≤ 4 AND Item 2 ≤ 4</li> <li>Struggling: All other response combinations</li> </ul> </li> <li>B. SOCIAL NEEDS ASSESSMENT – FOR EFFORTS TO IDENTIFY AND RESPOND TO UNMET SOCIAL NEEDS</li> <li>3. Do you need help with any of the following at this time? (Please select ALL that apply and then mark which ones are urgent.)</li> <li>Need help</li></ul>			possible		2	3	4	5	6	7	8	9	possible	
Worst possible       Best possible         0       1       2       3       4       5       6       7       8       9       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10		2.	On wh	ich ste	p do yo	u think	you wil	ll stand a	about fiv	ve years	from n	ow?		
Thriving, Struggling, Suffering determination: <ul> <li>Thriving (highest category): Item 1 ≥ 7 AND Item 2 ≥ 8</li> <li>Suffering (lowest category): Item 1 ≤ 4 AND Item 2 ≤ 4</li> <li>Struggling: All other response combinations</li> </ul> Worst Possible         B. SOCIAL NEEDS ASSESSMENT – FOR EFFORTS TO IDENTIFY AND RESPOND TO UNMET SOCIAL NEEDS         3. Do you need help with any of the following at this time? (Please select ALL that apply and then mark which ones are urgent.)         Need help              Lirgent													possible	
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Do you need help with any of the following at this time? (Please select ALL that apply and then mark which ones are urgent.)      Need help     Decod     Decod     Decod     Decod     Decod	Thriving, Struggling, Suffering determination:         • Thriving (highest category): Item 1 ≥ 7 AND Item 2 ≥ 8         • Suffering (lowest category): Item 1 ≤4 AND Item 2 ≤4											Fõ		
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				000000										

Health care

□ Transportation.

Personal safety

Employment

Childcare

C Other

Loneliness or social isolation

Email/other:

Einances

#### WELL BEING IN THE NATION (WIN) COVID Assessment – BRIEF

COVID Assessment – BRI

#### C. EQUITY - USED TO ASSURE PEOPLE WHO MIGHT BE AT RISK OF A POOR OUTCOME ARE SUPPORTED

- 5. What is the ZIP Code where you live? \_\_\_\_\_ 6\_ Your age \_\_\_\_\_
- 6. Do you identify as (Please select all that apply):
  - American Indian, Alaska Native, or Indigenous
  - Asian or Asian American
  - Black or African American
  - Hispanic, Latino/a/x, or Latin American
  - Middle Eastern
  - Multiracial or Multi-ethnic
  - Native Hawaiian or Pacific Islander
  - White
  - Race or ethnicity not included above (Optional, please state): \_\_\_\_\_\_
  - Prefer not to answer

7. Do you identify as (Please select all that apply):

- Man (cisgender or transgender)
- Woman (cisgender or transgender)
- Non-binary or gender non-conforming person
- Different identity (Optional, please state): \_\_\_\_\_
- Prefer not to answer
- 8. This question helps us identify additional resources that may be available to support you. Which of these,

if any, do you identify as? (Please mark all that apply).

- An unpaid caregiver (of child(ren) <18 years old, person(s) with health problem or disability, and/or an older adult(s))</p>
- Essential worker outside of healthcare who is not working from home (e.g., teacher, childcare worker, grocery or convenience store worker, trash collection, manufacturing, utilities, food service, transportation)
- Healthcare worker (including pharmacy, dentistry, home health worker)
- Person living or working in correctional or detention facility
- Person living or working in nursing home or long-term care facility
- Person experiencing homelessness or housing insecurity
- Person living alone
- Person living in a home where more than one person sleeps in a room
- Person who identifies as LGBTQ
- Person dealing with anxiety, depression, or other mental health diagnosis including trauma or PTSD
- Person who smokes cigarettes/cigars
- Person who uses drugs or has a substance use disorder.
- Person with medical condition that puts you at high risk for severe COVID-19 (e.g., cancer, chronic kidney disease, COPD, diabetes, Down Syndrome, heart disease, immunocompromised, pregnant, obese, sickle cell)
- Person living with a disability
- Ωther high-risk group not included above (Optional, please state): \_\_\_\_\_\_

#### BEING DATA TO DESIGN WHAT IS NEEDED IN REAL TIME

Get Tested

Current Restrictions



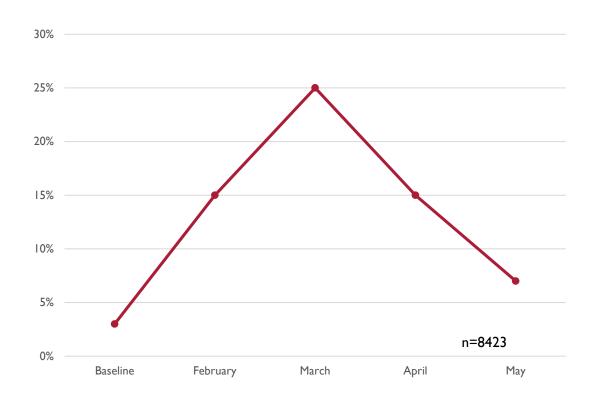


**Relief and Support** 



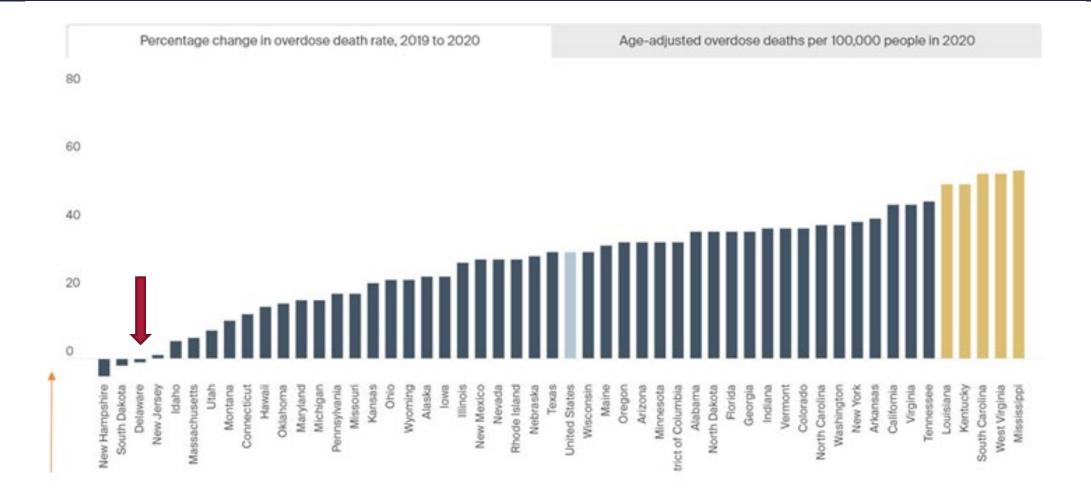
FAO

% DSAMH Patients who are Suffering



- Assessment of well-being and connecting people with their social needs
- Narcan distribution at foodbanks based on social needs
- Housing people who were homeless and changing the delivery of mental health
- Improved access for everyone leveraging telehealth and online peer supports (Support Wall)
- Transitions for people from incarceration
- Data systems across sectors

#### WELL-BEING SAVES LIVES



Home Our Approach Resources News Contact Us Funding

REACH, IMMUNIZATIONS, SYSTEM CHANGE FOR EQUITY

# An equitable recovery is built on trust

Together we are transforming our relationships and systems to create the conditions for everyone to thrive.

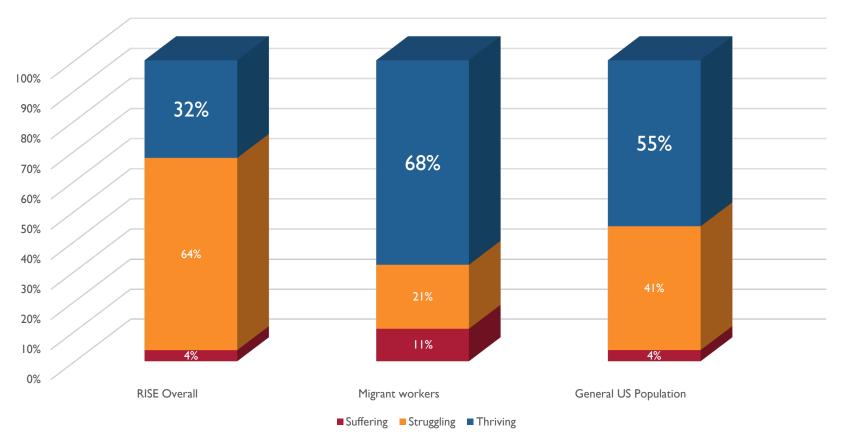
#### COMMUNITIES RISE PARTNERS -2400+ CBOS ON THE GROUND WHO BRING DEEP DECADES LONG EXPERIENCE TO REACHING HARD TO REACH COMMUNITIES

40



### RISE – WELL-BEING OF MIGRANT WORKERS





Well-being of Migrant Workers

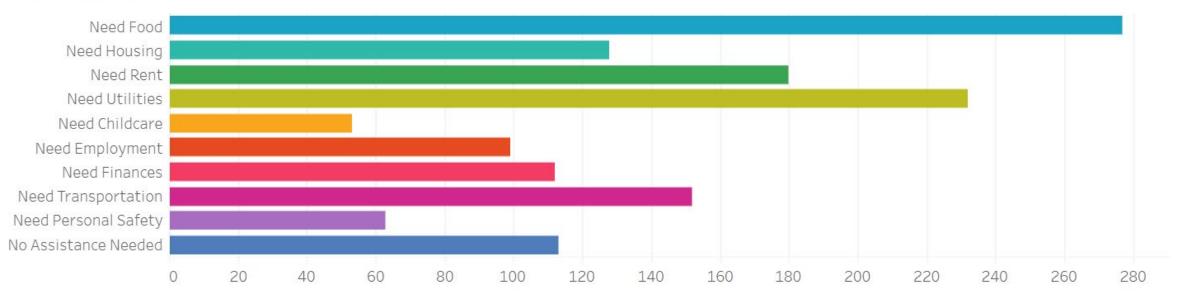




# WHAT MIGHT BE LEADING TO SUFFERING AND HOW CAN WE MITIGATE THAT?



#### **Basic Needs**







USING SOCIAL NEEDS DATA TO CREATE THE CONDITIONS FOR EVERYONE TO THRIVE

200+

communities working together to create the conditions for everyone to thrive

25+

states engaging in equitable vaccinations,

civic capacity building and system change

13

partners with deep roots working with communities experiencing inequities.

## 184,000 215,000

people (approx.) connected to basic needs (food, housing, etc)

– people vaccinated (approx.)

**44**M+

people reached



#### Any questions ?

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#### FOR MORE INFORMATION

Rhode Island demographics:

- https://health.ri.gov/data/covid-19
- www.winmeasures.org

Health Equity and COVID-19: https://conta.cc/34WoYav

Well-being and Equity (WE) in the World

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- www.weintheworld.org



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