

# *2<sup>ND</sup> ANNUAL HEALTH EQUITY SUMMIT*

**Dr. Jerome Adams, Executive Director, Health Equity  
Initiatives**

# Opening Remarks

# *PROVOST PATRICK WOLFE*

## **Opening Remarks**



*DR. KAREN PLAUT,  
EXECUTIVE VICE PRESIDENT  
FOR RESEARCH*

**Opening Remarks**



*DR. JEROME ADAMS,  
EXECUTIVE DIRECTOR OF  
HEALTH EQUITY INITIATIVES*



**HEI Vision and Progress**

# *HEI AT PURDUE*

*VISION, PROGRESS AND FUTURE DIRECTIONS*

**Jerome Adams MD, MPH, FASA**

**Distinguished Professor and Executive Director of  
Health Equity Initiatives**

# THANK YOU TO OUR SUMMIT CONTRIBUTORS!!!

- Office of the Provost
- Office of Diversity, Inclusion and Belonging
- College of Health and Human Sciences
- College of Veterinary Sciences
- RCHE (Regenstrief Center for Healthcare Engineering)

## OUR STRATEGIC ADVISORY TEAM

- Provosts Akridge and Wolfe
- Dr. John Gates
- Dr. Steve Abel
- Dean Barker
- Dean/ EVP Plaut
- Dean Reed
- Dean Underwood



# THANKS TO OUR FACULTY CHAMPIONS

- Food for Health:
- Haley Oliver



- Infectious Diseases:
- Steve Steinhubl and Randolph Hubach



- Mental Health and Substance Misuse:
- Nicole Adams and Hugh Lee



THANKS TO YOU!!!

- **Goals for today:**
  - **Celebration**
  - **Awareness**
  - **Education**
  - **Collaboration**
  - **Feedback and future directions**



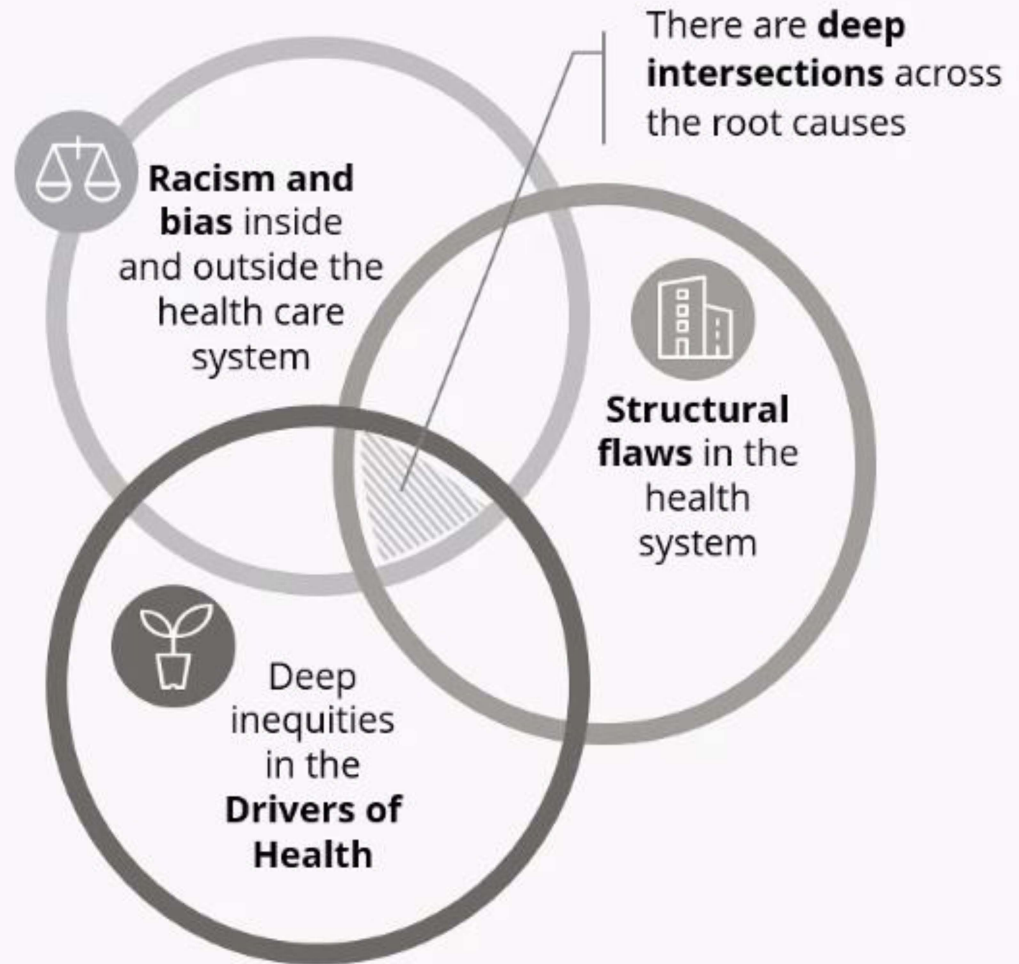


**Of all the forms of inequality,  
injustice in health care is the  
most shocking and inhumane.**

**Health inequities, driven by root causes, are estimated to cost the United States \$320 billion a year!<sup>1</sup>**

1) According to a recent study by Deloitte

**In order to achieve health equity at scale, we must impact the root causes of inequities**



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# Cost of Poor Health in Indiana

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- Obesity: accounts for more than \$3.5 billion in medical costs in Indiana yearly.
- Chronic disease
  - **\$53.3 Billion** – indirect cost **including lost productivity** of major chronic diseases
  - **\$22.4 Billion** – direct cost of major chronic diseases
  - **\$75.5 Billion** - total direct and indirect cost of major chronic disease
- Smoking
  - Nearly \$3 billion in annual health care costs, including \$590 million in Medicaid costs
  - Indiana taxpayers pay over \$900 per household in smoking-caused expenditures
  - Smoking during pregnancy resulted in an estimated \$3.37 million in healthcare costs in 2019
- Cervical cancer: More than \$54 million in estimated direct healthcare costs

# U.S. News and World Report 2021

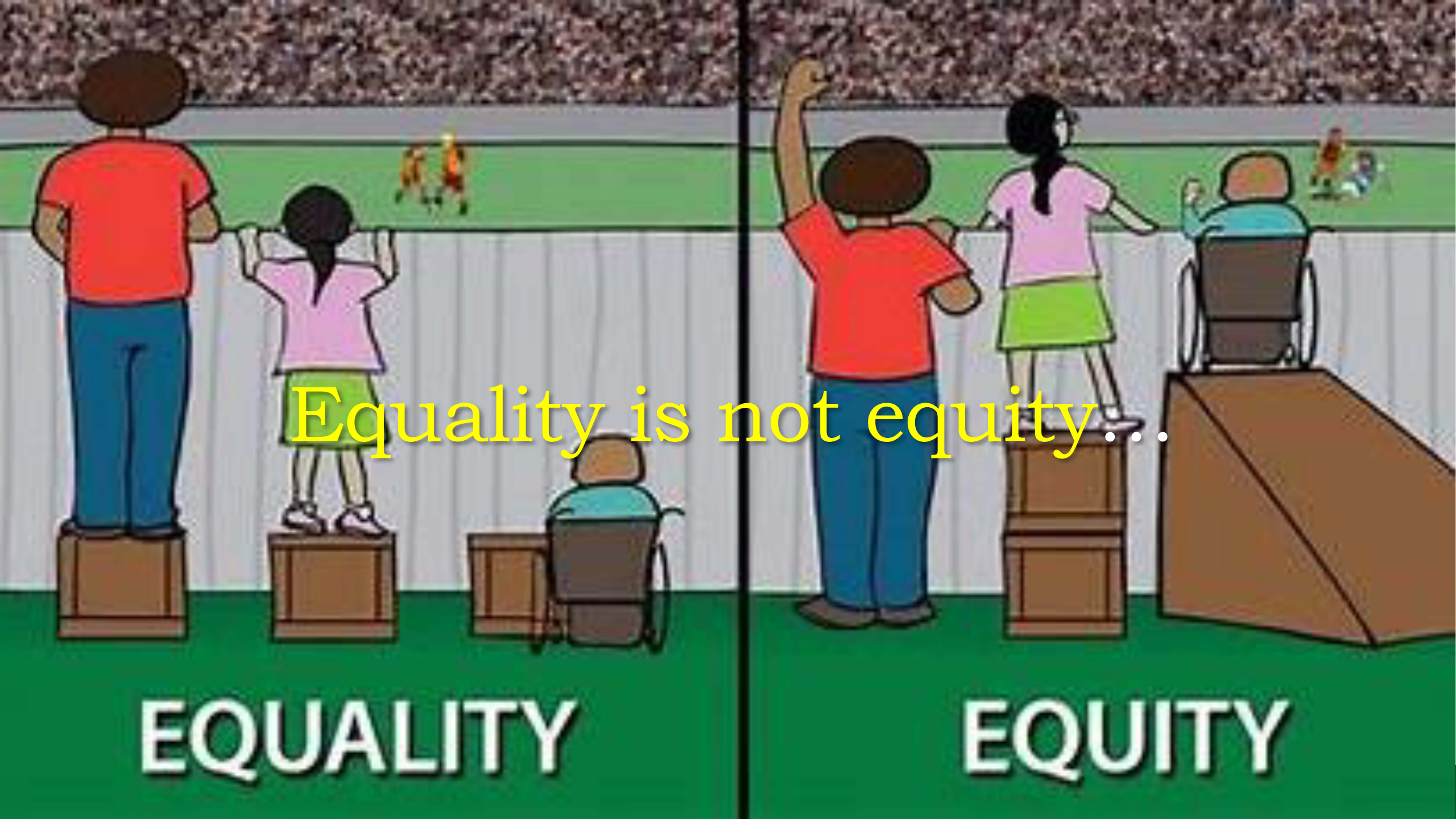
## Best States Ranking, Indiana ranks 32<sup>nd</sup>

### Achievements

- Affordability #6
- Opportunity #7
- Pre-K through 12<sup>th</sup> grade #9
- Growth of the economy #19
- Public safety #25

### Opportunities

- Health care access #23
- Health care quality #27
- Air quality #38
- **Public health #40**
- Pollution #48

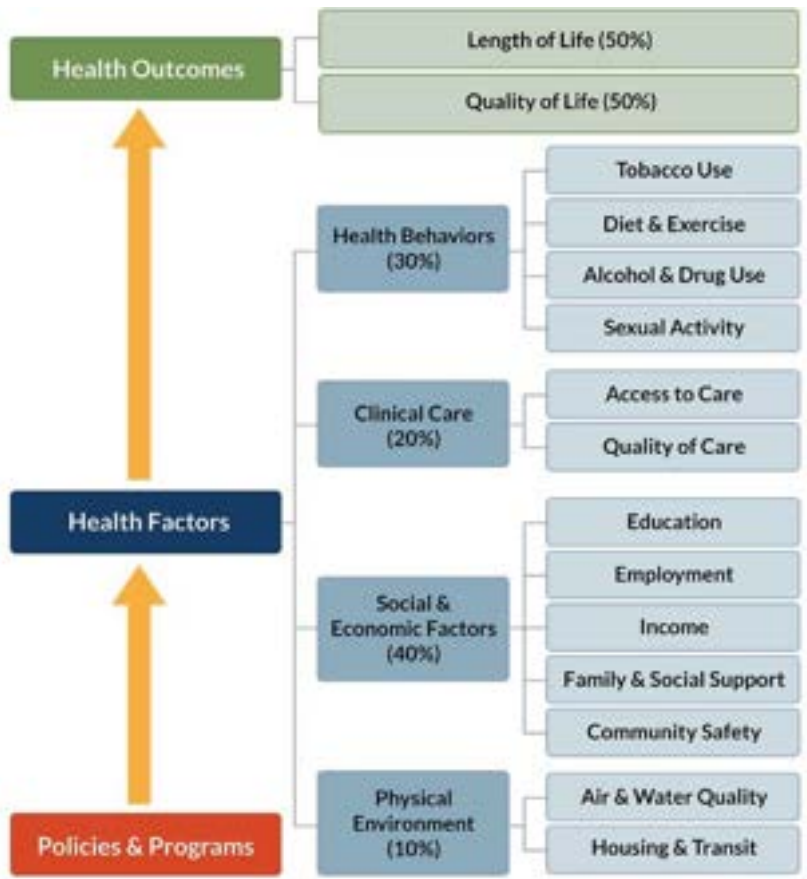


Equality is not equity...

**EQUALITY**

**EQUITY**

# Healthcare is NOT health!!!



Medical Model

What We Spend On Being Healthy





# What is health equity?

*Health equity is when everyone has a fair opportunity to make healthy choices and can be their healthiest and happiest version of themselves*



HIGH



### Opportunity neighborhoods



LOW

Quality schools

Access to early childcare and education

Number of parks and green spaces

Quality housing and public transportation

Access to healthy foods

Availability of jobs and healthy, on-the-job workers

Opportunities for economic growth

Healthy living conditions

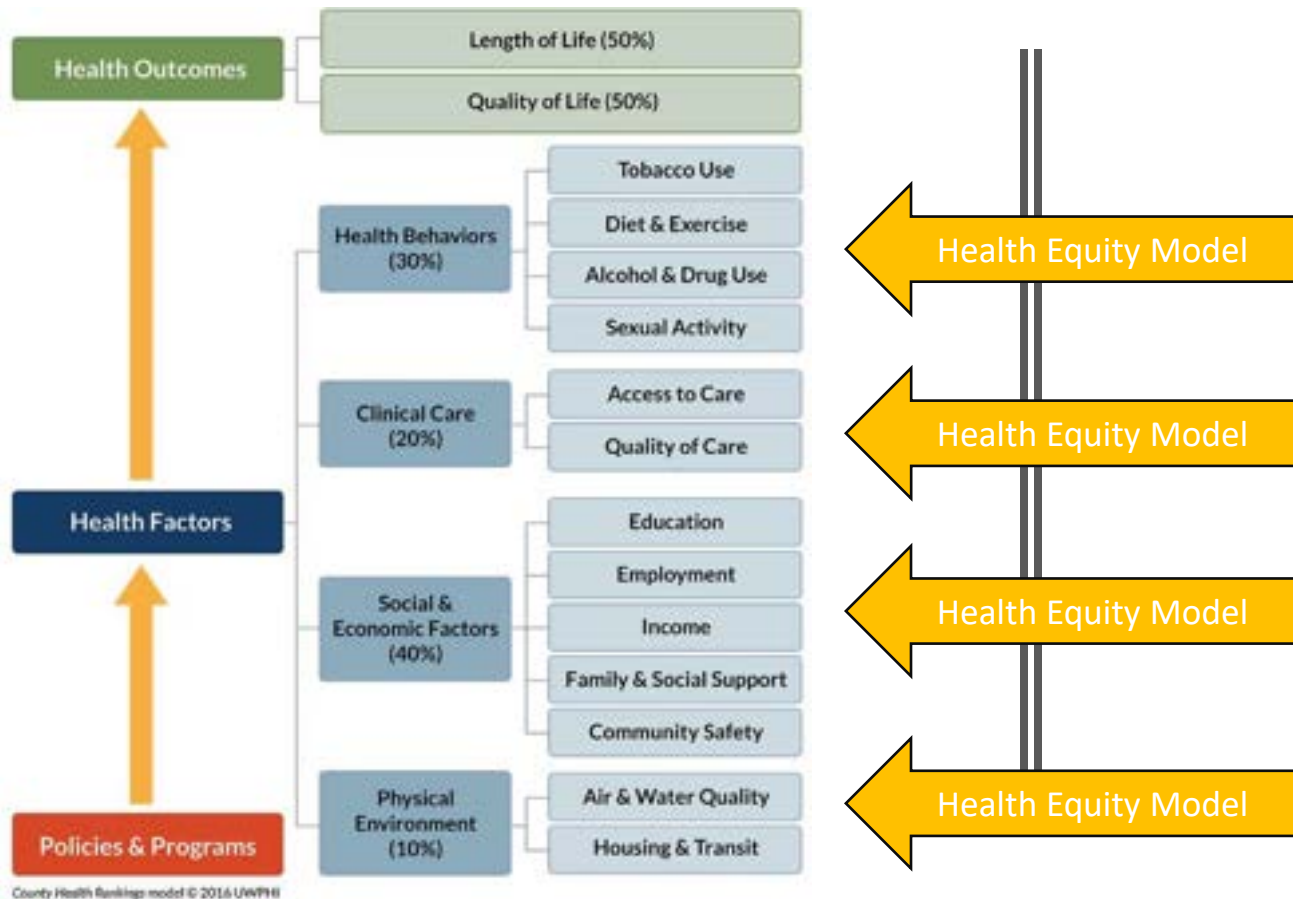
Feelings of civic pride and responsibility

Access to local suppliers



CONVENIENCE STORE

# Health equity IS health!



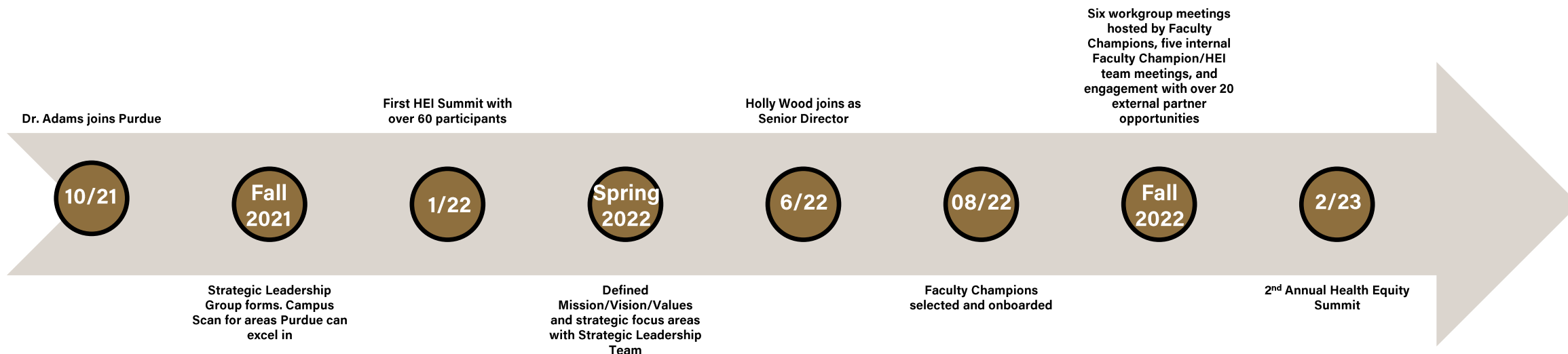
- College of Agriculture
- College of Education
- College of Engineering
- Exploratory Studies
- College of Health and Human Sciences
- College of Liberal Arts
- Krannert School of Management
- College of Pharmacy
- Purdue Polytechnic Institute
- College of Science
- College of Veterinary Medicine



# MY PERSONAL GOALS AT PURDUE

- **Realization-** understand the array of resources and talent at Purdue
- **Coordination-** find out where the Venn diagrams overlap in ongoing activities
- **Collaboration-** provide opportunities for those with shared interests to work together
- **Innovation-** look for new opportunities for Purdue to advance health equity regionally and nationally
- **Amplification-** be a megaphone to promote YOUR ongoing and future efforts
- **Appreciation-** increase knowledge and appreciation of Purdue as an important player in the health equity space

# THE PURDUE HEI JOURNEY



# MISSION AND VISION

## Mission

- To marshal the considerable resources at Purdue to ensure all people have fair access to resources and opportunities that will allow them to make healthy choices.

## Vision

- Purdue will be a collaborative, transformational, and interdisciplinary leader in Health Equity by leveraging its unique assets to address health disparities and social drivers to improve health outcomes across Indiana and beyond.

# OUR VALUES

## Equity

- Identifying and addressing health disparities.
- Helping to develop a pipeline of diverse health equity faculty, staff, and partners.

## Collaboration

- Cross-campus, inter-disciplinary efforts to tackle complex challenges.

## Results

- Tracking and sharing tangible & measurable outcomes on the most pressing HEI focus areas.

## Community Engagement

- Connecting communities with the resources across Purdue to work together to build healthier communities.
- Building trust in communities through outreach and engagement.

## Education

- Faculty at the core using education, research, evaluation, and applied learning to make a significant change.
- Leveraging the power and passion of Purdue's student body.

# PURDUE DIVERSITY, EQUITY, AND INCLUSION

FOOD FOR HEALTH



NUTRITION, OBESITY, FOOD INSECURITY, SUPPLY CHAIN

INFECTIOUS DISEASES



COVID, HIV & ZOOONOTIC DISEASES

EMERGING



BASED ON NEED, NEW TRENDS, DEMAND, OR RESOURCES

## HEALTH EQUITY & INCLUSION FOCUS AREAS

MENTAL HEALTH & SUBSTANCE MISUSE



ENGAGEMENT & ENTREPREURSHIP



EDUCATION & RESEARCH



TECHNOLOGY & DATA



COMMUNICATION & POLICY



# PURDUE CHANGEMAKERS

## EXTERNAL PARTNERS

## STUDENT BODY

## FACULTY AND STAFF

## STRATEGIC CONNECTORS

Educators - Communicators - Influencers - Collaborators - Researchers - Community Engagement - Engage students and staff

Integrate HEI across Purdue - See and leverage connections  
Role model cross-campus collaboration - Break down silos  
Translate strategy into action - Provide real-time advice and guidance  
Carry HEI message in and across Purdue - Engage the community in Purdue's HEI efforts

## STRATEGIC LEADERSHIP

Provide strategic vision and direction  
Help navigate internal and external stakeholders  
Help set the tone and message for the University  
Secure access to resources  
Help identify areas for research

# ACCOMPLISHMENTS SO FAR

- **First-ever annual report!**
- **Ongoing faculty workgroup meetings**
- **State engagements: Governor's Public Health Commission, Mental Health Roundtable, projects with local health departments, hospitals, and other Purdue campuses and IN universities**
- **Federal engagements: White House Conference on Hunger, Nutrition and Health, White House Summit on Hepatitis C Elimination, CDC Foundation, HRSA, ONDCP**
- **State and National partner meetings: Eli Lilly, Anthem/Elevance Health, Humana, Wabash National, Indianapolis Colts, Indiana Pacers, Kroger Health, other National universities**
- **Helped interview/ recruit some of the new Health Equity cluster hires, and other campus hires**
- **HEI/I-HOPE work towards a CDC grant**
- **HEI/CHEqI micro-grants**

# CLUSTER HIRES



# HEI/CHEQI MINI GRANTS

- **In early 2022, \$50,000 donated by the Chaney's to support our HEI efforts**
- **In March 2022, 11 grants awarded to Indiana community-based organizations**
  - **Kheprw Institute: Implement a community gardening program and evaluate the impacts on healthy eating behaviors**
  - **Arsenal Tech: Open Art Studio at Arsenal Tech as an afterschool program**
  - **INCHWA: Mindfulness and resiliency classes for community health workers**
  - **Eskenazi Pedigo: Bi-weekly public health education classes provided by pharmacists at Wheeler Mission**
- **Shows how we can leverage our brand and networks to secure funding, work with the talented Faculty and staff at Purdue to target it in a way that promotes health equity at the community level**
- **Working to help partners improve interventions, assess outcomes, and write up findings**

# WHAT'S NEXT?

- **Need to move from awareness to action and impact (ie “consequence”)**
- **Faculty meetings with a focus on projects that have tangible outcomes**
  - **Pursuing several grants**
  - **Rural Health Center of Excellence?**
  - **Projects with the state and with counties**
  - **Involve even more Purdue partners- including at other campuses**
- **Work with campus leadership to continue crafting a health equity vision and infrastructure**
- **Involve new hires and more students in HEI work**
- **Make the business and workforce case – in addition to the moral case- for health equity**

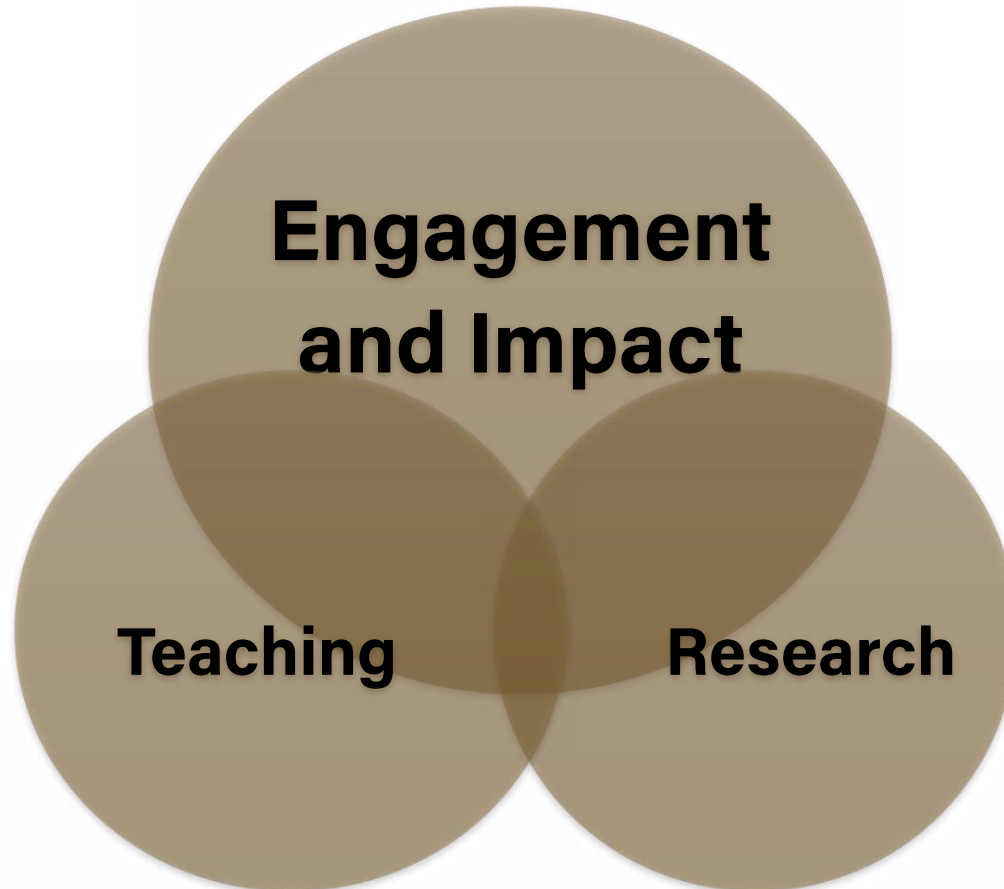


# PURDUE: INDIANA'S LAND GRANT UNIVERSITY

- **Problem solvers, with a focus on practical applications of agriculture, science, and engineering**
  - **US Rep Justin Morrill: “We need engineers to build roads and bridges. We need people who understand science and agriculture.”**
  - **Land-grant universities distinguish themselves from other institutions by directing their collective brainpower and resources toward research that addresses society’s economic, political or social problems. Then they share what they learn with the public in an effort to identify workable solutions**
- **Economic development is a cornerstone of the land grant mission**
  - **The land-grant concept was established to... encourage economic development through scientific research**
  - **Health equity leads to a healthy workforce and a healthy economy**

<https://landgrantimpacts.org/about/#:~:text=Land-grant%20institutions%20have%20traditionally%20pursued%20a%20threefold%20mission,agriculture%20and%20engineering%2C%20and%20contributing%20to%20economic%20development.>

# WHAT OUR HEI TEAM AND EFFORT CAN BRING TO THE TABLE



*HOLLY WOOD, SENIOR  
DIRECTOR OF HEALTH  
EQUITY INITIATIVES*



**HEI Vision and Progress**



# I-HOPE

- **Community capacity building through:**
  - Strategic collaborations
  - Seed funding opportunities to advance health equity
  - Grant writing assistance
  - Evaluation effort support
  - Utilization of evidence-based tools and resources



# I-HOPE

## Social and Community Context

- IDOH Trauma Informed Communities Project - Wayne County Paramedics
- Develop community coalitions to address COVID-19 issues - Qsource
- Responding to Racial Disparities in Health - Indiana University Center for Rural Engagement
- Develop Linguistically and Culturally Appropriate Community-level Communications Campaigns - Purdue University

## Neighborhoods and Built Environment

- Healthcare and Rural Housing - Corporation for Supportive Housing - Indiana Program
- Bicycle and pedestrian master planning for rural areas - IDH

## Economic Stability: Food Access/Food Security

- Indiana Black Breastfeeding Coalition - Indiana Department of Health (IDH)
- Donor Milk Express Pilot Program - IDH
- SNAP/WIC Outreach - IDH
- Rural food quality and access programs - IDH
- Food as Medicine Models for Rural Southern Indiana - Indiana University Center for Rural Engagement

## Healthcare Access and Quality

- *Heart Healthy Hoosiers* Cardiovascular Disease Prevention - IDH
- Expansion of the *Sexual Assault Nurse Examiner (SANE)* Program - IDH
- Interventions to Reduce Smoking During Pregnancy in the Rural and Southern Indiana - IU-School of Public Health-Bloomington
- Ensure zero barriers to Naloxone access - ShipHappens
- Assist community members living with SUD in navigating recovery systems and provide services - Wayne County Paramedics
- Address patient barriers that prevent access to telemedicine and support utilization of remote patient monitoring - Indiana Primary Health Care Association
- Mobile crisis intervention - Wayne County Paramedics
- Viral hepatitis services programs - Damien Center and Step Up Inc.

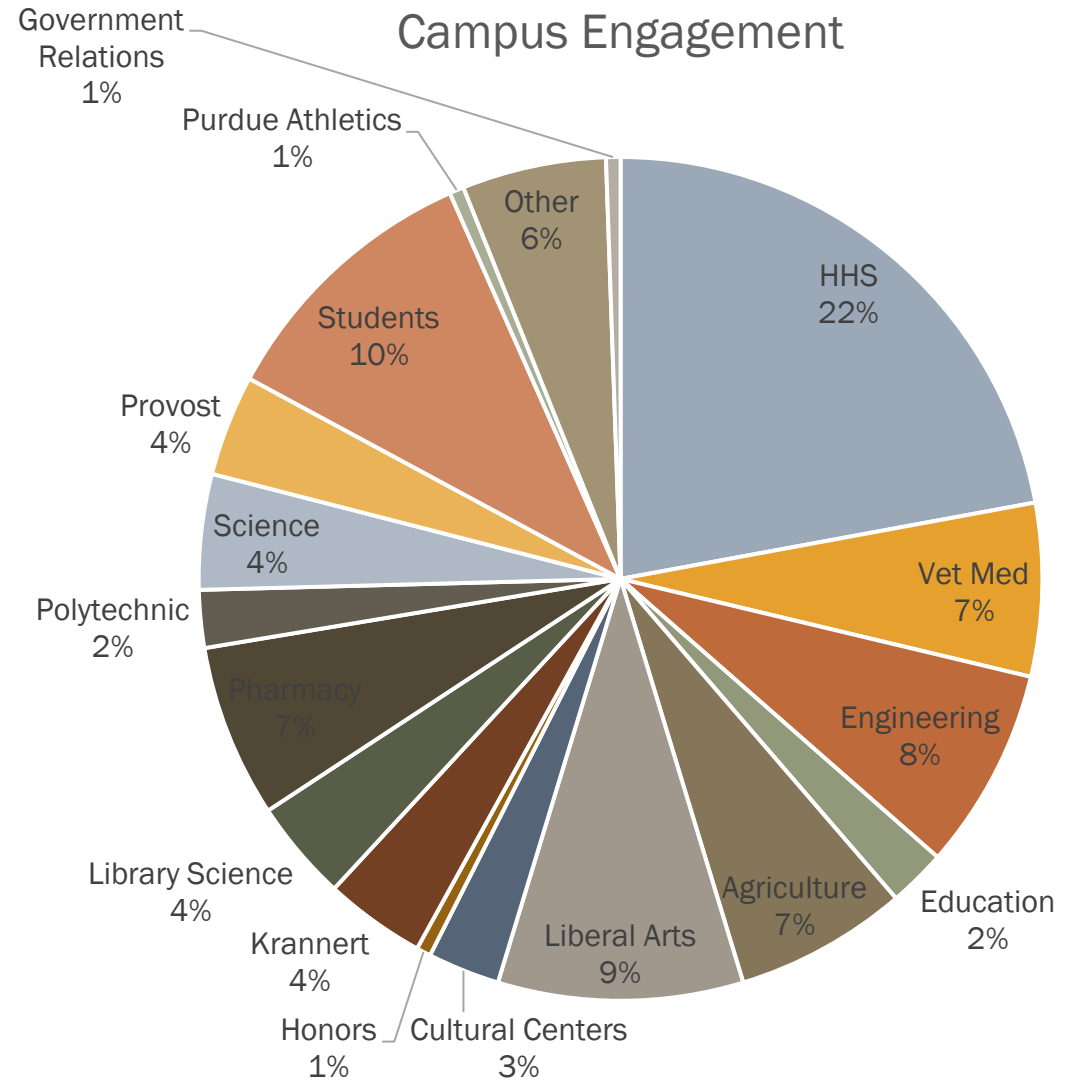
# WAYNE COUNTY

- **Community Action Event**
- **Wayne County Cares Support**

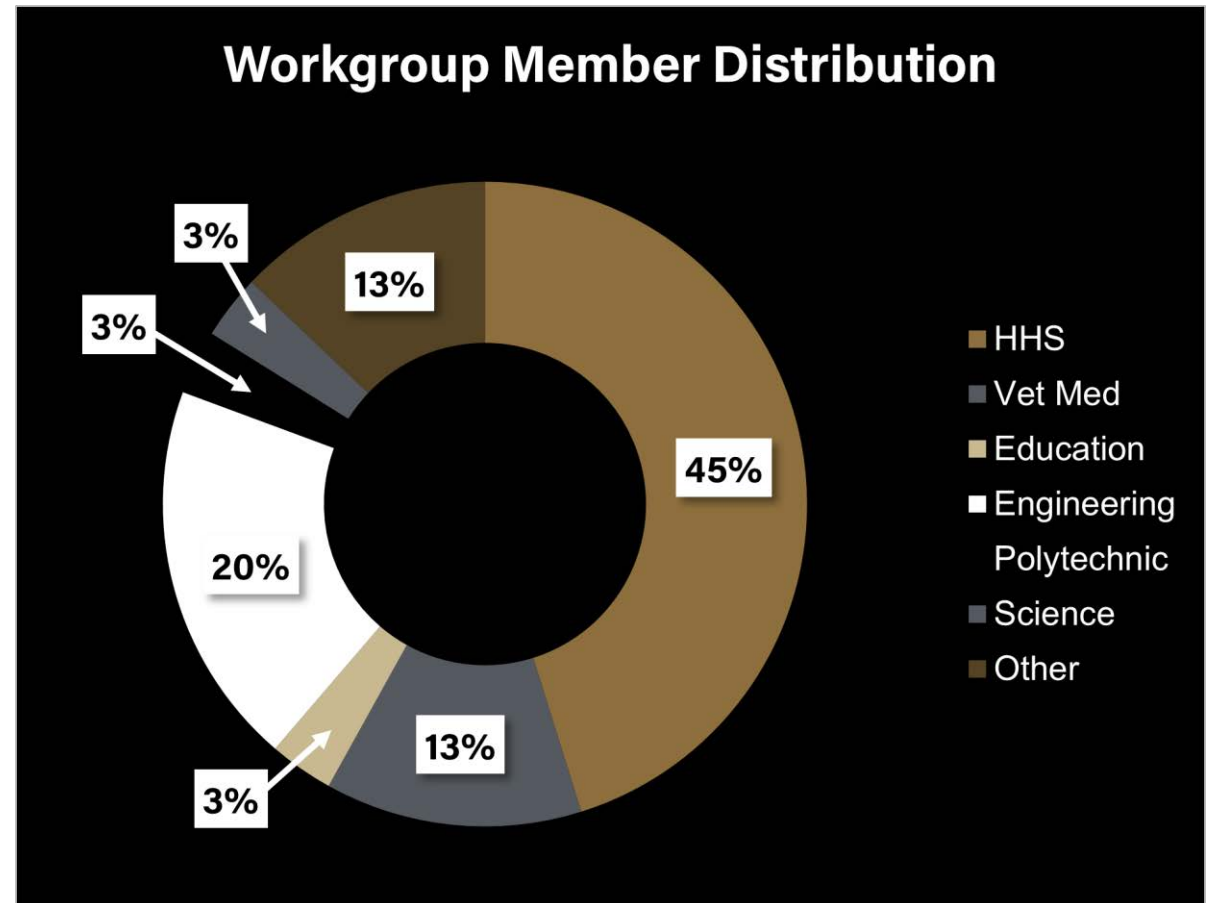


*"I attended the I-HOPE forum in Wayne County in April of 2022. Little did I know it would impact my life forever... realizing adults in the community wanted youth to become more engaged with our workforce, I decided to start my own business... Hogg Helps... also partners with Future Achievers... I can testify that if I didn't attend the I-HOPE event, or gain support from community leaders that attended, none of these opportunities would have come to fruition for me."*

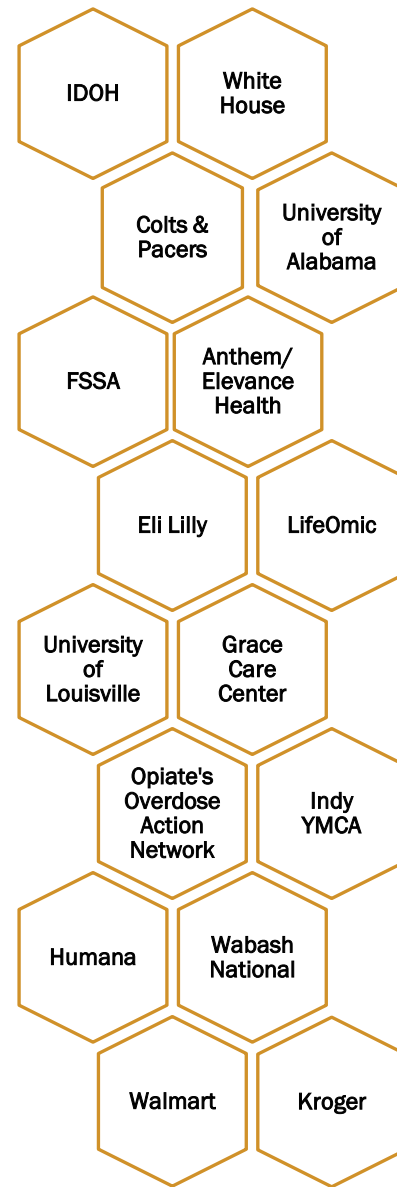
# Engagement Across Campus



# Workgroup Engagement Across Campus



# Engagement with External Partners



# COMMUNITY- FOCUSED RESEARCH ORGANIZATION (CFRO)



BOARD MEMBERS



# VISION IN MOTION

**Ongoing  
informed  
growth**

**Student  
service &  
engagemen  
t**

**Intentional  
industry  
partnership  
s**



# UPCOMING FUNDING OPPORTUNITY

- **Seed funding coming out of I-HOPE project**
  - **Eligible counties: Allen, Cass, Clark, Daviess, Delaware, Elkhart, Fayette, Lake, Madison, Scott, St. Joseph, Vanderburgh, and Wayne**
  - **Implementation funding for projects that focus on mental health, substance use, infant mortality, maternal mortality, and/or food security, as well as advance health equity among populations historically underserved**



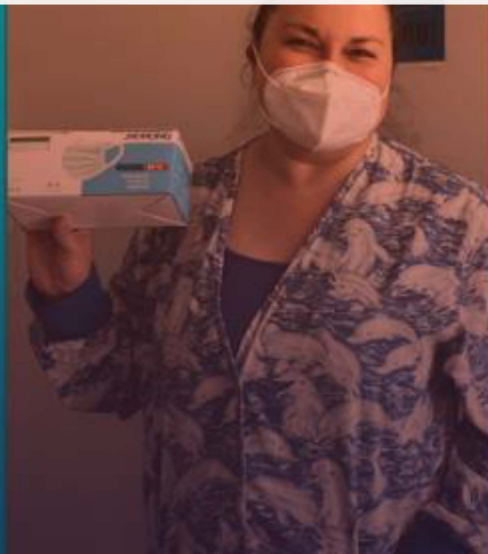
***DR. JUDY MONROE,  
PRESIDENT AND CEO OF THE  
CDC FOUNDATION***

**Advancing Health Equity Through Data**





# Advancing Health Equity Through Data





# Together Our Impact Is Greater

We **unleash the power of collaboration** between CDC and philanthropies, organizations, corporations, governments and individuals in order to protect the health, safety and security of America and the world.

We believe that by aligning diverse interests and leveraging all parties' unique strengths, these collaborations create **greater impact** than any one entity could alone.



# PAVING THE ROAD TO HEALTH EQUITY

**Health Equity**  
is when everyone has the opportunity  
to be as healthy as possible



**Programs**  
Successful health  
equity strategies



**Measurement**  
Data practices to support  
the advancement of  
health equity



**Policy**  
Laws, regulations, and  
rules to improve  
population health



**Infrastructure**  
Organizational structures and functions that support health equity



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention

TIMELY. ACCURATE. ACCESSIBLE.

# THE NEW WORLD OF PUBLIC HEALTH DATA

CDC is building a digital public health superhighway to accelerate lifesaving prevention and response.

## THE REALITY



## THE OPPORTUNITY

### REACTING

Always behind when epidemics occur



### PREDICTING

Getting ahead of epidemics to stop them quickly

### COUNTING

Collecting data without the ability to rapidly analyze it



### UNDERSTANDING

Rapid data analysis to gain real-time insights

### STORING SEPARATELY

Siloed systems that restrict data sharing



### SHARING EFFECTIVELY

Interoperable, accessible data for action

### MOVING SLOWLY

Outdated, paper-based systems with multiple points of data transfer



### MOVING FAST

A true digital highway to automate transfer of critical data in real time

### USING RESOURCES INEFFICIENTLY

New resources always required to do new data collection



### CONNECTING RESOURCES

Leveraging existing resources and making common investments for the future

# CDC Foundation's Six Strategies for Impact

**Strengthen the  
Public Health System  
to Protect Us All**



**Address the  
Climate and  
Health Challenge**



**Integrate Health  
Equity Principles  
into All Our Work**



**Modernize  
Public Health  
Protection Data**



**Promote and  
Protect the Public's  
Health Through  
Communication**



**Fortify Global  
Health Security  
To Protect Us All  
from Health Threats**





# CDC Foundation Health Equity Strategic Priorities



Build Public Health Workforce Capacity and Skills



Partner with Community-Based Organizations



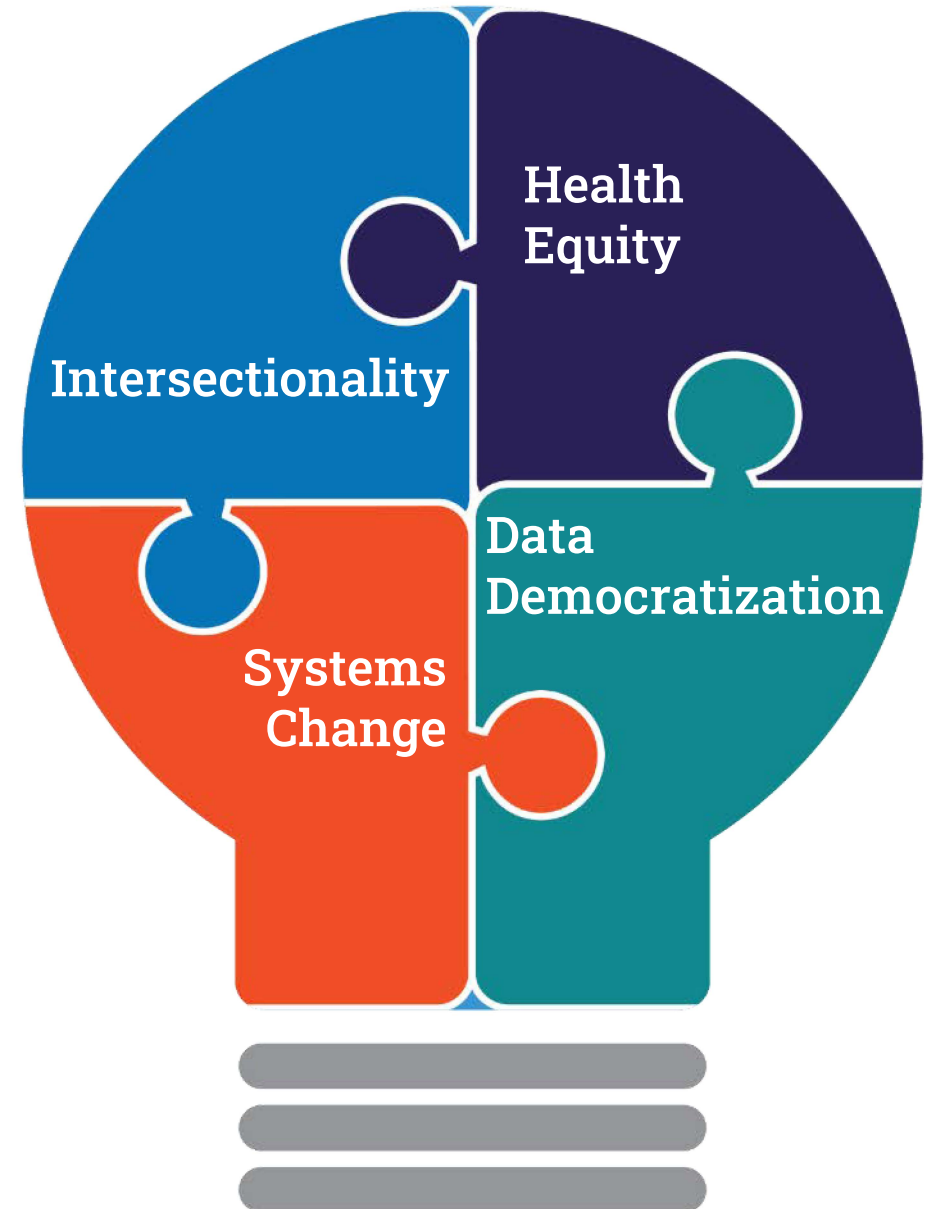
Focus on Cross-Sector Collaboration for Systems Change

# The Creation of More Equitable Data Systems

Public health practitioners, including funders, project managers and community partners, rely on **data when making decisions**. Data affects which regulations and laws are enacted and which programs are funded.

Data are the **building blocks** to help us better understand and eliminate health inequities. We need **equitable data systems** to be able to effectively address inequities.

These intersecting ideas form the basis for the data equity principles.



# Health Equity Data Initiatives and Systems

**Principles for Using Public Health Data to Drive Equity**  
A guide to embedding equitable practices throughout the data life cycle

Downloaded by:  
CDC Foundation Health Equity Strategy Office  
Lorraine Sperling, John Goff  
November 17, 2021  
10:46:37 AM PST

**CDC Foundation**  
Together our impact is greater

**The STRETCH Framework**

STRETCH Framework developed in partnership with the Strategies to Repair Equity and Transform Community Health (STRETCH) Initiative.

Version 1, January 2022

**CDC Foundation** **astho** **MTM**

Supported by the Robert Wood Johnson Foundation

**URBAN INSTITUTE**

**DO NO HARM GUIDE**  
Applying Equity Awareness in Data Visualization

The Brotherhood Sisterhood

WELCOME TO THE **NEW**

**HEALTHY PLACES INDEX®**

VISIT THE HPI 3.0 MAP

**Health Equity Tracker**

Satcher Health Leadership Institute  
**SHU** **MOREHOUSE** SCHOOL OF MEDICINE

**Equitable Data To Fight Health Inequities**

Learn how data can help to fight the inequities that are affecting our most vulnerable communities.

EXPLORE THE HEALTH EQUITY TRACKER WEBSITE HERE

**Leveraging CIE for Public Health Needs and Response**

March 2022

**2H** **Health Leads**

**Rhode Island's Health Equity Zones**  
A Model for Building Healthy, Resilient Communities



## CMS Steps for Resolving Major Gaps in Health Equity Data

- Collecting new elements and filling existing gaps in CMS's health equity data
- Equipping the industry with new tools and capabilities
- Providing access to disaggregated data and insights



## Examples of Progress to Date (2021-2022)

- Added race & ethnicity data fields on the Medicare Advantage Enrollment form
- Committed to expanding data collection and use
- Released RFI on equity data collection, stratification and summary score development
- Expanded Medicare Advantage stratified reporting to include Dual Eligibility or Low-Income Subsidy status
- Release guidance to state health officials on addressing SDOH



# Better Data for Equity

Our tracker puts Health Equity first. Envisioned by the Satcher Health Leadership Institute, the Health Equity Tracker is designed to boost inclusivity, highlight at-risk populations, alert users to existing inequities in health data, and so much more.

Our goal for this tool is to support the work being done by policymakers, community leaders, researchers, and ultimately all champions for health equity. [Explore our tracker today](#) and find data to help your community reach their best level of health.

[Explore the data](#)



## Recent news

News and stories from the Satcher Health Leadership Institute and beyond

# THE HEALTHY PLACES INDEX<sup>®</sup> (HPI) MAPS NEIGHBORHOOD CONDITIONS DRIVING HEALTH

HPI advances health equity through **actionable, community-level data** and curated **policy recommendations**.

Used to invest **\$2.3 billion** to communities with greatest need.

HPI is a **peer-reviewed, proven, go-to data tool** with **hundreds of use cases** across multiple sectors.

Tools

Like & Share

Community Conditions

Explore the California Healthy Places Index score to examine neighborhood measures linked to health outcomes, and view key indicators of diversity and equity.

Learn more >

Lennox

HPI Score (3.0): 22.8 percentile

Less → More healthy conditions



This Tract has healthier community conditions than 22.8% of other California Tracts.

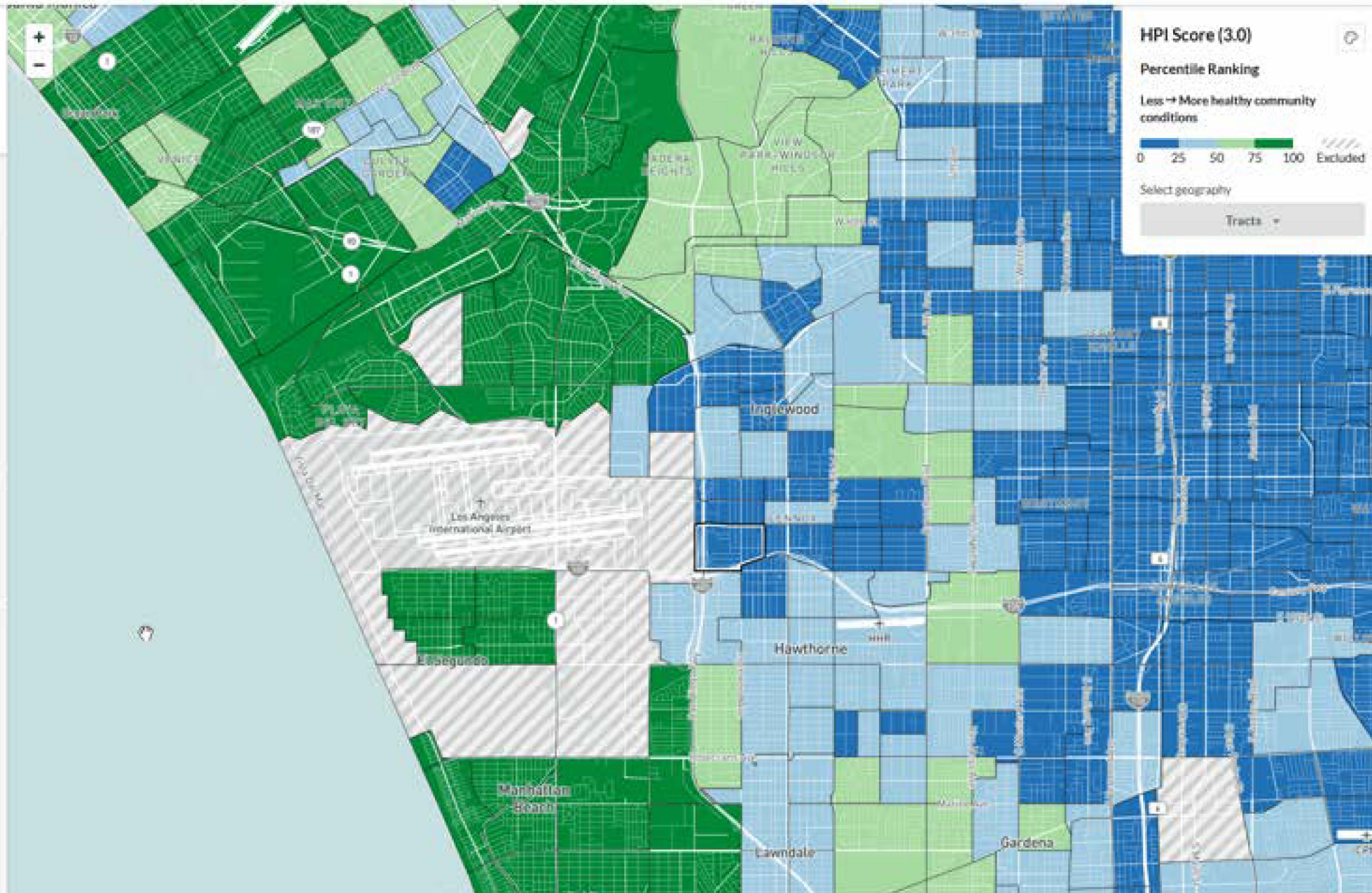
Tract 6016

County > City / Town > Tract  
Los Angeles > Lennox > 6016

Population: 4,439

Policy Action Areas

- Economic
- Education
- Social
- Transportation





# Leading the Way...



## INDIANA GOVERNOR'S PUBLIC HEALTH COMMISSION



Report to the Governor in fulfillment of Executive Order 21-21  
Submitted by the Staff of the Indiana Department of Health

Public Health Funding

Workforce

Governance, Infrastructure and Services

Data and Information Integration

Emergency Preparedness

Child and Adolescent Health



# PUBLIC HEALTH DAY

Investing in Hoosier Lives





**CDC** Foundation  
Together our impact is greater

[www.cdcfoundation.org](http://www.cdcfoundation.org)

10-Minute Break

Dr. Steve Abel, Dr. John Gates,  
Dr. Jasmine Gonzalvo, & Dr. Pavlos Vlachos

## Panel: Health Equity on Campus



# CHEqI

## BOARD OF DIRECTORS

Community  
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Gender  
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Mental  
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Public Health

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being.



Dr. Lola  
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Olatunde



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Dr. Zach  
Weber



Dr. Todd  
Walroth



Holly Wood



Dr. Carol Ott



Dr. Natalia  
Rodriguez



Becca  
Johnson



Dr. Monica  
Miller

### A call to action from the Purdue University Center for Health Equity and Innovation

Jasmine D. Gonzalvo Pharm.D., M.S., Ashley Meredith Pharm.D., MPH, Omolola Adeoye-Olatunde Pharm.D., M.S., Carlyn Kimiecik MSW, Sonak Pastakia Pharm.D., MPH, Ph.D., FCCP, Natalia Rodriguez Ph.D., MPH, Yumary Ruiz Ph.D., MPH, Carol Ott Pharm.D., Ellen Schellhase Pharm.D., Elizabeth Crawford M.A., Susie Crowe Pharm.D., Jeffrey Samuel Pharm.D., MPH, Megan Conklin Pharm.D., Jerome Adams M.D., MPH, Rakhi Karwa Pharm.D., ... See fewer authors



### Building a University-School-Community Partnership to Improve Adolescent Well-Being

Carlyn Kimiecik, MSW, Jasmine D Gonzalvo, PharmD, Shana Cash, MA, MPH, Drew Goodin, Sonak Pastakia, PharmD, PhD, MPH

Children & Schools, Volume 45, Issue 1, January 2023, Pages 27-34, <https://doi.org/10.1093/cs/cdac029>  
Published: 02 December 2022 Article history



# Teaching

### How public health partnerships are encouraging COVID-19 vaccination in Mississippi, Michigan, Indiana and South Carolina

David R. Buys, Associate Professor of Health, Mississippi State University, Brooke W. McKeever, Associate Professor of Communication, University of South Carolina, Debra Furr-Holden, Associate Dean for Public Health Integration, Michigan State University, and Omolola Adeoye-Olatunde, Assistant Professor of Pharmacy Practice, Purdue University



# Engagement

### Implementation of a Global Health Equity fellowship established in partnership between an academic institution and governmental agency

Rakhi Karwa Pharm.D., Ellen Schellhase Pharm.D., Christine Y. Manji Pharm.D., Sonak D. Pastakia Pharm.D., MPH, Ph.D., Imran Manji BPharm, MPH, Jeffrey M. Samuel Pharm.D., MPH

### Indiana community health workers: challenges and opportunities for workforce development

Natalia M. Rodriguez, Yumary Ruiz, Ashley H. Meredith, Carlyn Kimiecik, Omolola A. Adeoye-Olatunde, Lynnet Francesca Kimera & Jasmine D. Gonzalvo

BMC Health Services Research 22, Article number: 117 (2022) | Cite this article

### 40 ideas: Significantly expand community health workers in central Indiana



### Statement from the Purdue University Center for Health Equity and Innovation on Tyre Nichols

The recent, senseless murder of Tyre Nichols has stirred up strong feelings of sadness, frustration, outrage, confusion, exhaustion, and hopelessness across the nation and across campus. Tyre's death is yet another reminder of the constant, palpable fear and pain experienced by Black and Brown individuals every day. This tragedy has reopened deep-seated wounds that will never fully heal.

The HEqi team is here to listen. Next week, on Thursday, February 9th, at 6:30 pm we will hold a listening session for students to share their grief and address their trauma. Please email [cheqi@purdue.edu](mailto:cheqi@purdue.edu) if you'd like to join.



# Center for Health Equity and Innovation (CHEqI) at Purdue University: Request to Collaborate Form

Please complete this request to collaborate form. This form will allow us to direct your interest in CHEqI to the right team member. We look forward to working with you. Please anticipate a response within two weeks. Additional information may be requested from the CHEqI team upon review of your submission.

If you have an issue with completing this form, please contact our CHEqI program managers at [cheqi@purdue.edu](mailto:cheqi@purdue.edu) for further assistance.

Thanks,  
**CHEqI at Purdue University College of Pharmacy**

**Requestor Name (Information)**   
*\* must provide value*

**Email**   
*\* must provide value*

**Phone Number**   
*\* must provide value*

**Organization Name**   
*\* must provide value*

**Division / Department Name (if applicable)**



# CHEqI Request to Collaborate Form



# HEALTH EQUITY RESOURCES



Promotion and  
Tenure Criteria



The Guide



Societal Impact  
Fellows



Scholarship of  
Engagement



Service Learning



Health Equity  
Language Guide

# Health Equity Workgroup Updates



**PURDUE**  
UNIVERSITY®

Health Equity

2/24/2023

66

# *HEALTH EQUITY INITIATIVE FACULTY CHAMPIONS REPORT*

**Inaugural Year 2022-2023**

## Faculty Champions 2022-2023 by Pillar

- **Food For Health**
  - Dr. Haley Oliver- Professor of Food Science
  
- **Infectious Diseases**
  - Dr. Randolph Hubach- Associate Professor of Public Health
  - Dr. Steve Steinhubl- Professor Biomedical Engineering
  
- **Mental Health and Substance Use**
  - Dr. Nicole Adams- Clinical Associate Professor of Nursing
  - Dr. Hugh Lee- Associate Professor of Biomedical Engineering

# *Building Infrastructure*

With the help of working groups from across campus

- **Pillar specific websites to provide resources**
- **Email listservs to help connect faculty**
- **Workshop in April to provide an opportunity for faculty to learn, connect, and provide input into the direction for next year**

# *Mental Health and Substance Use Workgroup*

## Upcoming and Potential Community Based Projects

- Seed funding for: **Implementation of an Evidence-based Approach to Address the Mental Health of Long-Term Care Residents and Staff (PI: Kathy Abrahamson, School of Nursing)**
- Teen Mental Health First Aid and Youth Mental Health First Aid from the National Council for Mental Wellbeing. Potential partnership opportunities
- Purdue Community: how can we support researchers in this space?
- Technology and Health...partnering across campus

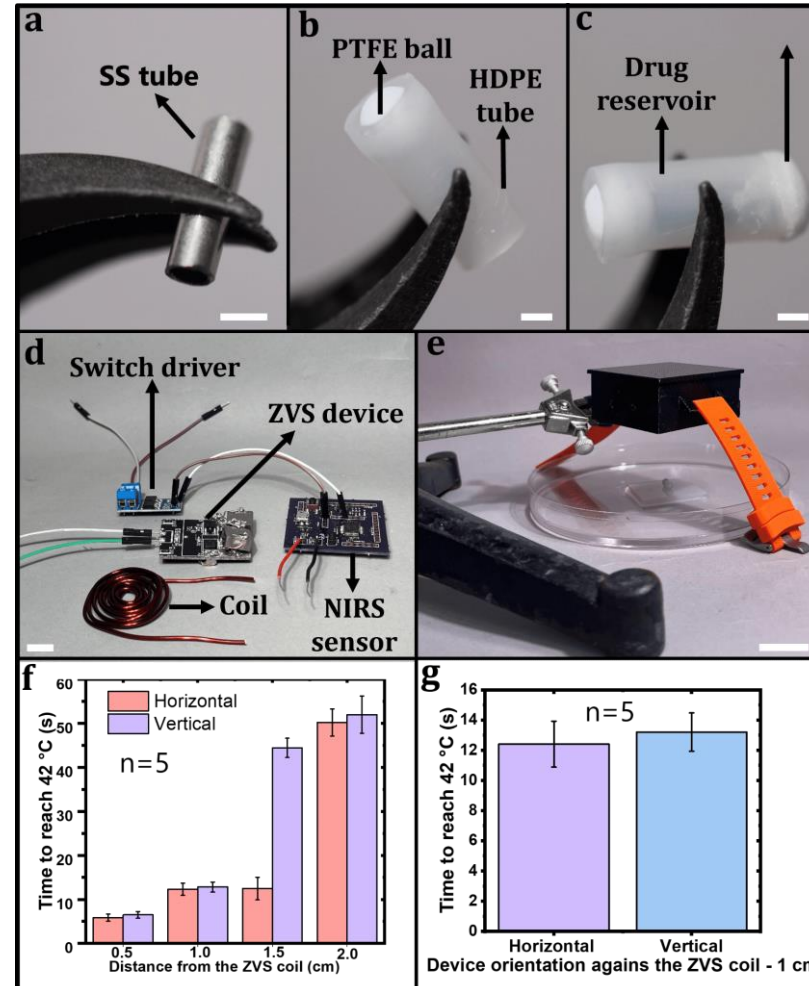
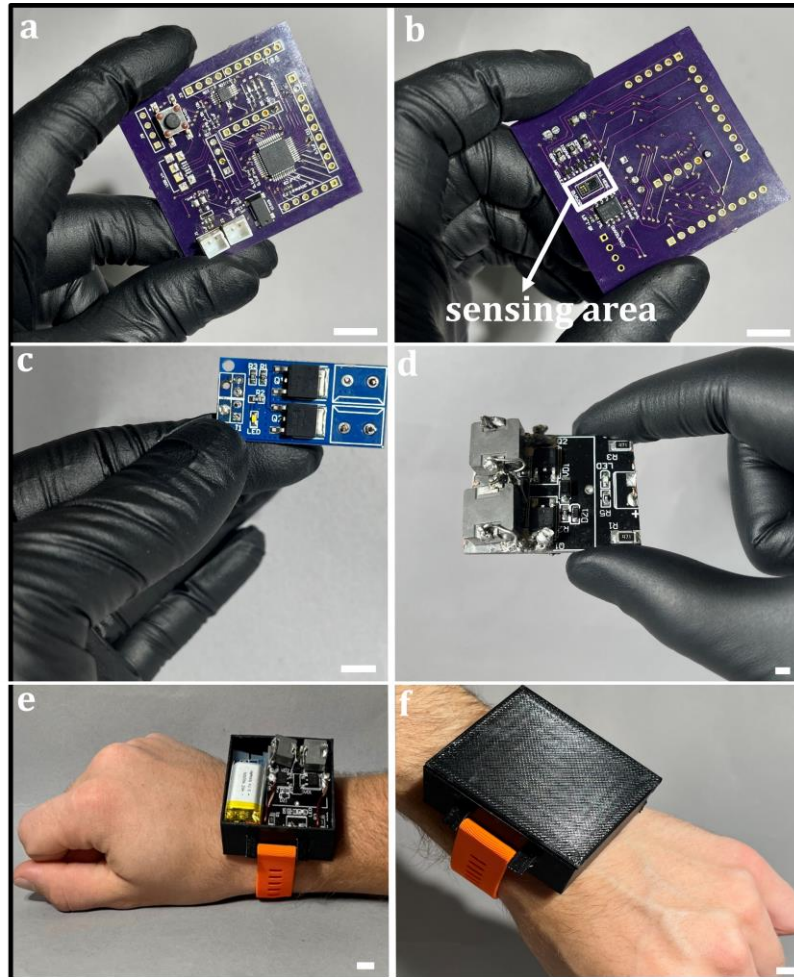
# *Addressing Social Determinants of Health in Primary Care*

## A Software Development Project

- The Need
- Bridges Software Platform
- Clinic Use
- Data Collection
- Future Technology



# Translation of closed-loop naloxone delivery device



- Fast Track SBIR (1R44DA056277)
- NIH I-Corps (3R44DA056277-01S1)



# Food for Health Workgroup

## National Engagement



End hunger and increase healthy eating and physical activity by 2030, so that fewer Americans experience diet-related diseases like diabetes, obesity, and hypertension.



INSTITUTE FOR ADVANCING HEALTH THROUGH AGRICULTURE

## Engagement Across Campus

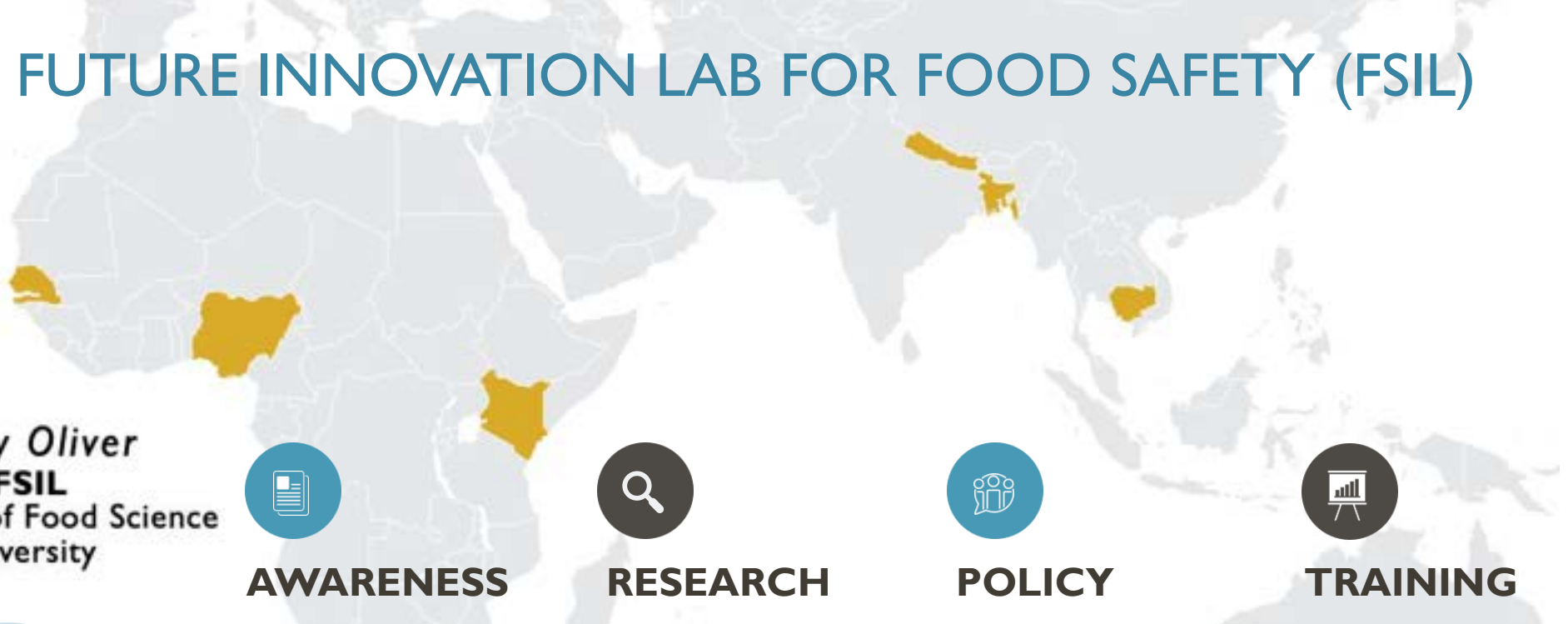
- 12 members from 5 colleges = Networking
- "Big Idea"



# FEED THE FUTURE INNOVATION LAB FOR FOOD SAFETY (FSIL)



**Dr. Haley Oliver**  
Director, FSIL  
Professor of Food Science  
Purdue University



## AWARENESS

Increase awareness of food safety issues, impacts, and measures to reduce food safety risks.



## RESEARCH

Build local research capacity and conduct research on regional food safety challenges.



## POLICY

Develop policies that enable conditions for food safety research, translation, and practice.

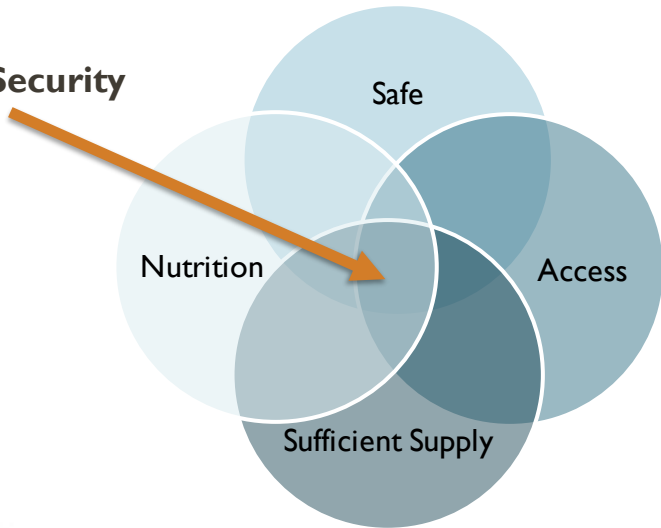


## TRAINING

Accelerate translational research technologies and practices.

## RESEARCH & ENGAGEMENT ACTIVITIES

Food Security



Health Equity



Cornell University

# *Infectious Diseases Working Group*

## Community Engaged Programs

- **Policy initiatives: SSP/SEP Programs**
- **Leveraging HRSA-funded Community Health Worker Training Program to increase ID awareness and intervention among this cadre of health professionals**
  - **Example: Engaging HCV coordinators funded through HEA 1007**
- **Next steps**

# *Infectious Disease in Rural Health*



## Intersection of HIV and Rural Health

- **e-HERO (3U54MD012388-05S2)**
  - mHealth intervention to increase HIV self-testing among rural sexual minority men (SMM) and rural Native American men
- **3T-Prevent (R34 MH129208)**
  - Focuses on promoting bacterial sexually transmitted infection (BSTI) partner treatment through
    - patient-delivered partner therapy (PDPT)
    - increasing HIV testing by including HIV self-testing (HIVST) kits with PDPT
    - promoting HIV pre-exposure prophylaxis (PrEP) among SMM and partners
  - **Project GROW: Growing Rural Outreach and Wellness (SAMHSA 1 H79 SP082136-01)**

# Digital Health Technologies to Address Health Inequities

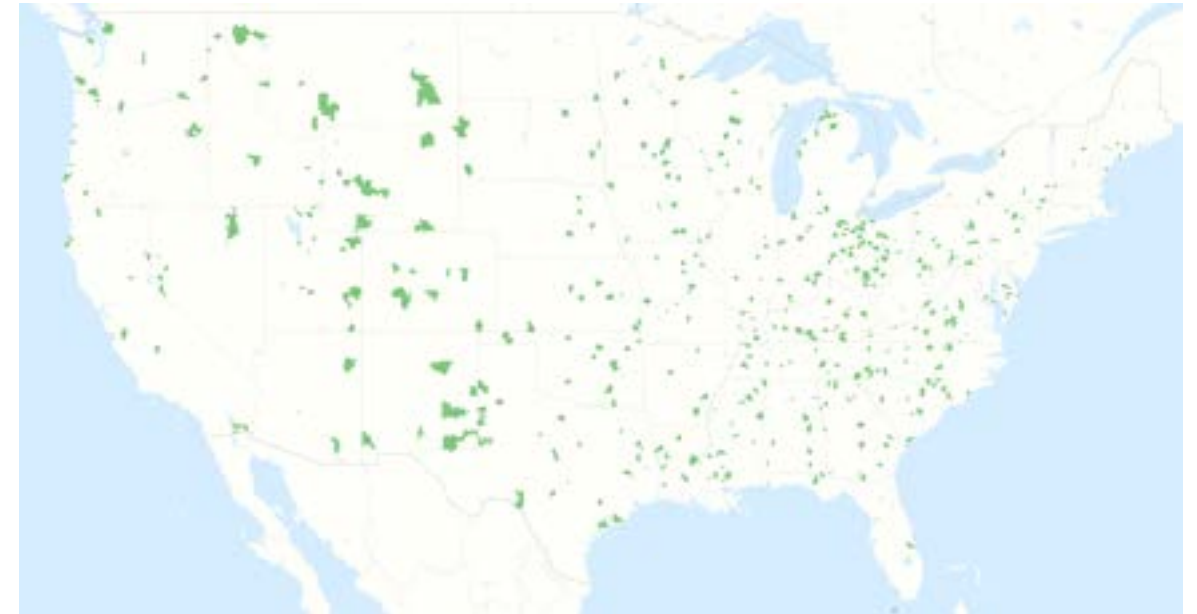
## INDIANA

2022  
MARCH OF DIMES  
REPORT CARD

INFANT HEALTH

PRETERM BIRTH  
GRADE

D



# PowerMom

Scripps Research  
Digital Trials Center



4,528

The number of diverse pregnant participants  
from all 50 states.



14,045

The number of individual surveys and  
counting.



107,102

The number of total daily measurements of  
sleep, activity, blood pressure and heart  
rate.

2/24/2023

77

# Novel Technologies to Address Care Gaps

Hepatitis C is curable with treatment, but only ~37% people have achieved a cure.

**What If You Have a Life-Threatening Disease That Can Be Cured...*But You Don't Know It?***

**Hepatitis C: Get Checked. Get Care. Get Cured.**

The hep C virus is more contagious than HIV. It causes chronic liver disease that can slowly progress for years without symptoms or physical signs and can ultimately lead to death. You can have hep C and not even know it. The good news? Hepatitis C can be cured! Follow the 3 Cs to end hep C.

**The 3 Cs of Hep C: Check. Care. Cure.**

**Get Checked**

Getting checked for hep C is easy. Contact your physician to schedule a hep C screening.

**Get Care**

Persons infected with hep C should seek care with a physician who can prescribe treatment. A cure is as simple as one pill a day for 8-16 weeks.

**Get Cured**

Following treatment, 90-95% of patients are cured. That means countless lives are saved.

If you're one of thousands of individuals who have hepatitis C and don't know it, following the 3 Cs can save your life. Contact a physician today to schedule your hepatitis C screening. It could save your life.



Visit [CheckCareCure.IN.gov](https://www.checkcarecure.in.gov) for information on who is at risk, testing sites and more.

Check, Care, Cure is an initiative of the Indiana Family Social Services Administration and the Indiana Department of Health.



## Complications of Hepatitis C:

- 1 in 3 develop cirrhosis
- 1 in 20 develop liver failure
- It is the cause of ~50% of all liver cancers
- Reduces life expectancy by an average of 15 years

# Novel Technologies to Address Care Gaps



- In a pilot study of 288 people (~60% with a psychiatric condition, ~10% homeless) a digital medicine program was implemented to improve treatment to cure.
- Improved pill adherence to achieve cure up to 95%.



# Successes

## Seed Funding

- **Developed a template and process for faculty to seek seed funding for community-engage research or engagement projects**
- **Each pillar has \$10,000 this year.**
  - **Matching funds available through I-HOPE if working in specific counties**
- **Mental Health and Substance Use have awarded funding for their first project!**



# Challenges

## The Pillars

- **Substantial overlap between pillars**
- **Some projects directly influencing health equity do not fit in any pillar**
- **Time and meetings**
- **For Consideration:**
  - **Health Equity Initiatives would be stronger together than divided. We propose to work as a single Champion group to provide support as needed to specific projects.**

*THANK YOU*

**We've only just begun...**

*DEAN MARION UNDERWOOD,  
COLLEGE OF HEALTH &  
HUMAN SCIENCES*

**Faculty Cluster Hires**



## *Fall 2022 Health Equity Cluster*



**AFSAN BHADELIA**  
Assistant Professor  
Department of Public  
Health



**SOOJUNG JO**  
Assistant Professor  
School of Nursing



**CARLOS MAHAFFEY**  
Assistant Professor  
Department of Public  
Health



**SHANDEY  
MALCOLM**  
Assistant Professor  
Department of Public  
Health



**PAUL ROBBINS**  
Assistant Professor  
Department of Human  
and Family Studies



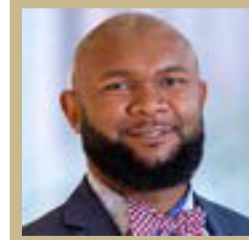
**BUKOLA USIDAME**  
Assistant Professor  
Department of Public  
Health



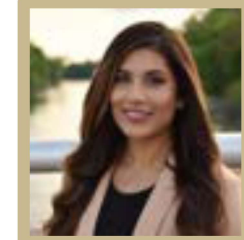
**HAOCEN WANG**  
Assistant Professor  
School of Nursing



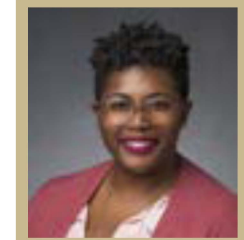
**PATRICIA WOLF**  
Assistant Professor  
Department of  
Nutrition



**MICHAEL  
PRESTON**  
Assistant Professor  
Of Pharmacy  
Practice



**FARIA CHAUDHRY**  
Clinical Assistant  
Professor of  
Pharmacy Practice



**ANDREA HAYES**  
Assistant Professor  
Science and  
Engineering  
Libraries

# Lunch

# Panel: State of the State

*DR. LINDSAY WEAVER, CHIEF  
MEDICAL OFFICER, INDIANA  
DEPARTMENT OF HEALTH*



**Governor's Public Health Commission,  
Current State of Public Health & the  
Vision for Health Equity 2023**



**Indiana**  
**Department**  
**of**  
**Health**

# PURDUE HEALTH EQUITY SUMMIT

**LINDSAY M. WEAVER, M.D., FACEP**  
CHIEF MEDICAL OFFICER

February 14, 2023



OUR MISSION:

To promote, protect, and improve the health and safety of all Hoosiers.

OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.



# 2023: A Year of Looking Forward

- Moving beyond pandemic
- Assessing current state
- Building on lessons learned
- Focusing on big picture and public health transformation





# INDIANA GOVERNOR'S PUBLIC HEALTH COMMISSION

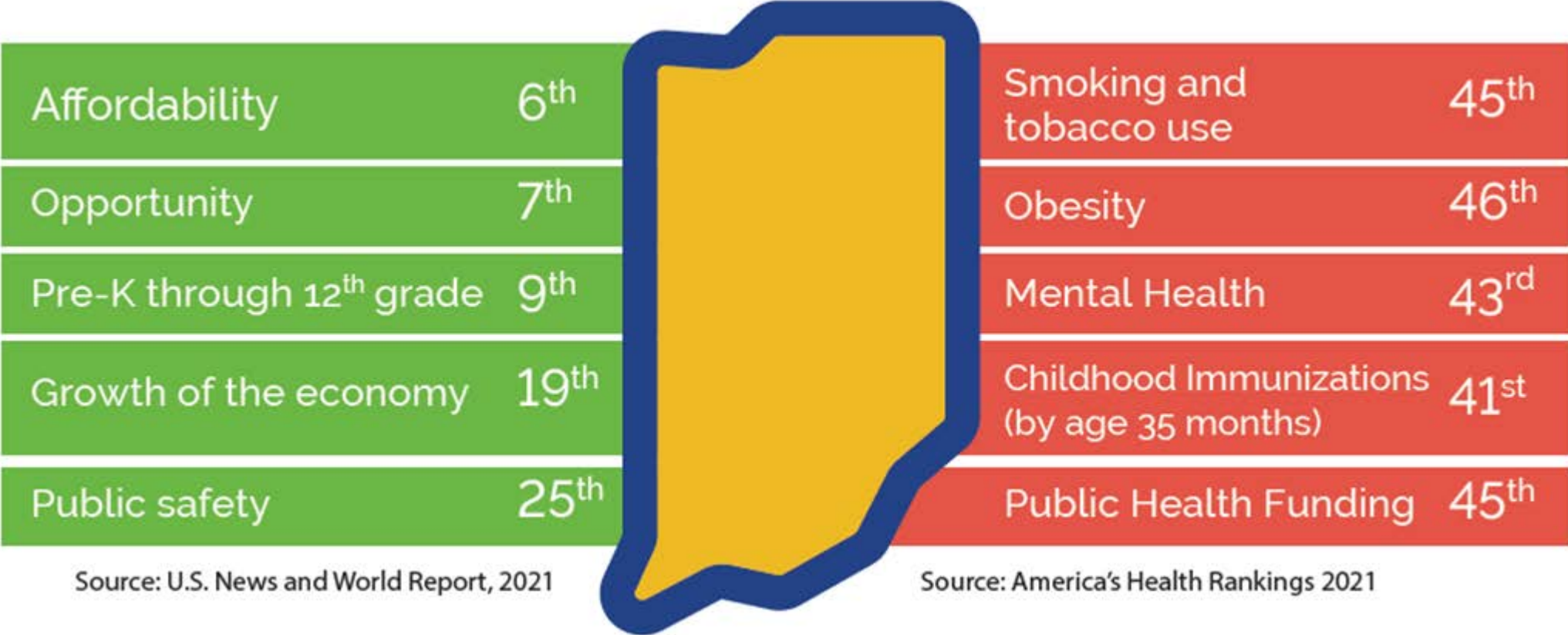


Core Leadership Meeting



Indiana  
Department  
of  
Health

# How Indiana Ranks Nationally

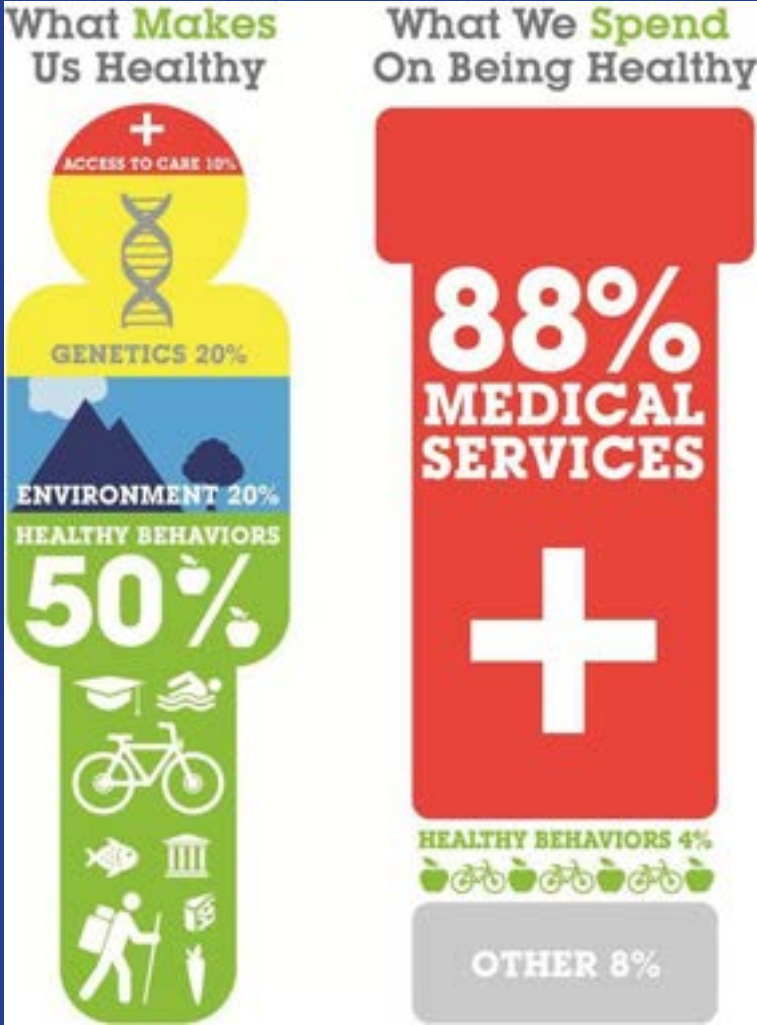


# Public Health and Health Outcomes

- The things that most impact health outcomes are not well funded, which contributes to greater healthcare needs over the long-term.
- Investments in public health have as high as a 14:1 ROI

Clinical Care

Public Health's domain

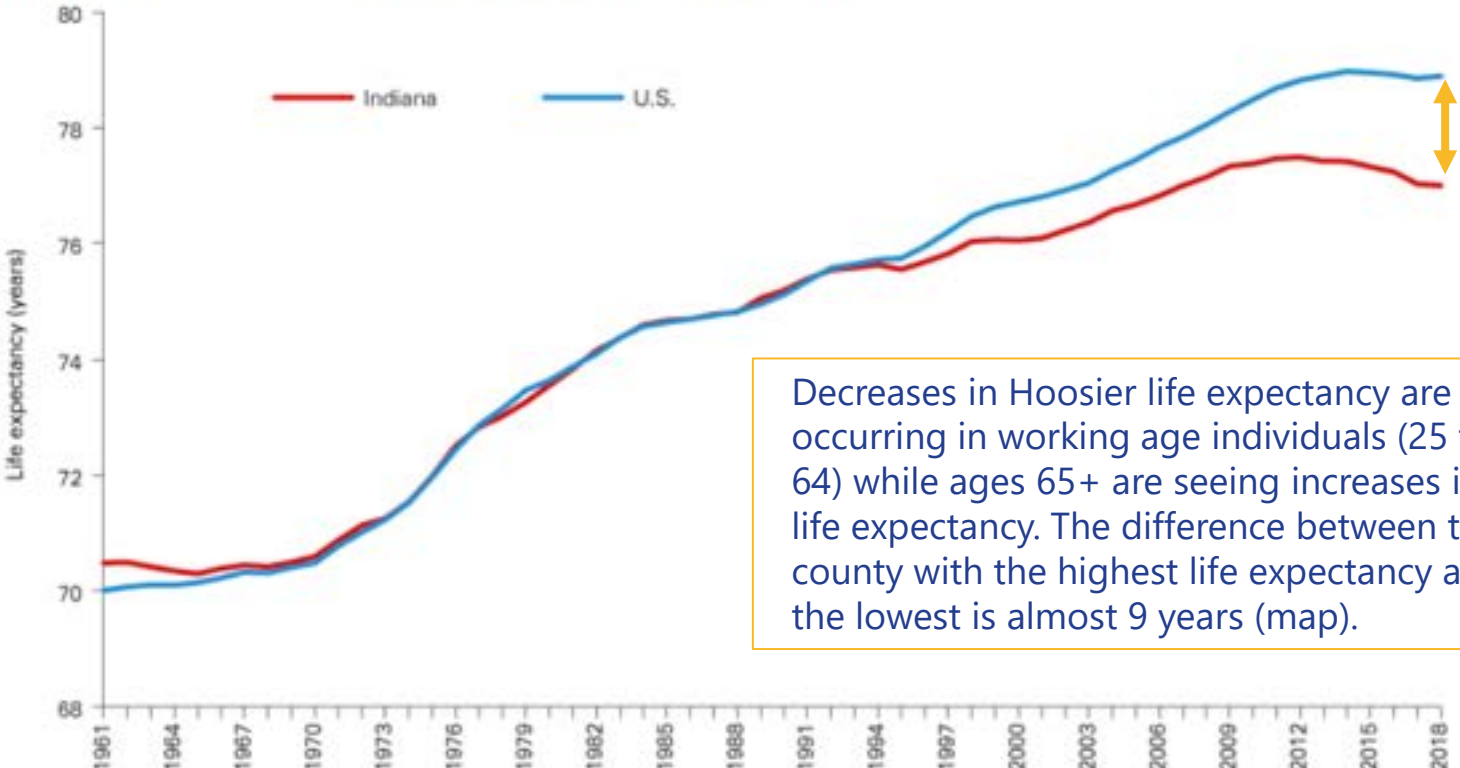


Private Insurance, Medicaid, Children's Programs

Public health programs

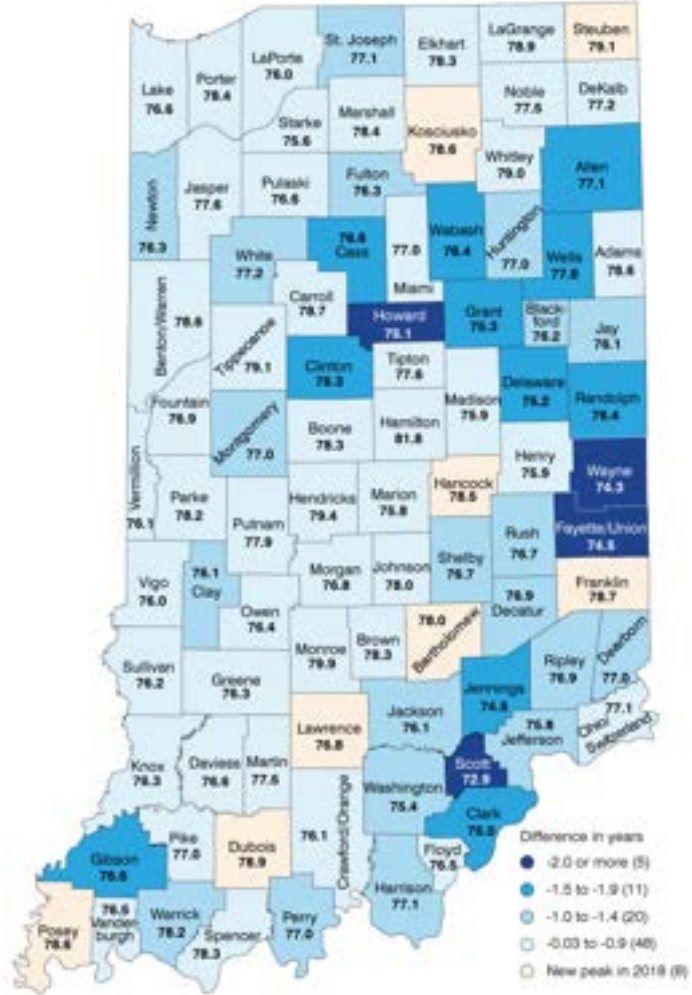
# Life Expectancy in Indiana

Figure 1: Life expectancy at birth, three-year moving average

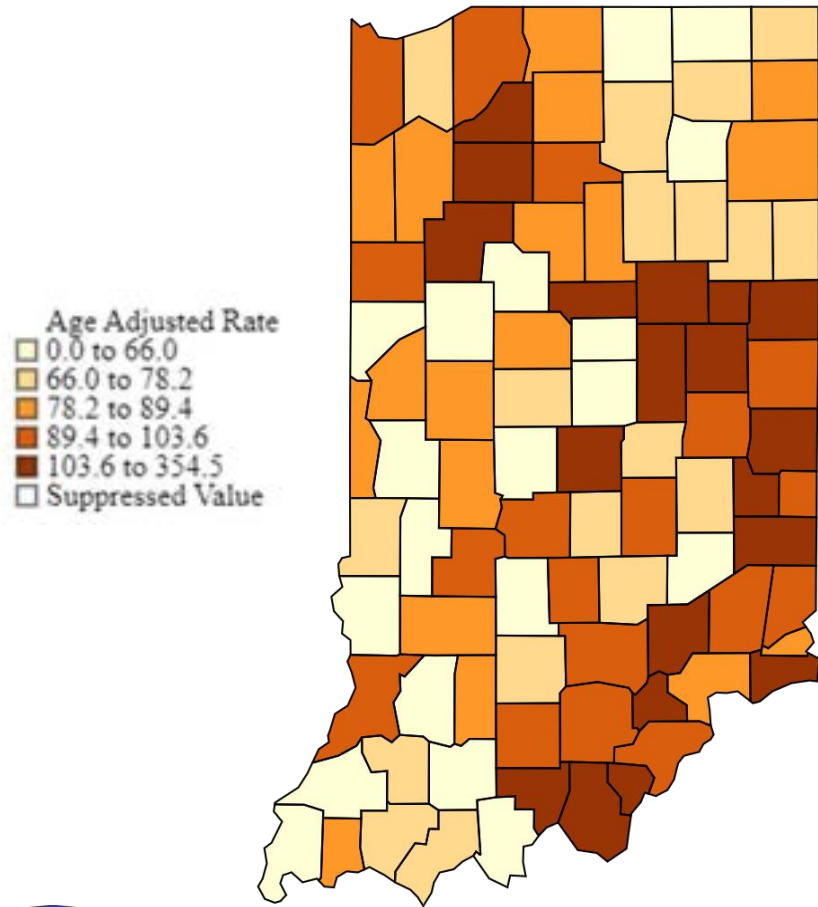


Decreases in Hoosier life expectancy are occurring in working age individuals (25 to 64) while ages 65+ are seeing increases in life expectancy. The difference between the county with the highest life expectancy and the lowest is almost 9 years (map).

Source: United States Mortality Database. University of California, Berkeley (USA). Available at [usa.mortality.org](http://usa.mortality.org) (data downloaded on 5/10/2021).



# Risk of Mortality from Injury Compared to Access to a Trauma Center Within a 45-Minute Drive



## Indiana Trauma Center Access: Areas Within a 45-Minute Drive

45-Minute Accessible Trauma Center \*

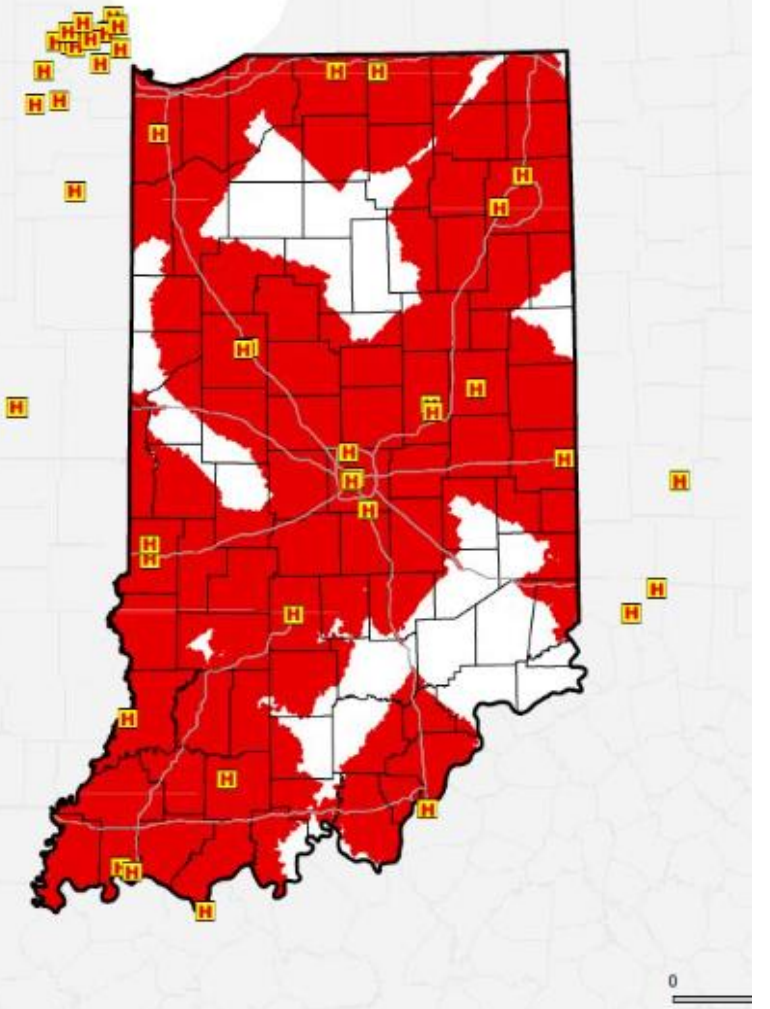
45-Minute Accessible Areas

Average Travel Time  
*based on posted and historical speeds*

	45-Minute Coverage (at average speed)		State Total
	n	% of state	n
Land Area	26,648 sq mi	74%	35,826 sq mi
Population	5,937,078 people	92%	6,483,802 people
Interstates	1,219 miles	96%	1,266 miles

\* Considered a trauma center for purposes of the triage and transport rule.

Travel times are calculated with 2016 street network reference data published by Esri. Travel times do not take into account current traffic volume or restrictions. Population and land area are calculated from the 2010 U.S. Census block summary geography. Interstate mileage is calculated using a single direction of a divided highway (source: INDOT). All statistics should be considered an estimate.



# GPHC Reviewed Six Public Health Areas

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1. Governance, Infrastructure and Services
  - Define core public health services available in every jurisdiction, regional support team model, credentials for local health officers and representatives to local health boards
2. Public Health Funding
  - Increase public health funding, sustainable public health investments, and maximize all funding sources
3. Workforce
  - Establish State Health Workforce Council and develop public health and healthcare workforce plan
4. Data Information Integration
  - Maintain the IDOH Office of Data and Analytics to securely analyze public health data for quality improvement and disease prevention and support local health departments
5. Emergency Preparedness
  - Invest in a State Strategic Stockpile, State Trauma System and trauma care, EMS training and readiness, access to emergency medical services
6. Child and Adolescent Health
  - Support current school health screenings and support oral health programs





# PH Funding Recommendations

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- Provide stable, recurring and accessible funding
- Local elected officials decide whether to opt-in to additional funding and agree would agree to provide core public health services
  - Vote to opt in every five years and maintain at least 20% local cost sharing
- Local officials who opt-out the first year will continue to receive state funding at their current (legacy) amount and have the option to opt-in in year two
- IDOH to provide technical assistance to local health departments
  - Grants writing, insurance billing, clinical consultation, and more.

# Transforming Public Health

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**Key pillar of Governor Holcomb's Next Level Agenda**

## **PUBLIC HEALTH COMMISSION**

**GOAL:** Ensure all Hoosiers have access to foundational health services by increasing the state investment and providing stable, recurring, and accessible funding. Improve Indiana's life expectancy and public health funding ranking among states through increased local access to core services.

- Increase annual state public health appropriation **+\$120M/yr in FY23** and **+\$227M in FY24**
  - Out of these increases, \$100M in 1<sup>st</sup> year and \$200M in 2<sup>nd</sup> year will be solely dedicated to locals who opt-in for public health funding (up from \$6.9M/yr)
  - Remainder of state level public health funding will assist in areas such as healthcare workforce planning, data analytics, emergency preparedness, and promoting child screenings & oral health programs

# Current Required LHD Services



- Vital records
- Birth and death certificates



- Environmental services



- Food protection and inspection



- Fatality review



- Lead assessment and case management



- Immunizations



- Infectious disease monitoring and prevention



- Tuberculosis control and case management



- Tattoo, body piercing, and eyelash safety



- Health-related areas during emergencies/ disasters

- **On average, LHDs have implemented about half of 20 recommended public health activities.**



SOURCE: Fairbanks School of Public Health Indiana  
Public Health System Review, December 2020

# Additional Services

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- Tobacco Prevention and Cessation

- Youth vaping and pregnant women



- Harm Reduction for Trauma and Injury Prevention

- Child seat safety education



- Maternal and Infant Mortality

- Safe sleep education and sleep sacks



- School Health Liaison

- Vision, hearing and dental screenings



- Equitable Delivery of Core Services

- Rural, urban, socioeconomic status, age, disability, gender, race, ethnicity



- Full-time Public Health Nurse

- Clinical services and prevention

# Updated Core Services



## Communicable Disease Control

### Food Protection

- Conduct inspections, foodborne illness investigations



### Immunizations

- Provide access and clinics



### Infectious Disease Surveillance and Prevention

- Review data, identify and investigate outbreaks



### Tuberculosis Control and Case Management

- Coordinate clinical needs and provide education



### Tattoo, Body Piercing, Eyelash Safety and Sanitation

- Respond to complaints and apply the state rule



## Chronic Disease and Injury Prevention

### Tobacco Prevention and Cessation

- Promote prevention and cessation, such as cessation programs or supporting a tobacco control coalition



### Trauma and Injury Prevention

- Promote safety to reduce harm, such as injury prevention initiatives. Examples include child safety seat trainings, overdose education, and programs to prevent older adult falls,



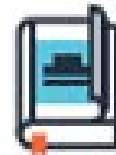
### Screenings and referrals

- Screen for chronic diseases such as obesity, diabetes and cancer.



## Environmental Public Health

- Investigate complaints, help ensure well water quality and inspect swimming pools



## Vital Records

- Provide timely certificates through trained on-staff registrar

# Updated Core Services



## Access and Linkage to Clinical Care

- Include at least one full-time public health nurse on staff and after-hours access



## Health-Related Areas during Emergencies/Disasters

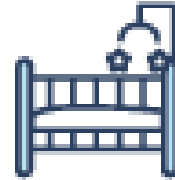
- Staff includes dedicated preparedness coordinator on staff, and ensure resources are available in an emergency



## Maternal, Child and Family Health

### Fatality Review

- Participate in review teams and develop prevention strategies



### Maternal and Child Health

- Provide linkages to care and promote safe sleep



### School Health Liaison

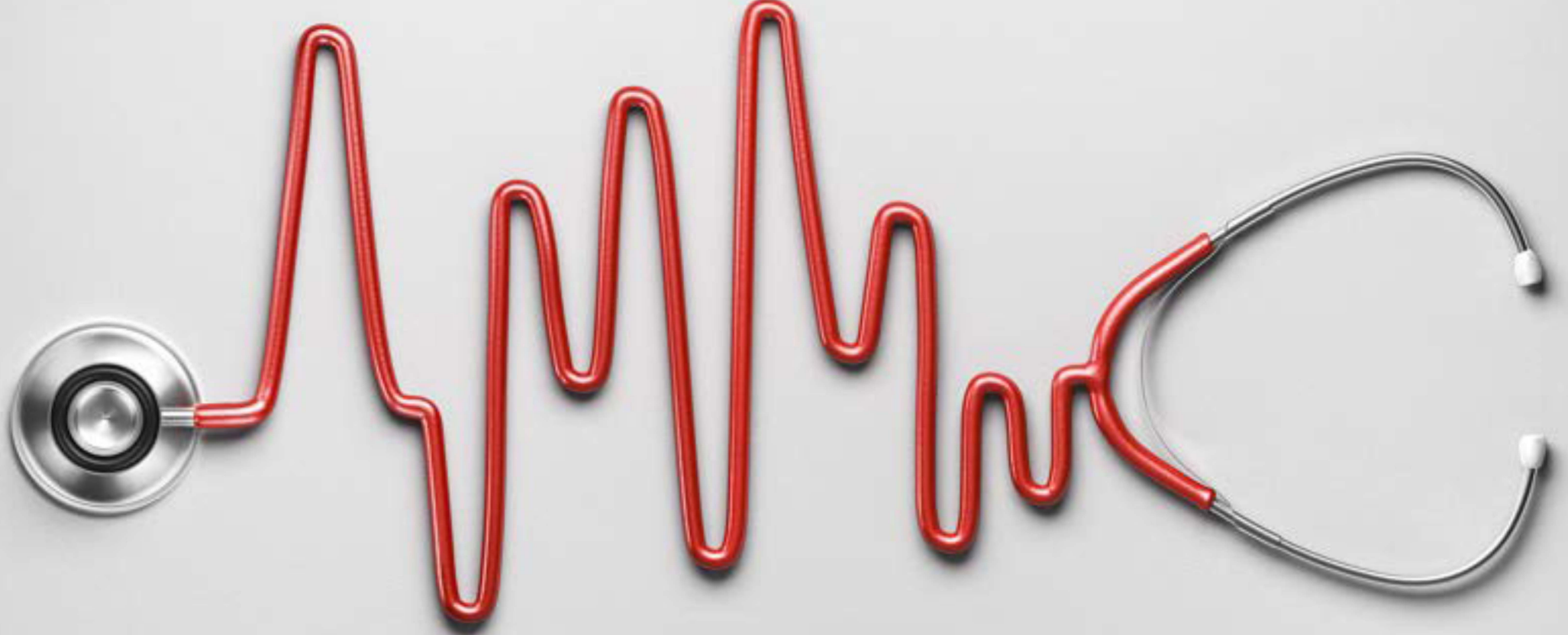
- Support school needs, including vision, hearing and dental screenings
- Partner with schools to promote whole child health



### Lead Case Manager and Risk Assessment

- Identify exposure risk and ensure no-cost testing for children younger than 7 years

[in.gov/gphc](https://www.in.gov/gphc)



# A Case for Health Equity



**Indiana**  
Department  
of  
**Health**



# Health Equity

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**Health equity** is the state in which everyone has a fair and just opportunity to attain their highest level of health.

**Health disparities** are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by populations that have been disadvantaged by their social or economic status, geographic location, and environment.

**Social determinants of health** are the conditions in the places where people live, learn, work, play, and worship that affect a wide range of health risks and outcomes. Long-standing inequities in key areas of social determinants of health are interrelated and influence a wide range of health and quality-of-life risks and outcomes.



# Hoosiers by the Numbers

Population Demographic	IN	U.S.
White, Non-Hispanic	77.5%	59.3%
Black/AA, Non-Hispanic	10.2%	13.6%
Latinx/Hispanic	7.7%	18.9%
Asian	2.7%	6.1%
Multiple race, AI/NA, NHa/PI	~2%	~2%
Total	6,833,037	333,287,557
Female, all ages	50.4%	50.5%

- 2021 Income:
  - Median: \$61,944
  - Per capita: \$32,537
- Persons in poverty: 12.2%
  - Context: 2021 weighted threshold is \$21,559 for household of 3 people
- 70% own, 30% rent their housing unit
- 8.9% reported language other than English spoken at home at least part of the time

# What is Social Vulnerability?

---

Every community must prepare for and respond to hazardous events, whether a natural disaster like a tornado or disease outbreak, or a human-made event such as a harmful chemical spill.

A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster.

These factors are known as social vulnerability.

# Recognizing Health Disparities

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- COVID – cases and vaccination rates
- Infant and maternal mortality
- Cancer screenings
- Overdose rates
- Not just based on race and ethnicity – urban/rural, age also factors

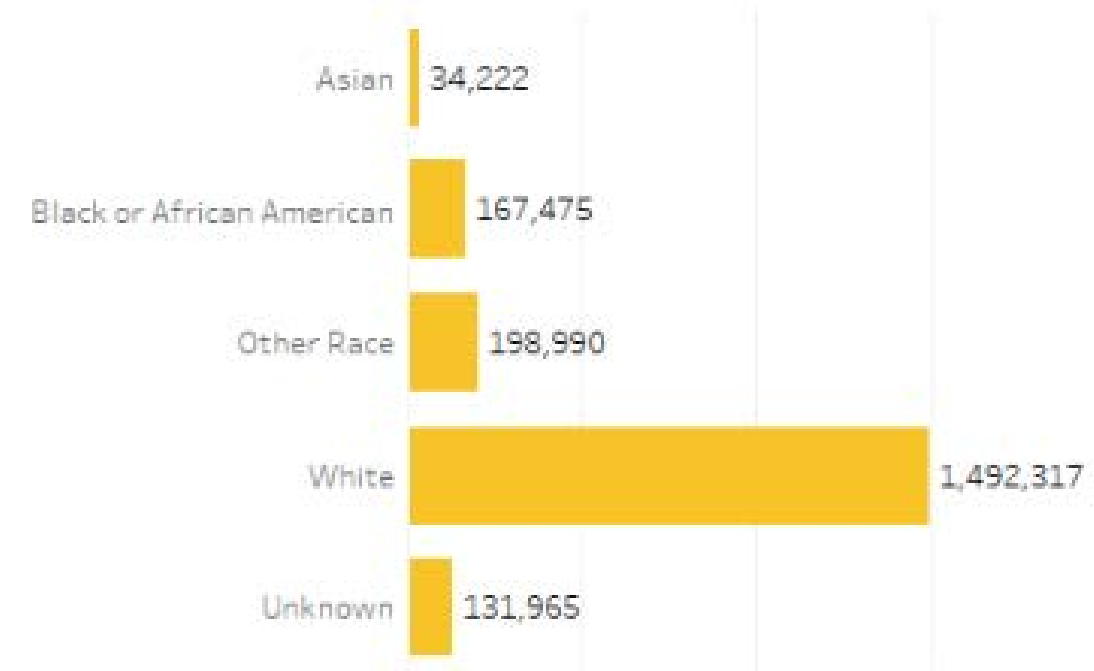
# COVID-19 Case Demographics

## Statewide Cases Demographics

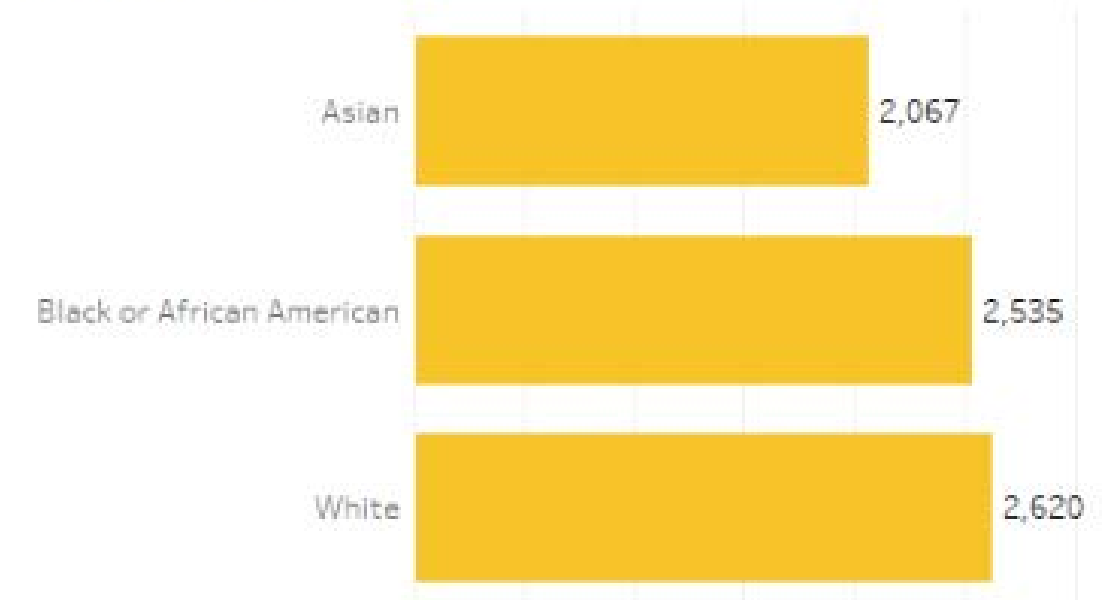
Demographic

Race

Count of Cases

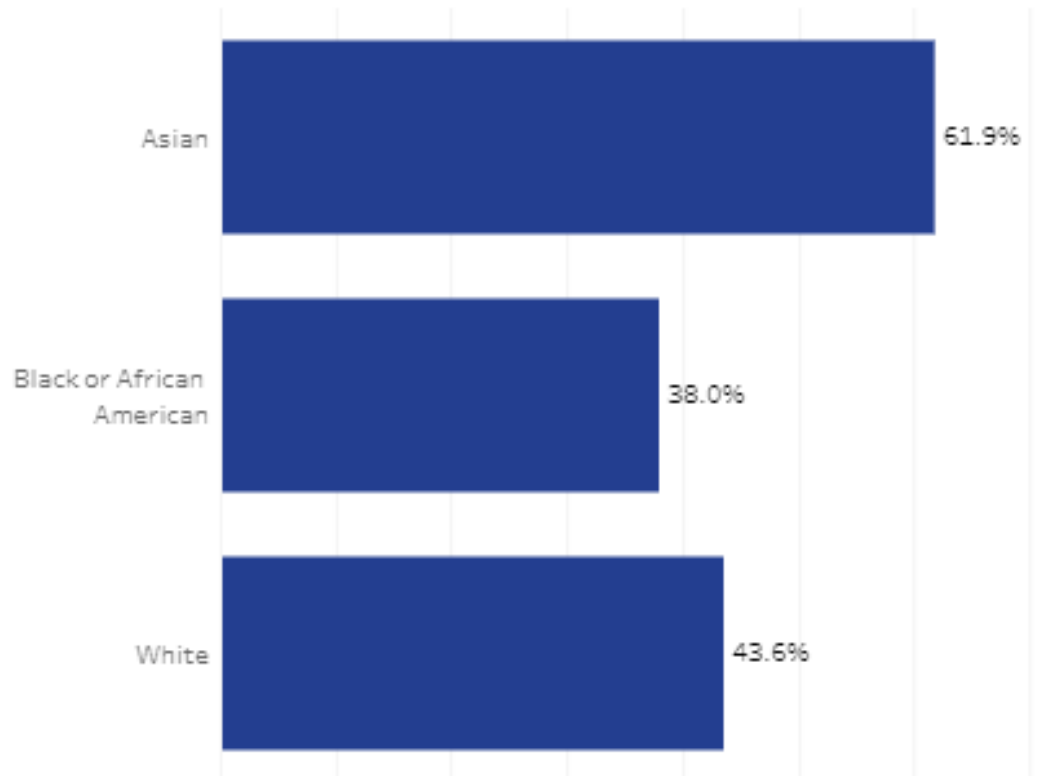


Per 10,000 Residents

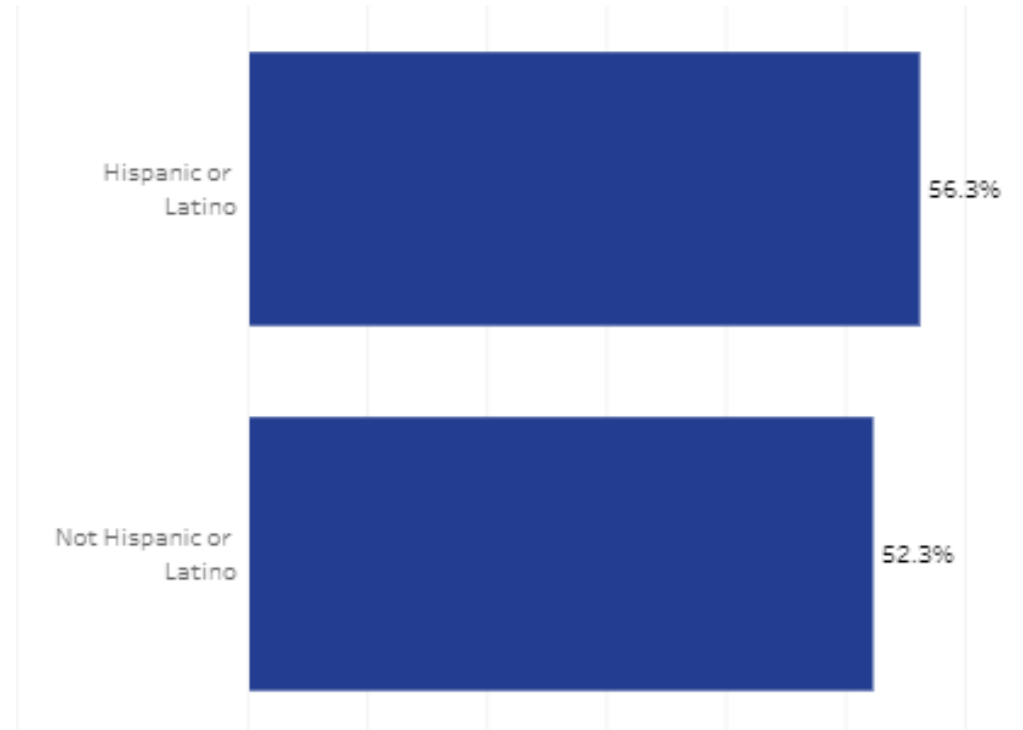


# COVID-19 Vaccination Rates by Race & Ethnicity

Percent of Race Completed Primary Series

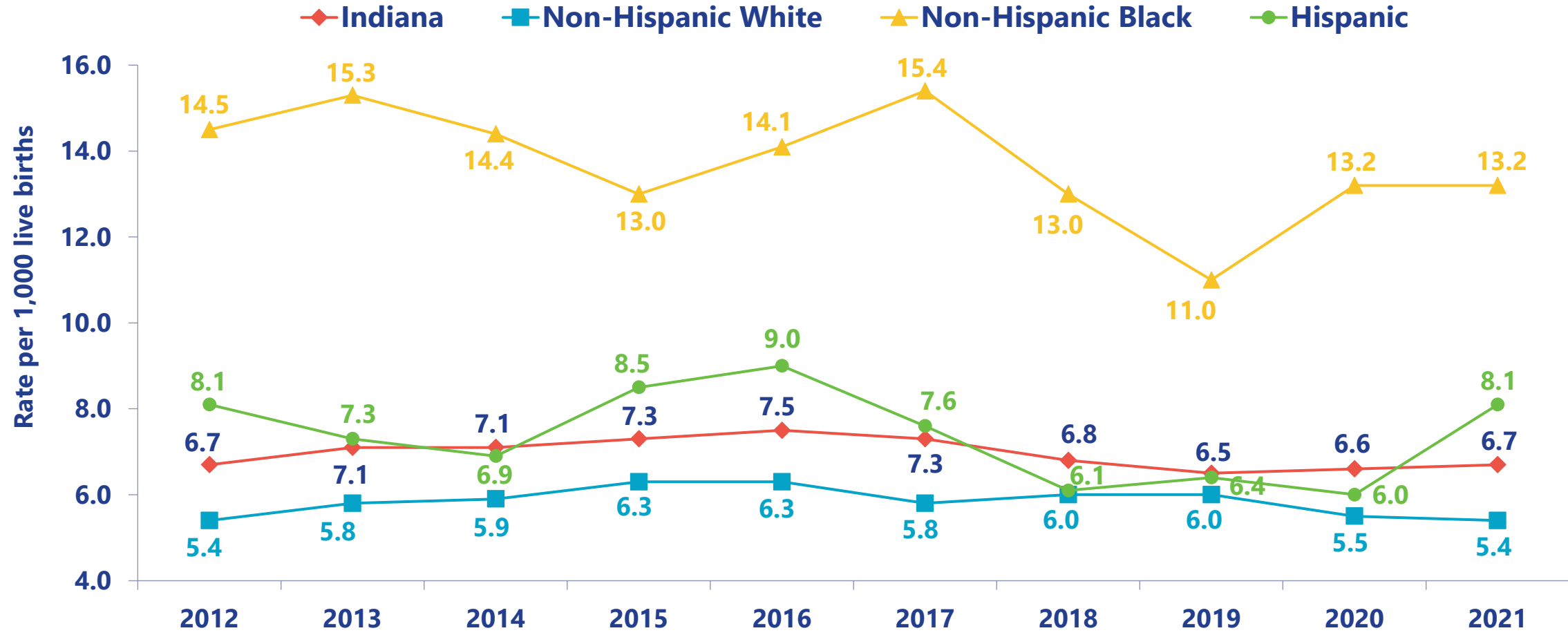


Percent of Ethnicity Completed Primary Series



# Indiana IMRs by Race and Ethnicity

2012-2021

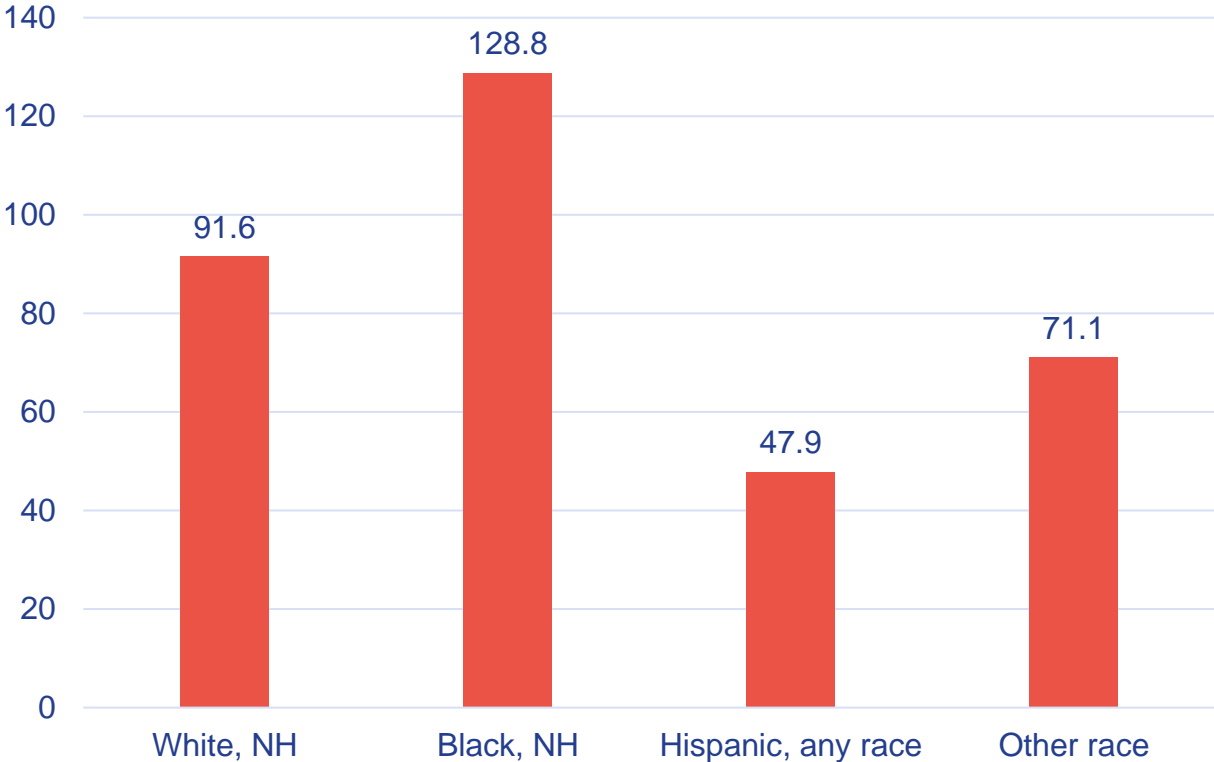


Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [January 9, 2023]  
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, DAT

# 2018-20 Maternal Mortality, Preg.-Assoc. Deaths

Race/Ethnicity	N	%
White, non-Hispanic	157	73.0%
Black, non-Hispanic	41	19.1%
Hispanic, any race	12	5.6%
Other	5	2.3%

Avg. three-year ratio of pregnancy-associated deaths by race and ethnicity, per 100,000 live births (*n*=215)

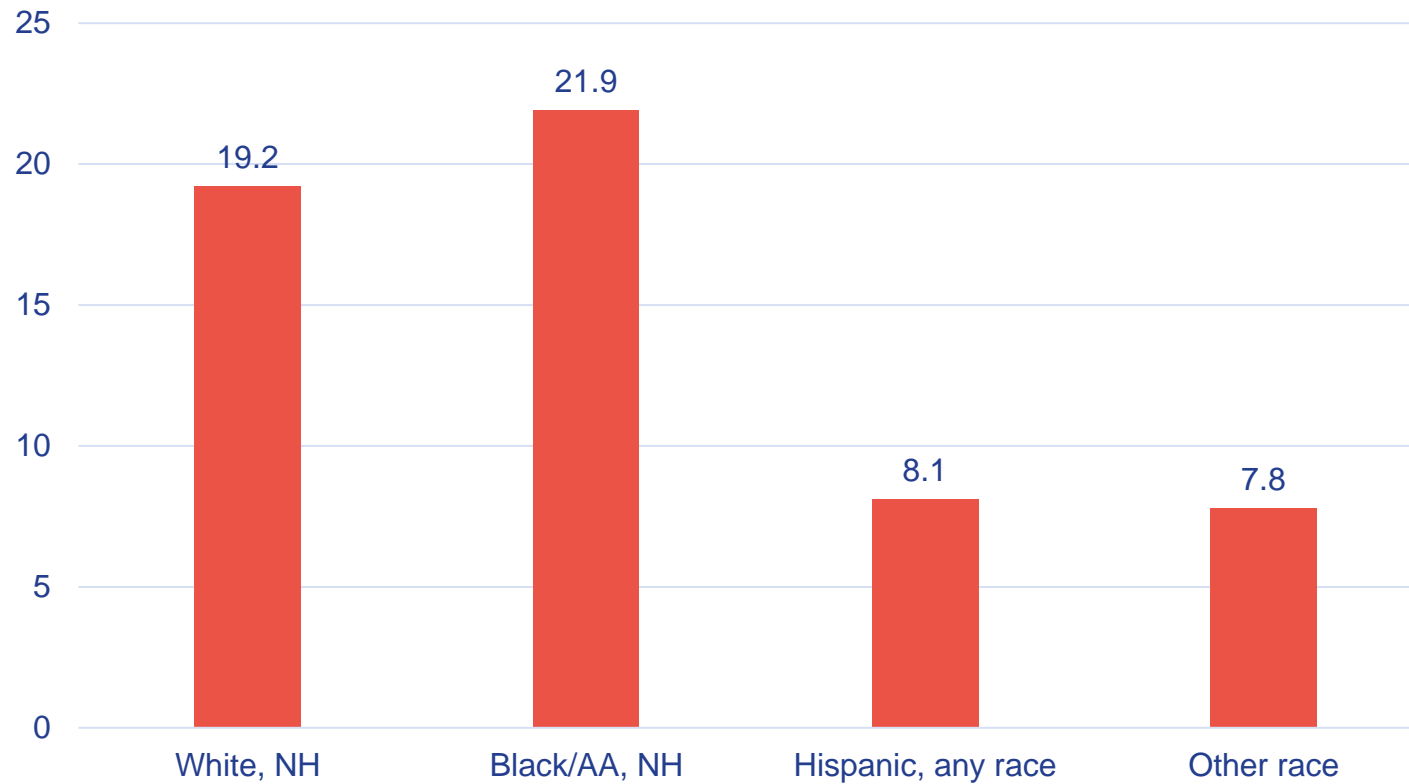


Source: Indiana Department of Health, Maternal Mortality Review Committee, 2018-2020



# 2018-20 Maternal Mortality, Preg.-Rel. Deaths

Avg. three-year ratio of pregnancy-related deaths by race and ethnicity, per 100,000 live births (n=43)



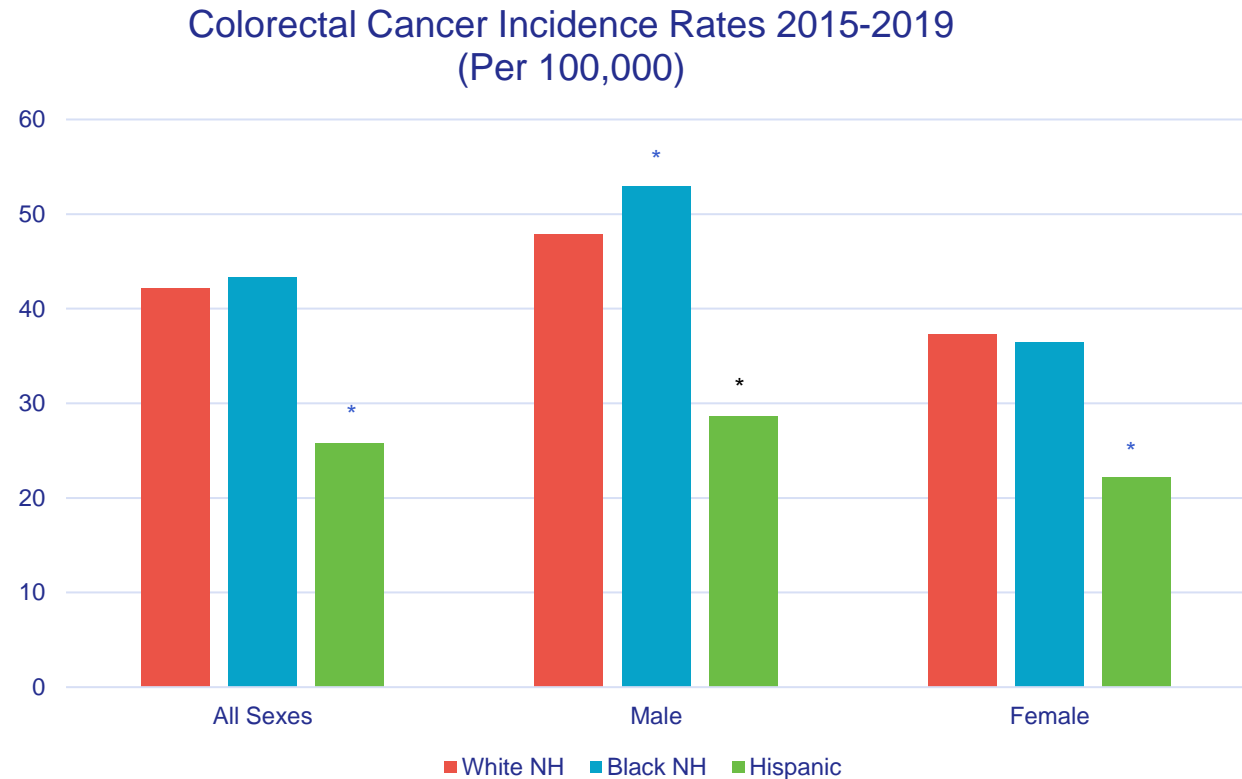
# Colorectal screening 2016-2020

Colorectal Screening	Adults Aged 50-75 Who Have Ever Had a Sigmoidoscopy or Colonoscopy	Adults 50-75 Who Have Followed the USPSTF Colorectal Screening Guidelines
Urban	68.3%	68.1%
Rural	64.6%	64.8%

According to BRFSS 2016, 2018, and 2020 combined data rural counties had statistically significant lower rates of colorectal cancer screenings across multiple screening measures compared to urban counties (5).

# Colorectal Cancer Incidence

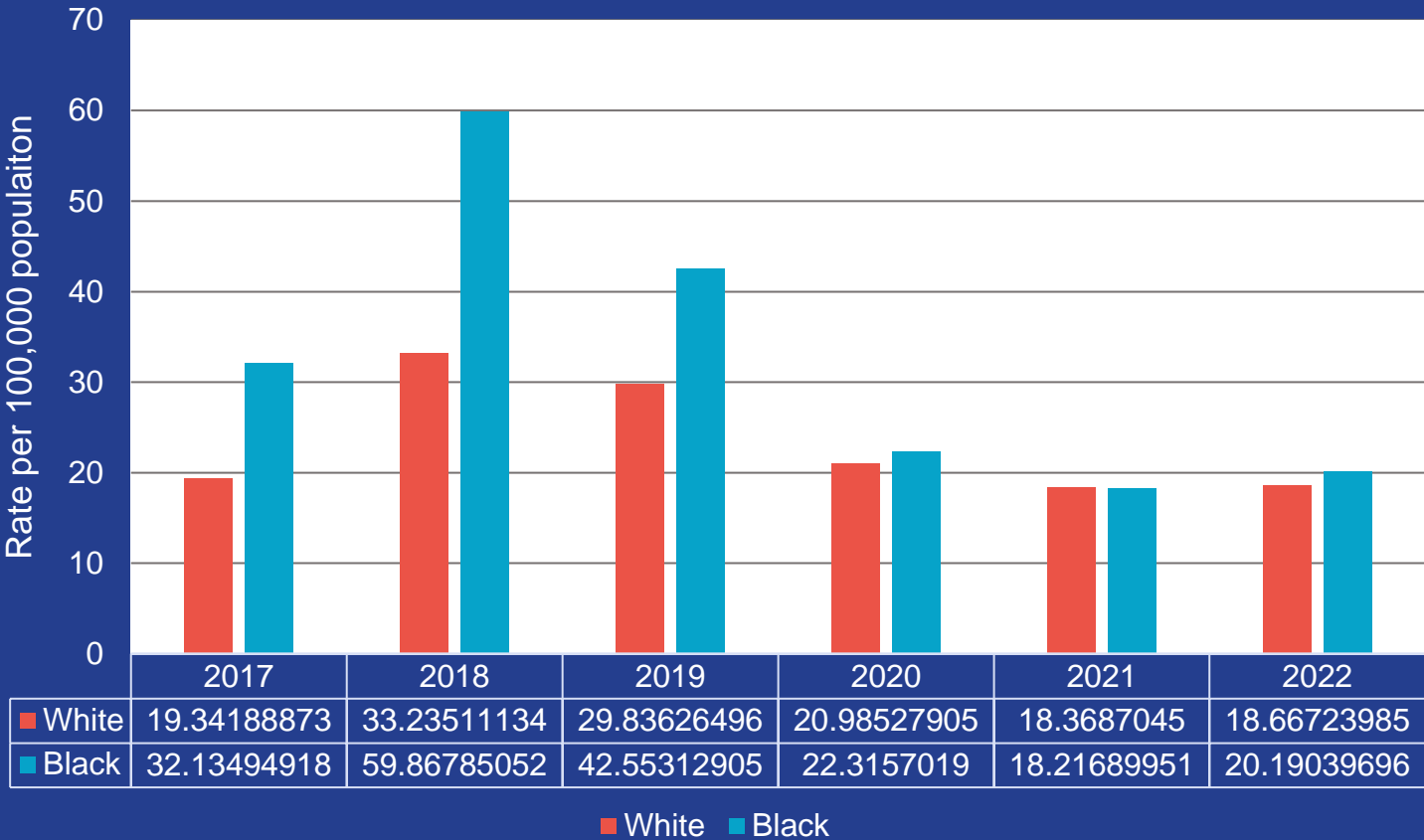
- Hispanics are more likely to be diagnosed with diabetes, a risk factor for colorectal cancer.
- Hispanics are also less likely to be diagnosed with colorectal cancer due to reduced screening rates and access to timely follow-up treatment.
- Black individuals have the highest colorectal cancer incidence and mortality in Indiana and the US.
- Men have much higher rates than women in Indiana and the US (6).



\* Bars with an asterisk represent a statistically significant difference between rates compared with their white NH counterpart

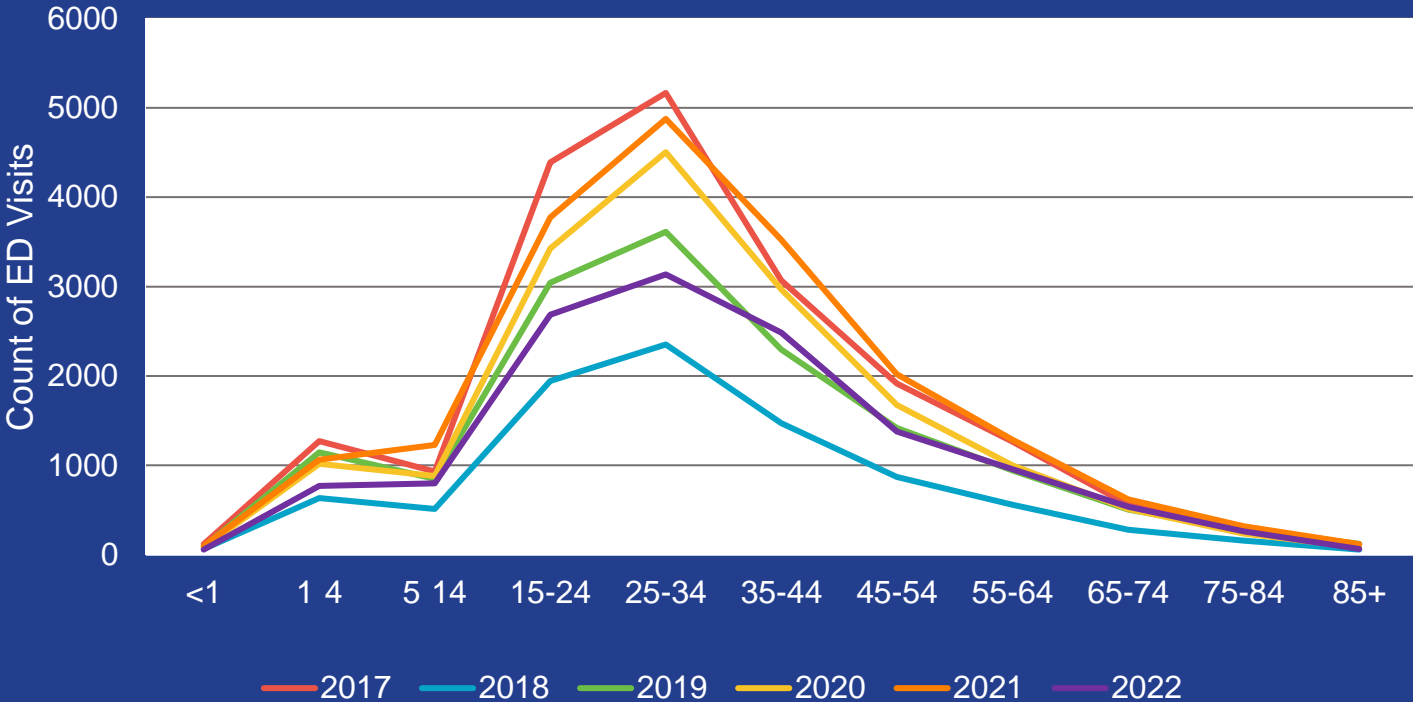
# Deaths due to Any Opioid Drug Overdose in Indiana

- Rates for the Black population in Indiana are higher than those for the White population for all overdose-related ED visits, overdose-related hospitalizations and opioid-involved overdose deaths in the years provided



# ED Visits due to Any Drug Overdose in Indiana

- The 25-34 age range is more likely to be seen in the ED for overdoses than any other age range in the years provided



# Connecting the Dots

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- We must look at health equity, social vulnerability when we address the health of our state
- GPHC funding addresses SVI – more money for those with lower life expectancy/higher SVI
- Counties with poorer metrics often lacking access to public health services – goal is to level playing field so where you live doesn't determine your access to core PH services

# Summary & Next Steps

---

- Every Hoosier deserves access to core public health services
- Public health services are best delivered locally by trusted partners in community
- Investing in public health today helps ensure economic security and prosperity tomorrow through retention of a healthy, skilled workforce, emergency preparedness, and better health outcomes
- We can't afford NOT to invest – so be a public health champion!

**Thank you!**





**JAY CHAUDHARY, DIRECTOR,  
INDIANA DIVISION OF  
MENTAL HEALTH AND  
ADDICTION**

**Mental Health Roundtable, FSSA**



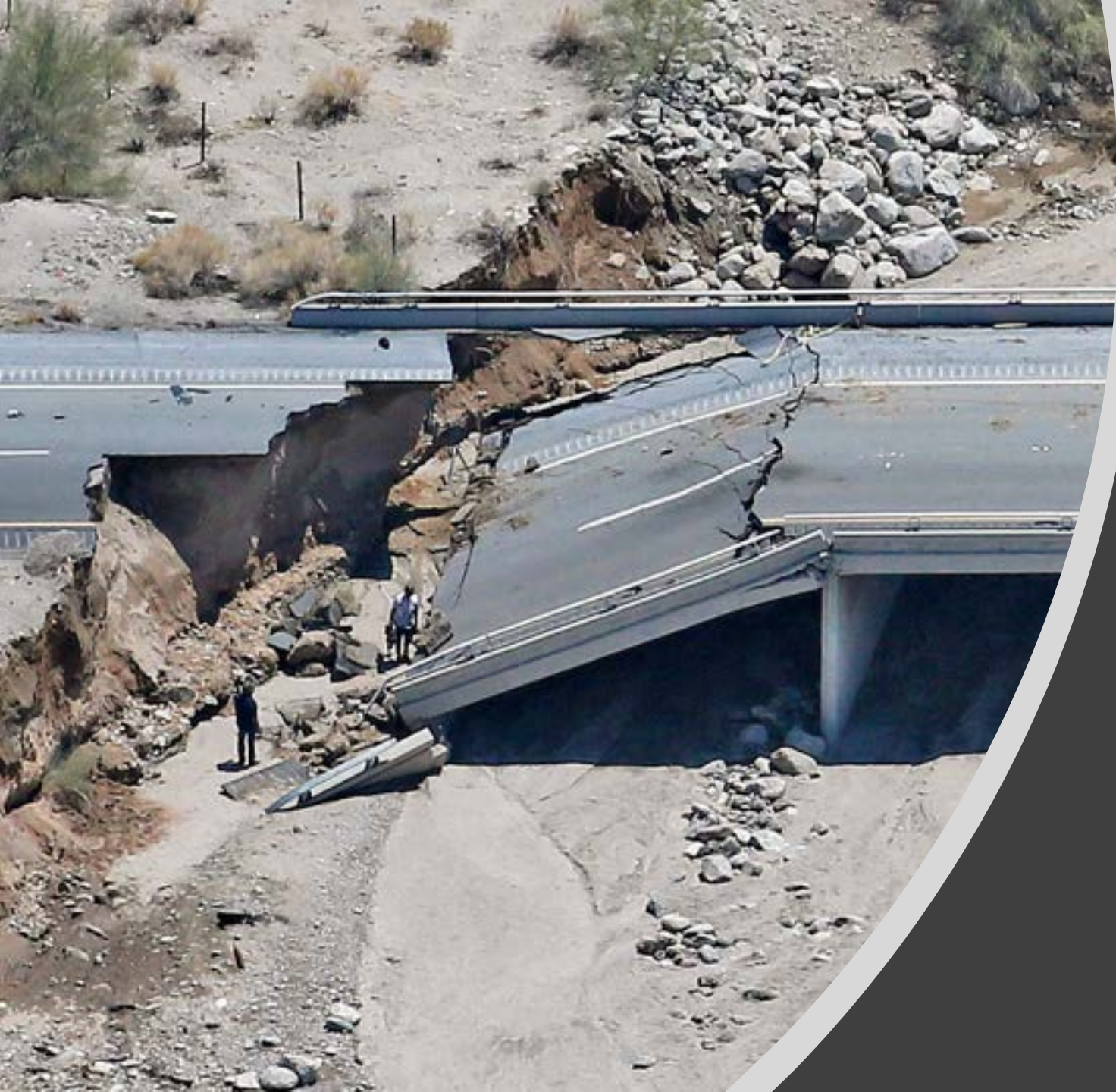
Why is this so hard?

TENSIONS:

Public Safety vs. Compassionate Care

Bodily Autonomy vs. Forced Treatment





Why is this so hard? (Pt.2)

9-8-8



CCBHC



National Council for Mental Wellness

Local Collaborations



Indiana's Roadmap

# 2023 DMHA Priorities

Build Infrastructure

Grow Workforce

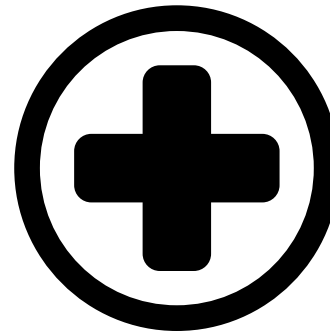
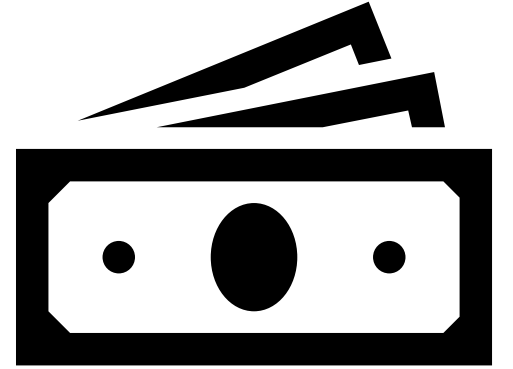
Quality Improvement



**Division of Mental  
Health and Addiction**

# What if there was a way to

- Keep people with mental illness out of jails and the ED
- Let police do police work
- Divert people away from the justice system and into treatment
- Save hundreds of millions of dollars



# 988 is More than a Number: It's a Chance to Transform Crisis Care



Someone to contact



Someone to respond



A safe place for help

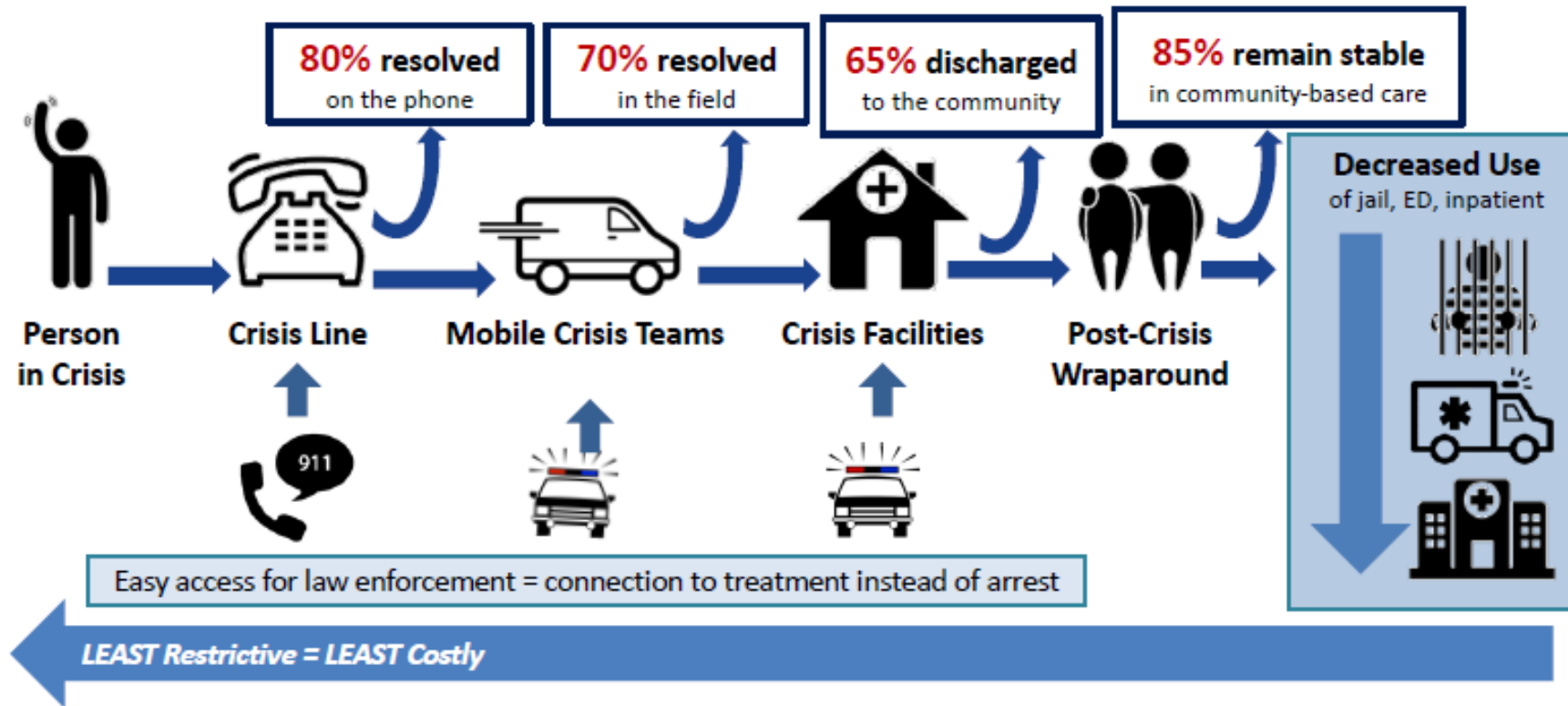
STATE INFRASTRUCTURE CONNECTING THE THREE

***A system capable of serving anyone, anytime, anywhere***

# Putting it all together ...

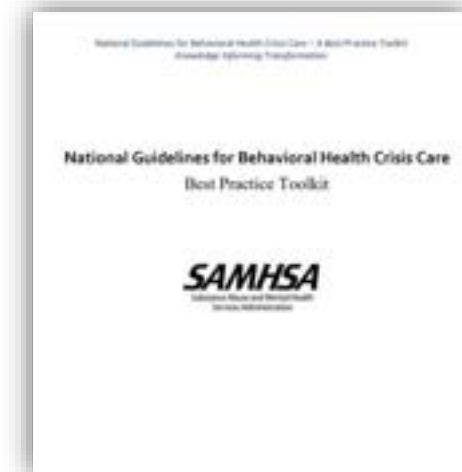


## Crisis System: Alignment of services toward a common goal



Balfour ME, Hahn Stephenson A, Winsky J, & Goldman ML (2020). *Cops, Clinicians, or Both? Collaborative Approaches to Responding to Behavioral Health Emergencies*. Alexandria, VA: National Association of State Mental Health Program Directors. <https://www.nasmhpd.org/sites/default/files/2020paper11.pdf>

*The above image is a reproduced slide from the April 2, 2021  
Congressional Briefing: Mental Health is Not a Crime:  
How 988 and Crisis Services will Transform Care*







## **Invest \$100 million in crisis care and save:**

- \$260 million in psychiatric inpatient spending,
- \$37 million in ED costs,
- 45 years of psychiatric ED boarding hours, and
- 37 full-time equivalents of police officer time and salary

# Certified Community Behavioral Health Clinics

# What is a CCBHC?

CCBHCs provide a **comprehensive range of mental health and substance use services**. The CCBHC model alleviates decades-old challenges that have led to a crisis in providing access to mental health and substance use care.



# THE CHALLENGE VS THE CCBHC SOLUTION

## THE CHALLENGE

Current system forces complex individuals into a predetermined treatment pathway



Allow for building custom treatment pathways



## THE CHALLENGE

BH challenges touch on many different systems, but collaboration is difficult



Allows for pathways to strengthen entire ecosystem (schools, criminal justice, etc)



## THE CHALLENGE

We don't know how we are doing



Radical data transparency



# Future Directions & Final Q&A

# *THANK YOU*

To contact us, please reach out to Aubrey Anderson at [adams339@purdue.edu](mailto:adams339@purdue.edu).

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