A blue ribbon graphic that forms a large, stylized letter 'P' on the left side of the slide. The ribbon is a medium blue color and has a darker blue shadow or fold on its right side, giving it a three-dimensional appearance.

Peeling Back the Onion: Unmasking COVID-19, Racism, and Health Disparities in Pennsylvania

2021 Community and Public
Health Conference

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Villanova University, M. Louise
Fitzpatrick College of Nursing

- **December 31, 2019:** China reported a cluster of cases of pneumonia in people associated with the Huanan Seafood Wholesale Market in Wuhan, China.
- **January 19, 2020:** a 35-year-old man in Snohomish County, Washington, with respiratory symptoms and had visited Wuhan.
- **March 6, 2020:** first reported cases in Pennsylvania in Wayne & Delaware Counties – related to travel in US and Europe.
(895,121 7APR2021)



Vulnerabilities to Severe COVID-19 Disease

CDC List of Risk of Severe COVID-19	Pennsylvania Health Indicators
Older adults (≥ 65 y/o)	8 th nationally older adults (18.7%)
Pre-existing conditions Renal, CVD, Respiratory, DM, Cancer	Leading cause of death (1 Heart Disease, 2 Cancer, 4 Stroke, 5 Resp Disease, 7 Diabetes) (CDC)
Obesity (> 30 kg/m ²)	Obesity 33.2% adults (CDC, 2019)
Smoking	Smokers (17.3% adults, 24.4% high school students e-cigarettes, 2020)
Pregnancy	Fertility Rate: 56.3/1000 women 15-44 y/o
Downs Syndrome	Downs Syndrome (5.8% cognitive disability, 2019)

Other vulnerabilities?

- Educational attainment
- Income
- Access to fresh and healthy food
- Access to health care
- Air Quality
- Immigration status (trust, language)
- Race/Ethnicity (Black, Latino)
- Residential situation (ownership, # people, housing security)



04/28/



Educational Attainment

- Health Literacy
- Scientific Literacy
- Employment Opportunities

Income

- Determines where you live
- Access to healthy food
- Access to health care
- **COVID-19:** Racial & ethnic income disparities: 38% excess death among African Americans



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Access to Fresh and Healthy Food

- US: 11% food insecure
- 23.5 million Americans live in food deserts.
- Association between food deserts and CVD

Access to Health Care

- Low-income communities
- **COVID-19:** 14% would not seek health care if experiences early Sx.
- Non-white, young adults (under 30), high school education, or earn less than \$40,000/year



Air Quality

- Increased risk of Respiratory & CVD diseases, and cancers.
- Relationship between high rates of **COVID-19** and high levels of air pollution (most frequently PM 2.5)

Immigration Status

- Understanding complex US health system.
- Language and cultural barriers.
- Trust in health system and providers.



Race & Ethnicity

- Latinos and African Americans less likely to have health insurance.
- Negative experiences of discrimination within the health system.
- African Americans more likely to live in high-poverty communities.
- **COVID-19** NYC: Latinos 29% population – 34% deaths. African Americans 22% population – 28% deaths.
- **COVID-19** US: African Americans 13% of population, 32% deaths





Residential Situation

- Environmental risks of housing and neighborhood
- Access to resources

SDH Vulnerabilities to Severe COVID-19 Disease

Vulnerability	Pennsylvania Health Indicators
Race and Ethnicity Immigrants	Black: 12%, Latino 7.8%, Asian 3.41% 7% of PA population
Owner-occupied housing Homeless Housing insecure	68.9% 13,990 on any day (2019) 24% (1.6 million Pennsylvanians, 2020)
High school graduate or higher Bachelor's degree or higher	90.5% (34.69% just HS) 31.4%
Persons living in poverty	12% (Latino 28.1%, Black 26%)
Persons without insurance	7.0%
Air Quality	Grade C-F in urban and surrounding suburban counties. Fracking – many do not have local air monitoring (2020)

—

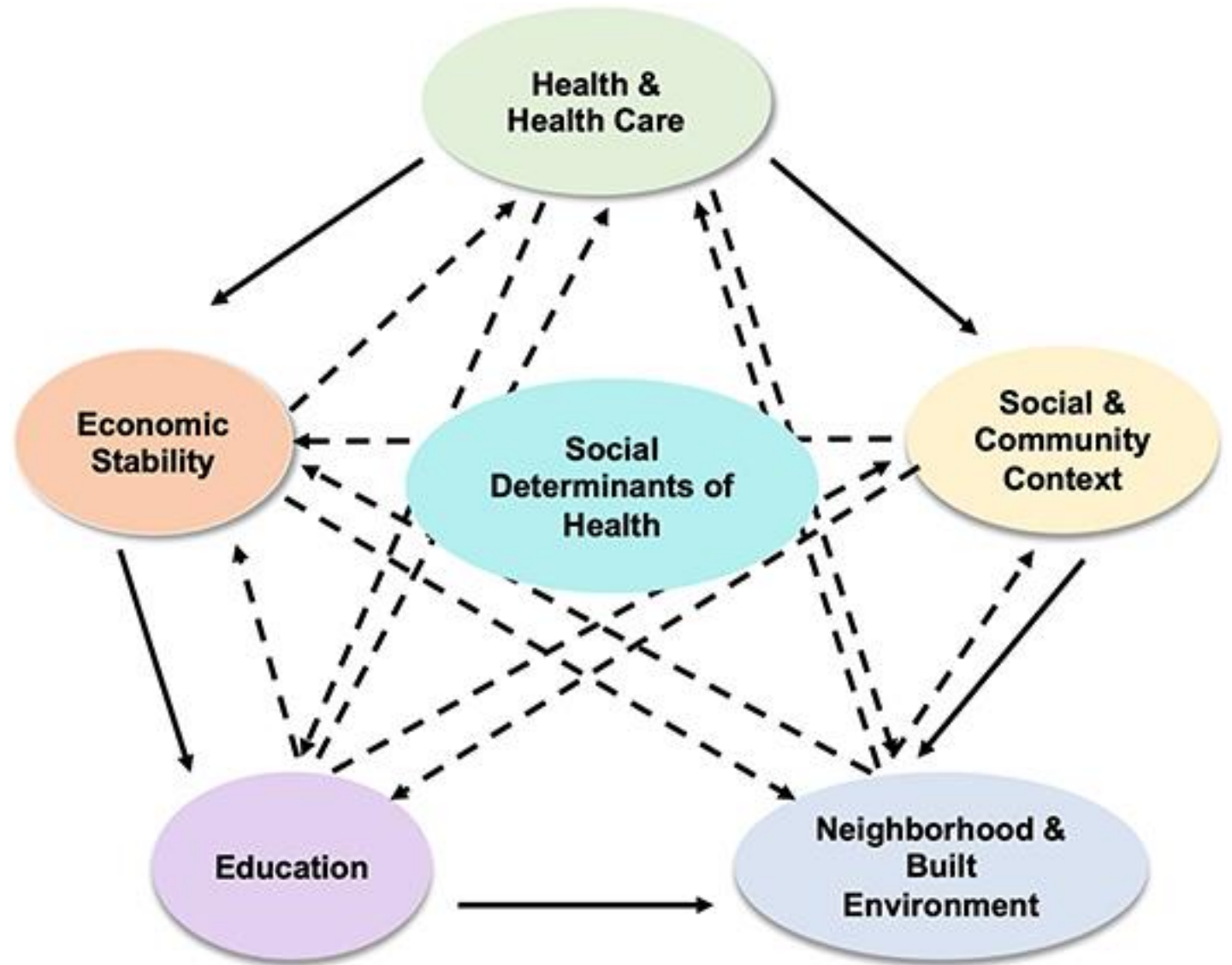
Was this a surprise?

- to public health professionals and agencies?
- to the public?





Social Determinates of Health



County	Racial & Ethnic % of county population	Persons living in poverty
Centre County	White (87.9) Black (3.7) Latino (3)	15.9%
Indiana County	White (94.8) Black (2.8) Latino (1.4)	14%
Cumberland County	White (88) Black (4.7) Latino (4.3%)	7.2%
Philadelphia	White (44.8) Black (43.6) Latino (15.2)	23%
Allegheny County	White (79.9) Black (13.4) Latino (2.3)	10.8

Change the dialogue

- And our funding.
- On average, OECD nations spend \$2 on social services for every \$1 on health care. The U.S. spends 55 cents/dollar.





We must stop!

- Talking
- Teaching
- Researching


.....without action.









A close-up photograph of a person's hands peeling a yellow onion on a wooden cutting board. The person is using a small knife to remove the outer layers of the onion. The onion is partially peeled, showing the white flesh underneath the yellow skin. The cutting board is made of wood and has some onion peels scattered on it. The background is slightly blurred, showing a kitchen counter and a bowl.

Acknowledge and
address our history
of structural
racism.....



1941

- ▶ Left high school at 17 to serve in a segregated U.S. military.
- ▶ Returned home and was eligible to the GI bill benefits.
 - ▶ Education
 - ▶ Low-interest loans
 - ▶ Guaranteed mortgage loans
- ▶ Earned a GED & Bachelor's Degree in Accounting at Temple University
- ▶ Married, bought a brand-new house in 1953 with a guaranteed low-interest mortgage.
- ▶ Sent his children to a predominantly white highly ranked Pennsylvania public school.
- ▶ All three children were well-prepared when they attended college.

1941

- Served in a segregated military
- Returned home and was eligible to the GI bill benefits.
 - Education
 - Low-interest loans
 - Guaranteed mortgage loans
- Many offices that managed the benefits made it difficult for Black men to access their benefit.
- Subject to Redlining – practice of making loans difficult for people living in neighborhoods of color.
- Black veterans relegated to urban settings or areas of low housing value.
- Children attended lower performing schools and lower financed schools.



GI Bill

- **Business loan**

 - Improved income


- **Education programs**

 - Improved income

- **Loans to buy houses**

 - Move from
environmental risks
Better schools



A photograph of a busy school hallway. In the center, a young Black man in a blue button-down shirt and grey pants walks towards the camera, smiling, while holding a pink folder and a smartphone. To his left, a young white woman with long brown hair, wearing a white top and blue jeans, walks in the same direction, carrying a large grey bag. In the background, other students are walking away from the camera. On the right side of the hallway, a student with curly hair is seen from behind, holding papers. A grey recycling bin is visible on the right. The hallway has yellow walls and a light-colored floor.

Our educational
opportunities
influence our
health.

Where we live
matters.





Instead of talking amongst ourselves, we must engage others for solutions:

- Community members
- Official organizations
- Policy makers
- Health care



Change our Research Methods

- Using the science to develop interventions that work.
 - Translational Science
 - Community Based Participatory Research





Translational Science

- “the process of turning observations in the lab, clinic, and community into interventions that improve the health of individuals and the public.” National Institutes of Health Clinical and Translational Science
- Goal: Turning observations into tested, effective interventions for populations, sharing findings, and sharing health outcomes.

Community-based Participatory Research

- Community drives the research question.
- Community shares in data collection and analysis.
- Addressing issues that are important to the community.



Collecting Data in Clinical Setting

- Screening for SODH
- ICD-10 (International Classification of Disease, 10th Revision)
- Codes Z55-Z65 that relate to social and economic issues (education, housing, economic conditions, social environment)
- EMR (electronic health record)
- Data gathering and quality improvement



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Share our findings
beyond the walls of
academia

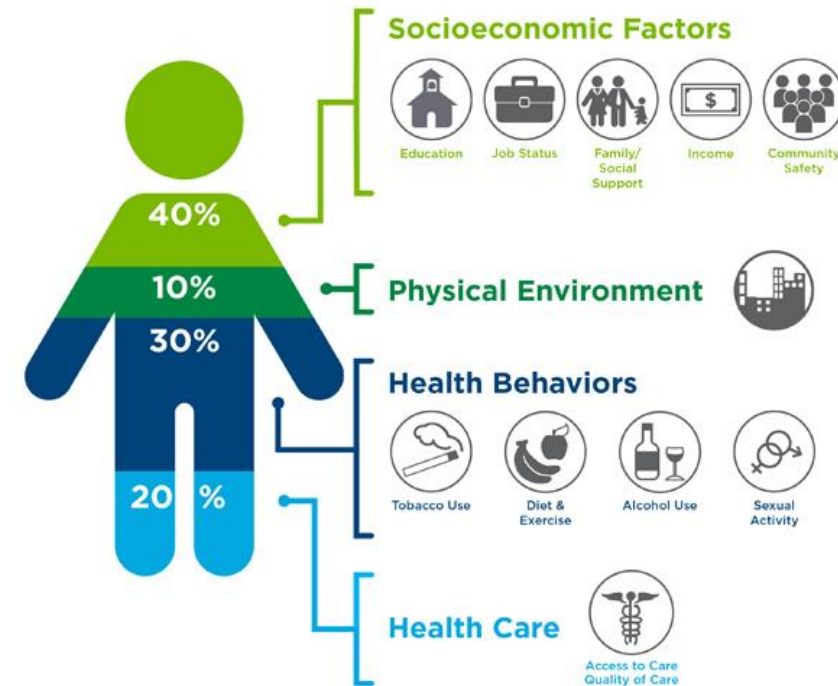
- Use media professionals at universities, organizations.
- Use social media.
- Become friendly with reporters.



Department or Centers for Social Determinants of Health

- **National Institute for Health** (National Institute of Minority Health and Health Disparities; NIH Rural Health Interest Group)
- **PA Department of Health** (Office of Health Equity)
- **County Health Departments** (in assessments or performance objectives)
- **Academic institutions** University of Washington: Cntr Health Equity, Diversity, & Inclusion

What Goes Into Your Health?



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

The Bridgespan Group

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Understand the
historical,
economic, and
structural context
of health to
develop structural
competence. –
Murray (2020)





Teach exemplars
of programs that
attempt to break
the historical,
economic, and
structural barriers
to health.





Founded by David Olds, PhD (Human development and family studies)

Nurse home visiting program for vulnerable first-time mothers.

At a total average cost of **\$9,933** per family.

Outcomes:

48% Reduction in child abuse

52% Reduction in ER visits (accidents and poisonings)

50% Reduction in language delays of child 21 months

79% less behavioral/intellectual problems at age 6

32% subsequent pregnancies

82% increase in months employed

59% reduction in child arrests at age 15

State and federal cost savings due to NFP will average **\$26,179** per family served or 2.6 times the cost of the program.

NFP's total benefits to society equal **\$62,890** per family served (6.5 to 1 benefit-cost ratio for every dollar invested in Nurse-Family Partnership)





FNP Offices in Pennsylvania

Bethlehem

Philadelphia

Pottsville

Reading

York

50 PA Counties Served





Together

for West Philadelphia



- Collaboration with Main Line Health System (Philadelphia), local academic institutions, and community and faith organizations in West Philadelphia to meet health impacts of SDH:
- Health Equity, Education, Food Justice, Housing, Employment, and Senior Well-Being

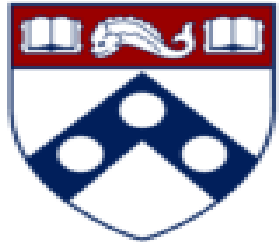


A BETTER CHANCE

Opening the door to greater educational opportunities since 1963.

- Academically talented middle & high school students of color
- Demonstrates leadership
- Students live at home or in the community where the school is located.
- 96% enter college
- 83% earn a Bachelor's degree
- 50% earn graduate or professional degree.





CENTER FOR GUARANTEED INCOME RESEARCH Social Policy & Practice UNIVERSITY of PENNSYLVANIA

Who's receiving the \$500, and what's the impact?



70%
of recipients
identify as
female

\$1,800 recipients' median monthly
household income before SEED



37% of recipients identify as **Hispanic, Latinx, or of Spanish origin**



47%
White



28%
Black or African
American



11%
Asian



2%
American
Indian



2%
Pacific
Islander



10%
Other

43% of recipients are employed full- or part-time
20% are disabled, not working
11% care-takers
11% looking for work



Less than 2% of SEED recipients are unemployed and not looking for work

40%

of money is spent
on **food**

Merchandise makes up
25% of purchases, and
utilities about 11-12%

"My health feels a lot lot better. I was stressed out, my body was wearing out, you could tell my body was wearing out...I feel healthier, I have more energy, I'm able to just relax and have fun I guess have fun. Having fun with my kids, that's the biggest thing right now. It's only six months right now. Six months and it opened my eyes to a whole bunch of different things."

-- Tomas Vargas, SEED Recipient

SEED: The Stockton Economic Empowerment Demonstration



The guaranteed income alleviated financial scarcity creating new opportunities for **self determination, choice, goal-setting, and risk-taking**

"I could sustain myself until this new opportunity came around, and I was able to take it."



Partnership of 6 Commonwealth Agencies,
comprised of the secretaries of Departments
of:

- Aging
- Agriculture
- Community and Economic
- Education
- Health
- Human Services.

Responsible for promoting coordination,
communication, and collaborating with public,
charitable, and private leaders in food security.



A large group of people are gathered in a room with blue walls, some standing and some sitting in chairs. They appear to be at a community meeting or public consultation. The room has a drop ceiling and some framed pictures or maps on the wall. A large, semi-transparent circular graphic is overlaid on the left side of the image, containing text and a list of bullet points.

What do these programs have in common?

- Collaboration with other agencies.
- Engaging, listening to, and including targeted community input and leadership.
- Focusing on the goal to improve the SDH.





Thank you

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Health and the Environment

- Public health professionals have been aware of the health disparities of the populations that they serve which are largely influenced by the social determinants of health. The events of 2020 unmasked to the general public the combined impact of climate change, a pandemic, and the historical and structural impacts of racism. It is time for public health professionals to harness that awareness to move public health interventions forward to promote the health of all Pennsylvanians.