



Harris County
Public Health
Building a Healthy Community



#InvisibilityCrisis: Bring Public Health to the Spotlight

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Manhattan, KS
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#InvisibilityCrisis
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Chronic Disease



Food Safety



Emergency Preparedness



Environmental Health



Infectious Diseases



Injury



Social, Mental, and Emotional Wellbeing

EVERYTHING IS BIGGER IN TEXAS



Chronic
Disease



Food
Safety



Emergency
Preparedness



Environmental
Health



Infectious
Diseases



Injury



Social, Mental,
and Emotional
Wellbeing

Harris County: Big, Diverse & Complex

Harris County is the third most populous county with over **4.7 million** people spread over **1,778 square miles**.



Even Our Challenges: Mosquitoes, Obesity and Everything In-Between



HARRIS COUNTY, TX

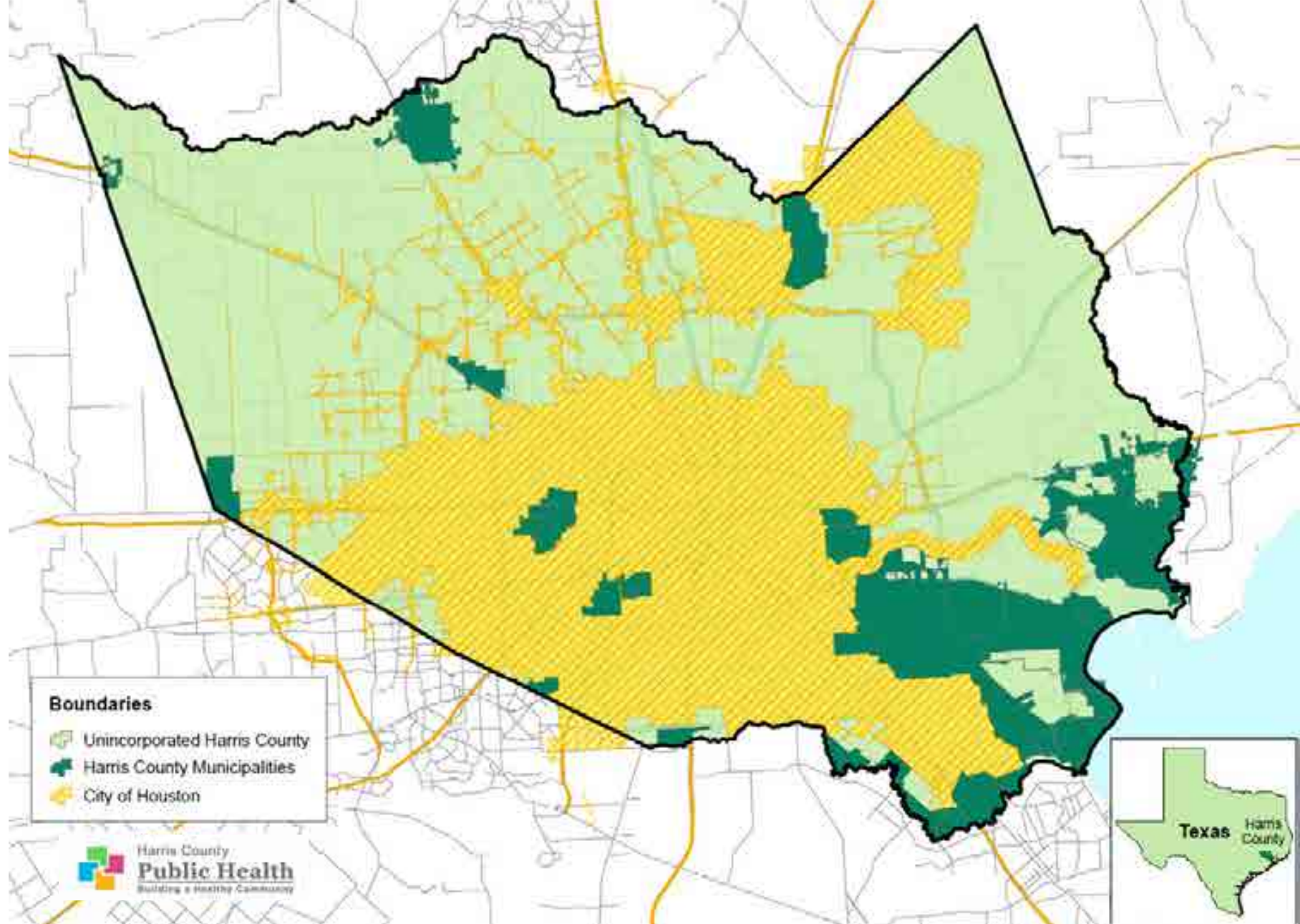
Population Growth from 1990 - 2016

U.S.A.	30%
Cook County	3%
LA County	15%
Harris County	67%

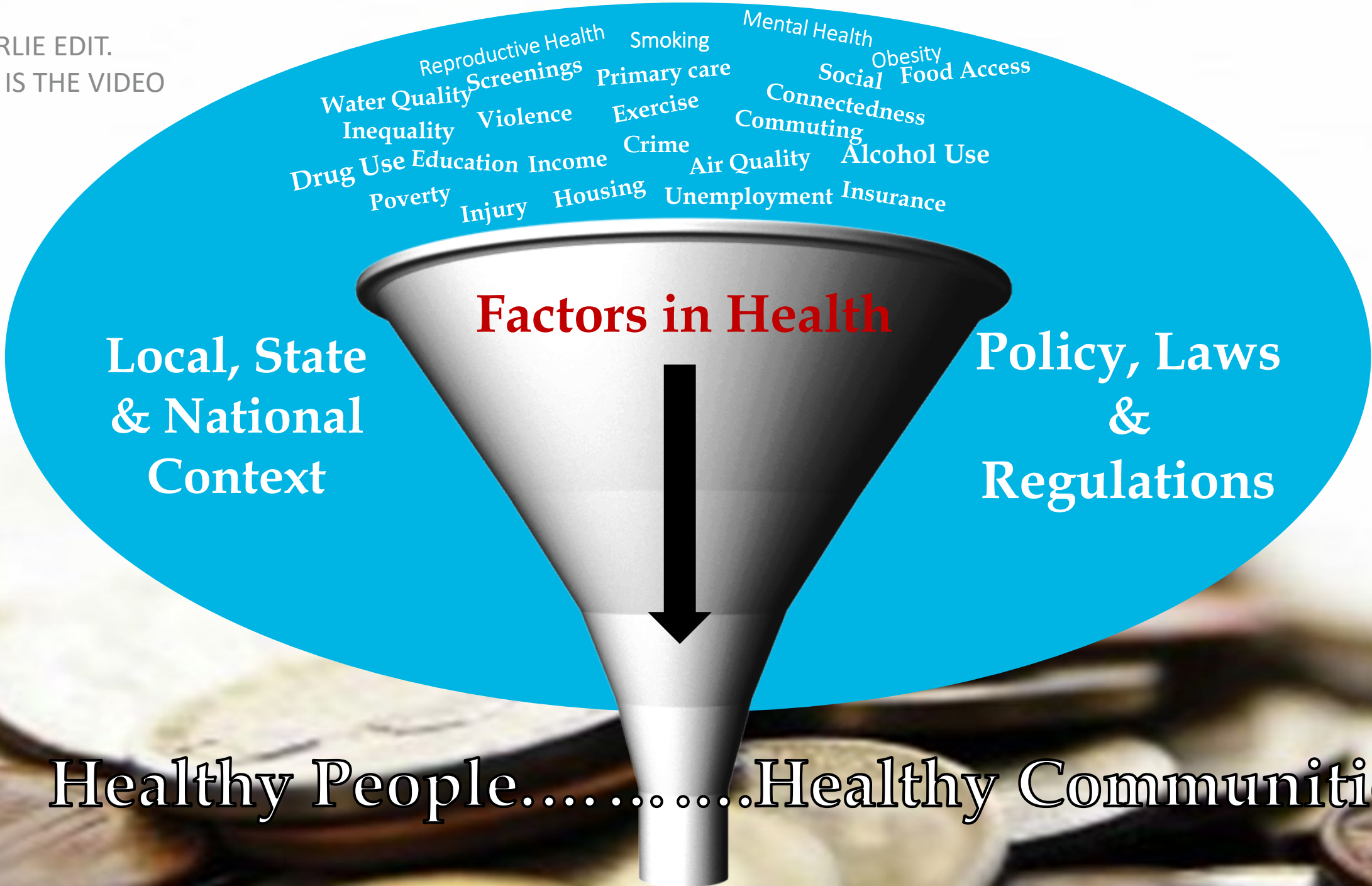
Population Size, 2016

Unincorporated	2.0M
City of Houston	2.2M
Other municipalities	500K

Source: Population Study, Harris County Budget Management Department, February 2016. Available at: <http://www.harriscountytexas.gov/budget/>



CHARLIE EDIT.
THIS IS THE VIDEO



The True Drivers of Health

*80% of
Health is out
of Health Care*





***“I diagnosed ‘abdominal pain’ when the real problem was hunger;
I confused social issues with medical problems in other patients, too.”***

—Laura Gottlieb, MD
San Francisco Chronicle 8/23/10

Public Health AND Healthcare



Public Health	Medicine
Focuses on populations	Focuses on the individual
Emphasizes prevention and health promotion for the whole community	Emphasizes diagnosis, treatment and care for the whole patient
Employs interventions aimed at the environment, human behavior, lifestyle and medical care	Employs provision of medical care
Stimulated by threats to the health of populations	Stimulated by needs of patients

"Public Health vs. Medicine," Harvey Fineburg, MD, PhD, Harvard University School of Public Health, 1999.







Framing Health



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Public Health is an Investment

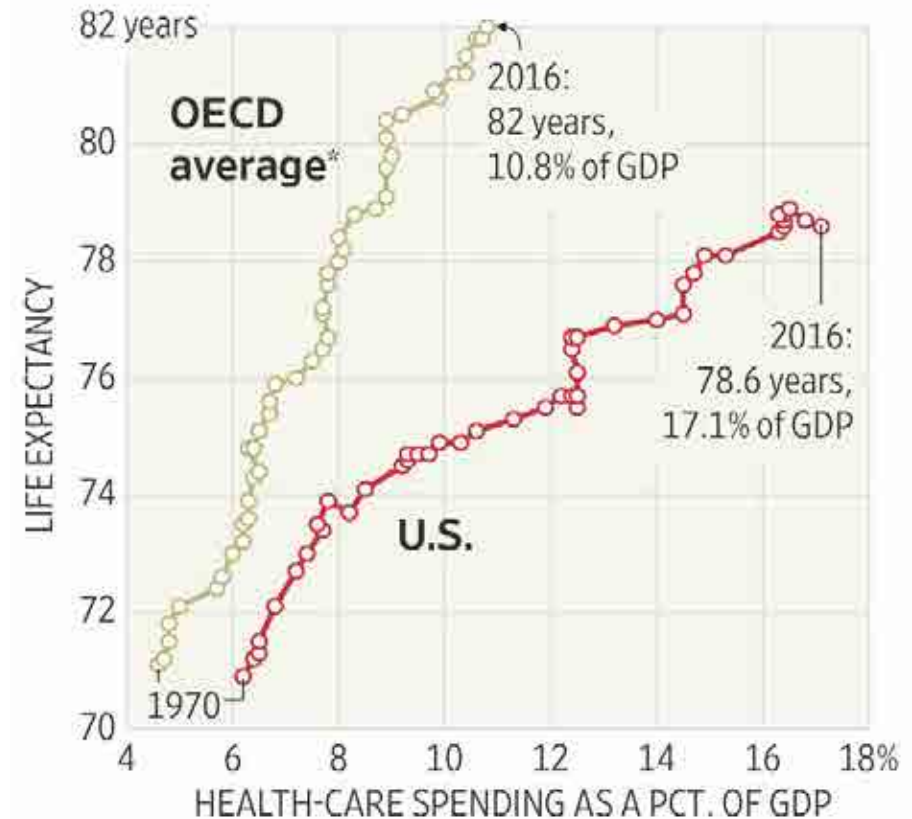
The U.S. spends \$2.5 trillion on health care every year.

\$8,086

is spent on medical care
per person per year.

Only \$251 is spent per person on public health measures that prevent medical conditions *before* they occur.

The U.S. spends more of its GDP on health care but has worse results than OECD nations



*Of 10 OECD nations with the largest per capita GDP for which data were available in all years

Source: OECD

OUR PREMISE: LLWWP

LLWWP: Health is a complex equation based on a number of inputs not limited to the clinic setting. Health takes place:

- Where people **Live**
- Where people **Learn**
- Where people **Work**
- Where people **Worship**
- Where people **Play**



Our Premise: Global Health Matters

Harris County:
Harris County has a population of about 4.7 million people. It is the most culturally diverse metropolitan area in the U.S., with a refugee and immigrant population of about 1.1 million and at least 148 languages spoken at home.

HCPH: Global Perspective
Harris County Public Health (HCPH) is the county health department for Harris County, Texas and its work in the community is globally significant. Harris County is home to the world's largest medical complex, the Texas Medical Center, one of the nation's busiest ports with global freight, the Port of Houston, and two international airports. This makes it a major hub for health, science, innovation, commerce and travel. HCPH operates the largest refugee health screening program in Texas as well as one of the nation's leading mosquito and vector control programs - both require a global health lens to bolster community resilience. Using global-to-local health approaches, HCPH advances One Health principles while building on partnerships with the London School of Hygiene and Tropical Medicine, the International City/County Management Association, National Academies of Sciences, Engineering, and Medicine, Rice Centers for Disease Control & Prevention, Microsoft Research, the Gates Foundation and the Consular Corp. of Houston representing over 90 countries.

HCPH Priority Public Health Issues:

- Food Safety
- Infectious Diseases
- Chronic Diseases
- Emergency Preparedness
- Injury
- Social, Mental, and Emotional Wellbeing

(713) 439-6000 | hcphtx.org | 2223 West Loop South, Houston, TX 77027

Global Connections
Increasingly, global health plays a key role in domestic public health practice. Whether responding to pandemics, Ebola, Zika or the latest infectious disease to broader global threats like geopolitical unrest or evolving climate conditions, **global health intersects with domestic health**. Through its three-pronged global health strategy based on global-to-local theory and foundational public health practice, HCPH is effectively positioned to operate in the global-domestic space. To advance its strategy, **HCPH continually seeks mentorship and partnership opportunities with global health leaders** to build community resilience with **enhanced focus on populations** where poverty, age, race/ethnicity, gender, traumatic experiences and other factors play a role.

Data and Surveillance
A global perspective begins with **monitoring global health trends**, including neglected tropical diseases, antibiotic-resistant diseases, and climate conditions. Currently, HCPH engages in active surveillance of infectious diseases in international travelers and patients in its Refugee Health Screening Program. HCPH is also developing capacity to more broadly monitor global health trends, including policy and practice responses from around the world for possible adaptation domestically in local communities.

Education and Policy Development
HCPH believes applying effective and proven strategies from the international community will improve local efforts to promote health literacy and pro-health strategies. **Efforts such as the HCPH Health Health Village, mobile health app, trainings designed to equip and mobilize community champions, and engagement with non-English speaking populations for emergency response education** all are informed by these strategies. Additionally, through **action-oriented educational conferences on One Health, Food Safety, Vector Control, Zika** and other topics, HCPH reaches across sectors and systems, assuming a convening role for thought leadership, education and system-level change.

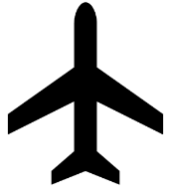
Access to Opportunity
Global initiatives will improve, for example, how **community health workers** can effectively reach community members in Harris County's diverse, multi-cultural population. With an increased focus on social determinants of health, HCPH develops **strategic partnerships** across sectors to integrate social services with health services to link residents to opportunities for employment, food and legal aid and housing while promoting literacy, learning and educational attainment.

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Our Premise: One Health Matters



More people, in more places



More travel, from more places



More vectors, and more cases



Chronic Disease



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Infectious Diseases



Injury

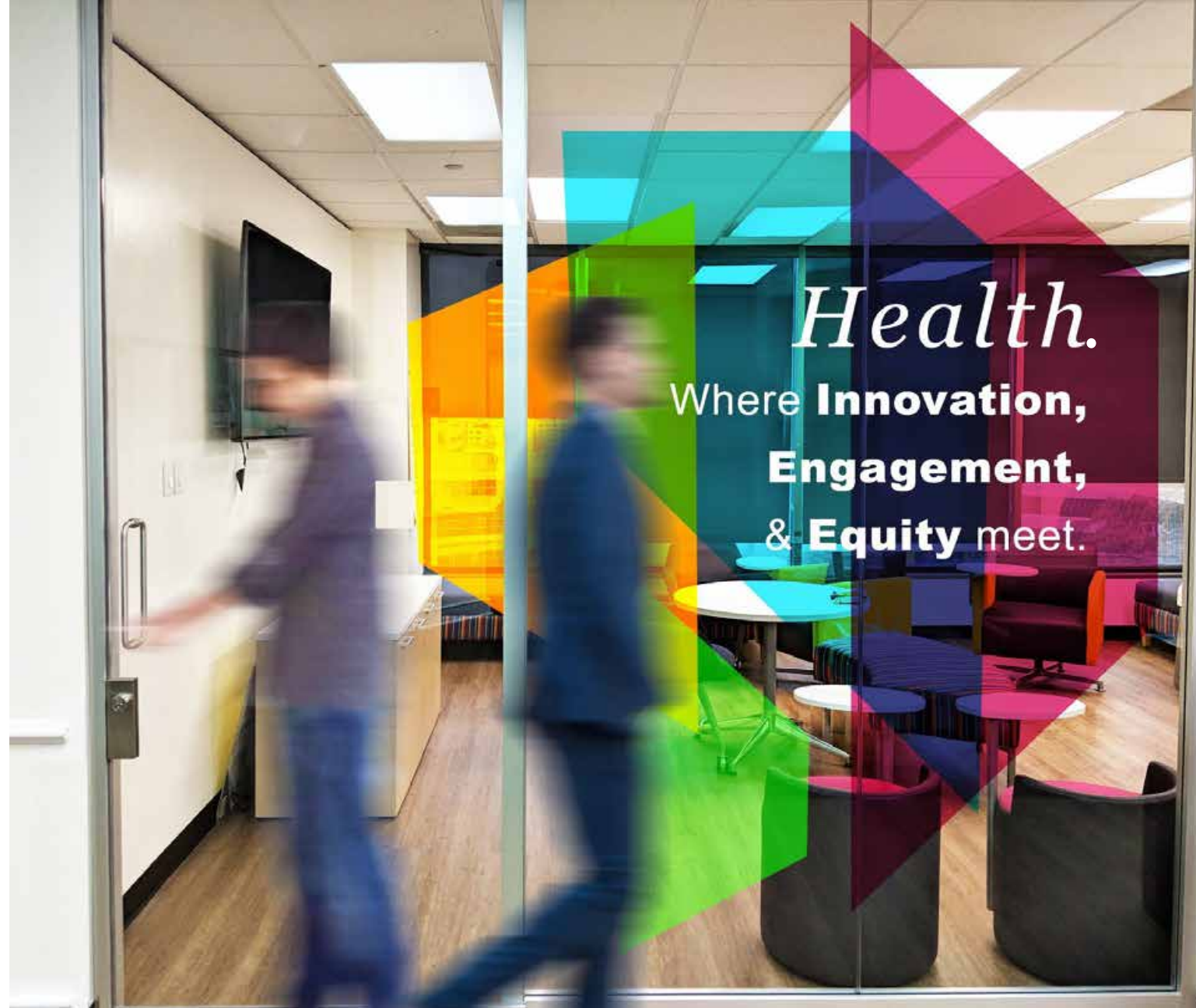


Social, Mental,
and Emotional
Wellbeing



#InvisibilityCrisis

Our *Road* to Health



I&E&E



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“Hi-Tech”_“Hi-Touch”



The Me: @ushahmd
The We: @HCPHTX

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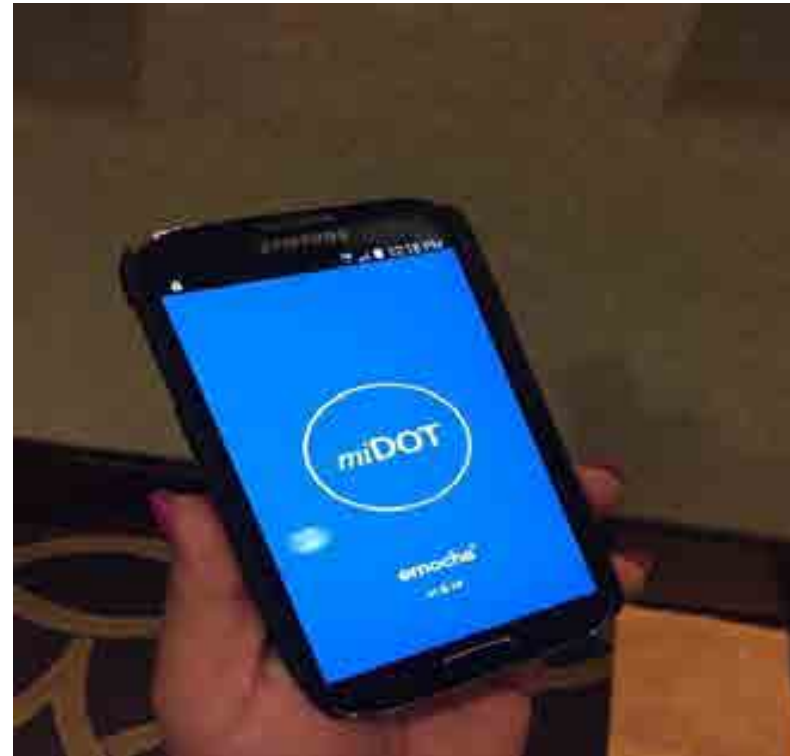


Social, Mental, and Emotional Wellbeing

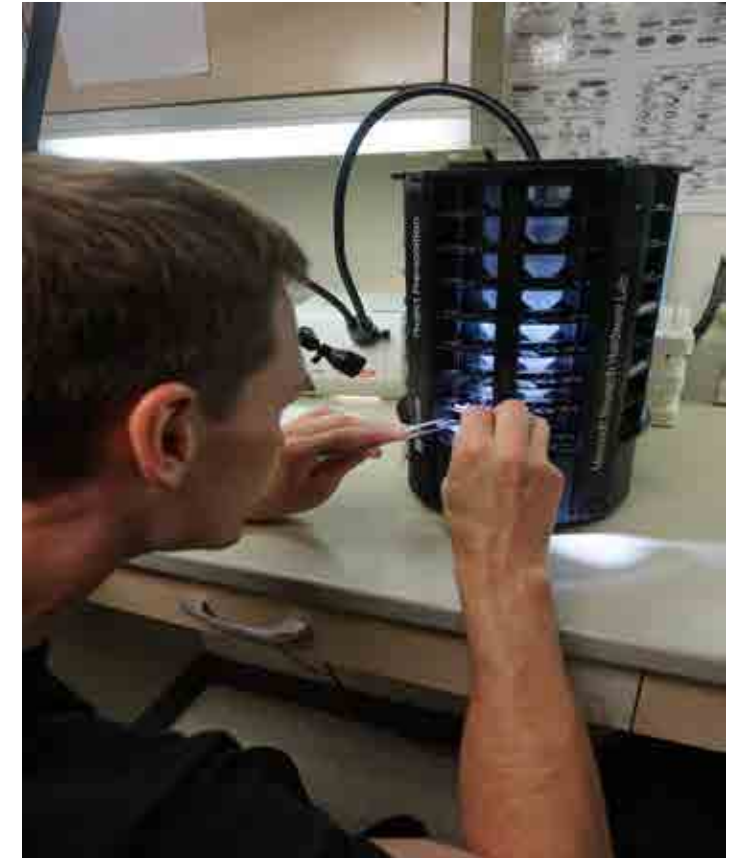
Hi-tech Innovation: From Apps to Traps



***The HCPH mobile app –
view and report real-time
concerns***



***Video Directly-Observed
Therapy for TB***

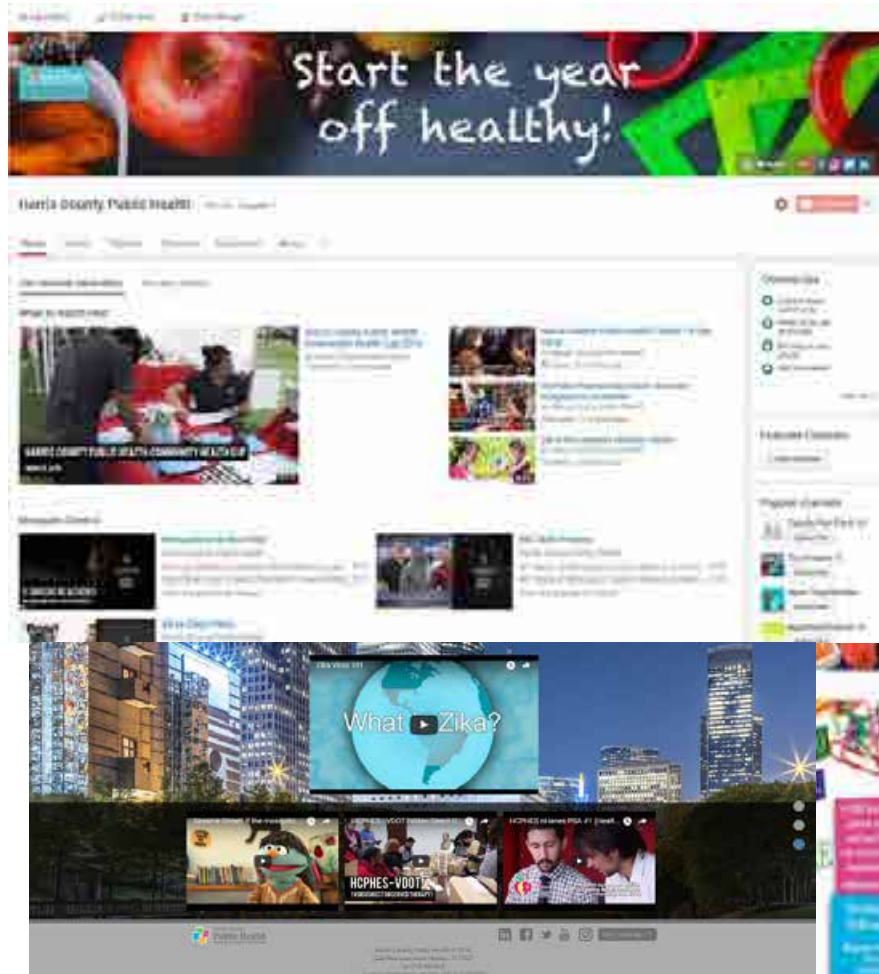


***“Smart” mosquito traps produce
real-time Big Data from the field***

Hi-Touch Engagement Opportunities



Engagement Through (Social) Media



Breaking News: Public Health is Inherently Political



FOR USE BY WHITE PERSONS
THESE PUBLIC PREMISES AND THE AMENITIES
THEREOF HAVE BEEN RESERVED FOR THE
EXCLUSIVE USE OF WHITE PERSONS.
By Order Provincial Secretary



BEACH AND SEA
WHITES ONLY

Vaccines Do Not
Cause Autism
Concerns | Vaccine
Safety | CDC



MARTIN LUTHER KING

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

Speaking before the Second National Convention
of the Medical Committee for Human Rights.
Chicago, Illinois. March 25 1966.



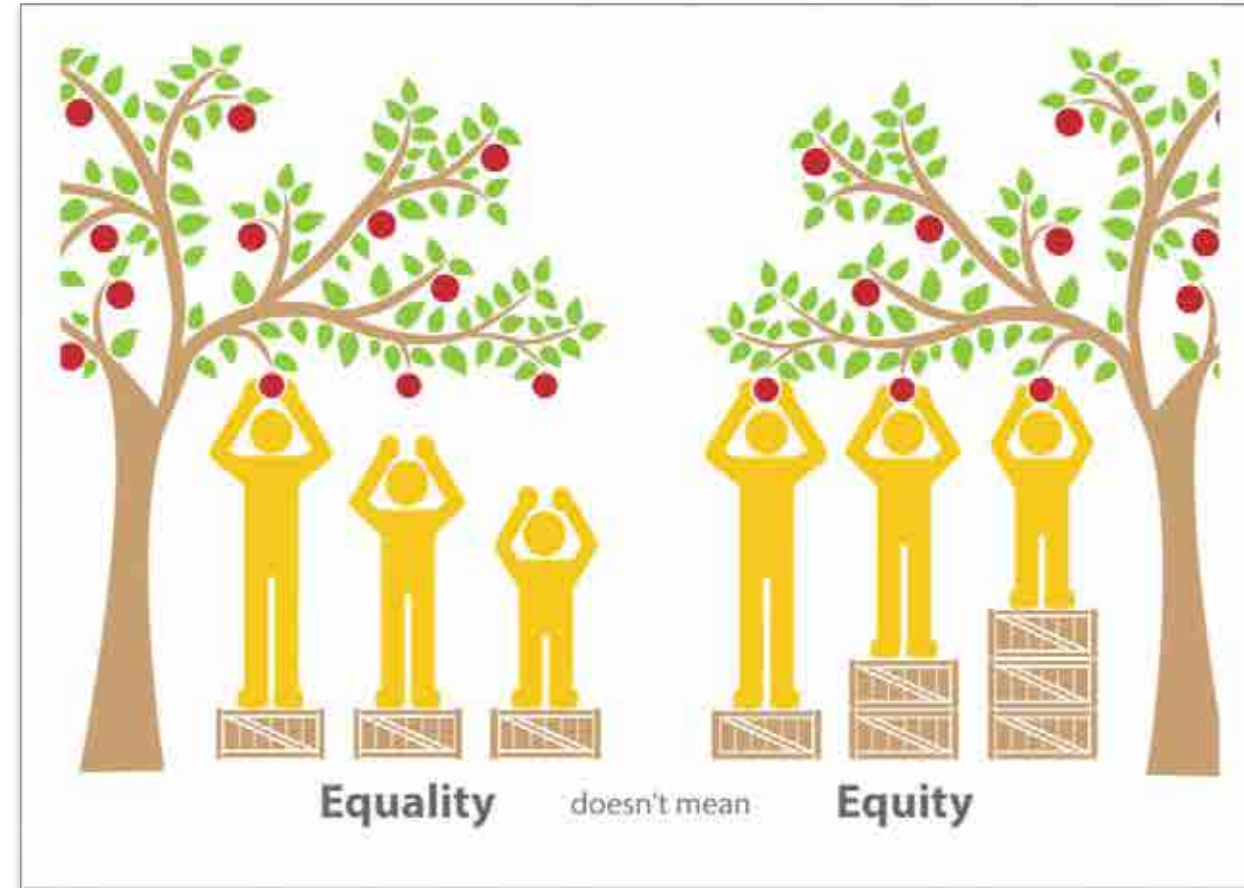


Equity



What is Health Equity?

A state in which every person has the **opportunity** to attain his or her **full health potential** and no one is disadvantaged from achieving this potential because of socioeconomic or environmental conditions



Equity: An Inside/Outside Strategy

“We often talk about [health equity] as an inside/outside strategy. The *outside* is building up capacity of residents to participate in the democratic process, become decision makers, shape policy and solutions, and change culture. *Inside* is trying to work within those institutions **to incorporate and institutionalize an equity lens in what they’re doing.**”

The California Endowment

Quoted in *Summarizing the Landscape of Healthy Communities: A Review of Demonstration Programs Working towards Health Equity*, Build Healthy Places Network

http://buildhealthyplaces.org/downloads/Summarizing-the-Landscape-of-Healthy-Communities_Full_Report.pdf



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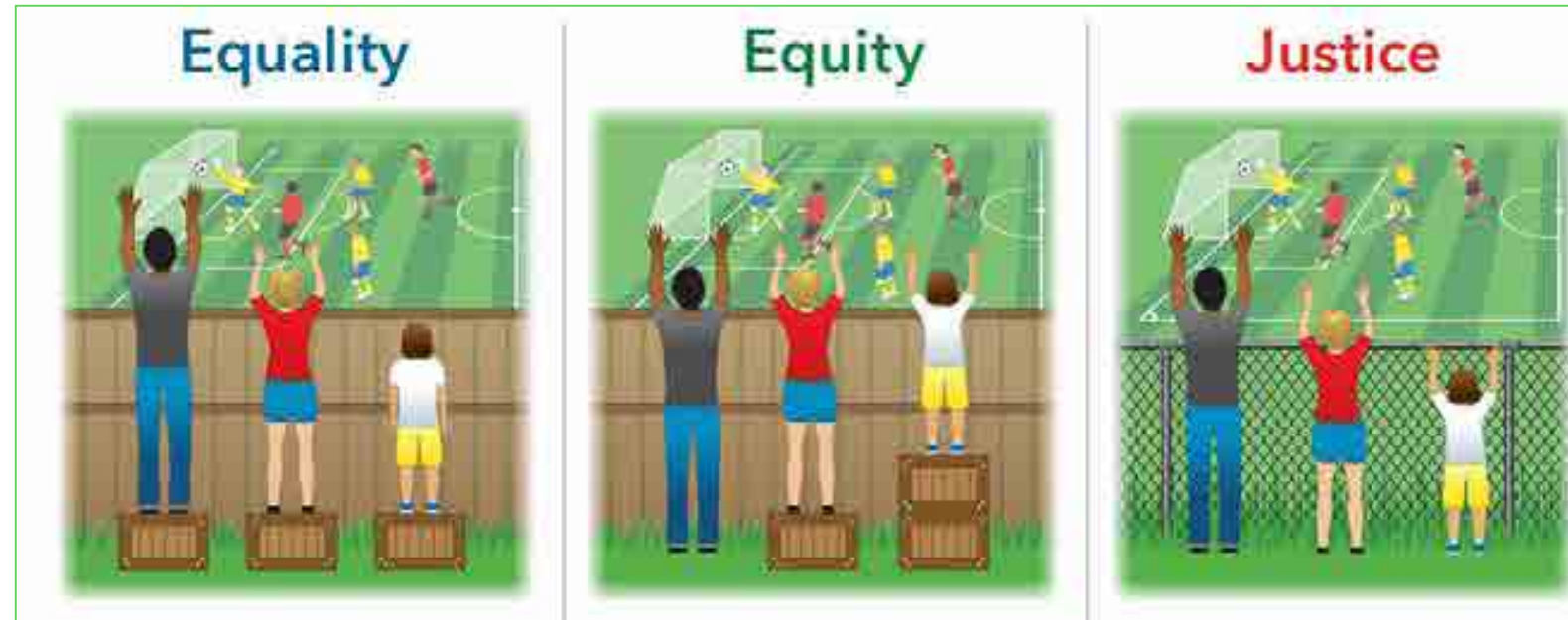


Social, Mental, and Emotional Wellbeing

Public Health *is also*....

The Social Fabric of a Community
*and the conditions in the environment
that affect a wide range of health,
functioning, and quality-of-life.*

- Economic Stability
- Education
- Transportation
- Housing
- Community Conditions



Our Equity Approach: The 4 E's



Economics



Education



Environment



Engagement

Hurricane Harvey



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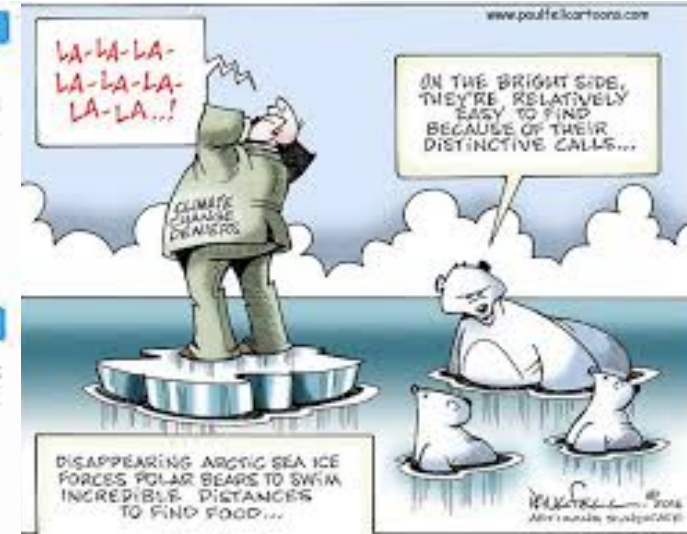
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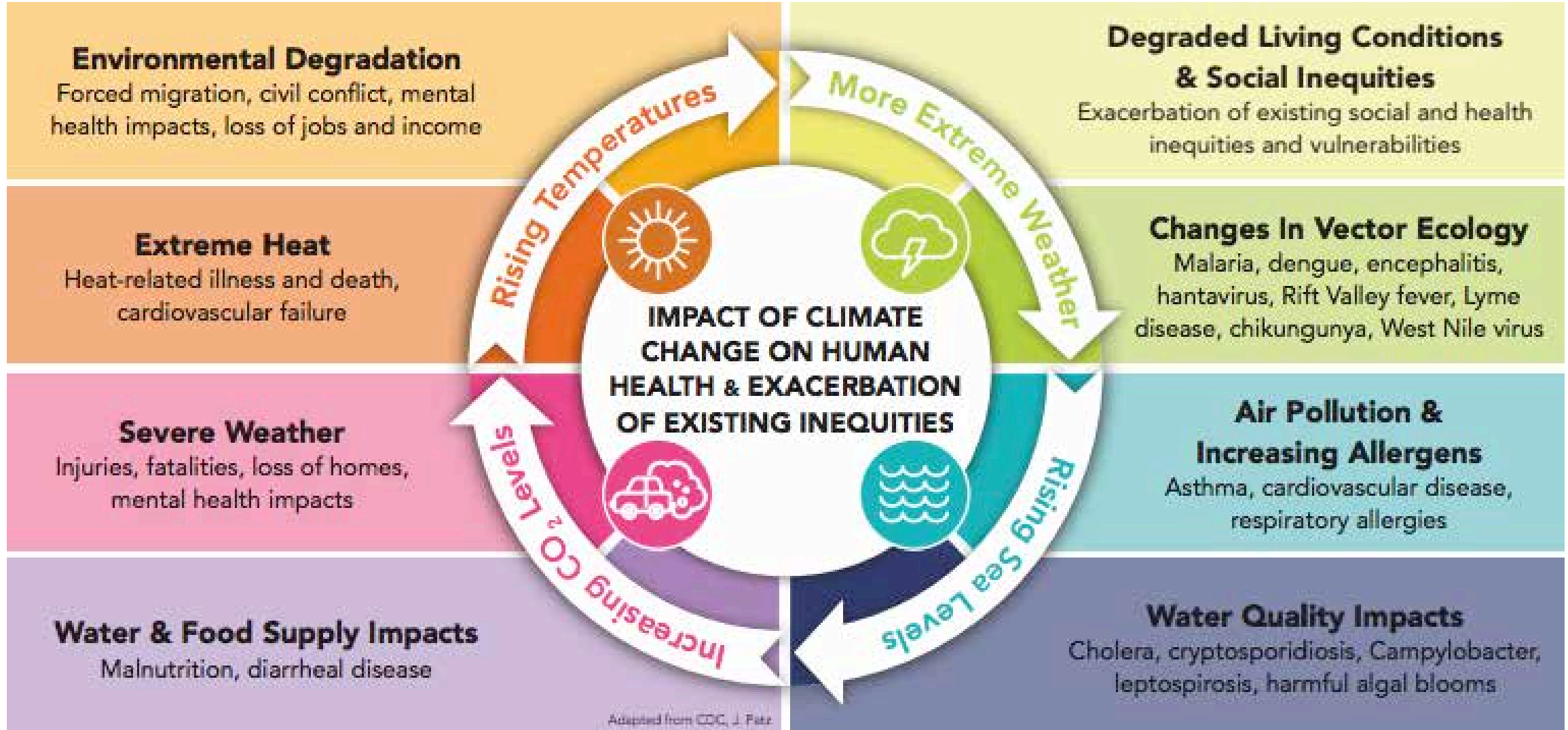
Donald J. Trump
Snowing in Texas and Louisiana, record setting freezing temperatures throughout the country and beyond. Global warming is an expensive hoax!

Donald J. Trump
The concept of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive.



A woman with blonde hair, smiling, is holding a white protest sign. The sign has the text "THERE IS NO PLANET B" in large, bold, black capital letters. The word "PLANET" is partially obscured by a red graphic element. In the background, another sign is partially visible with the text "ERE DO" and "EVEN STAR".

Climate Change Impacts Health



Source: California Department of Health

Select HCPH Response Events: Never a Dull Moment



Nation's first Biowatch hit in Houston (2003)

Monkey Pox found in exotic pet market (2003)

Possible Lassa Fever on cargo ship from Africa (2004)

Crosby Well natural gas explosion (2005)

Hurricane Katrina Response – Astrodome (2005)

Hurricane Rita Evacuation (2005)

Multi-State GI illness investigation (2005)

Fake Flu Investigation (2005)

Hydrobromic acid release – (2006)

Rabies Response – teenager death (2006)

Hepatitis A Response – restaurant worker (2007)

Patient with MDR-TB & travel history (2008)

Salmonella Saint Paul investigation (2008)

Hurricane Ike Response (2008)

nH1N1 18 month response (2009-2010)

West Nile virus (WNV) response (2012)

Cyclospora investigation (2013)

CHIK-V related (2014)

Ebola readiness & “response” activities (2014-2015)

Rabies in Harris County dog (2015)

Zika Virus (2016-17)

Hurricane Harvey (2017-18)

Measles “resurgence” (2019)

ITC Petrochemical Plant Fire (current)



HCPH Priority Public Health Issues for 2013-2018
Selected for the magnitude of the issue and our ability to make progress in Harris County



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Video clip of Harvey effort

PUBLIC HEALTH RESPONDS WHERE PEOPLE:

Live
Learn
Work
Worship
Play



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Social, Mental,
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“Taking Public Health to the Public”



*“Statistics are human beings
with the tears wiped off.”*

– Sir Austin Bradford Hill



Putting It Together

I&E(&E)



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HCPH: Organizational Transformation

HCPH is transforming its public health mission by building internal capacity through staff development, operational efficiencies, facility improvements, and utilization of new ideas and technologies. This includes engaging cross-disciplinary leadership teams under the umbrella of an overall departmental strategic planning process.

Examples abound – not limited to Health Innovation, One Health, Health Equity, Chronic Disease Prevention, Built Environment – and are helping shape this very transformation. At HCPH, we know change is often not easy but it is necessary. We embrace change in building the “*best health department not for yesterday or today, but for tomorrow.*”





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Three **V's** of Public Health

- **V**isibility
- **V**alue
- **V**alidation



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Future State: Looking Ahead

A well-recognized and well-resourced public health system that is strong, adaptable and responsive to community needs.



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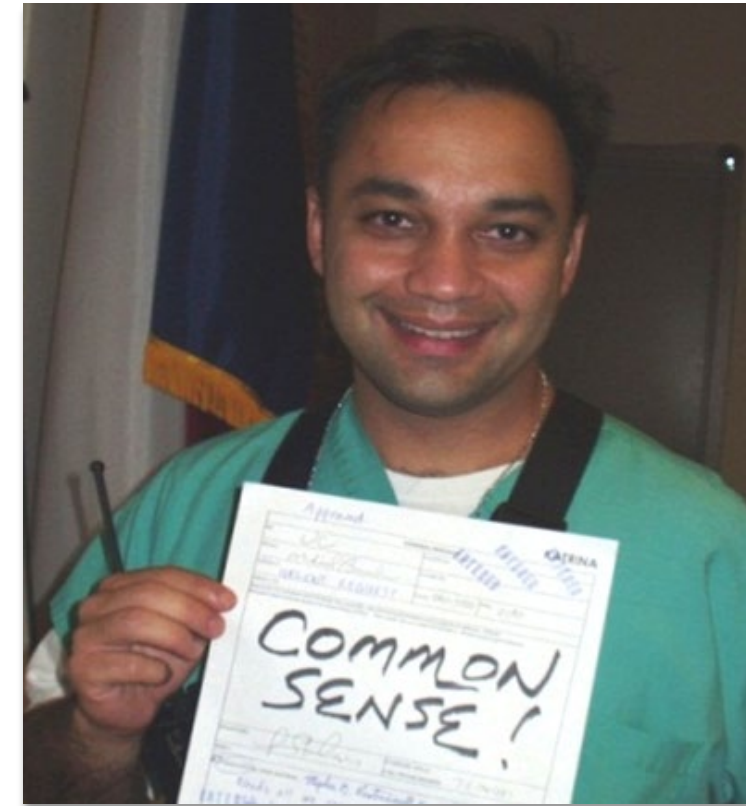


Public
Health =

*Building a
Healthy Community*

Public Health Just Makes “Common Sense” ... And It Takes A Village . . .

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