



Harris County
Public Health
Building a Healthy Community

Operationalizing One Health at a Local Level – Harris County Public Health

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Harris County Public Health (HCPH)

Forum on Microbial Threats Workshop on One Health

February 23, 2021

Houston/Harris County, TX



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**.



HARRIS COUNTY IS HOME TO...

- One of the most **diverse** communities in America
- The world's **largest** medical center
- One of the world's **largest** ports
- Two **international** airports
- The nation's **largest** concentration petro-chemical facilities
- The **largest** refugee health screening program in Texas



HCPH ORGANIZATIONAL FRAMEWORK

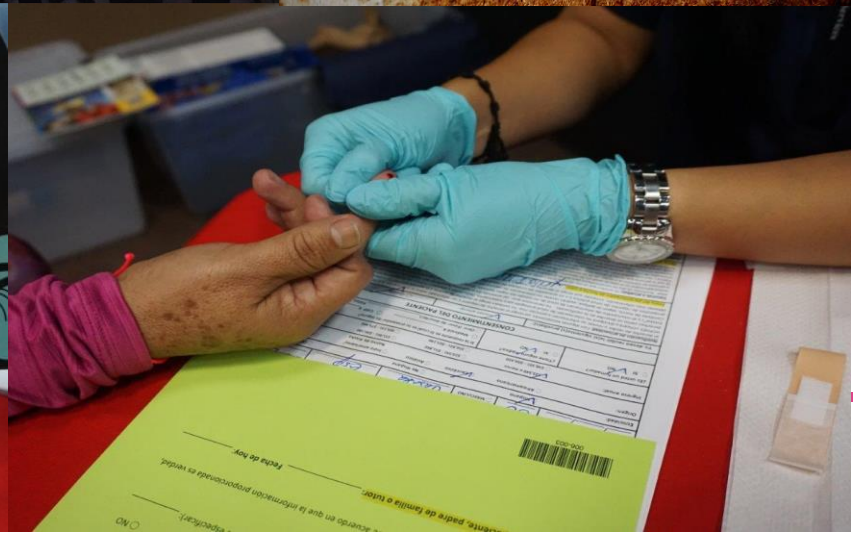
5 Offices

- Office of Communications Education and Engagement
- Office of Finance Services and Support
- Office of Policy and Planning
- Office of Public Health Preparedness and Response
- Office of Science Surveillance and Technology

5 Divisions

- Disease Control and Clinical Prevention Division
- Environmental Public Health Division
- Mosquito Vector Control Division
- Nutrition and Chronic Disease Division
- Veterinary Public Health Division





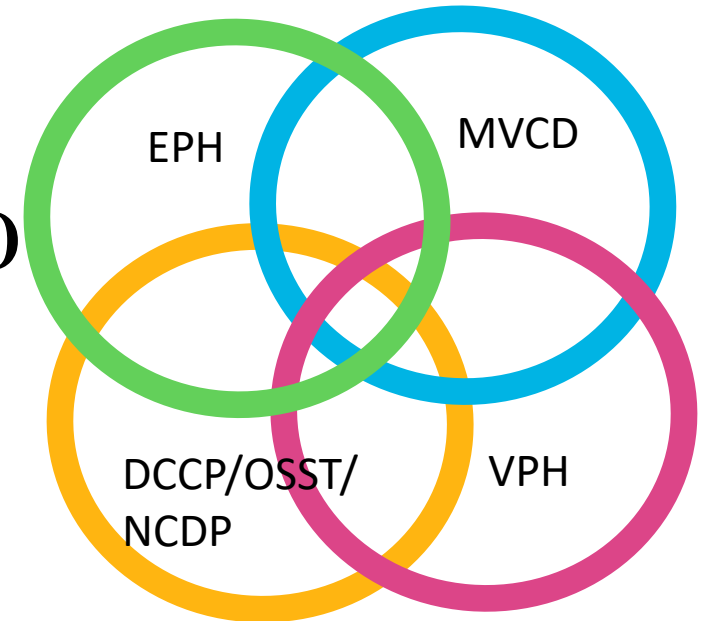
NEVER A DULL MOMENT

- *Tropical Storm Allison (2001)*
- *Nation's first Biowatch hit in Houston (2003)*
- *Monkey Pox found in exotic pet market (2003)*
- *Possible Lassa Fever on cargo ship – Africa (2004)*
- *Crosby Well natural gas explosion (2005)*
- *Hurricane Katrina Response – Astrodome (2005)*
- *Hurricane Rita Evacuation (2005)*
- *Multi-State GI illness investigation – soccer (2005)*
- *Fake Flu Investigation (2005)*
- *Hydrobromic acid release – (2006)*
- *Rabies Response – teenager death (2006)*
- *Hepatitis A Response – restaurant worker (2007)*
- *Salmonella Saint Paul investigation (2008)*
- *Hurricane Ike Response (2008)*
- *Hepatitis B in nursing home (2009)*
- *nH1N1 18 month response (2009 – 2010)*
- *West Nile virus (WNV) response (2012)*
- *Cyclospora investigation (2013)*
- *Ebola readiness/response activities (2014 – 2015)*
- *Rabies in Harris County dog (2015)*
- *Memorial Day Floods (2015)*
- *Tax Day Floods (2016)*
- *Zika Response (2016 – 2017)*
- *Hurricane Harvey (2017 - ongoing)*
- *ITC Fire – Deer Park (2019)*
- *COVID – 19 (2020 – ongoing)*
- *Winter Storm (2021 – ongoing)*

One Health at Harris County

ONE TEAM

- Office of Science, Surveillance, & Technology (**OSST**)
- Disease Control & Clinical Prevention Division (**DCCP**)
- Veterinary Public Health Division (**VPH**)
- Mosquito & Vector Control Division (**MVCD**)
- Nutrition & Chronic Disease Prevention Division (**NCDP**)
- Environmental Public Health Division (**EPH**)



HCPH and the Case for “One Health”

In one year in Harris County, diseases that spread from animals to people ...

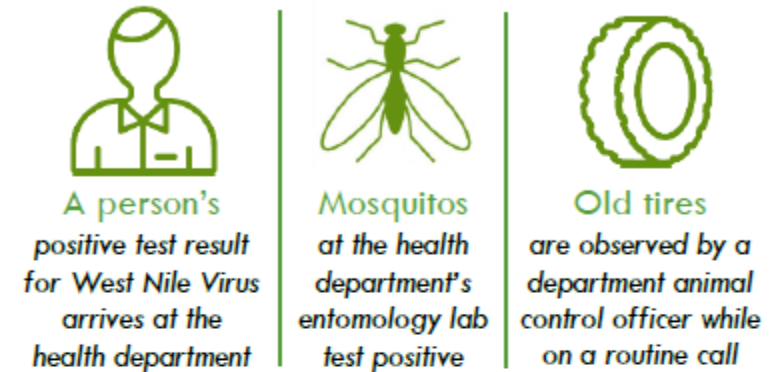
396
Salmonella and E.coli cases
Due to eating or handling contaminated animal products

95
West Nile Virus, chikungunya, and malaria cases
All transmitted by mosquitoes

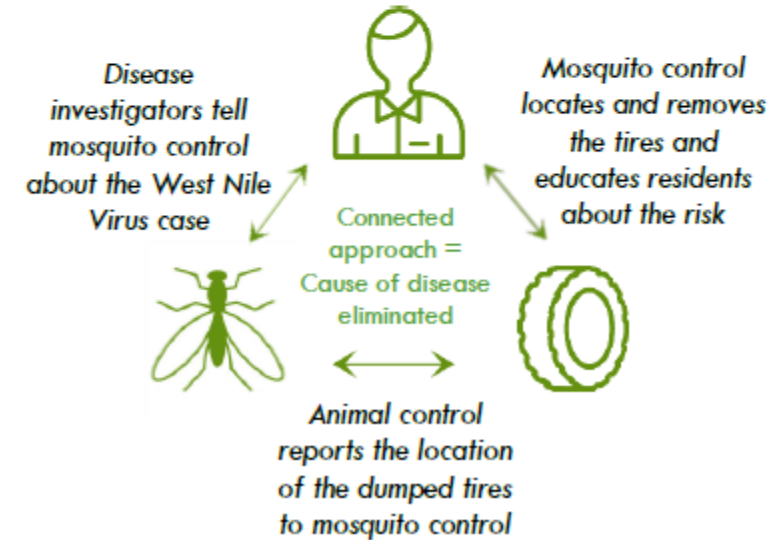
31
Cryptosporidium or “crypto” cases
A parasite spread by food, water, or soil contaminated by sick animals

*Numbers represent closed cases of illness in humans in unincorporated Harris County (excluding Houston) in 2014.³

Before One Health

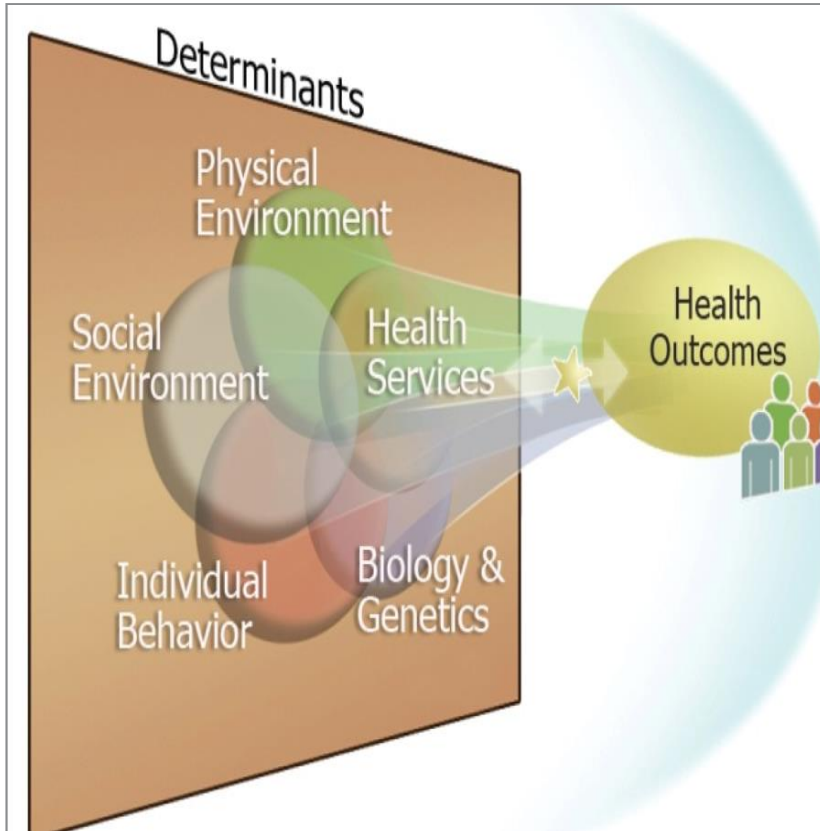


After One Health



HCPH Components of Effective Zika Response

Health Equity



One Health



Multi-Disciplinary Team (MDT)



Zika Response: Low Tech to High Tech



HCPHES Mosquito Control Division (713) 440-4800



HCPHES Mosquito Control Division (713) 440-4800



HCPHES Mosquito Control Division (713) 440-4800





One Health Rabies Approach



One Health Conference

From Theory to Practice

September 14 – 15, 2018

www.OneHealthConferenceHC.org • www.facebook.com/OneHealthConference



One Health, One Goal: Healthy People, Animals and Places
#ONEHEALTH2018

ONE Health ONE Goal

Healthy People, Animals and Places



OHC Conference 2020

Harnessing the Power of Equity

Due to the COVID-19 Pandemic, the 2020 One Health Conference hosted by Harris County Public Health was held virtually on **Tuesday, October 20 and Thursday, October 22**. Our first virtual conference was a huge success, and we hope that you enjoyed enlightening discussions and insightful perspectives from our phenomenal speakers from across the nation.



OneHealth Conference

October 20th & 22nd

1:00PM - 4:00PM (CST)

A conference uniting veterinary, medical, environmental and public health disciplines.



Environmental
Health



Infectious
Diseases



Injury



Social, Mental,
and Emotional
Wellbeing

HURRICANE HARVEY – HCPH RESPONSE

- Multi-agency coordination
- Community engagement
- Shelter medical operations
- Disease surveillance
- Mosquito control
- Environmental health
- Animal management
- Mobile service delivery



COVID-19 and One Health



- Case Investigation/Tracing

- Social Services
- Mental Health
- Quarantine/Isolation
- Education for pet owners

- Testing

- Vaccination

- Policy/Guidance

- Communication and Engagement

- Health Alert Network (HAN)

- Healthcare/Education
- Dental
- Veterinary

- HCPH Seroprevalence Project

- HCPH Pilot Project for Surveillance and Investigation of SARs CoV-2 in Animals

- Best Practices – South Korea, China



Harris County's Vaccine "Smart" Waitlist

February 5, 2021

The COVID-19 vaccine is now available for persons in [Phases 1A and 1B](#), including adults ages 65 and older with or without an underlying condition. With the purpose of providing our community with an efficient, fair, and equitable distribution process, Harris County Public Health (HCPH) has created a vaccine "smart" waitlist. Persons eligible under [Phases 1A or 1B](#) are randomly selected from the waitlist to receive the vaccine. For more information see the attached flyer and visit our, [Register for COVID-19 Vaccine](#) page.

You are receiving this information because you subscribed for VHAN email updates from Harris County Veterinary Public Health. If a colleague forwarded this email to you and you would like to receive future updates, please [subscribe](#).



Houston Area Health Alert Network

*****FOR USE BY HEALTHCARE PROFESSIONALS ONLY** - NOT for public distribution or posting as this message may contain potentially CONFIDENTIAL health information.***

This transmission is a [HEALTH UPDATE](#). A Health Update provides additional information regarding an incident or situation and is unlikely to require immediate action. It is sent to select HAN participants, based on the subject matter. We request your assistance with the distribution of this information as appropriate within your institution. Harris County Public Health is responsible for maintaining the Houston Area Health Alert Network (HAN). For more information about the HAN or to update your contact information, please email the HCPH Surveillance and Epidemiology Unit at Epidemiology_Program@phs.hctx.net or go to the bottom of this email to update your preferences or unsubscribe.

COVID-19 Vaccine Updates

January 28, 2021



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DANGER
CARBON MONOXIDE



Texas Winter Storm 2021



A look ahead

We are not prepared

- More cases
- More germs
- More risk

But we could be

- More funding
- More vector control
- More research & education



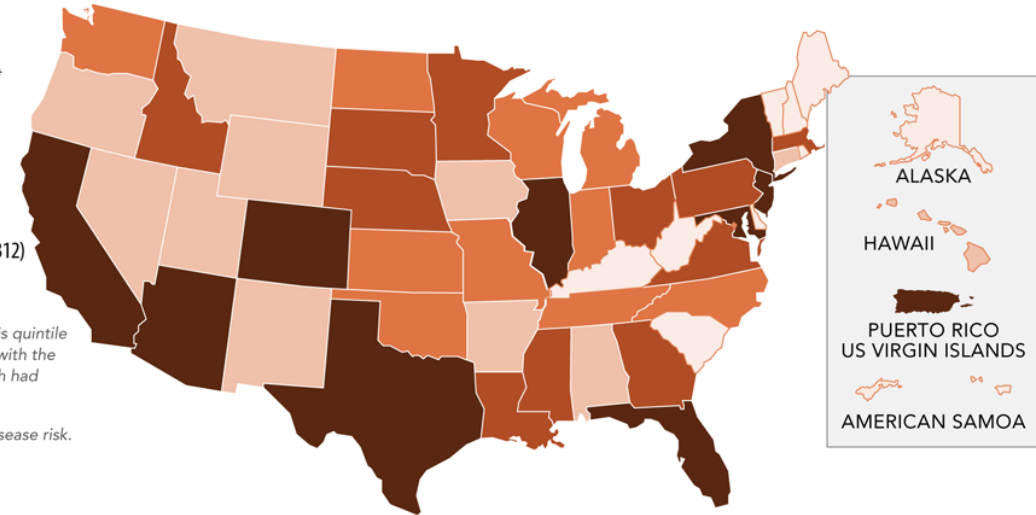
DISEASE CASES FROM MOSQUITOES (2004-2016, REPORTED)

Disease counts include both locally transmitted and travel-associated cases.

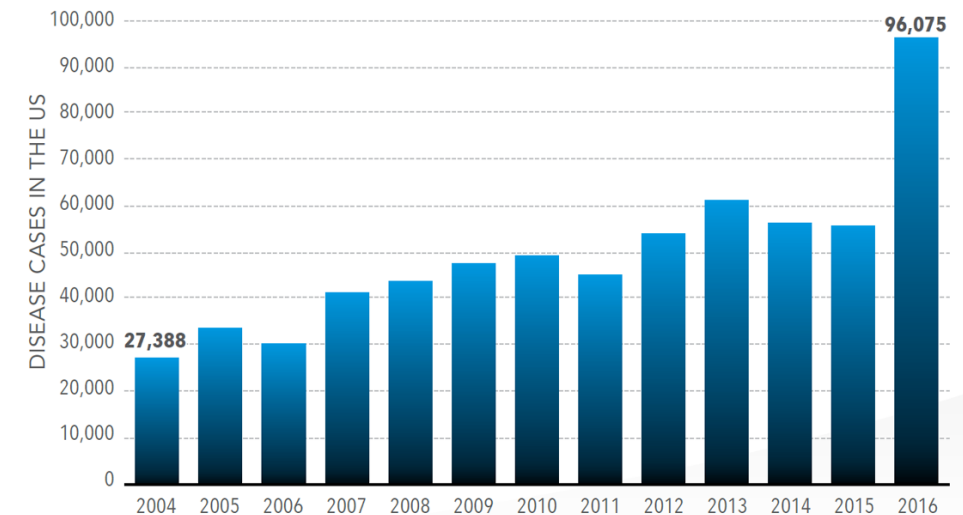
- Top 20% (more than 1,678)*
- 2nd 20% (1,138-1,678)
- 3rd 20% (545-1,137)
- 4th 20% (313-544)
- Bottom 20% of states (87-312)

* All states and territories in this quintile fell between 1,678 and 9,254, with the exception of Puerto Rico, which had 80,534 cases.

Maps show case counts, not disease risk.



Disease cases from infected mosquitoes, ticks, and fleas have tripled in 13 years.



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Future State: Looking Ahead

Proactive Policies and Funding Support that are Flexible and Appropriate to Build Necessary Capacity at the Local Level



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