

# HOUSTON **COMMUNITY HEALTH** **IMPROVEMENT PLAN**

2018 – 2021



**HOUSTON HEALTH**  
DEPARTMENT





## **Self-sufficient families and individuals in safe and healthy communities**

I am pleased to present the Community Health Improvement Plan (CHIP) for the City of Houston as a charter for establishing our community as a healthy and safe place to live, work, worship, and play.

In 2016, the Houston Health Department (HHD) began the process of updating the previous Community Health Improvement Plan. Based on the results from the Community Health Assessment 2016 (CHA) and the State of Health: Houston/Harris County 2015 - 2016 report, community partners collaborated with HHD to identify programs, strategies, and recommendations to address identified health issues. The Houston Community Health Improvement Plan 2018 - 2021 fulfills the mission of HHD to “work in partnership with the community to promote and protect the health and social well-being of Houstonians.”

By reviewing this plan, you will understand how the community was engaged in this process, how data support the need for addressing the identified health issues, and recommendations for strategies/actions and partnerships to help improve the quality of life for greater Houston area residents.

I encourage you to examine the plan, engage with community partners and HHD on the implementation of strategies/actions set forth. It takes all members of the community to implement changes in the individual, family, neighborhood, and societal aspects of one's lives to truly accomplish change in overall health and well-being.

Stephen L. Williams, M.Ed., M.P.A.  
Director, Houston Health Department

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# ACKNOWLEDGEMENTS

Welcome to the Houston Community Health Improvement Plan 2018 – 2021 (CHIP). The community health improvement planning process began in 2016 through engagement and collaboration with the Houston community and our partners. We hope this plan assists the community and partnering organizations with the implementation of the goals, objectives, and strategies/actions to address the five health priorities in Houston.

## CONTRIBUTORS (Partners and HHD)

### Health Priority: Access to Care

- Enroll Gulf Coast
- Avenue 360
- Center for Public Policy and Priorities
- Change Happens
- Legacy Community Health Services
- Light and Salt
- Lone Star Legal Aid
- Young Invincibles

### Access to Care Sub Priority: Behavioral Health

- The Network of Behavioral Health Providers (NBHP)

### Health Priority: Environmental Health (Air/Water)

- Air Alliance Houston
- Bayou Preservation Association
- Health Priority: Infectious Disease (HIV)
- Houston Ryan White Planning Council (RWPC)
- Houston HIV Prevention Community Planning Group (CPG)

### Health Priority Maternal and Child Health (Childhood Asthma, Childhood Lead Poisoning Prevention, Immunizations)

- Immunization Coalition of Greater Houston
- Gulf Coast Asthma Coalition
- Houston Independent School District (Health and Medical Services)
- Texas Children's Health Plan
- Lead and Healthy Homes Strategic Planning Committee
- Texas Children's Health Plan
- Environmental Defense Fund
- Baylor College of Medicine
- University of Houston & University of Houston College of Medicine
- Harris County Public Health

### Health Priority: Chronic Disease

- American Diabetes Association
- American Heart Association
- BakerRipley
- Brighter Bites
- Cigna Health Company
- Diabetes Awareness and Wellness Network
- Federally Qualified Health Centers
- Go Healthy Houston
- Harris County Public Health
- Houston Business Coalition on Health
- Houston Food Bank
- Houston-Galveston Area Council
- Houston Independent School District
- Houston Parks and Recreation Department
- Houston Planning and Development
- Houston Public Works Department
- MD Anderson Cancer Center
- Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- Texas Medical Center Campus
- Urban Harvest
- U.S. Department of Health and Human Services (HHS)
- UTHealth School of Public Health • YMCA of Greater Houston

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# OVERVIEW

The Community Health Assessment 2016 (CHA), Houston Health Department (HHD) Strategic Plan 2018 - 2022 (SP), and Houston Community Health Improvement Plan (CHIP): 2018 -2021 serve as the foundations for the national voluntary public health accreditation board (PHAB). The upcoming PHAB reaccreditation process drives a continuous quality improvement process that enhances community efforts to support public health.

The Houston Health Department (HHD) used modified and adopted frameworks such as The Bay Area Regional Health Inequities Initiative (BARHII) and the Mobilizing for Action through Planning and Partnerships (MAPP) to drive the planning and development of the Houston CHIP 2018 - 2021. The modified BARHII described the upstream (i.e., social determinants of health) and downstream factors. The modified MAPP framework helps communities apply strategic thinking to prioritize public health issues and identify strategies/actions to address them.

The State of Health: Houston & Harris County (SOH) 2015 - 2016 report was a starting point to assess the health of Houston. The report encompassed a broad community health assessment in collaboration with partnering organizations. In addition, HHD examined various primary and secondary data sources as part of the Community Health Assessment 2016 (CHA). The CHA provided more insight in terms of community perceptions and priorities.

The Houston CHIP is the product of a collaboration between community partners (refer to page 5) and the City of Houston, to improve the health and well-being of Houstonians.

It is a long-term, systematic, community-driven plan design to address five priority health areas identified in the CHAs and complimentary to HHD's Strategic Plan. All facets of the Houston community have a role in applying the plan to improve the health and quality of life of Houston area residents. HHD and its community partners maintain a continuous and collaborative relationship to meet the needs of Houstonians and update the living Houston CHIP as data, resources, and strategies evolve.

## About HHD

The Houston Health (HHD) has engaged in a mission to work in partnership with the community to promote and protect the health and social well-being of Houstonians in which they live. HHD provides traditional public health services and implements innovative methods to meet the community's present and future needs.

HHD is a full-service public health department with 1000 employees and approximately a 161-million-dollar budget. HHD serves as a catalyst to foster collaborations and reach the overall goal of the Houston CHIP; to transition from individual health areas into a comprehensive public health system.

# HOUSTON COMMUNITY HEALTH IMPROVEMENT PLANNING PROCESS

»» *“There is no power for change greater than a community discovering what it cares about.”*

– Margaret J. Wheatley



## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLANNING PROCESS

The Houston Community Health Improvement Planning (HCHIP) process is a comprehensive community approach to develop a plan by reassessing, creating, revising, implementing, and tracking the identified plan priorities to improve health through community and partnership engagement. The HCHIP process addresses considerations of social determinants of health by engaging partners, focusing on programs/resources, and information available as a community to improve Houston's health together.

In 2016, the Houston Health Department (HHD) began the HCHIP process for the PHAB reaccreditation. HHD used the following modified and adopted frameworks throughout the HCHIP process:

- The Mobilizing for Action through Planning and Partnerships (MAPP)<sup>1</sup> framework was modified, adapted, and used to develop, implement, and track the Houston CHIP 2018 – 2021. MAPP is a community-driven strategic planning process for improving community health and it is facilitated by public health leaders to prioritize public health issues and identify resources to address them.<sup>2</sup> The Houston Health Department (HHD) used the framework to establish the MAPP Core team, to include Houston CHIP Champions, and community partners in collaboration for oversight, monitoring and tracking the implementation of the plan.
- The Bay Area Regional Health Inequities Initiative (BARHII) framework was modified and adapted for the Houston/Harris County trends and data report to include describing upstream and downstream factors. The upstream factors, i.e., social determinants of health (SDoH), are beyond the control of individuals. These factors are generally system-oriented (social inequities, structural inequities, institutional power, and most living conditions), generating responses in individuals as well as populations.<sup>3</sup>

**The criteria used for community prioritization entails the following:**

- The ability of HHD to meet the needs
- Alignment with other health systems, stakeholders/partners, and initiatives focused on the same area of service and population, the Mayor's priorities, and the State's priorities

- Likelihood of alignment with ongoing HHD priorities and programs
- The effectiveness of existing programs
- How the HHD has responded to the needs of this community in the past
- The most significant health needs as perceived by the community (Community Health Survey 2016)

Based on an extensive process of prioritization that spanned data collection to analysis, implementation of prioritization techniques, and input by the HHD executive team, the five priority areas were identified, as the following:

- Access to Care (to include behavioral health\*).  
*Behavioral Health was added based on other data sources.*
- Chronic Diseases
- Environmental Health (air quality/water quality)
- Infectious Diseases
- Maternal and Child Health

### The Community Health Assessment (CHA) Process

*The CHA 2016 has served as the primary data source to update the Houston Community Health Improvement Plan (CHIP): 2018 – 2021 and HHD's strategic plan for 2018 - 2022.*

In 2016, the Houston Department of Health (HHD) had partnered and collaborated with the community and other stakeholders to conduct community health data collection and assessment processes. The HHD - Office of Planning, Evaluation, and Research for Effectiveness (OPERE) is the unit that collects, analyzes and disseminates health data to inform decision-making in the department and the City of Houston community. OPERE conducted the 2016 CHA, consisting of primary and secondary data. The 2016 CHA has served as the primary data source to update of the Houston Community Health Improvement Plan (CHIP): 2018 – 2021 and the HHD's strategic plan for 2018 - 2022.



### CHA 2016 Data Sources

For the Community Health Assessment 2016 (CHA), the Houston Health Department (HHD) service area, and the population was defined as Houston/Harris County. Most of the data collected were at the county level, and therefore data is presented at the County and/or City level (if available). The CHA focused on the people who live in the Houston/Harris County area.

Prior to the CHA, the State of Health: Houston & Harris County (SOH) 2015-2016 report was used as a starting point to assess the health of Houston, which consisted of a broad community health assessment in collaboration with multiple partner organizations to identify pertinent health indicators on over 50 health topics that impact the residents of Houston and Harris County. The CHA 2016 data sources also included the Houston Community Health Survey 2016, along with other complementary administrative data sources to align relevant data for prioritization. The National and State data and plans/priorities, as well as Healthy People 2020, have been referred to for informing the CHA 2016.

### CHA 2016 Process with Houston Community and Partnering Organizations

In 2016, HHD had partnered and collaborated with the community and other stakeholders to conduct and engaged in its second city-wide community health assessment 2016 (CHA). Since 2012, health data collection and assessment processes were also conducted. HHD examined various primary and secondary data sources as part of the community health assessment. The CHA 2016 provided insights in terms of community perception and priorities. An essential component of improving the public's health is genuine community engagement. Without community engagement and "buy-in," the Houston Health Department (HHD) may not be able to understand the health-related priorities of community members nor how the health department can address those needs.

### CHA 2016 Key Steps

- Administered a brief survey to the public in English and Spanish through CitizensNet, the City of Houston's e-newsletter from the Mayor's office, which has over 129,000 subscribers, and by distributing paper copies of the survey at the Multi-Service Centers from June 27 to July 15, 2016.
- Promotion of the CHA 2016 survey was on Facebook and Twitter, and was made available through SurveyMonkey.
- Participants were asked to respond to three questions:
  - What are the top three health-related concerns of the community where you live?
  - What should the Houston Health Department be doing to improve the overall health of Houstonians?
  - How can Houston Health Department best reach your community to provide health information?
- Compiled other health data in the priority areas identified by the CHA. Upon the analysis of the priorities, the survey netted over 2,000 responses from 158 Houston zip codes. Over 600 of the survey respondents indicated that they would like to receive more information and further contribute to the development of the Community Health Improvement Plan (CHIP).
- Establish the HHD's "Community Opinion Group" (COG) with initially over 400 respondents who provided a valid email address to continue to provide feedback throughout the development and implementation of the Houston CHIP to ensure the representation of the community voice in the priorities and objectives.
- In 2017, HHD sent a short survey to over 400 members/residents of the COG to obtain feedback on the top ten codes. The COG members were asked to prioritize their top 5 concerns to help develop the priority areas for the CHIP. The two-question survey was sent via SurveyMonkey and asked participants to check their top five (5) concerns from the list and to provide any additional feedback or concerns that they may have had.
- The HHD Office of Planning, Evaluation and Research Effectiveness (OPERE) acquired licenses for ATLAS.ti qualitative analysis software to conduct analysis on response data from the Community Health Assessment (CHA) Survey, the CHIP Survey for Employees, and the departmental Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. Prior to beginning the analysis, OPERE staff, along with interns, reviewed responses to identify common themes within the health issues and concerns identified by survey respondents. These themes were then defined and used to create "code families" for qualitative analysis (14 code families, 67 codes). These codes were input into ATLAS.ti along with definitions and documentation. Multiple staff conducted individual analysis on the response data and codes were ranked by frequency (counts).
- The analysis revealed the following issues as the top ten health concerns of respondents, refer to Table 1.

**Table 1 What are the top three health-related concerns of the community where you live?**

TOP TEN CODES	TOTALS:
CHRONIC DISEASE: CVD, DIABETES, OBESITY, CANCER, (GENERAL)	1277
ENVIRONMENTAL: DISEASE VECTORS	371
ENVIRONMENTAL: WATER QUALITY, AIR QUALITY,	380
ACCESS: COST OF CARE/INSURANCE	337
HEALTHY LIFESTYLE: DIET	208
NEIGHBORHOOD: FLOODING/DRAINAGE	174
ENVIRONMENTAL: NUISANCE PESTS	169
INFECTIOUS DISEASE: ZIKA	168
NEIGHBORHOOD: CRIMINAL ACTIVITY	155
VULNERABLE POPULATIONS: CHILDREN, PREGNANT WOMEN	140

- Included in the top ten health concerns and activities that HHD needs to engage in are the issues relating directly to social determinants of health such as infrastructure, access to services and care. In addition, promoting healthy diet and or promoting exercise carry the notion of communities' need relating to addressing health inequities and addressing higher health risks and poorer health outcomes. The connection of social determinants of health to poorer health outcomes has been well established. As such social determinants of health contribute more than 40% to the health outcomes of an individual. HHD is committed to addressing the social inequities and health disparities that have been keeping Houston from reaching the Health People 2020 goals. On May 2, 2017, OPERE sent a short survey to over 400 members of the COG (those who provided a contact email) obtained feedback on these top ten codes. Respondents were asked to prioritize their top 5 concerns in order to help develop the priority areas for the CHIP. The two-question survey was sent via SurveyMonkey, and asked participants to check their top 5 concerns from the list, and to provide any additional feedback or concerns that they may have had.

- Based on the issues identified in the community health assessment, community feedback from the survey, and departmental capacity, the following priorities for the CHIP were developed:

**1. Access to Care (Cost of care/insurance) Behavioral Health<sup>4</sup> (An addition based on data sources)**

2. Chronic Disease
3. Environmental Health (water quality, air quality)
4. Infectious Disease (*Zika*, *WNV*<sup>5</sup>, HIV/AIDS).
5. Maternal and Child Health (Immunizations, Childhood Lead Poisoning, and Childhood Asthma)

### **Mobilizing for Action through Planning and Partnerships (MAPP) Modified and Adapted Framework: MAPP Core Team**

#### *Overview of Role and Responsibilities for the Houston CHIP 2018 - 2021*

The Houston Health Department (HHD) used a modified and adapted Mobilizing for Action through Planning and Partnerships (MAPP) process as the framework to develop the Community Health Improvement Plan 2018 – 2021. The modified and adapted MAPP process entailed: 1) establishing a core team and CHIP Champions, 2) shared vision, 3) assessments, 4) identified strategic issues, 5) goals/strategies, and 6) action cycle.

The MAPP Core team consists of the three HHD offices: 1) Office of Program Development role is to coordinate the planning, development, and implementation of the Houston CHIP with the identified CHIP Champions of their respective priority areas and community partners, MAPP (adapted), and provide technical support, 2) Office of Planning, Evaluation, and Research for Effectiveness's (OPERE) role is to conduct the community health assessments, disseminate relevant findings, tracking

and evaluate data, and provide technical support, and 3) Office of Performance Measurement's (OPM) role is to coordinate reports for PHAB accreditation/reaccreditation and provide technical support.

MAPP (HHD modified and adapted). Sources: NACCHO.org/CDC.gov

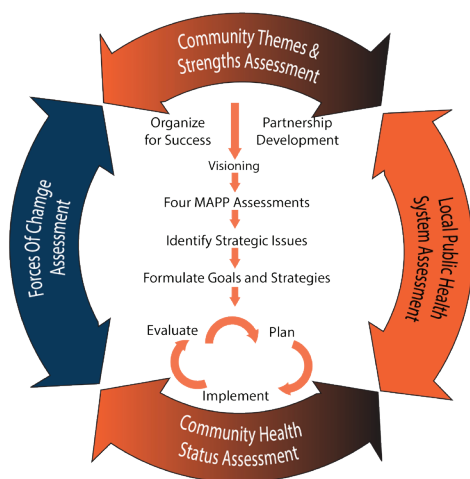


Image Source: Community Tool Box <https://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/mapp/main>

The CHIP Champions (HHD staff representative) are an extension of the MAPP Core team. The CHIP Champions have specific roles and responsibilities, such as:

- 1) serve as a liaison, subject matter expert (SME)/Representative, 2) facilitate, lead, attend and schedule/coordinate community partner meetings, as applicable, 3) coordinate and ensure periodic CHIP data updates between internal and external partners (i.e., agendas, announcements, etc.), 4) develop goals and SMART (specific, measurable, achievable, relevant, time-framed) objectives with community partners, 5) provide input and assist with the development of the CHIP Priority Area Section such as narratives, and a final report, 6) assist in assuring continuous work of CHIP – Health Focus Area with external partners, as applicable, 7) implement CHIP Plan - Health Priority Area to drive internal activities to contribute to health outcome/improvement, 8) maintains/coordinates the data collection and evaluation process between partners and with Office of Planning, Evaluation, and Research Effectiveness (OPERE), and 9) coordinate CHIP - Health Priority Area outcome/update reports with the Office of Performance Measure (OPM).

### **Implementation, Tracking, and Accountability of Houston CHIP with Partners and Community Opinion Group (COG)**

The community partners in each priority health area, in collaboration with HHD and the CHIP Champions,

are responsible for developing (such as goals, SMART objectives, identifying strategies, and policy actions), implementing, monitoring, tracking data, and reassessing the Houston CHIP.

### **Priority Health Area 1: Access to Care**

The Enroll Gulf Coast (EGC), also known as the Collaborative, is a community partner for the Access to Care. EGC role is to assist consumers with access to care through the Marketplace or safety net services. In 2017, EGC met to review data, develop goals, SMART objectives, strategies / activities, establish indicators, a timeline, and determine the partner organizations' responsibilities. EGC came to a consensus to request relevant data from the Texas Health and Human Services annually, as available. The tracking tool that HHD uses is the Smartsheet that documents the implementation of the plan/data progress.

During a Collaborative meeting held on May 7, 2019, the remaining collaborative members discussed the many changes to the work of the partnerships since its inception. As discussed, the political climate has had and will have an impact on access to care for Houston. In 2017, there were more than two attempts by the federal government to repeal the Affordable Care Act (ACA). On December 22, 2017, the 2018 Tax Bill removed the individual mandate, which is the requirement for all those who are in the country with lawful status and have an income to have health care. Now with the requirement removed, many people will see no need to have health insurance.

With the challenges of a new political climate, ACA policy, and local funding changes, the Collaborative reviewed and aligned its goals and SMART objectives. From May - June 2019, the Collaborative decided to update their charge to not only focus on ACA, but to include all programs which provide access to health including Child Health Insurance Plans, Medicaid, Medicare, and other financial assistance programs. The Collaborative is responsible for reviewing/reassessing the data annually, determining how the recent political climate impacts access to care for the Houston community, has implications on the SMART objectives, and data. In addition, the EGCC partnership responsibilities entail reporting their enrollment reports quarterly, outreach numbers, outreach events, programs providing access to health care insurance. The tracking tool that HHD uses is the Smartsheet which documents the implementation of the plan/data progress.

## **Behavioral Health<sup>7</sup> (Sub Priority Access to Care)**

The Network of Behavioral Health Providers (NBHP) organization is a member organization that agreed to partner and align their project goals and process objectives for the CHIP 2018 - 2021. NBHP is the lead and subject matter expert for behavioral health. During 2018, the development of the goals, process objectives, and strategies/activities with consensus obtained by voting members. The NBHP will be responsible for the implementation, tracking, reviewing/reassessing, and reporting their progress to the designated HHD CHIP Champions. The designated HHD CHIP Champion will coordinate with NBHP on the annual updates for the Houston CHIP (2018 - 2021). In addition, behavioral trends and data will be shared periodically between HHD and NBHP.

The tracking tool that HHD uses is the Smartsheet that documents the implementation of the plan/data progress.

## **Priority Health Area 2: Chronic Disease**

During 2016 - 2019, the HHD Office of Chronic Disease, Health Promotion & Wellness collaborated and partnered with Go Healthy Houston Task Force (GHH) on the development of the CHIP - Chronic Disease section. GHH is a partner comprised of a multi-sectoral group that includes representation from public health agencies, community-based organizations, city council, Houston Independent School District, local grocers, health insurers, businesses, academia, parks and recreation, and individuals. The collaboration entailed developing the goals, SMART objectives, indicators, strategies/activities, and data collection process to the implementation of the plan.

The partners will be responsible for reviewing, implementing, tracking, and reporting their data to the HHD CHIP Champions annually. The tracking tool that HHD uses is Smartsheet that will document the plan and data progress. The HHD CHIP Champion will monitor the partners' progress of the identified community health improvement objectives, etc.

## **Priority Health Area 3: Environmental Health (Air Quality/Water Quality)**

During 2017 - 2019, the HHD CHIP Champions for both Air and Water quality work closely with their partners on the development of goals, SMART objectives, strategies, implementation, reviewing, tracking of the plan. The CHIP development worksheets were used to

guide the development of goals and objectives. Based on the strategies/activities, the community partners' implementation responsibilities and data are tracked by using Smartsheet and HHD centralized tracking process with 3-1-1, annually. HHD works closely with 3-1-1 to resolve and close the case investigations.

The Water Quality goals, objectives, strategies/activities, etc. were developed with the partner Bayou Preservation Association (BP). BP's (water quality) role is to conduct bacteria screenings in the five (5) most impaired waterway segments through strategies/activities, then share the data with the CHIP Champions to update the plan and monitoring on an annual basis. HHD uses a Smartsheet that will document the plan and data progress.

The Air Quality goals, objectives, strategies/activities were developed through meetings with the partners at Air Alliance Houston and Public Citizens. They are weighted by the impact on community and input from the community when available. The 2019 air quality goals and objectives were determined on September 19, 2018. The CHIP development worksheets were used to guide the development of goals and objectives. The following reports reviewed were the State of Health Report, community surveys, the Health of Houston Survey, Mayor's Transition Report, and the Houston-Galveston Area Council Basin Summary Report. A list of service areas was developed which became the focus of CHIP water quality goals. Preliminary goals and targets were drafted beginning 4/19/17 and discussed with our partnering agency, the Bayou Preservation Association. During subsequent meetings, the goals were further refined with feedback from HHD MAPP Core team and external partners.

The tracking tool that HHD uses is the Smartsheet that documents the implementation of the plan/data progress.

## **Priority Health Area 4: Infectious Disease (HIV)**

During 2018, the HHD CHIP Champion serves on and partnered with the Houston HIV Prevention Community Planning Group (CPG) and the Houston Area HIV Services Ryan White Planning Council (RWPC). HHD - Bureau of HIV/STD & Viral Hepatitis Prevention, CPG, RWPC Office of Support, Harris County Public Health - Ryan White Grant Administration, and the Houston Regional HIV/AIDS Resource Group agreed by consensus to adopt the goals, SMART objectives, indicators, strategies/activities and to collectively be responsible for the implementation and updates to the plan, annually. The partners also decided by consensus to use and align the Houston Area



Comprehensive HIV Prevention and Care Services Plan (2017 – 2021) for the Infectious Disease section within the Houston CHIP 2018 – 2021. The group used a modified consensus decision-making matrix tool to narrow their scope to include the goals, SMART objectives, indicators, strategies, and responsibilities.

The CHIP Champion will gather the data from the partners who already tracked specific data to update the plan/data annually, and will share for centralized monitoring of progress using the HHD Smartsheet and the HIV data platform.

## **Priority Health Area 5: Maternal and Child Health (Immunizations, Childhood Lead Poisoning Prevention, Childhood Asthma)**

### **Childhood Asthma**

In late 2018, the HHD Bureau of Community and Children's Environmental Health (BCCEH), Asthma Prevention and Control Program worked collaboratively with internal and external partners to develop the goals, SMART objectives, strategies/activities, indicators, and data collection process. Some of the HHD partners are the Gulf Coast Asthma Coalition, Houston Independent School District (HISD), Texas Children's Health Plan, health care providers, and interested individuals. The partners' responsibilities are based on the strategies/activities, such as the HISD school nurses identifying asthmatic children in schools with a high concentration of asthma diagnoses.

In April of 2019, the coalition met to discuss additional survey results, resources, and possible activities related to the Asthma CHIP. The top three activities that arose from the survey were policy development, community education, and training for professionals. Asthma coalition members also put forth the evaluation markers (data) that should be used to measure changes in asthma outcomes. For example, hospital admissions, asthma death statistics, asthma projects implemented, and a number of new members recruited into the coalition.

Also, the Texas Children's Health Plan/other managed care health plans (MCO) will share the data regarding the asthma indicators. The partners will be responsible for sharing/reporting their data to the HHD CHIP Champions, annually. The tracking tool that HHD uses is Smartsheet that will document the plan and data progress.

### **Childhood Lead Poisoning Prevention**

The HHD Bureau of Community and Children's Environmental Health (BCCEH) facilitates the Lead and Healthy Homes Strategic Planning Committee (LHHSPC).

The LHHSPC partnered and collaborated with HHD to develop the Childhood Lead Poisoning Prevention goals, SMART objectives, indicators within Maternal and Child Health CHIP. LHHSPC held additional meetings in November 2018 to discuss and decide on which Strategic Plan (revised September 2018) goal(s), etc. aligns with the Houston CHIP. The LHHSPC agreed by consensus in late November to the goals, SMART Objectives, indicators, challenges, barriers, recommendations for the Houston CHIP as it aligns with their Strategic Plan.

The LHHSPC used a consensus decision-making matrix tool to help identify strategies/activities. The strategies may include education and outreach, removing lead hazards from homes, and follow the screening schedule guidelines set by the Texas Department of State Health Services (TDSHS) to help reach the goals through 2021. The final decision matrix was submitted in December 2018 and approved by the LHHSPC. The committee is comprised of community partners who continue to provide feedback with recommendations based on the plan and data progress. The tracking tool that HHD uses is Smartsheet that will document the plan and data progress.

### **Immunizations**

On November 14, 2018, HHD – Bureau of Immunizations invited the Immunization Coalition of Greater Houston (ICOGH) to collaborate and partner on the development of the Houston CHIP 2018 -2021, Maternal and Child Health (MCH) section. During the meeting, the ICOGH members process entailed using a modified consensus decision-making matrix tool to review the proposed goals. The group agreed by consensus to focus on the following: Goal #1: Work with Agencies to increase education, access, and resources to promote increased childhood immunization rates and Goal#2: Monitor and Respond to Legislation dealing with the promotion of immunizations. In addition, the ICOGH developed the SMART/process objectives, identified strategies/actions, and determined the partner responsible for the implementation of the MCH - Immunization section.

On November 28, 2018, the Maternal and Child Health -Immunizations section goals and SMART/process objectives were finalized and approved. ICOGH reconvened on April 17, 2019, at the United Way of Greater Houston. The members (all) in attendance discussed the progress of CHIP (MCH/Immunization) goals and voted to extend the target dates to 2021 to expand projects and reach in the community. The tracking tool that HHD uses is Smartsheet to document the plan and data progress.

## Community Process to Tracking and Implementation of the Plan

The Houston CHIP community process to track the implementation of the plan is based on progress reviews conducted annually at the community partners' meetings. The Houston CHIP: 2018 - 2021 website to be hosted on the Houston State of Health <http://www.houstonstateofhealth.com/> will help track specific indicators that are meaningful to the community. Also, periodic email updates will be sent to the interested HHD Community Opinion Group (COG) members, as applicable. A disclaimer will inform the community that there may be a lag in the availability of specific data. The website will allow the community to provide feedback on the CHIP.

## Reassessing and Revising Houston Community Health Improvement Plan


If there are data collection challenges, the process entails the Houston CHIP champion of the health priority area requesting technical assistance from OPERE. Based on the outcome of the technical assistance or data collection challenges due to the political climate, a drastic change in community partners, or limited resources, a submission of a CHIP SMART objectives update form may be warranted. With consensus and approval of the community partners, the CHIP Champion will 1) contact and confirm the data collection challenges with OPERE, 2) complete the form for revisions of CHIP SMART objectives, indicators, etc., 3) obtain the approval signatures from the Executive Sponsor/ Designee, Community Partner, OPERE Data Representative, and Accreditation Coordinator, and 4) upon final approval by the Accreditation Coordinator, update the CHIP template, and 5) scan and email a copy of the signed form to the CHIP coordinator, and 6) final step is to update the CHIP document and web materials.

The Community Opinion Group (COG) will be emailed updates of Houston CHIP revisions, as applicable.



# SOCIAL DETERMINANTS of HEALTH (SDoH)

Houston/Harris County

 *"People who live in high-poverty neighborhoods have less access to jobs, services, high-quality education, parks, safe streets, and other essential ingredients of economic and social success that are the backbone of strong economies."*

*– National Academies of Sciences, Engineering and Medicine.*

*Communities in Action: Pathways to Health Equity*



## SOCIAL DETERMINANTS OF HEALTH (SDoH)

*(Causes of higher health risks, poorer health outcomes and health inequities)*

Healthy People 2020 states that “social determinants of health (SDoH) are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”<sup>8</sup> Health disparities adversely affect groups of people who have systematically experienced more significant obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.<sup>9</sup>

SDoH can impact health directly, but can also indirectly impact health by shaping how people behave. Poverty, unemployment, and housing insecurity are all examples of social determinants that result in poor health outcomes.<sup>10</sup>

### Healthy People 2020 Approach to Social Determinants of Health

A “place-based” organizing framework, reflecting five (5) key areas of social determinants of health (SDoH), was developed by Healthy People 2020. These five key areas (determinants) include (Figure 1):

- Economic Stability
- Education
- Social and Community Context
- Health and Health Care
- Neighborhood and Built Environment<sup>11</sup>

Policymakers are recognizing the importance of the social determinants and incorporating them into public policy, indicating a shift from the traditional medicalized approach the United States has taken to solve its health care problems. This approach offers a way to reduce medical costs for individuals, insurers, and the government while improving outcomes, and it is worth further consideration and creative implementation.<sup>12</sup>

Social Determinants of Health (SDOH), Healthy People 2020



Figure 1 Healthy People 2020

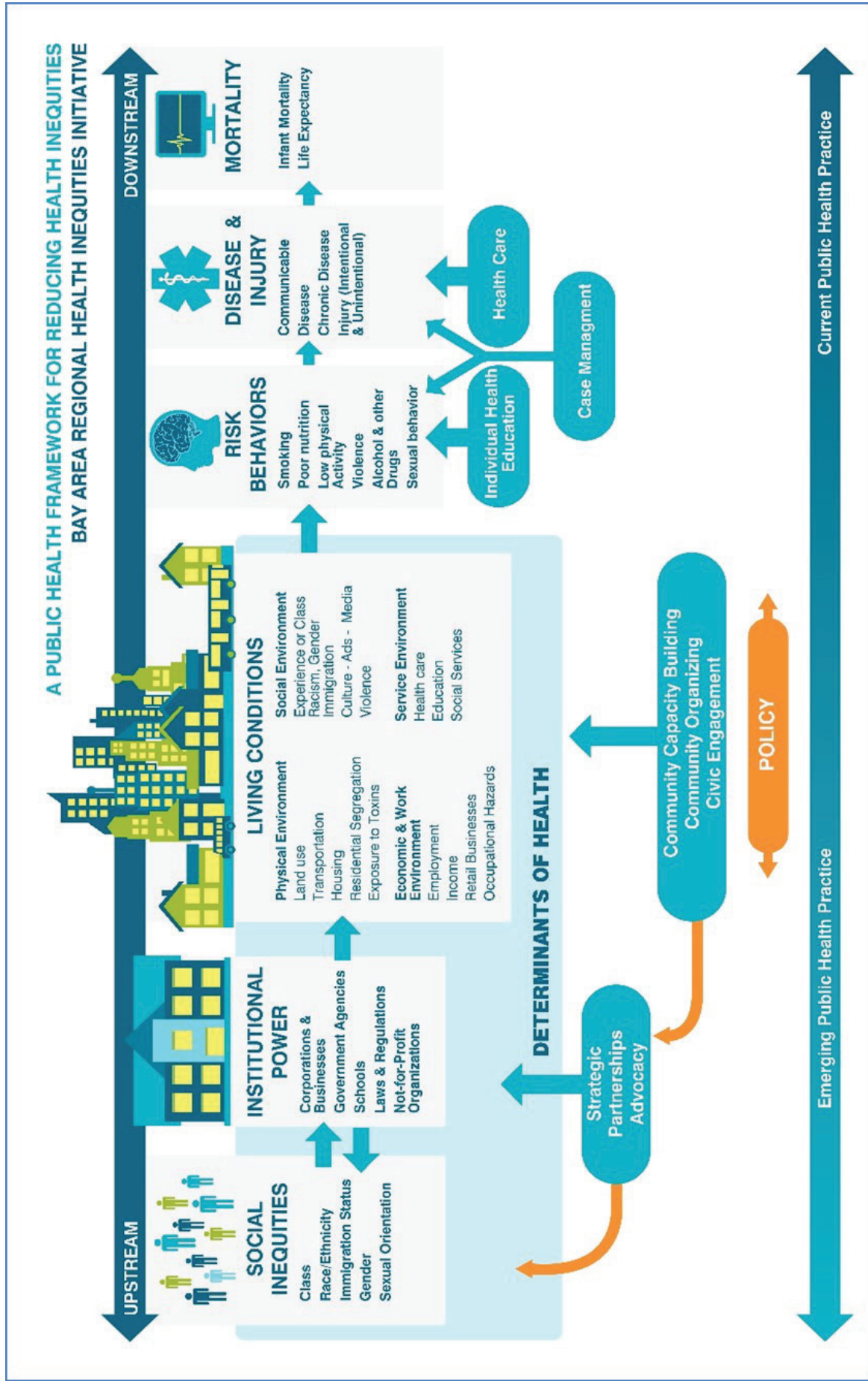
## FRAMEWORK TO ADDRESS HEALTH DISPARITIES

The Houston Health Department (HHD) chose and adapted the Bay Area Regional Health Inequities Initiative (BARHII) Public Health framework (Figure 2) to present public health trends and data about Houston and Harris County. The adapted BARHII framework separates health into two sections, “upstream” and “downstream.” Upstream factors are the determinants of health, including social inequities, such as class, race/ethnicity, immigration status, gender, and sexual orientation; institutional power from organizations such as corporations and businesses, government agencies, schools, laws and regulations, and not-for-profit organizations; and living conditions such as housing, exposure to toxins, experience of racism, employment opportunities, culture, community violence, and available resources such as education and healthcare.<sup>13</sup>

Upstream factors strongly influence the downstream factors. These include risk behaviors, such as smoking, use of alcohol and drugs, lack of physical activity, diseases and injury from infectious and chronic illness, and intentional and unintentional injuries; and finally, mortality, which includes infant mortality and life expectancy. Strategies and interventions can be helpful at any point along the continuum. Upstream strategies and interventions focus on prevention and partnership strategies to improve equity in the resources that impact living conditions. Downstream strategies and interventions, such as health education, healthcare, and case management, can assist persons in coping with illness and risk behaviors.<sup>14</sup>



Figure 2: BARHII Framework to Address Health Inequities in Houston/Harris County

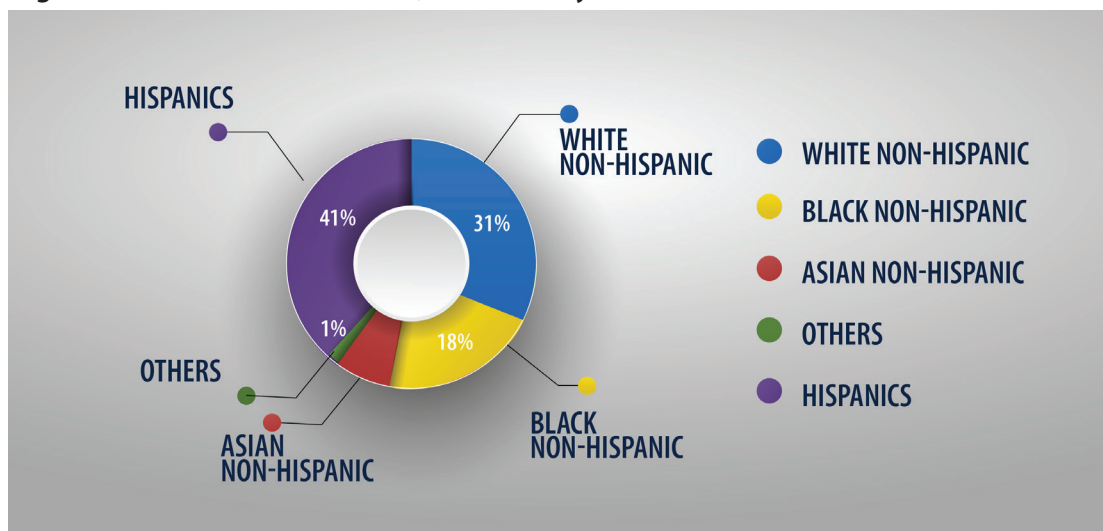


Source: BARHII Framework, 2018. Adapted by the Houston Health Department.

## HOUSTON/HARRIS COUNTY DEMOGRAPHICS

Houston is the fourth-largest city in the US, with an estimated 2017 population of 2.3 million. Most of Houston is contained within Harris County, although Houston also extends slightly into Fort Bend and Montgomery counties. Harris County is the third-most populous county in the United States, including Houston, which is home to approximately 4.7 million residents. The Houston metropolitan area, sometimes referred to as Greater Houston, encompasses a nine-county area of Harris and surrounding counties that stretch to Galveston and along the Gulf Coast. This area, also known as the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area (MSA), contains approximately 6.9 million residents, according to estimates from the US Census. This area has been growing rapidly for years.<sup>15</sup>

**Figure 3: Racial/Ethnic Distribution, Harris County TX 2012-2016**



Data Source: US Census Bureau, American Community Survey<sup>16</sup>

Houston/Harris County has become a “minority majority” area, where no one racial/ethnic group is in the majority. Hispanics (41.8%) are the largest group, followed by whites (31.0%) and blacks (18.5%).

## FIVE KEY AREAS OF SOCIAL DETERMINANTS OF HEALTH (SDoH)

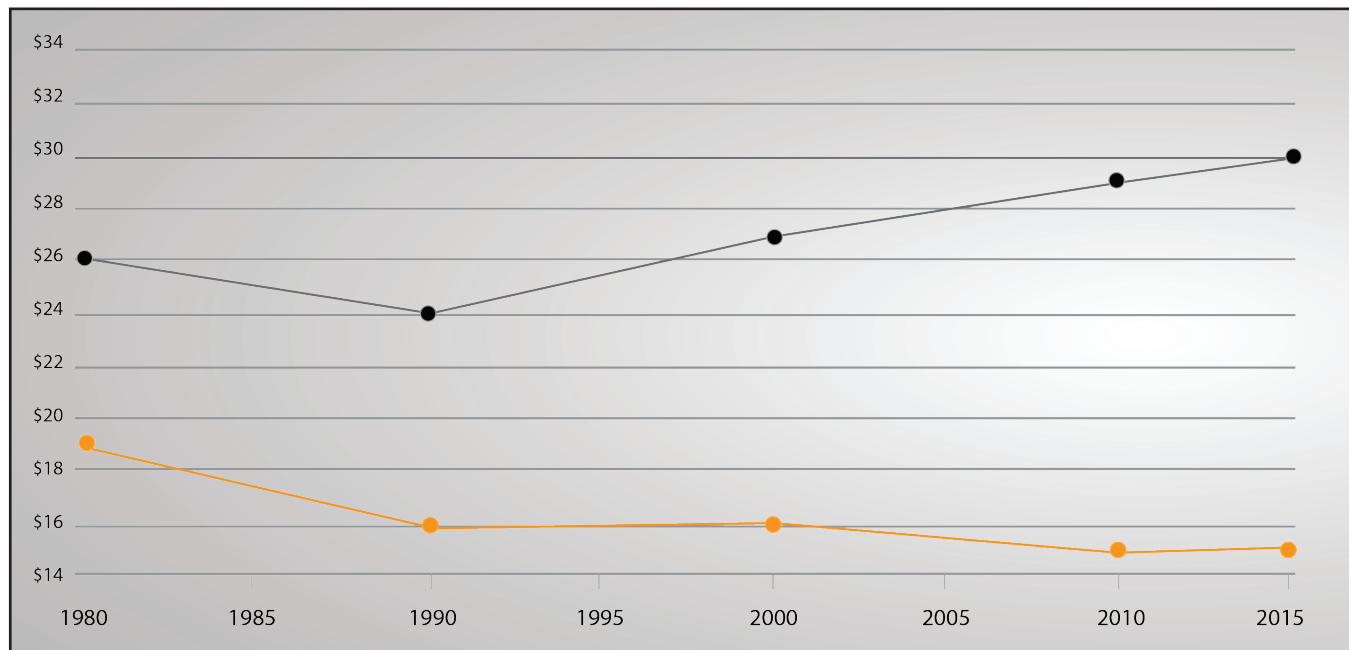
The Centers for Disease Control and Prevention (CDC) noted, “the socioeconomic circumstances of persons and where they live, and work strongly influence their health.”<sup>17</sup> Each individual starts out with his or her own genetic health profile, along with a number of social determinants that may play into the overall health throughout their life span.

When a population experiences poor socioeconomic circumstances, health consequences can be seen in every stage of life. Further, these conditions have a cumulative effect, so that those with the most unfavorable circumstances have the poorest health outcomes. People in lower socioeconomic levels usually run at least twice the risk of serious illness and premature death than those in higher socioeconomic levels. Common indicators used to measure socioeconomic circumstances are education, employment, income, and housing.<sup>18</sup>

### ECONOMIC STABILITY

Discrepancies in wages are commonly seen by race/ethnicity and gender in Houston/Harris County. According to the National Equity Atlas, in 2015 in Houston, the median wage of workers of color was \$15 less than those of white workers. Over 35 years, from 1980 to 2015, the gap has increased to more than twice as much.<sup>19</sup>

Improving wage disparities can have a positive impact for the total population. Policy and systems changes that ensure equal pay for equal work, fair hiring, and rising wages for low-wage workers will boost incomes, resulting in more of the consumer spending that drives economic growth and job creation.<sup>20</sup>

**Figure 4: Trends in Median Hourly Wage by Race/Ethnicity, Houston, Texas 1980 - 2015**

Data Source: National Equity Atlas    People of color ■ White ■ (People of Color: Hispanics, African Americans, Asians, Native Americans, mixed racial backgrounds)

### POVERTY LEVEL

Poverty greatly impacts the shape of communities. Poverty is measured by the proportion of people living below the Federal Poverty Level (FPL) or twice/three times the FPL. In the period of 2014-2018, 20.6% of Houston families lived below the FPL. This can be compared to 16.5% in Harris County, 14.9% in Texas, and 11.8% in the US.<sup>21</sup> The US Census Bureau reports that the poverty threshold for a family with two adults and one child was \$20,780 in 2018. The income threshold for a one-person household was \$12,140.<sup>22</sup>

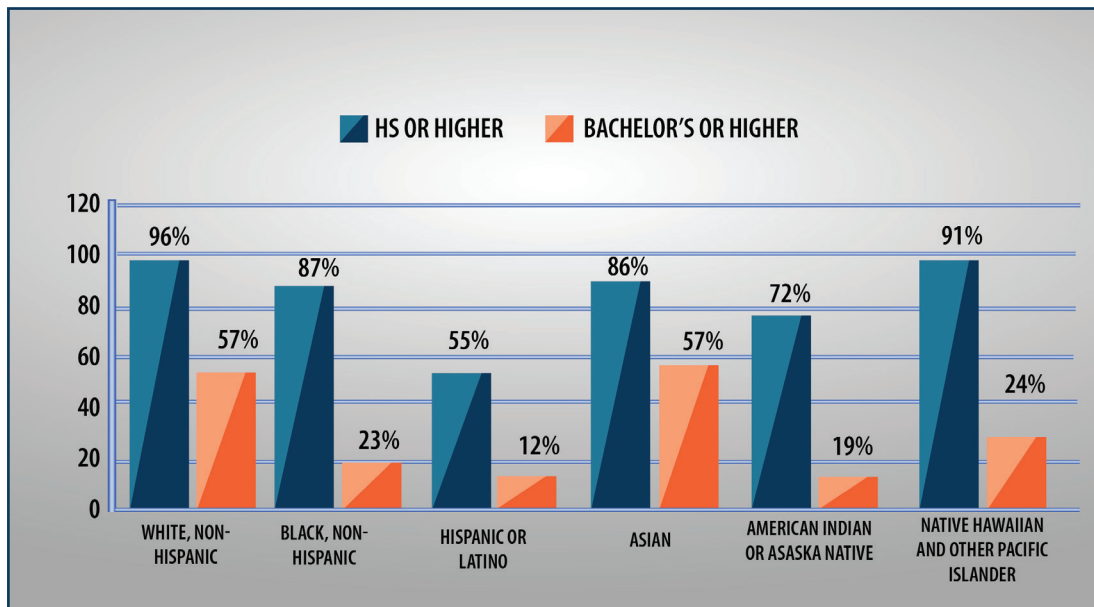
### EDUCATION

The U.S. Census (2014 – 2018) indicates that the percentage of high school graduates in Texas is 83.2%, Harris County 80.9%, Houston 78.3% compared to the U.S. 87.7%.<sup>23</sup> High school dropout rates are a key indicator of social and economic challenges, including limited earning potential, increased unemployment, greater likelihood of criminality, and a shorter lifespan.<sup>24</sup> Harris County and Houston's high school graduation rates are lower than that of the U.S. population.<sup>25</sup> Higher education leads to lower rates of chronic illness and death and long years of life (life expectancy). The health advantage that education grants can be seen through one or more generations. The parent's education, particularly the mother's, is strongly associated with their child's health outcomes.<sup>26</sup>

There are many mechanisms by which education can impact health status such as:

1. increasing knowledge about health (health literacy)
2. improving coping and problem-solving skills
3. expanding employment opportunities and earning potential
4. facilitating greater self-efficacy in problem solving, stress management and more access to social support<sup>27</sup>

Houston minority residents aged 15 -19 are less likely to be enrolled in school, with blacks 2.2 times less likely to be enrolled in school, and Hispanics are 3.4 times less likely to be enrolled in school than whites.<sup>28</sup>

**Figure 5: Percentage of Educational Attainment by Race/Ethnicity, Houston TX 2012-2016**Data Source: American Community Survey<sup>29</sup>

Each additional year of education leads to 11% more income annually, and additional benefits such as a safer work environment and better availability of health insurance.

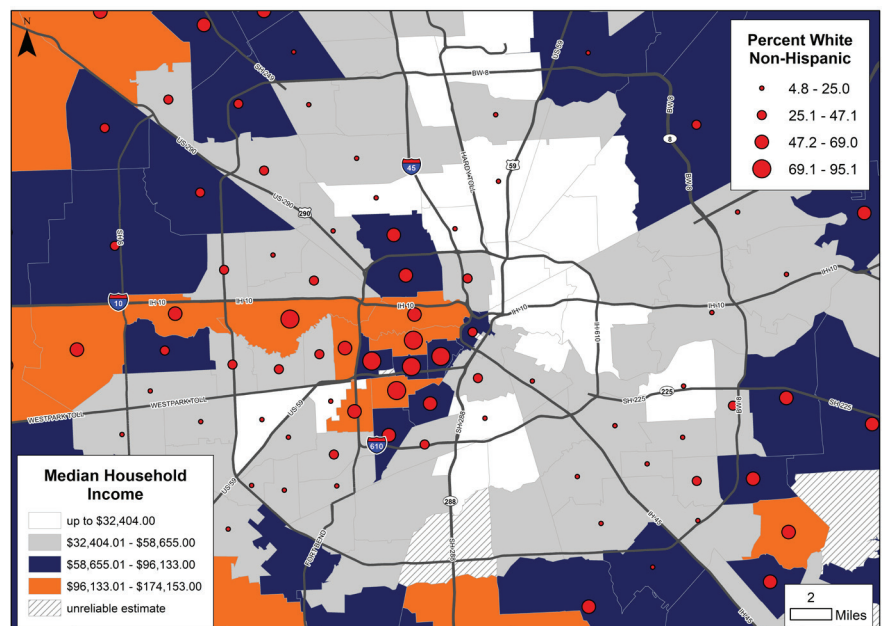
## SOCIAL AND COMMUNITY CONTEXT

### *Household Income and Racial Segregation by Zip Code*

According to the Pew Research Center, Houston has 37% of low-income households located in the lower-income census tract. The highly segregated concentration of low-income households has significant implications for the living conditions and resources available to Houston families.<sup>30</sup> Access to quality, safe, and affordable housing is one of the important neighborhood features that shape health outcomes. The Kinder Institute reported that the Houston area is the most diverse large metropolitan area in the United States and is also one of the most segregated. Residential segregation can be by race/ethnicity or by income, and it is related to income inequality.<sup>31</sup>

People choose their neighborhood in large part based on their ability to afford housing in that area and secondly on their preferences for location, which includes safety and proximity to work, schools, parks, and other amenities. Regional decisions can also impact communities and the health of residents. For example, where to locate train, subway, and bus lines, or where to locate a new hospital or a new landfill all have potential implications for those who live near these amenities or hazards.<sup>32</sup>

### **Household Income & Racial Segregation by Zip Code (ACS 2012-2016)**



Data Source: US Census Bureau, American Community Survey, Map by the Houston Health Department.



## IMMIGRATION

The Houston metropolitan area has been rapidly growing, from 6 million in 2010 to 7 million in 2017; immigrants account for 1.7 million of the total population. Resulting from this growth, Houston has become a majority-minority city, where no one racial/ethnic group is in the majority. Immigrants in Houston come primarily from Spanish speaking countries in Central and South America or countries in Asia.<sup>33</sup>

The aggregate education and income profile by country of origin of the immigrant population in Houston are bimodal, meaning that they are highly educated, or they have fewer than 12 years of schooling. The aggregated income profile shows that either they are earners with a high family income or they are at less than 200% of the Federal Poverty Level. This type of pattern is seen consistently, based on their country of origin.<sup>34</sup>

## LANGUAGE

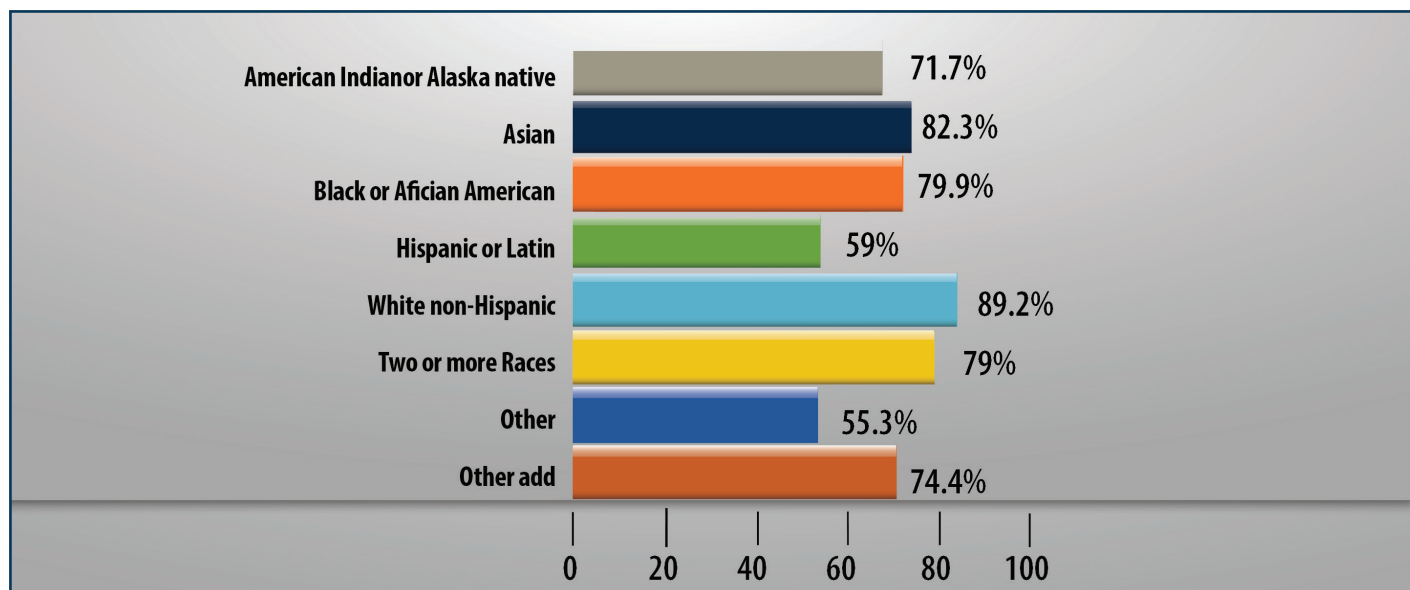
Houston/Harris County has greater proportions of both foreign-born residents and residents who do not speak English at home than Texas or the U.S. American Community Survey data for 2017 – 2018 estimates show that 26.1% of Harris County residents are foreign-born, compared with 29.5% of Houston residents, 17.1% of Texas residents, and 13.7% of U.S. residents. In 2013, 70.0% of foreign-born Harris County residents reported Latin America as their birthplace while 21.1% reported Asia as their birthplace. In the U.S., 51.9% of foreign-born residents reported they were born in Latin America and 29.5% reported that they were born in Asia<sup>35</sup>

## HEALTH AND HEALTH CARE

According to the State of Health website, using 2015 data, 22.1% of Harris County adults are unable to see a doctor due to cost. The county's percentage is higher than the proportion of adults who cannot see the doctor in Texas (18.3%) and the US (12.1%). More females (27.1%) found visits to a doctor unaffordable compared to men (16.7%).<sup>36</sup>

State of Health (2015 – 2016) states that the proportion of people that have health insurance varies by race/ethnicity in Harris County. The white non-Hispanic population has the highest percentage of persons with health insurance (89.2%). The Hispanic population has the lowest percentage of persons (59.0%) who are insured.<sup>37</sup>

**Figure 6: Percentage of Adults with Health Insurance by Race/Ethnicity, Harris County TX 2016**



Data Source: Houston State of Health website

## NEIGHBORHOOD AND BUILT ENVIRONMENT

*The Greater Houston area is the most diverse and one of the most segregated large metropolitan areas in the country.*

The World Health Organizations (WHO) reported that “where people live affects their health and chances of leading flourishing lives.”<sup>38</sup> Built environment examples include population density, housing age, land usage, green space, and walkability. According to the Centers for Disease Control and Prevention (CDC), healthy community design can improve people’s health by:

- Increasing physical activity
- Increasing access to healthy food
- Minimizing the effects of climate change
- Strengthening the community’s social fabric
- Providing fair access to livelihood, education, and resources<sup>39</sup>
- Reducing injury
- Improving air and water quality
- Decreasing mental health stresses

### LAND USE/GREEN SPACE

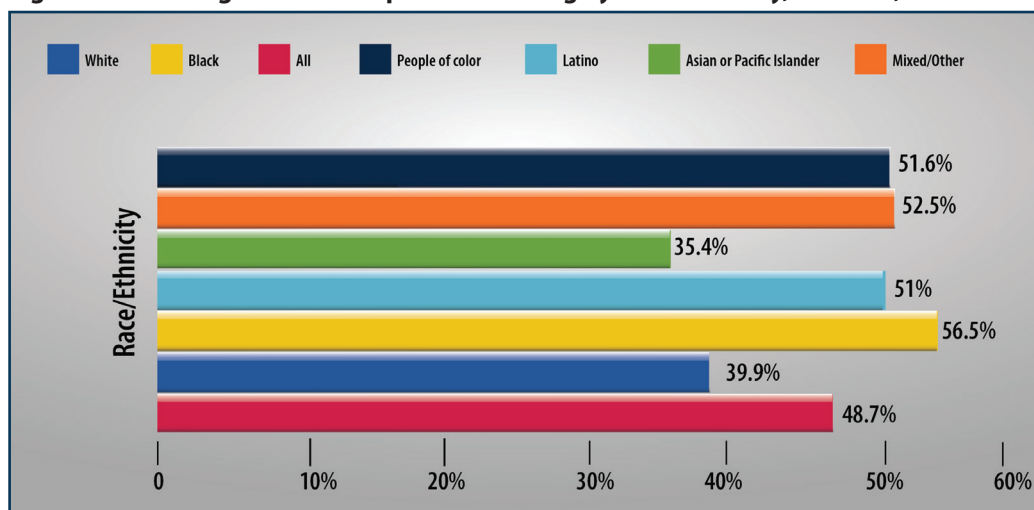
Parks and other green spaces provide opportunities for physical activity, mental health promotion, and cultural events. Harris County, with 14.05 acres per 100 residents, does not meet the national standard of 20 acres per 100 residents. Despite the ample evidence of health benefits, Houston’s park space lags in terms of accessibility, investment, and services in comparison to other major cities.<sup>40</sup>

### HOUSING

Housing is the single most significant expense for most households, and far too many pay a high amount for housing, particularly low-income families and households of color. According to the Harris County Flood District, Hurricane Harvey 2017 produced the largest and most devastating house flooding event ever recorded in Harris County. Based on house flooding assessments, the estimated total number of homes flooded within Harris County was 154,170 which comprised of 9%-12% of the total number of buildings in the county.<sup>41</sup>

One in five households in Harris County reported severe housing problems, based on data from 2010 - 2014. Severe housing problems are defined as overcrowding, high housing costs, lack of a kitchen, or lack of plumbing facilities. Part of the housing crisis is a shortage of affordable rental properties. About half of Harris County residents are renters, including many with very low-incomes, defined as a maximum of \$23,850 for a family of four. According to the Urban Institute, Harris County had 45,048 adequate, affordable and available units for 164,064 low-income families that needed housing in 2010-2014.<sup>42</sup>

**Figure 7: Percentage of Income Spent on Housing by Race/Ethnicity, Houston, Texas 2015<sup>43</sup>**



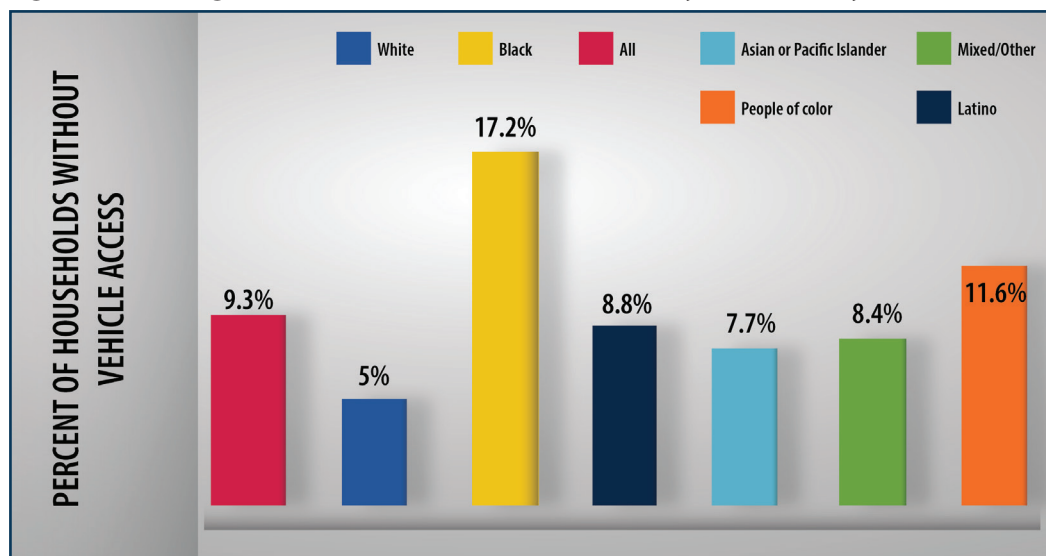
Most minority populations spend half or more of their salary on housing costs. Blacks and Hispanics and some other minority groups spent a larger proportion of their salary paying for their housing costs in Houston compared to white and Asian households.

Data Source: National Equity Atlas

## TRANSPORTATION

Reliable and affordable transportation is critical for meeting daily needs and accessing educational and employment opportunities. The public transit system for the Houston area is the METRO Transit Authority. METRO serves Houston and the nearby areas through its bus and rail network. However, the suburban and the outlying areas minimally served by their transportation network. The Houston area is wide-spread and covers 1,285 square miles, making adequate public transportation more of a challenge.<sup>44</sup>

**Figure 8: Percentage of Households Without Vehicle Access by Race/Ethnicity, Houston TX 2015**



In Houston, 17.2% of black households do not have access to a car, a larger proportion than faced by all other groups. This creates many challenges in their daily lives.

Data Source: National Equity Atlas<sup>45</sup>

## TOXIC AIR POLLUTION

Houston air pollution comes from emissions from one of the largest ports in the US and the many industrial refining and chemical companies along the Houston ship channel, including one of the largest petrochemical complexes in the world. Houston does not have zoning, so some communities exist next to these industrial sites. Inhalation of toxic air pollutants from industrial emissions can cause cancer as well as other respiratory illnesses in these communities.<sup>46</sup>

## LEAD-BASED PAINT

Lead is recognized as the leading environmental poison for children in the City of Houston and exposure to lead-based paint is the primary source. The Centers for Disease Control and Prevention (CDC) has designated lead-based paint as "the most widespread and dangerous high-dose source of lead exposure for young children."<sup>47</sup> Children living in older, deteriorated homes are at highest risk of lead exposure. Homes built before 1978 are more likely to contain lead-based paint than those built after 1978.<sup>48</sup>





# FIVE HEALTH PRIORITIES

Access to Care

Chronic Disease

Environmental Health

Infectious Disease

Maternal and Child Health

» *“Empowerment of individuals and communities is absolutely central. Getting the community involved in organizing their own destiny has got to be a key part of it.” – Michael Marmot* «

# ACCESS TO CARE

“Increase the availability of primary care providers, including clinics that service the uninsured.” – Community Opinion Group Voice, 2019

A Kaiser Family Foundation report noted, “Health insurance makes a difference in whether and when people get necessary medical care, where they get their care, and ultimately, how healthy people are.” On December 22, 2017, Congress passed the Tax Cuts and Jobs Act of 2017 (Sec. 11081) bill that “repeals the penalty for individuals who fail to maintain minimum essential health coverage as required by the Patient Protection and Affordable Care Act (commonly referred to as the individual mandate).”<sup>49</sup>

Texas has the highest rate of uninsured persons in the nation, a position the state has held for many years. According to 2017 American Community Survey: 1 year estimates (uninsured) data, City of Houston residents (25.4%), Texas residents (17.3%) are without health insurance coverage, compared to 8.7% of U.S. residents.<sup>50</sup> Rates of uninsurance are even higher when the elderly (primarily covered by Medicare) and children (often eligible for Medicaid or CHIP if not covered by family members’ employer-sponsored coverage) are excluded. At all ages, uninsurance rates are higher in Texas than the United States, and are even higher in the Houston region (Houston-The Woodlands Combined Statistical Area), Harris County, and the City of Houston than in Texas.<sup>51</sup>



## 1 GOAL

**Maintain the current level of enrollments to access to care in the Enroll Gulf Coast Collaborative.**

### SMART Objectives

#### Objective 1.1

By December 31, 2021, increase the number of organizations that are actively participating in the Collaborative from 8 to 12.

#### Objective 1.2

By December 31, 2021, maintain the application assistance for Children Health Insurance Plan (CHIP), Medicaid and Marketplace enrollments (Baseline 2800).

#### Objective 1.3

By December 31, 2021, maintain the number of people who are educated about enrollment and insurance (Baseline 10,300).

## STRATEGIES/ACTIONS

- Enroll Gulf Coast (EGC) partners focusing on enrollment assistance will reach out to past clients through email, robo-calls and snail mail and provide education on enrollment and application assistance.
- EGC will work in partnership to put together two enrollment events and three phone banks a year to outreach to target populations.
- Partners who work with families will inform parents of the CHIP/Medicaid plan enrollment period.

**COMMUNITY PARTNERS:** Enroll Gulf Coast; Avenue 360; Center for Public Policy and Priorities; Change Happens; Legacy Community Health Services; Light and Salt; Lone Star Legal Aid; The Network of Behavioral Health Providers; Young Invincibles

## BEHAVIORAL HEALTH (Sub-Priority)

With more than 500,000 Texans suffering from serious and persistent mental illness and 1 in 5 Texans experiencing a mental health condition each year, behavioral health continues to be a problem with no long-term solution in sight.<sup>52</sup> The Houston State of Health (2016) states that 11.2% of adults who reported that their mental health, which includes stress, depression, and problems with emotions, was not good for 14 or more of the past 30 days. Psychological distress can affect all aspects of individual lives.<sup>53</sup> With respect to younger residents, an estimate 3 million youth and young adults live with mental health concerns that are serious<sup>54</sup> and local data reflect almost 200,000 youth in the Houston area have a mental health condition which requires treatment.<sup>55</sup>

Barriers to receiving mental health services were described in the Houston State of Health 2015 -2015 as 8% of Houston/Harris County adults reported seeing a mental health professional in the last year. An additional 9% reported needed professional mental health assistance, but were unable to obtain care. Of those who were unable to access mental healthcare, nearly 60% identified cost as the principal barrier, followed by feeling uncomfortable (31%), concerned that someone would find out (22%), and having trouble getting an appointment (17%). In addition, 38% of residents who did not get the help they needed to face more than one barrier in seeking mental health care.<sup>56</sup>

“I applaud an objective which will create a framework for a system-wide, person-centered continuum of care that integrates medical, behavioral health, and social services.” – *Community Opinion Group Voice, 2019*

### 1 GOAL

**Promote a Trauma-Informed System of Care and increase access for patients by training NBHP-affiliated licensed behavioral health professionals and other Houston-area professionals directly involved in trauma and/or disaster recovery.**

#### SMART Objectives

##### Objective 1.1

By December 2019, train and graduate up to 70 licensed, master's level NBHP behavioral health providers from the Houston-Galveston Trauma Institute's 12-month intensive Trauma Informed Care program.

##### Objective 1.2

By December 2018, provide at least 8 hours of training on Trauma Informed Care, in collaboration with the Israel Trauma Coalition, to as many as 40 behavioral health and disaster recovery professionals that are both licensed and non-licensed.

##### Objective 1.3

By December 2021, 30 professionals that completed the Israel Trauma Coalition's "Train-The-Trainer" Trauma program in 2018 will deliver at least 8 hours of training on Trauma Informed Care to at least 100 professionals involved with primary care, behavioral health, or disaster recovery.

### 2 GOAL

**Work with local agencies to provide licensed behavioral health provider volunteers to prepare and respond in case of emergency and/or disaster.**

#### SMART Objective

##### Objective 2.1

By October 2019, develop and maintain an emergency disaster response plan for behavioral health that focuses on the coordination and support of behavioral health provider volunteers.

### 3 GOAL

**Strengthen overall Behavioral Health for Houston citizens by increasing access to whole person care.**

#### SMART Objectives

##### Objective 3.1

Create the blueprint/framework for a coordinated, system-wide, person centered continuum of care that integrates medical, behavioral health and social services while addressing the social determinants of health by May 2019.

##### Objective 3.2

Engage at least 60 behavioral health, primary care, and social service organizations for partnership in our Community Coordination of Care (C3) initiative by December 2018.

##### Objective 3.3

Implement a pilot a project by September 2019 focused on improving client and community outcomes, reducing service duplication, maximizing resource efficiency and generating cost savings.

## STRATEGIES/ACTIONS

- Develop a protocol for volunteers, design and maintain an on-line sign-up system for volunteer response
- Develop a system for volunteer license checks, scheduling templates, and training modules for different types of disasters (natural disaster, loss of power, community violence, different populations, different settings (shelter); including Identify IT solution for hosting training modules on NBHP.org website for easy access by licensed BH volunteers
- Specific training for providing behavioral health services in a shelter.

**COMMUNITY PARTNER:** The Network of Behavioral Health Providers (NBHP \*)



# CHRONIC DISEASE

## HEALTHY FOODS AND BEVERAGES

Food insecurity, defined by the United States Department of Agriculture (USDA) as limited availability or uncertainty to access nutritionally adequate foods.<sup>57</sup> It is associated with chronic health problems including diabetes, heart disease, high blood pressure, high cholesterol, obesity, and mental health issues including major depression.<sup>58</sup>

Food insecurity is an economic and social indicator of the health of a community.<sup>59</sup> In Harris County, 16.6% of the households reported uncertain or limited access to nutritious food in 2016.<sup>60</sup> This could be due to a number of reasons such as cost of nutritious foods, lack of transportation, lack of easy access to a grocery or food preparation challenges.<sup>61</sup>

Child food insecurity has serious long-term implications for the child's health and development.<sup>62</sup> Children who are food insecure are more likely to be hospitalized and to develop many physical and mental health issues.<sup>63</sup> Food insecurity can also exacerbate the academic, behavioral or disciplinary problems encountered in school.<sup>64</sup> According to the State of Health website, one in four children in Harris County faces uncertainty in whether adequate and nutritious food will be available in their homes.<sup>65</sup>

**COMMUNITY PARTNERS:** Brighter Bites, Houston Food Bank, Harris County Public Health, Houston Health Department, Houston Parks and Recreation Department Urban Harvest, U.S. Department of Health and Human Services (HHS), Houston Independent School District, Special Supplemental Nutrition Program for Women, Infants, and Children.



Photo: Community garden with youth, 2018



*"Increase the number of local community gardens."*

– Community Opinion Group Voice, 2019



### GOAL 1

#### Increase access to healthy foods and beverages

##### SMART Objectives

##### Objective 1.1

Increase utilization rate of EBT and other nutrition assistance resources by 3% by December 2021.

##### Objective 1.2

Increase the reach of promotion of school food options and programs during the summer by 20% by December 2021.

#### STRATEGIES/ACTIONS

- Facilitate electronic benefit transfer (EBT) payment technical assistance to local farmers markets.
- Increase awareness and promotion of school food options and program during the summer.



## PROMOTING WELLNESS AND PHYSICAL ACTIVITY



Photo: Go Walk Houston Day, 2018

More than 60% of adults in the United States do not engage in the recommended amount of activity, and about 25% of adults are not active at all.<sup>66</sup> Physical activity helps reduce the symptoms of anxiety and depression, improves mood and feelings of well-being, promotes healthy sleep patterns, reduces the risk of multiple chronic diseases, helps control weight, develop lean muscle, and reduce body fat.<sup>67</sup>

*"More parks and safe place to walk."*

– Community Opinion Group Voice, 2019

### STRATEGIES/ACTIONS

- Install and revitalize bike lanes.
- Install and revitalize sidewalk network.
- Provide worksite wellness technical assistance and best practices.

## GOAL 2

### Increase opportunities for active living.

#### SMART Objectives

#### Objective 2.1

Increase and improve active transportation infrastructure in underserved communities by 3% by December 2021.

#### Objective 2.2

Increase the number of worksite promoting wellness and physical activity opportunities by an additional 3 worksites from 2017 to December 2021.

**COMMUNITY PARTNERS:** American Heart Association, Cigna, Harris County Public Health, Houston Business Coalition on Health, Houston-Galveston Area Council, Houston Health Department, Houston Parks and Recreation Department, Houston Planning and Development, Houston Public Works Department, Management Districts/TIRZ.

# CHRONIC DISEASE

## EMERGING TRENDS IN TOBACCO PRODUCTS



*"Vaping risk is insufficiently publicized at present. Billboards and short TV commercials should be used."*

*- Community Opinion Group Voice, 2019*



Tobacco is most responsible for avoidable illness and death in the United States.<sup>68</sup> In 2002, over 22% of persons in the Houston area reported that they smoked. That percentage dropped to 12% in 2016.<sup>69</sup> Even though rates are dropping, smoking still leads to the deaths of 28,000 adults in Texas each year.

One of the emerging trends for tobacco use is electronic cigarettes (e-cigarettes).<sup>70</sup> According to the Surgeon General, between 2011 and 2018, past-30-day e-cigarette use grew dramatically among middle school (grades 6-8) and high school (grades 9-12) students. E-cigarettes have been the most commonly used tobacco product by youth in the United States since 2014.<sup>71</sup> The Centers for Disease

Control and Prevention states that "electronic cigarettes (e-cigarettes) is unsafe for kids, teens, and young adults. Most e-cigarettes contain nicotine. Nicotine is highly addictive and can harm adolescent brain development, which continues into the early to mid-20s. E-cigarettes can contain other harmful substances besides nicotine. Young people who use e-cigarettes may be more likely to smoke cigarettes in the future."<sup>72</sup>

According to the 2018 Texas Youth Tobacco Survey, 13% of youth used e-cigarettes in the past 30 days. This means that 18.9% of high school students and 6.0% of middle school students used e-cigarettes in the past 30 days.<sup>73</sup>



### Increase access to smoke and tobacco free environments.

#### SMART Objectives

#### Objective 3.1

Increase policy development activities to update the City of Houston Smoking Ordinance to address emerging trends in tobacco use and to increase the number of people covered by 6 activities by December 2021.

#### Objective 3.2

Implement health promotion activities to reduce youth initiation of tobacco use and nicotine dependency by 3 activities by December 2021.

### STRATEGIES/ACTIONS

- Develop a youth focus tobacco prevention messaging campaign.

**COMMUNITY PARTNERS:** American Diabetes Association, BakerRipley, City of Houston, Go Healthy Houston, Houston Health Foundation, Harris County Public Health, Houston Health Department, Houston Independent School District, MDACC Anderson, University of Texas School of Public Health, Texas Medical Center Campus.



## COMMUNITY-BASED HEALTH EDUCATION AND PROMOTION



Chronic diseases such as heart disease, cancer, and diabetes are responsible for seven out of every ten deaths each year.<sup>74</sup> In Harris County, heart disease has persisted as the first or second cause of death, and cerebrovascular disease, a category that includes stroke, is the fourth leading cause of death.<sup>75</sup>

The State of Health: Houston and Harris County 2015-2016 mentioned that according to the 2013 BRFSS data, 5.5% of surveyed adults living in the Houston-Baytown-Sugar Land MSA (Houston MSA) being diagnosed with some form of heart disease compared to 5.7% of Texas adults.<sup>76</sup> In addition, the 2013 BRFSS data showed that 10.8% of surveyed adults in the Houston-Baytown-Sugar Land MSA reported they had been told by a physician that they have diabetes, compared to 10.9% of surveyed adults in Texas.<sup>77</sup>

“Diabetes can be treated and managed by healthy eating, regular physical activity, and medication to lower blood glucose levels.”

- Centers for Disease Control and Prevention, 2019

### STRATEGIES/ACTIONS

- Increase promotion of local diabetes prevention and self-management programs.
- Increase awareness and promotion of school food options and program during the summer.
- Increase client referrals to existing diabetes prevention programs.
- Increase availability of health education for the prevention and management of chronic diseases.

**COMMUNITY PARTNERS:** American Diabetes Association, BakerRipley, CAN Do Houston, Federally Qualified Health Centers, Houston Health Department, Provider Partners, YMCA of Greater Houston.

## 4 GOAL

**Increase access to community-based health education and preventative interventions that promote wellness.**

### SMART Objectives

#### Objective 4.1

Increase the number of community-based chronic disease health education and promotional activities in Complete Communities by 5 activities by December 2021.



# ENVIRONMENTAL HEALTH

## AIR QUALITY / WATER QUALITY

Environmental pollution can exacerbate health disparities. In the case of air pollution, low income communities are most likely to be located near polluting sources.<sup>78</sup> All areas in the Houston/Harris County region are exposed to unhealthy levels of at least one air contaminant—a result of urban concentrations of vehicle exhaust and industrial emissions. Communities closest to large sources of air toxins are at greatest risk of detrimental health effects from air toxic pollution. In Houston/Harris County, the greatest sources of air toxic pollution are next to and around the Houston Ship Channel.<sup>79</sup>



Clean Water is crucial to the health of Houston/Harris residents.<sup>80</sup> In order to maintain water quality, surface water is monitored for bacteria levels, dissolved oxygen, toxic contaminants and nutrients all of which affect the safety of contact recreational activities and fish consumption. Over 80% of the waterways fall below state water quality standards for one or more of these parameters, such as high bacteria concentrations and toxic contaminants.<sup>81</sup>

### GOAL 1

**Conduct outreach activities that increase environmental awareness and promote environmental health resources to community (Air Quality / Water Quality).**

#### SMART Objective

##### Objective 1.1

By December 31, 2021, conduct outreach activities at least four times per year and increase up to six times per year.

*"It would be good to see billboards, public awareness campaigns, info disseminated through Complete Communities."*  
 - Community Opinion Group Voice, 2019





Source: Bayou Preservation Association, January 2020, Little White Oak Bayou, Woodland Park, Houston

## GOAL 2

### Conduct activities that address the amount of pollutants released into the air.

#### SMART Objectives

##### Objective 2.1

Identify the top 5 cement batch plant locations annually that impact the Houston community based on proximity to sensitive receptors with assistance from the Air Alliance of Houston (AAH) by December 31, 2021.

##### Objective 2.2

By December 31, 2021, conduct random surveys at a minimum of five sites once a week at previously unmonitored sites.

#### STRATEGIES/ACTIONS

- Conduct outreach activities\* at least four times per year by December 31, 2018 and increase up to six times per year by December 31, 2021. Outreach activities\* may include Earth Day, Trash Bash, Water Festival, Houston Health Day, promoting EPA Village Green Monitor.
- Address and/or eliminate at least one-point source or non-point source of bacteria on each of these top 5 most impaired waterways by December 31, 2021.
- Conduct at least one litter reduction activity in each of the three prioritized watersheds once per calendar year through 2021.

## GOAL 3

### Conduct activities aimed at reducing bacteria and other pollutants entering our bayous, creeks and streams.

#### SMART Objectives

##### Objective 3.1

By December 2021, establish a baseline for the number of point sources or non-point sources of bacteria that are eliminated from the identified top five impaired waterways.

##### Objective 3.2

By December 2021, establish a baseline for the annual number of service requests related to trash/floatables in three prioritized waterways.

**COMMUNITY PARTNERS:** Air Alliance Houston, Bayou Preservation Association



# INFECTIOUS DISEASE

## HUMAN IMMUNODEFICIENCY VIRUS(HIV)



“The CDC estimates 1.1 million people are currently living with HIV in the United States in 2016 and about one in seven are unaware of their infection and need testing.” - Centers for Disease Control and Prevention

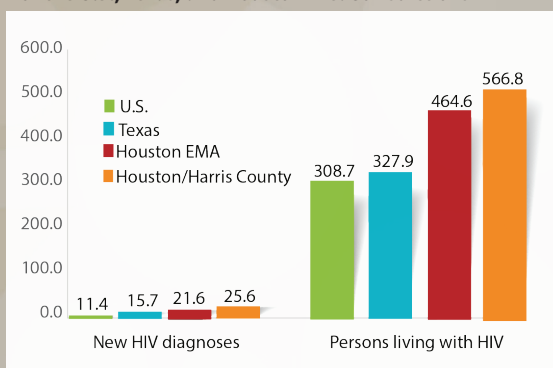
Stage 3 HIV (formerly AIDS) has been a reportable condition in Texas since March 1983. In January 1999, all positive HIV tests became reportable to the State. While the year in which a positive HIV test result is reported is not necessarily the year in which the transmission occurred, reports of new HIV diagnoses provide the most complete representation of trends in HIV transmission.

In 2018, 1,211 new diagnoses of HIV disease (including stage 3 HIV) were reported in Houston/Harris County, an 8.1% increase in case counts from 2017. The rate of new HIV diagnoses increased from 23.9 to 25.6 per 100,000 residents, while the rate of stage 3 HIV diagnoses in Houston/Harris County remained approximately 11 diagnoses for every 100,000 residents. Proportionally, Black/African Americans made up the majority of new HIV diagnoses in 2018 at 45%, followed by Hispanic/Latinos at 38%. Male-to-male sexual contact or MSM accounted for the most transmission risk at 68%, followed by sex with male/sex with female at 25%.<sup>82</sup>

As of the end of calendar year 2018, there were 26,859 people living with HIV (regardless of disease progression) in Houston/Harris County. This is a prevalence rate of 567 people living with HIV for every 100,000 people in the jurisdiction. Of those living with HIV in Houston/Harris County, 76% are male, 49% are African American, 75% are age 35 and older, and 58% report male-to-male sexual contact or MSM as their primary transmission risk.<sup>83</sup>

Both Houston/Harris County and the Houston Eligible Metropolitan Area (EMA) have higher rates of new HIV diagnoses and prevalence than Texas and the U.S. Some specific populations in the Houston EMA have been hardest-hit by HIV. Men who have sex with men (MSM), Black/African Americans, and Hispanic/Latinos had the largest numbers of new HIV diagnoses in the EMA in 2018. At the subpopulation level, Black/African American MSM, Hispanic/Latino MSM, and youth of color (ages 13-24) were also hardest-hit.<sup>84</sup>

**\*Rate of New HIV Diagnoses and of Persons Living with HIV for the U.S., Texas, and Houston Area Jurisdictions**



\*Rate is per 100,000 population in the respective jurisdiction.

Sources:

U.S.: Centers for Disease Control and Prevention. Diagnoses of HIV Infection in the United States and Dependent Areas, 2018. HIV Surveillance Report, 2018 (Preliminary); vol. 30. Published November 2019.

Texas: Texas Department of State Health Services (TDSHS), Texas eHARS, 2018.

Houston EMA: Texas eHARS. All data, 2018.

Houston/Harris County: Houston/Harris County eHARS. Diagnoses, 2018; Prevalence, 2018.

## HIV Care Continuum – Houston EMA (2016 – 2018)<sup>85</sup>

Larger Figure: [http://rwpchouston.org/Publications/2017\\_Comp\\_Plan/Care\\_Continuum.htm](http://rwpchouston.org/Publications/2017_Comp_Plan/Care_Continuum.htm)

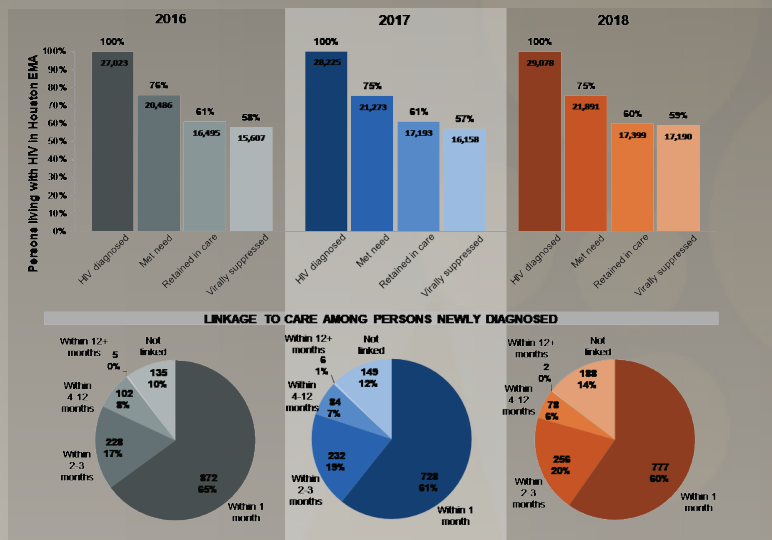


Table of Definitions

- HIV diagnosed:** # of persons living with HIV (PLWH) residing in Houston EMA through end of year (Source: Texas eHARS data)
- Met need:** # (%) of PLWH in Houston EMA with met need (at least one: medical visit, ART prescription, or CD4/VL test) in year (Source: \*\*Texas DSHS HIV Unmet Need Project (incl. eHARS, ELR, ARIES, ADAP, Medicaid, private payer data)
- Linked to care (pie chart):** # (%) of newly diagnosed PLWH in Houston EMA who were linked to medical care ("Met need") within N months of their HIV diagnosis (Source: Texas DSHS HIV Unmet Need Project (incl. eHARS, ELR, ARIES, ADAP, Medicaid, private payer data)
- Retained in care:** # (%) of PLWH in Houston EMA with at least 2 medical visits, ART prescriptions, or CD4/VL tests in year, at least 3 months apart (Source: Texas DSHS HIV Unmet Need Project (incl. eHARS, ELR, ARIES, ADAP, Medicaid, private payer data)
- Virally suppressed:** # (%) of PLWH in Houston EMA whose last viral load test of the year was  $\leq 200$  copies/mL (Source: Texas ELRs, ARIES labs, ADAP labs)

- From 2016-2018, the total number of persons diagnosed with HIV increased each year and the percentage of those with met need, retention, and viral suppression remained relatively constant.
- The percentage of newly diagnosed people living with HIV (PLWH) linked to care within one month of diagnosis decreased from 65% to 60% from 2016 to 2018.



## Reduce disparities in the Houston Area HIV epidemic and address the needs of vulnerable populations.

### SMART Objective

#### Objective 3.1

Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by December 2021.

## STRATEGIES/ACTIONS

- Adopt high-impact structural interventions such as governmental policy change and population-based efforts that destigmatize HIV risk reduction and help create unfettered access to HIV information and proven prevention tools.
- Expand opportunities for HIV testing for the general public and in high incidence populations and communities.

**COMMUNITY PARTNERS:** Houston Ryan White Planning Council (RWPC), Houston HIV Prevention Community Planning Group (CPG)



## Prevent and reduce new HIV transmissions.

### SMART Objectives

#### Objective 1.1

Reduce the number of new HIV infections diagnosed in the Houston Area by at least 25% from 1,386 (2014) to  $\leq 1,004$  by December 2021.



## Ensure that all people living with or at risk for HIV have access to early and continuous HIV prevention and care services.

### SMART Objectives

#### Objective 2.1

Increase the proportion of newly-diagnosed individuals linked to clinical HIV care within one month of their HIV diagnosis to at least 85% from 66% (2015) by December 2021.

#### Objective 2.2

Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by December 2021.



# MATERNAL AND CHILD HEALTH

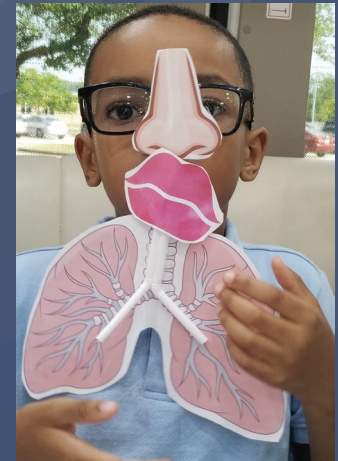
## A S T H M A



Photo Source: Environmental Mobile Unit (EMU) for Asthma Education and Outreach, 2019

*"In the United States, nine people die each day from asthma."*

**- Centers for Disease Control and Prevention**



Asthma is a chronic (long-term) lung disease that affects both children and adults.<sup>86</sup> This makes airways very sensitive to any irritants or allergens, such as secondhand smoke, dust, furry pets, poor air quality, or mold.<sup>87</sup>

According to Centers for Disease Control and Prevention (CDC), more than half of children with asthma had one or more attacks in 2016. Every year, 1 in 6 children with asthma visits the Emergency Department with about 1 in 20 children with asthma hospitalized for asthma. An estimated 7.0% of children in Texas have current asthma.<sup>88</sup> In 2014, a telephone survey conducted by the American Lung Association estimated that over 91,000 children and 209,000 adults in Harris County have been diagnosed with asthma.<sup>89</sup>

In the Texas Health Service Region 6 (Houston Area), the 2011 hospital admittance rate with asthma as the primary diagnosis was 7.7 per 10,000 admissions, lower than the state rate of 9.4. As one of the most common chronic childhood disorders, asthma is one of the leading causes of school absenteeism. In 2008, a total of 14.4 million school days were missed by children who had an asthma attack the previous year.<sup>90</sup>

### STRATEGIES/ACTIONS

- Coordinate with school nurses to identify asthmatic children in schools with high concentration of asthma diagnosis.
- Establish and implement an Asthma Management Plan with HISD nurses and health care providers regarding outcomes related to asthma education, home visits, and trigger reduction.
- Provide basic asthma screening services and follow-up at targeted schools through the Environmental Mobile Unit (EMU) project.
- Engage health care providers, educators, public health professionals, and other stakeholders through the Gulf Coast Asthma Coalition to increase awareness, provide educational opportunities and share best practices.

**COMMUNITY PARTNERS:** Gulf Coast Asthma Coalition, Houston Independent School District Health and Medical), Texas Children's Health Plan, Environmental Defense Fund, Baylor College of Medicine, University of Houston & University of Houston College of Medicine, Harris County Public Health

## 1 GOAL

**Prevent exacerbations of asthma in school age children.**

### SMART Objectives

#### Objective 1.1

By December 2020, increase the number of HISD students receiving asthma self-management education, including asthma trigger reduction training, by 10% annually.

#### Objective 1.2

By December 2020, decrease the number of HISD students, receiving asthma self-management education, who visit the emergency department or are hospitalized due to asthma by 5% annually.



## CHILDHOOD LEAD POISONING PREVENTION

According to the Health Disparity and Health Inequity Report, lead is recognized as the leading environmental poison for children in the City of Houston, and exposure to lead-based paint is the primary source. The Centers for Disease Control and Prevention (CDC) has designated lead-based paint as “the most widespread and dangerous high-dose source of lead exposure for young children.” Lead can be found throughout a child’s environment. Homes built before 1978 (when lead-based paints were banned) probably contain lead-based paint.<sup>91</sup> When the paint peels and cracks, it makes lead dust. Children can be poisoned when they swallow or breathe in lead dust. Lead can be found in some products such as toys, jewelry, and candies imported from other countries or traditional home remedies.

According to the US Environmental Protection Agency (EPA) Environmental Justice Index for lead paint in housing stock, old housing in Houston, Texas, is likely to have lead-based paint overlap with low-income communities. These communities have high percentages of minority residents compared to the national average. Lead-based paint in these low-income areas may be especially toxic for children, as the families may not have sufficient income to remediate old and crumbling paint. The highest Environmental Justice Index associated with lead housing stock includes ZIP codes 77012, 77013, 77017, 77033, 77076, and 77087.<sup>92</sup>



Lowes partner with HHD/HUD (Housing and Urban Development) lead based paint program for the BUILD event, April 2018

“Promote early testing for lead during an immunization” - Community Opinion Group Voice, 2019

### STRATEGIES/ACTIONS

- Develop culturally linguistic lead poisoning education flyers, newsletters, multi-media platform announcements, and presentations to target educational efforts in at-risk communities.
- Target screening and provide educational materials (screening guidelines and lead hazard awareness) at locations where children under the age of 6 years spend time and organizations that serve young children and mothers including WIC sites, Immunizations clinics, daycares and Head Start programs.

**COMMUNITY PARTNERS:** Gulf Coast Asthma Coalition; Houston Independent School District (Health and Medical Services), Texas Children’s Health Plan Lead and Healthy Homes Strategic Planning Committee, Texas Children’s Health Plan, Environmental Defense Fund; Baylor College of Medicine, University of Houston & University of Houston College of Medicine, Harris County Public Health

## 2 GOAL

### Decrease childhood lead poisoning in Houston through primary prevention.

#### SMART Objectives

#### Objective 2.1

By December 2021, increase the number of public awareness and educational events by 10% annually.

#### Objective 2.2

By December 2021, increase the number of homes remediated by 3% annually.

#### Objective 2.3

By December 2021, increase the number of children screened for lead under the age of 6 years who live in at-risk areas for lead exposure by 15% annually.

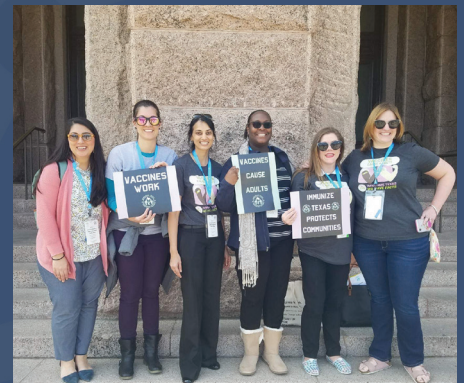
# MATERNAL AND CHILD HEALTH

## IMMUNIZATIONS

High levels of vaccination coverage are important to reduce vaccine-preventable diseases, in both the vaccinated and the under-vaccinated population.<sup>93</sup> According to the Centers for Disease Control and Prevention (CDC) report, the overall combined seven vaccine series coverage among children aged 19 to 35 months for 2017 in Houston was 74.3% compared to the Texas level of 67.8%.<sup>94</sup>

“...a campaign about the importance of vaccinating.”

– Community Opinion Group Voice, 2019



ICOGH members attend Immunization Advocacy and Rally Day at the Capitol (Austin, Texas), 2019

### 3 GOAL

**Work with Agencies to increase education, access and resources to promote increased childhood immunization rates.**

#### SMART Objectives

##### Objective 3.1

Increase by four (4) the number of additional hospitals that will participate annually in the Hospital Baby Bundle project during National Infant Immunization Week in April by 2021.

##### Objective 3.2

Increase by 150% (from 80 to 195) the number of baby bundles that will be distributed to hospitals in the Houston area by April 2021.

##### Objective 3.3

Develop an Expecting Mothers Baby Bundle Project and distribute among the expecting members of at least three (3) community partners during Pregnancy Week during National Immunization Awareness Month by August 2021.

### 4 GOAL

**Monitor and Respond to Legislation dealing with the promotion of immunizations.**

#### SMART Objectives

##### Objective 4.1

Immunizations Coalition of Greater Houston (ICOGH) will distribute a letter signed by at least 50% of active ICOGH members and/or their affiliated organizations to distribute among Texas Legislators by March 15, 2021.

##### Objective 4.2

Identify at least ten (10) ICOGH members to participate in “Immunization Advocacy and Rally Day at the Capitol” by April 2021.

### STRATEGIES/ACTIONS

- ICOGH plans to increase the overall number of “bundles” distributed during April for the infant immunization national observance. The bundles will consist of various immunization educational materials and resources that stress the importance of immunizations throughout childhood.
- ICOGH plans to support evidence-based policies aimed at increasing coverage rates throughout the state of Texas. To show support for pro-vaccine legislation, ICOGH will attend the “Immunization Advocacy and Rally Day at the Capitol” during the 87th legislative session to promote immunization education and pro-vaccine legislation. A letter will detail the mission of the coalition and encourage legislative support of pro-immunization policies.

**COMMUNITY PARTNERS:** Immunization Coalition of Greater Houston (ICOGH)

# N O T E S

In 2016, the Houston Health Department with community partners engaged in its second city-wide community health assessment (CHA) since 2012. The Houston CHA provided more insights in terms of community perception and priorities. Prior to the CHA, the State of Health: Houston & Harris County (SOH) 2015-2016 report was developed in collaboration with multiple partner organizations to identify local community health indicators.

More information on the community health assessments at <http://www.houstonstateofhealth.com>.

# COMMUNITY HEALTH SURVEY 2016

## COUNTS BY ZIP CODE

The map serves as a reference to the count of respondents by zip code participating in the Community Health Assessment 2016 throughout Houston.

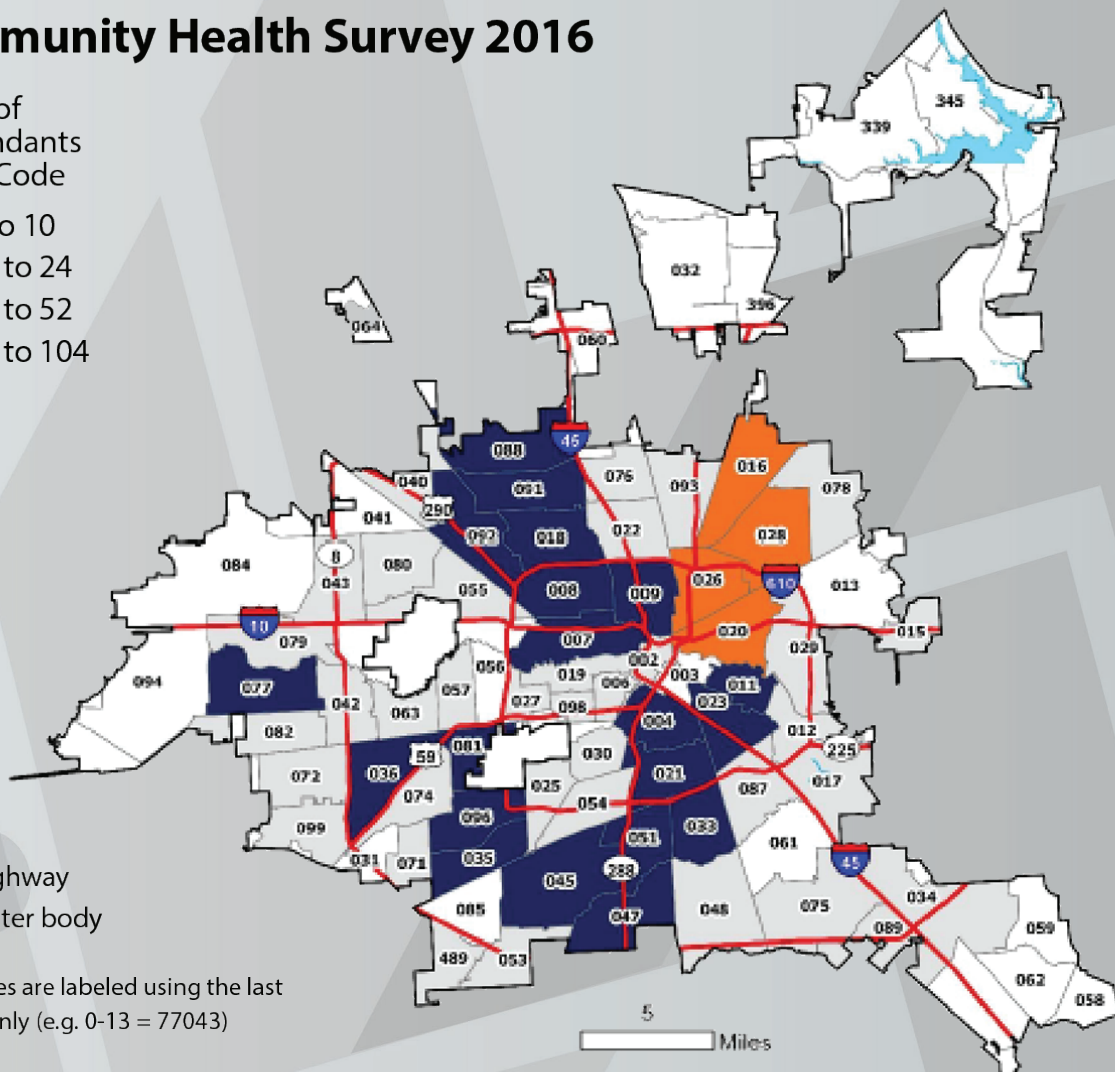
### Community Health Survey 2016

Count of Respondants by ZIP Code

- 1 to 10
- 11 to 24
- 25 to 52
- 53 to 104

— highway  
— water body

\*ZIP Codes are labeled using the last 3 digits only (e.g. 0-13 = 77043)







# APPENDICES

## HOUSTON CHIP INDICATORS

Priority Health Area	Actual Indicator
<b>Access to Care</b>	<ul style="list-style-type: none"> <li>Number of organizations in the collaborative</li> <li>Number of application assistance for CHIP, Medicaid and Marketplace enrollments</li> <li>Number of people who are educated about the enrollment / insurance</li> </ul>
<b>Behavioral Health</b> (Sub-Priority Health Area)	N/A
<b>Chronic Disease</b>	<ul style="list-style-type: none"> <li>Electronic Benefit Transfer (EBT) utilization count</li> <li>Number of sites operating annually</li> <li>Length of bikeways</li> <li>Number of health related worksites with &gt;5000 employees offering wellness program</li> <li>Number of policy development activities</li> <li>Number of tobacco prevention health promotion activities targeting youth</li> <li>Number of community-based chronic disease education and promotional activities</li> </ul>
<b>Environmental Health</b> (Air / Water)	Number of outreach activities offered per year
<b>Environmental</b> (Air)	<ul style="list-style-type: none"> <li>Number and identification of cement batch plant locations</li> <li>Percentage of resolve and close 3-1-1 case investigations</li> <li>Number of Particulate Matter 2.5 monitoring conducted based on complaints relating to cement batch plants</li> <li>Number of Random surveys conducted with a minimum of 5 sites once a week of previously unmonitored sites</li> <li>Attend at least 1 regulatory hearings per year (new sites permits)</li> <li>Number of outreach events attended</li> </ul>
<b>Environmental</b> (Water)	<ul style="list-style-type: none"> <li>Number of point sources or non-point sources of bacteria that are eliminated from the identified top five most impaired waterways</li> <li>Number of service requests related to prioritized three water ways</li> </ul>
<b>Infectious Disease - HIV</b>	<ul style="list-style-type: none"> <li>Number of new HIV infections diagnosed in the Houston area</li> <li>Increase the proportion of newly-diagnosed individuals linked to clinical HIV care within one month of their HIV diagnosis to at least 85% from 66% (2015) by 2021 (NHAS 2020 Indicator 4)</li> <li>Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by 2021 (NHAS 2020 Indicator 6)</li> </ul>
<b>Maternal and Child Health</b> -Asthma	<ul style="list-style-type: none"> <li>Number of children with an asthma diagnosis enrolled in the Houston independent School District (denominator)</li> <li>Number of parents with knowledge gain of common environmental asthma triggers including mold, dust mites, pet dander, pest and tobacco smoke (Baseline: 0, Target: 120)</li> <li>Number of children participating in community-based asthma self-management education activities (NAEPP)</li> <li>Rate of hospitalization for asthma among children</li> <li>Rate of Emergency Department (ED) visits for asthma among children</li> </ul>
<b>Maternal and Child Health</b> – Childhood Lead Poisoning	<ul style="list-style-type: none"> <li>Number of education and outreach events provided to the public</li> <li>Number of homes remediated</li> <li>Percentage of children screened under the age of 6 years in targeted zip codes</li> </ul>
<b>Maternal and Child Health</b> – Immunization	<ul style="list-style-type: none"> <li>Number of hospitals participating in Hospital Baby Bundle Project during National Infant Immunization Week (NIIW)</li> <li>Number during PWNIA month in August</li> </ul>

## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) : 2018 -2021

### Goals | SMART Objectives | Indicators | CHIP Champions | Data Representatives | Leadership | Partners

Access To Care						
Priority Health Areas	CHIP Goals	CHIP SMART Objectives	CHIP Indicators	CHIP Champions	Leadership	Partners
<b>Access to Care</b> (insurance)	<b>Goal #1:</b> Maintain the current level of enrollments to access to care in the Enroll Gulf Coast Collaborative (EGCC).	<p>1.1 By December 31, 2021, increase the number of organizations that are actively participating in the Collaborative from 8 to 12.</p> <p>1.2 By December 31, 2021, maintain the application assistance for CHIP, Medicaid and Marketplace enrollments.</p> <p>1.3 By December 31, 2021, maintain the number of people who are educated about enrollment and insurance.</p>	<p>- Number of organizations in the collaborative</p> <p>- Number of application assistance for CHIP, Medicaid and Marketplace enrollments</p> <p>- Number of people who are educated about the enrollment / insurance</p>	<p>Maria De La Cruz   Cheryl Sheppard</p> <p>Data Representative(s): (Devin Bradberry)</p>	<p>Angelina Esparza,</p> <p>Chief Program Officer Solly Diaz,</p> <p>Assistant Deputy Director Deborah Moore, Assistant Director</p>	<p>- The Enroll Gulf Coast Collaborative</p> <p>- Avenue 360</p> <p>- Center for Public Policy and Priorities</p> <p>- Change Happens</p> <p>- Legacy Community Health Services</p> <p>- Light and Salt</p> <p>- Lone Star Legal Aid - Young Invincibles</p>
<b>Behavioral Health</b> (BH)  (Access to Care Sub Priority) Based on data sources, BH was added as a sub Priority.	<b>Goal #1:</b> Promote a Trauma-Informed System of Care and increase access for patients by training NBHP-affiliated licensed behavioral health professionals and other Houston-area professionals directly involved in trauma and/or disaster recovery.	<p>1.1 By December 2019, train and graduate at least 70 licensed, master's level NBHP behavioral health providers from the Houston-Galveston Trauma Institute's 12-month intensive Trauma Informed Care program.</p> <p>1.2 By December 2018, provide at least 8 hours of training on Trauma Informed Care, in collaboration with the Israel Trauma Coalition, to as many as 40 behavioral health and disaster recovery professionals that are both licensed and non-licensed.</p> <p>1.3 By December 2021, 30 professionals that completed the Israel Trauma Coalition's "Train-The-Trainer" Trauma program in 2018 will deliver at least 8 hours of training on Trauma Informed Care to at least 100 professionals involved with primary care, behavioral health, or disaster recovery.</p>	N/A	<p>Nichelle Bailey   Dr. Clemelia Richardson</p> <p>Liaisons to NBHP*** **</p> <p><b>The Network Behavioral Health Providers (NBHP)- Ms. Andrea Usanga</b></p>	Deborah Moore, Assistant Director	- The Network of Behavioral Health Providers
	<p><b>Goal #2:</b> Work with local agencies to provide licensed behavioral health provider volunteers to prepare and respond in case of emergency and/or disaster.</p> <p><b>Goal #3:</b> Strengthen overall Behavioral Health for Houston citizens by increasing access to whole person care.</p>	<p>2.1 By October 2019, develop and maintain an emergency disaster response plan for behavioral health that focuses on the coordination and support of behavioral health provider volunteers.</p> <p>3.1 Create the blueprint/framework for a coordinated, system-wide, person-centered continuum of care that integrates medical, behavioral health and social services while addressing the social determinants of health by May 2019.</p> <p>3.2 Engage at least 60 behavioral health, primary care, and social service organizations for partnership in our Community Coordination of Care (C3) initiative by December 2018.</p> <p>3.3 Implement a pilot a project by September 2019 focused on improving client and community outcomes, reducing service duplication, maximizing resource efficiency and generating cost savings.</p>	N/A	<p>Nichelle Bailey   Dr. Clemelia Richardson</p> <p>Liaisons to NBHP*** **</p> <p><b>The Network Behavioral Health Providers (NBHP) – Ms. Andrea Usanga</b></p>	Deborah Moore, Assistant Director	- The Network of Behavioral Health Providers (NBHP)

## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) : 2018 -2021

## Goals | SMART Objectives | Indicators | CHIP Champions | Data Representatives | Leadership | Partners

Chronic Health						
Priority Health Areas	CHIP Goals	CHIP SMART Objectives	CHIP Indicators	CHIP Champions	Leadership	Partners
Chronic Disease	<b>Goal #1:</b> Increase access to healthy foods and beverages.	1.1 Increase utilization rate of EBT and other nutrition assistance resources by 3% by 2021.  1.2 Increase the reach of promotion of school food options and programs during the summer by 20% by 2021.	- Electronic Benefit Transfer (EBT) utilization count - Number of sites operating annually	Guilmae Pierre   Debra Maxwell   Dr. Faith Foreman - Hays  Data Representative(s): Debra Maxwell	Dr. Faith Foreman-Hays, Assistant Deputy Director	- American Diabetes Association - American Heart Association - BakerRipley - Brighter Bites - Cigna Health Company - Diabetes Awareness and Wellness Network - Federally Qualified Health Centers - Go Healthy Houston - Harris County Public Health - Houston Business Coalition on Health
	<b>Goal #2:</b> Increase opportunities for active living.	2.1 Increase and improve active transportation infrastructure in underserved communities by 3% by 2021.  2.2 Increase the number of worksite promoting wellness and physical activity opportunities by an additional 3 worksites from 2017 to December 2021.	- Length of bikeways  Number of health related worksites with >5000 employees offering wellness program			- Houston Food Bank - Houston-Galveston Area Council - Houston Independent School District - Houston Parks and Recreation Department - Houston Planning and Development - Houston Public Works Department
	<b>Goal #3:</b> Increase access to smoke- and tobacco free environments.	3.1 Increase policy development activities to update the City of Houston Smoking Ordinance to address emerging trends in tobacco use and to increase the number of people covered by 6 activities by 2021.  3.2 Implement health promotion activities to reduce youth initiation of tobacco use and nicotine dependency by 3 activities by 2021.	- Number of policy development activities  - Number of tobacco prevention health promotion activities targeting youth		Foreman- Assistant Deputy Director	- MD Anderson Cancer Center - Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) - Texas Medical Center Campus - Urban Harvest - U.S. Department of Health and Human Services (HHS) - UTHealth School of Public Health - YMCA of Greater Houston
	<b>Goal #4:</b> Increase access to community-based health education and preventative interventions that promote wellness. community-based health education and preventative interventions that promote wellness.	4.1 Increase the number of community-based chronic disease education and promotional activities in Complete Communities by 5 activities by 2021.	- Number of community-based chronic disease health education and promotional activities	Guilmae Pierre   Debra Maxwell   Dr. Faith Foreman - Hays  Data Representative(s): Debra Maxwell	Dr. Faith Foreman- Assistant Deputy Director  Foreman- Assistant Deputy Director	- American Diabetes Association - BakerRipley - CAN Do Houston - Federally Qualified Health Centers - Houston Health Department - Provider Partners



## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) : 2018 -2021

### Goals | SMART Objectives | Indicators | CHIP Champions | Data Representatives | Leadership | Partners

Environmental Health (Air   Water)						
Priority Health Areas	CHIP Goals	CHIP SMART Objectives	CHIP Indicators	CHIP Champions	Leadership	Partners
<b>Environmental Health</b> (Air Quality/Water Quality)	<b>Goal #1:</b> Conduct outreach activities that increase environmental awareness and promote environmental health resources to community (Air/ Water)	1.1 By December 31, 2021, conduct outreach activities at least four times per year and increase up to six times per year.	- Number of outreach activities offered per year	Nguyen Ly (Air)  Lisa Leija   Sonja Lewis   Donald Richner (Water)  Environmental Public Health Division  Data Representative(s): Linda Johnson (monitoring and reporting)	Patrick Key, Assistant Director Environmental Health Daisy James, Bureau Chief Environmental Health	- Air Alliance Houston  - Bayou Preservation Association
<b>Environmental Health</b> (Air Quality)	<b>Goal #2:</b> Conduct activities that address the amount of pollutants released into the air.	2.1 Identify the top 5 cement batch plant locations annually that impact the Houston community based on proximity to sensitive receptors with assistance from the Air Alliance of Houston (AAH) by December 31, 2021.  2.2 By December 31, 2021, conduct random surveys at a minimum of five sites once a week at previously unmonitored sites.	- Number and identification of cement batch plant locations - Percentage of resolve and close 3-1-1 case investigations - Number of Particulate Matter 2.5 monitoring conducted based on complaints relating to cement batch plants - Number of Random surveys conducted with a minimum of 5 sites once a week of previously unmonitored sites - Attend at least 1 regulatory hearings per year (new sites permits) - Number of outreach events attended	Nguyen Ly (Air)  Data Representative(s): Linda Johnson (monitoring and reporting)	Patrick Key, Assistant Director Environmental Health  Daisy James, Bureau Chief Environmental Health	- Air Alliance Houston
<b>Environmental Health</b> (Water Quality)	<b>Goal #3:</b> Conduct activities aimed at reducing bacteria and other pollutants entering our bayous, creeks and streams.	3.1 Establish a baseline for the number of point sources or non-point sources of bacteria that are eliminated from the identified top five impaired waterways by December 2021.  3.2 Establish a baseline for the annual number of service requests related to trash/floatables in three prioritized water ways by December 31, 2021.	Number of point sources or non-point sources of bacteria that are eliminated from the identified top five most impaired waterways - Number of service requests related to prioritized three water ways	Lisa Leija   Sonja Lewis   Donald Richner (Water) Environmental Public Health Division Data Representative(s): Linda Johnson (monitoring and reporting)	Daisy James, Bureau Chief Environmental Health Patrick Key, Assistant Director Environmental Health	- Bayou Preservation Association

## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) : 2018 -2021

Goals | SMART Objectives | Indicators | CHIP Champions | Data Representatives | Leadership | Partners

Infectious Disease - HIV						
Priority Health Areas	CHIP Goals	CHIP SMART Objectives	CHIP Indicators	CHIP Champions	Leadership	Partners
Infectious Disease - HIV	<b>Goal #1:</b> Prevent and reduce new HIV transmissions	1.1 Reduce the number of new HIV infections diagnosed in the Houston Area by at least 25% from 1,386 (2014) to ≤1,004 by December 2021.	- National HIV/AIDS Strategy (NHAS) 2020 Indicator 2 and Indicator 9 - # of new HIV infections diagnosed in Houston Area	Miyase Koksai-Ayhan (HIV) Camden Hallmark transitioned out. Data Representative(s): Miyase Koksai-Ayhan	Marlene McNeese Assistant Director	- Houston Ryan White Planning Council (RWPC)  - Houston HIV Prevention Community Planning Group (CPG)  <b>(Same Partners for Goals #1, #2, &amp; #3)</b>
	<b>Goal #2:</b> Ensure that all people living with or at risk for HIV have access to early and continuous HIV prevention and care services.	2.1 Increase the proportion of newly-diagnosed individuals linked to clinical HIV care within one month of their HIV diagnosis to at least 85% from 66% (2015) by December 2021.  2.2 Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by December 2021.	- National HIV/AIDS Strategy (NHAS) 2020 Indicator 4 {Increase the proportion of newly-diagnosed individuals linked to clinical HIV care within one month of their HIV diagnosis to at least 85% from 66% (2015) by 2021} - National HIV/AIDS Strategy (NHAS) 2020 Indicator 6 {Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by 2021}			
	<b>Goal #3:</b> Reduce disparities in the Houston Area HIV epidemic and address the needs of vulnerable populations.	3.1 Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by December 2021.	- National HIV/AIDS Strategy (NHAS) 2020 Indicator 6 {Increase the percentage of individuals with diagnosed HIV infection in the Houston Area who are virally suppressed from 57.0% (2015) to at least 80.0% by 2021}			

## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) : 2018 -2021

### Goals | SMART Objectives | Indicators | CHIP Champions | Data Representatives | Leadership | Partners

Maternal and Child Health						
Priority Health Areas	CHIP Goals	CHIP SMART Objectives	CHIP Indicators	CHIP Champions	Leadership	Partners
<b>Childhood Asthma Prevention</b>	<b>Goal #1:</b> Prevent exacerbations of asthma in school age children.	<p>1.1 By December 2020, increase the number of HISD students receiving asthma self-management education, including asthma trigger reduction training, by 10% annually.</p> <p>1.2 By December 2020, decrease the number of HISD students, receiving asthma self-management education, who visit the emergency department or are hospitalized due to asthma by 5% annually.</p>	<p>- Number of children with an asthma diagnosis enrolled in the Houston independent School District (denominator)</p> <p>- Number of parents with knowledge gain of common environmental asthma triggers including mold, dust mites, pet dander, pest and tobacco smoke (Baseline: 0, Target: 120)</p> <p>- Number of children participating in community-based asthma self-management education activities (NAEPP)</p> <p>- Rate of hospitalization for asthma among children</p> <p>- Rate of Emergency Department (ED) visits for asthma among children</p>	<p>Rosalie Guerrero   Kaavya Domakonda</p> <p>Data Representative(s): Rosalie Guerrero Program Staff</p>	<p>Patrick Key, Assistant Director</p> <p>Loren Hopkins, Bureau Chief</p>	<p>- Houston Health Department</p> <p>- Houston Independent School District (HISD)</p> <p>- Texas Children's Health Plan (TCHP)</p> <p>- Gulf Coast Asthma Coalition</p> <p>- The Lead and Healthy Homes Strategic Planning Committee including: Baylor, UT Health, University of Houston, Houston Independent School District, Avenue CDC, Mexican Consulate, Avance Head Start, BakerRipley Head Start, and other businesses, churches, and community organizations across.</p> <p>- HHD WIC</p>
<b>Childhood Lead Poisoning Prevention</b>	<b>Goal #2:</b> Decrease childhood lead poisoning in Houston through primary prevention	<p>2.1 By December 2021, increase the number of public awareness and educational events by 10% annually.</p> <p>2.2 By December 2021, increase the number of homes remediated by 3% annually.</p> <p>2.3 By December 2021, increase the number of children screened for lead under the age of 6 years who live in at-risk areas for lead exposure by 15% annually.</p>	<p>- Number of education and outreach events provided to the public</p> <p>- Number of homes remediated</p> <p>- Percentage of children screened under the age of 6 years in targeted zip codes</p>	<p>Kaavya Domakonda</p> <p>Data Representative(s): Kaavya Domakonda Program Staff</p>	<p>Patrick Key Assistant Director</p> <p>Loren Hopkins, Bureau Chief</p>	<p>Gulf Coast Asthma Coalition; Houston Independent School District (Health and Medical Services); Texas Children's Health Plan; Lead and Healthy Homes Strategic Planning Committee; Texas Children's Health Plan; Environmental Defense Fund; Baylor College of Medicine; University of Houston &amp; University of Houston College of Medicine; Harris County Public Health</p>

## HOUSTON COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) : 2018 -2021

## Goals | SMART Objectives | Indicators | CHIP Champions | Data Representatives | Leadership | Partners

Maternal and Child Health						
Priority Health Areas	CHIP Goals	CHIP SMART Objectives	CHIP Indicators	CHIP Champions	Leadership	Partners
Immunizations	<b>Goal #3:</b> Work with agencies to increase education, access and resources to promote increased immunization rates across the lifespan.	<p>3.1 Increase by four (4) the number of additional birthing hospitals that will participate in the Hospital Baby Bundle project during National Infant Immunization Week in April by 2021.</p> <p>3.2 Increase by 150% (from 80 to 195) the number of baby bundles that will be distributed to birthing hospitals in the Houston area by April 2021.</p> <p>3.3 Develop an Expecting Mothers Baby Bundle Project and distribute among the expecting members of at least three (3) community partners during Pregnancy Week during National Immunization Awareness Month by August 2021.</p>		<p>LaTasha Hinckson</p> <p>Data Representative(s): LaTasha Hinckson Program Staff</p>	<p>Decrecia Limbrick Assistant Director</p> <p>Stephanie Humbert Division Manager</p>	- Immunization Coalition of Greater Houston
Immunizations	<b>Goal #4:</b> Monitor and Respond to Legislation dealing with the promotion of immunizations	<p>4.1 Immunizations Coalition of Greater Houston (ICOGH) will distribute a letter signed by at least 50% of active ICOGH members and/or their affiliated organizations to distribute among Texas Legislators by March 15, 2021.</p> <p>4.2 Identify at least (10) ICOGH members to participate in "Immunization Advocacy and Rally Day at the Capitol" by April 2021.</p>	<p>-% of active ICOGH members and/or their affiliated organizations that sign a letter promoting pro-vaccination legislation to be distributed during the 87th legislative session.</p> <p>-# of ICOGH members to attend "Immunization Advocacy and Rally Day at the Capitol" in Austin, TX.</p>	<p>LaTasha Hinckson</p> <p>Data Representative(s): LaTasha Hinckson Program Staff</p>	<p>Decrecia Limbrick Assistant Director</p> <p>Stephanie Humbert Division Manager</p>	- Immunization Coalition of Greater Houston



# D E F I N I T I O N S

**Active Living** - A way of life that integrates physical activity into everyday routines, such as walking to the store or bicycling to work.

**Active Transportation** - is any self-propelled, human-powered mode of transportation, such as walking or bicycling.

**Active Transportation Infrastructure:** Provide safe and convenient travel for all users of the roadway. Active transportation infrastructure includes bicycle and pedestrian infrastructure such as sidewalks, bicycle lanes, bicycle parking and storage facilities, curb extensions, intersection treatments for bicycles, landscaping, paved shoulders, pedestrian- and bicyclist-scale lighting, pedestrian overpass or underpass, separation/buffers, shared-lane markings, signage, signalized pedestrian crossings and mid-block crossings, and trails or shared-use paths.

**Cement Batch Plant:** A concrete plant, also known as a batch plant or batching plant or a concrete batching plant, is equipment that combines various ingredients to form concrete. Some of these inputs include water, air, admixtures, sand, aggregate (rocks, gravel, etc.), fly ash, silica fume, slag, and cement.

**Combined 7-vaccine series coverage among children (19-35 months):** Children are immunized with 4 doses of diphtheria-tetanus-pertussis (DTaP), 3 doses of Polio, 1 dose of measles-mumps-rubella (MMR), 3 doses of Hep B, 3 doses of Hib, 1 dose of Varicella antigens, and 4 doses of Pneumococcal conjugate vaccine (PCV).

**Complete Communities:** Houston Complete Communities are communities identified by Mayor Sylvester Turner's Complete Communities Initiative designed to revitalize Houston's under-resourced communities in partnership with existing neighborhood residents.

**Cross-sectoral:** Refers to collaboration among different sectors and stakeholder groups, typically to accomplish a shared public health policy goal.

**Electronic Benefit Transfer (EBT):** An electronic system through which recipients of certain government benefits receive and spend funds electronically using a plastic EBT card similar to a bank debit card.

**Hospital Baby Bundle Project:** The bundles consist of immunization education and incentives to be provided to families of newborns upon discharge from the hospital and at least one new community partner providing services to expectant mothers.

**Underserved Communities:** A designation tied to a set of circumstances which may cause certain demographic groups to experience greater challenges in terms of health and other necessities.

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- <sup>80</sup> The State of Health 2015 – 2016, Houston/Harris County, page 70.
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## NOTES

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MATERNAL AND CHILD HEALTH  
INFECTIOUS DISEASE  
CHRONIC DISEASE



ACCESS TO CARE  
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